

Delaying Aging and Extending Life – An Ancient Dream Revisited : Using Body Regimens as a Window to Reflect on Aging, Identity, and the Body

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Boston College

The Graduate School of Arts and Sciences

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DELAYING AGING AND EXTENDING LIFE – AN ANCIENT DREAM
REVISITED: USING BODY REGIMENS AS A WINDOW TO REFLECT ON
AGING, IDENTITY, AND THE BODY

by

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Delaying Aging and Extending Life – An Ancient Dream Revisited: Using Body Regimens as a Window to Reflect on Aging, Identity, and the Body

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Abstract: The desire to defy the aging process and to prolong the lifespan has long captured the human imagination. Recognized as one of the most ancient known pieces of literature, the Epic of Gilgamesh documents a King's quest to find immortality. More recent examples include the story of Ponce de Leon's 16th century search to discover the Fountain of Youth, Sir Francis Bacon's (1659) assertion that humans are naturally immortal "potens non mori," and Benjamin Franklin's desire to be preserved in a vat of madeira until science is capable of life extension. Developments in science and technology, including telomere manipulation, genetic engineering, cloning, nanotechnology, the potential to create new organs from stem cells, and the creation of therapeutic pharmaceuticals that could significantly postpone disease, have served to inspire; aging in the 21st century is no longer regarded by scientists as an inevitable process programmed by evolution (Olshansky et al. 2006). Situated within a detailed historical overview, this qualitative research project explores the experiences of individuals engaged in practices currently implicated in potentially delaying aging and even extending life. Based on information from 44 in-depth interviews, this research explores issues such as lay understandings of the biology of aging, conceptualizations of the inner body, the use of and experience with optimization technologies, and the embodied effects of participation in anti-aging and life-extension body regimens.

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Chapter 1: Body Regimens Implicated in Delaying Aging and/or Extending Life – A Brief Overview and Introduction

The dream of potentially extending life and/or delaying bodily aging has been documented throughout the ages, and has been the cause of tremendous fascination and terror, cynicism and hope, struggle and submittal. Recognized as one of the most ancient known pieces of literature, the *Epic of Gilgamesh*, includes a legend which details Sumerian King Gilgamesh's efforts to locate a magical plant thought to restore youth. In his quest, Gilgamesh, eluded by a snake, is forced to confront the realization that aging and death are inevitable. While the moral overtones surrounding this legend may suggest that human efforts to manipulate the passage of time are futile, the dream is long lived and has been repeated, throughout the ages, in a wide variety of forms.

The storyline of my own research is positioned amidst this ancient dream as I explore present day individual engagement in practices implicated in potentially delaying bodily aging and/or extending bodily life. In her research on cosmetic surgery, a practice which is oftentimes implicated in aesthetic age retardation efforts, sociologist Virginia Pitts (2007:233) calls for scholars to “think about the means of practices as much as what the practices mean” in an effort to avoid centering only on a moralistic dualism between “right” and “wrong.” In an attempt to answer this call, and to similarly position my own work, this research will focus on individual engagement with three different body regimens currently implicated in potentially delaying bodily aging and even extending

bodily life and this includes: caloric restriction optimal nutrition (CRON), anti-aging medicine, and rigorous nutrition and exercise regimens thought to affect bodily aging.¹

In order to make sense of the innumerable human efforts to potentially delay aging and/or prolong life, philosopher Gerald Gruman (2003[1966]) wrote an insightful book which provides a framework to understand the pursuit of “prolongevity,²” from ancient times through the 18th century. Gruman’s research identifies three so-called “prolongevity legends” (antediluvian, hyperborean and fountain) to describe the history of human endeavors to potentially influence bodily aging and/or the human lifespan.

Antediluvian legends are based on the idea that people of the ancient past were able to avoid death, living hundreds of years longer than typical life spans of the day (Gruman 2003 [1966]). While antediluvian legends existed in ancient Greece through descriptions of Hesiod’s “Age of Gold,” a time when mortals were said to be ageless, these legends gained special prominence during the medieval period through stories about the longevity of biblical patriarchs. According to the *Book of Genesis*, before the great flood, people lived significantly longer lives. Methuselah, for example, was purported to have lived until the age of 969, while Noah was said to have reached 950 years. Regimens associated with antediluvian legends are based around religious piety, obedience, and morality.

¹ Recognition of the “means of practices” is important since it is increasingly clear that a diverse range of factors serve as motivation to people participating in such regimens. Similar, for example, to participation in activities associated with recycling, while some may partake due to a concern with environmental conservation, others may be more motivated by financial incentive or out of a community-instituted obligation. As my research will reveal, for example, people engaged in CRON do not always regard life extension as the overarching motivation, just as people using age management medicines may be motivated more by efforts to seek solutions for idiopathic ailments than by a desire to delay aging, per se.

² This word was coined in 1966 by philosopher Gerald Gruman to describe the belief that by following specific regimens and methods, individuals could extend the lifespan and live until extreme old age.

Hyperborean legends are premised on the idea that there are places in the world, generally remote islands or mountain communities, where people live much longer and healthier lives than what is otherwise typical (Gruman 2003[1966]). Ancient Greeks spoke of the longevity of the Hyperborean people who were said to live exceptionally long lives and, according to Pliny, when satiated by life and ready to die, simply went to the sea. Herodotus wrote extensively about his travels, referring to Ethiopia as “the land of the long lived” with most inhabitants said to reach 120 years or older. Seres, (meaning “of silk”), the ancient Greek and Roman term for the northeastern part of China, is repeatedly referred to as a region of long lived peoples. Strabo, a Greek geographer writing during the early 1st century, stated that some inhabitants of Seres lived for more than 200 years, describing them as “temperate in their habits and healthy; although the country produces everything in abundance.”³ Regimens associated with hyperborean legends involve modeling the identified practices and even living among the idealized long-lived communities.

Finally, fountain legends revolve around the idea that certain substances including water, food, and other miraculous healing remedies can enable people to retain youthfulness and live life indefinitely (Gruman 2003[1966]). The Indian legend of Cyavana, dating back almost 3,000 years ago, describes the ‘Pool of Youth.’ Becoming upset after realizing how much older he is than his wife, the Priest Cyavana searches for and finds the ‘Pool of Youth,’ and after bathing in it, he becomes youthful again (Parpola 2004/2005). The Ebers Papyrus, a medical text thought to be around 3,500 years old,

³ Retrieved on August 2, 2006, from <http://www.perseus.tufts.edu/cgi-bin/ptext?doc=Perseus%3Atext%3A1999.01.0239&query=head%3D%23119>

recommends ingesting the organs of young animals for vitality and immortality (Novil 2005), while in Ovid's *Metamorphosis*, Medea is said to have the ability to rejuvenate by creating a concoction that turns the elderly Aeson into a younger man, making his white beard turn black and his wrinkles disappear. Perhaps one of the most famous fountain legends in Western culture⁴ involves the popular rendition of Ponce de Leon's quest to discover the fountain of youth when he departed from Puerto Rico in 1513. The overriding premise of fountain legends includes the belief that the secret to longevity can be found in nature or made by humans. The roots of alchemy, and the quest for the "philosopher's stone," were also grounded in this tradition, as regimens associated with fountain legends inspired experimentation with various materials.

Evidence of the ways that Gruman's (2003[1966]) prolongevity legends live on through the present abound. For example, it could be argued that the antediluvian legend continues through the "Left Behind" phenomenon (Pfohl 2007). With more than 70 million copies sold since 1995, the *Left Behind* book, film and video series, by Tim LaHaye and Jerry Jenkins, unveils plots based on apocalyptic fantasy and terror, guiding audiences away from the corruption of the world to evangelistic-inspired morality, with the ultimate promise of a celestial eternal life. Flipping through a 2005 issue of *National Geographic* magazine, hints of the hyperborean legend remain as readers are beckoned to explore Loma Linda, California, a locale described as one of three places in the world

⁴ Recognizing that culture is a concept with varying definitions, my own use of the term is inspired by the work of anthropologist Clifford Geertz who explains culture as largely interpretive. In the words of Geertz (1973:5): "The concept of culture I espouse...is essentially a semiotic one. Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretive one in search of meaning."

with the highest longevity rate. Perhaps the most vivid in the public eye, fountain legends are literally sewn into the fabric of consumer culture, as the promise of age-defying and/or life-extending effects, are implicated in a lengthy list of remedies, tonics, wonder foods, exercises, practices, and programs (Martin 1994).

Can bodily aging be delayed? Can human life be prolonged? These are questions that have been examined since ancient times and any beginning to this story seems in a certain way arbitrary. How do you begin a topic with timeless roots? While Gruman's (2003[1966]) exploration of prolongevity legends provide a background that firmly establishes this dream as ancient, he concludes his story in the 18th century...around the time when I will begin mine.

Rolling the clock forward five thousand years from the Epic of Gilgamesh, this long lived dream of potentially extending life and/or delaying bodily aging continues. Aging in the twenty-first century is no longer regarded by scientists as an inevitable process programmed by evolution (Olshansky et al. 2006). The two main evolutionary theories of aging, one defining aging as a succession of accumulated errors (Harman 2001), and the other describing aging as a genetically regulated and programmed event (Prinzinger 2005; Hayflick 1985), have lead some scientists (Banks and Fossel 1997) to conclude that changes in gene expression can create and/or prevent destruction to cells and organisms.⁵

⁵ Biological theories of aging abound and many biogerontologists believe that biological aging is caused by multiple factors. The primary theories of biological aging, as detailed by Tirrito (2003), include "Programmed" theories and "Error" theories. In programmed theories, aging and death follow a biologically determined timetable.

- 1) *Programmed senescence*: aging is the result of a sequential switching on and off of certain genes.
- 2) *Endocrine theory*: hormones control the pace of aging.

The identification of so-called “longevity genes,”⁶ and the successful rearing of fruit flies, mice, worms, and yeast, that live twice as long as normal, due to genetic mutations, offers those interested in scientific intervention to delay aging and/or to extend the human lifespan considerable inspiration. Other scientific possibilities which further serve to inspire hope include, for example, the potential for telomere manipulation, genetic engineering, cloning, nanotechnology, the potential to create new organs from stem cells, and the development of therapeutic pharmaceuticals that could significantly postpone disease. Scientific researchers, looking through the lens of biomedicine⁷, debate the nuts and bolts of maintaining health and staving off death, with

-
- 3) *Immunological theory*: a programmed decline in the immune system leads to increased vulnerability to infectious disease, aging and death.

Error theories of biological aging posit that damage or error or environmental attacks on bodily systems cause deterioration, decline and dysfunction.

- 1) *Wear and Tear theory* –Aging is a result of deterioration of cells, tissues, and organs necessary for life. Aging occurs because somatic cells cannot renew themselves.
- 2) *Rate of Living Theory* – the greater an organisms rate of oxygen basal metabolism the shorter its life span. Self regulating bodily mechanisms decline with age.
- 3) *Free Radical Theory* – oxygen radicals cause cells and organs to stop functioning and to accumulate damage, which causes aging.
- 4) *Cellular Theory*: In 1961 Len Hayflick reported that cells reproduce a programmed number of times and then die. A genetic code causes the finite capability of cells to reproduce, and the cellular limit is related to the maximum life span of the species.
- 5) *Error Catastrophe Theory*: Damage to mechanisms that serve to synthesize proteins results in the accumulation of malfunctioning proteins to disastrous levels, leading to cell damage (Random Damage Theory) which eventually causes aging and death.
- 6) *Somatic Mutation Theory*: Genetic mutations occur and accumulate with age, causing cell to deteriorate and malfunction.

⁶ In April, 2003, a team with the National Human Genome Research Institute, reported having identified the genes involved in Hutchinson-Gilford Progeria Syndrome (HGPS), a disorder characterized by premature aging. Other research has identified genes associated with greater longevity in humans including variants of apoE, ACE, HLA-DR, and PAI-1. In contrast to research on flies, worms, yeast and mice, which reveals that the manipulation of a single gene can extend life span, scientists studying genes and longevity tend to think multiple genes are implicated in lifespan. Retrieved February 14, 2007, from <http://www.sciencedaily.com/releases/2005/04/050417213244.htm>

⁷ Biomedicine, as articulated by Powell (2006:31), involves the use of disciplinary control and power by legitimizing the search within the individual body for signs (in terms of risks, deficiencies, disorders, symptoms, and test results) that he or she is in need of medical surveillance through the medicalization process. This involves a shift in locus of risk from external to the individual to internal. What are the implications of this shift?

biogerontologists like Aubrey de Grey,⁸ editor of *Rejuvenation Research*, proposing that damage to macromolecules, cells, tissues, and organs can be repaired by advancing biotechnology.

In 1980 Dr. James Fries introduced his “Compression of Morbidity” hypothesis, suggesting that it is possible to reduce cumulative lifetime incidence of disease (morbidity) with engagement in health prevention practices, which could potentially lead to an increase in average age at death.⁹ Following up on this initial research, Fries published an article in 1998 based on data from a longitudinal study which concluded that smoking, BMI, and exercise patterns are predictors of longevity. Fries latest collaborative research (see Chakravarty et al. 2008) tracking approximately 500 senior runners for approximately two decades, revealed benefits from running in terms of both disability and survival. Over a 19 year period of the study, approximately 15% of the sample of runners had died, compared with around one third of the control group, and August 2008 headlines in Science News report: “Running Slows the Aging Clock, Researchers Find.” Turning to the internet, people can access a variety of life expectancy calculators to develop strategies for maximizing lifespan. For example, the New England Centenarian Study at Harvard Medical School includes a 23-question life expectancy

⁸ de Grey works closely with the non-profit Methuselah Foundation, a nonprofit organization he co-founded, which sponsors the multi-million dollar Methuselah Mouse Prize, "to be awarded for significant, scientifically reproducible life extension in already aged lab mice, to create a 'tipping point' in anti-aging science." The Methuselah Foundation received a tremendous financial boost in September, 2006, when Peter A. Thiel, co-founder and former CEO of PayPal, pledged \$3.5 million in support to fund scientific research focused on disease prevention and life extension.

⁹ It is important to note here that this was not Fries’ primary emphasis. He was clearly focused on compression of morbidity.

calculator¹⁰, with questions about family history and environmental factors, designed for individuals to estimate their “longevity potential.” Further, in *Living to 100: Lessons in Living to Your Maximum Potential at Any Age*, Drs. Thomas Perls and Margery Silver (1999), argue that the average person is born with a set of genes that would allow him or her to live to be about 85 years or older, but preventive steps can add as much as 10 years to an individual’s life.

The popular media entices audiences to make the connection between consumption, behaviors, aging, health, and longevity,¹¹ with bestselling books like Adelle Davis’ 1960s classic *Let’s Get Well*, and *Life Extension: A Practical Scientific Approach*, first published in 1980 by Durk Pearson and Sandy Shaw, suggesting dietary supplementation strategies said to slow down five of the six identified major causes of aging. A dizzying range of everyday practices have been implicated in this fight against aging and death which may include diet, exercise, abstention from smoking, limited alcohol, vitamins, stress reduction, coping mechanisms, personality, social class, relationships, and marriage (Tirrito 2003; Shulz-Aellen 1997). Information presented in the popular press like the CNN article published on July 30, 2007, titled “Checklist: How to live longer by a decade,”¹² provides readers with medical advice based on

¹⁰ This questionnaire can be found on the internet at www.livingto100.com.

¹¹ As stated by Tirrito (2003), for example, Vitamin A is recommended to prevent night blindness and reduce the risk of cancer, Vitamin B1 for healthy cell functioning, Vitamin B2 for the production of certain hormones and red blood cells, Vitamin B12 for nerve cells and Vitamin C as an antioxidant, and for the effects metabolism of cholesterol and tissue repair. Vitamin E is said to enhance the immune system and Vitamin K may prevent cancer and osteoporosis. Calcium is recommended to prevent osteoporosis. Exercise is said to affect glucose tolerance and insulin metabolism, cardiovascular function and muscle mass, lower the blood pressure and regulate lipid metabolism, prevent osteoporosis and positively alter psychological state/mood.

¹² Retrieved on August 13, 2008, from <http://www.cnn.com/2007/HEALTH/07/27/decade.checklist/index.html>

chronological age, while another published in the January, 2008, edition of Time magazine, titled, “Healthy Habits may give 14 years,” beckons readers to exercise, avoid smoking, consume at least five servings of fruits and vegetables a day and partake in moderate alcohol consumption in an effort to add years to life.¹³ A google search on May 19, 2008, for “how to live longer” brings up 145,000 links¹⁴ with suggestions that include drinking alcohol daily, having an optimistic attitude, getting a pet, stopping smoking, reducing stress, having more sex, being rich, getting a VAP test (advanced cholesterol screening), and not sleeping too much. A related google search on August 13, 2008, for “how to slow aging” and “how to reverse aging” yields 2,620 links, and 8,310 links, respectively, with information about a wide range of strategies that includes: pH balancing, hormone supplementation, antioxidants, oxygenation, exercise, the consumption of vegetables and protein, the avoidance of dairy and meat, and the practice of caloric restriction. As Powell (2006:26) suggests, “Healthy living and diet are seen as key shields to curtail the problems of biological aging”¹⁵ as the mass media helps to inspire interest in anti-aging medicine, through which “...it has fashioned a disciplinary link between positive aging and anti-aging” (Katz 1999).

A variety of broad streams and currents flow together to help shape the context (Conrad 1992) of present day practices implicated in potentially delaying aging and/or

¹³ Retrieved on April 6, 2008, from http://www.world-science.net/othernews/080107_health.htm

¹⁴ I did this same search a year prior on April 28, 2007, and got a total of 43,100 links. This may in part reveal the dramatic increase in information and interest on this topic.

¹⁵ Biological aging is associated with a range of beliefs that include the notion that the body is a machine and the related belief that overworked machines (and bodies) eventually expire. Biological aging involves the idea that bodily aging creates problems in vision, balance and hearing, and that over time, abnormal cells are created from DNA damage which causes changes in the skin. Finally, aging and death are regarded as “programmed events” that are caused by different genes (see Powell 2006; Biggs 1993).

extending life and these include past, present, and future anticipated changes in demographics, science, technology, medicine, and law, the expansion of the pharmaceutical industry, trends in consumerism, national health promotion efforts, and the impact of a powerful cultural rhetoric advocating personal responsibility for risk reduction and health prevention.

While situating such practices in a particular political, social, and historical milieu, my dissertation explores the experience of people currently engaged in bodily regimens broadly defined under the umbrella of the “healthy life extension community.”¹⁶ The “healthy life extension community” as defined by Longevity Meme, a non-profit organization dedicated to support technologies and lifestyles that help people “...live comfortably, healthily and capably for as long as they desire...”¹⁷ includes a broad spectrum of philosophies and practices premised around potentially delaying bodily aging and extending bodily life. These involve ideas associated with transhumanism, cryonics, artificial intelligence, futurism, and libertarianism, paired with practices associated with, for example, anti-aging or age management medicine, like hormone therapies, specific lifestyles like CRON, and the dietary, fitness, and vitamin/supplement regimens practiced by some health enthusiasts. When thinking about the goals of the “healthy life extension community,” it is useful to consider political scientist Robert Binstock’s (2004) identification of paradigms used to clarify differences in the goals of biogerontological research. For example, while some may claim

¹⁶ This term is used on the [longevitymeme.org](http://www.longevitymeme.org) website and a visual overview is provided in Appendix A of this dissertation. Retrieved on June 14, 2007, from http://www.longevitymeme.org/topics/healthy_life_extension_community.cfm

¹⁷ Retrieved on May 6, 2008, from <http://www.longevitymeme.org/about.cfm>

“compression of morbidity,” or shortening the period of infirmity before death, as the focus, others may be more interested in the potential to “decelerate aging,” or, among the most ambitious, to even “arrest” aging.¹⁸

Considering the exploration of aspects of the aforementioned “healthy life extension community” in the academic literature, cultural anthropologist Courtney Everts Mykytyn (2006a, 2006c, 2007) conducted qualitative research to provide important insights into the experiences and beliefs of doctors certified in anti-aging medicine, and she described anti-aging medicine as a “patient/practitioner movement to redefine aging.” Feminist scholars have analyzed anti-aging advertising to highlight significant relations of power, gender, and age (Calasanti 2007; Calasanti and King 2007).

Other scholars (Vincent and Tulle 2007; Vincent 2003; Moody 2002) illuminate the contention which currently surrounds the term “anti-aging,” and Binstock’s (2003, 2004) research has helped to reveal and detail the existence of numerous controversial debates related to prolongevity efforts. An important and overarching debate involves a fundamental discussion about prolongevity efforts, most generally, and this includes contention over whether scientific interventions to potentially delay aging and/or to extend life are just, moral, and desirable.¹⁹ Another debate surrounding the issue of

¹⁸ See chapter 9 for information about how these three paradigms intersect to the goals and expectations of the participants in this study.

¹⁹ Critics of prolongevity efforts include a diverse range of interests, similar in some ways to the debate over pornography, where the religious right suddenly finds itself aligned with the interests of many feminists. Visible public figures speaking out against prolongevity efforts include, for example, Leon Kass, bioethicist, and the former chair of the President’s Council on Bioethics from 2002-2005, and author of *Beyond Therapy: Biotechnology and the Pursuit of Human Improvement* (2003), Francis Fukuyama, Professor of International Political Economy at Johns Hopkins, and author of *Our Posthuman Future: Consequences of the Biotechnology Revolution* (2002), and Bioethicist, Daniel Callahan, of the Hastings Center, perhaps best known for his advocacy of medical care rationing, is also a vocal critic of life extension. Other critics of prolongevity efforts include some associated with the Luddite movement, critics

prolongevity, recognized as the most litigious, and perhaps contentious debate within the life extension movement, involves “boundary work” (Binstock et al. 2006b) efforts serving to separate the wheat from the chaff, in order to distinguish what some define as “legitimate” biogerontological research from what are sometimes labeled “snake-oil” peddling commercial enterprises capitalizing on the public’s dream of a longer life. For example, to distance their scientific research on life extension from the types of products and scams outlined in the 2001 Government Accounting Office (GAO) report “Anti Aging Products Pose Potential for Physical and Economic Harm,” an international group of 51 researchers in the field of aging joined together to write a position statement on intervening in the process of aging to “...inform the public of the distinction between the pseudoscientific anti-aging industry, and the genuine science of aging that has rapidly progressed in recent years.”²⁰

Researchers Juengst (2002), Binstock (2003), and colleagues (see for example, Binstock, Fishman and Juengst 2006a, or Fishman, Binstock and Lambrix, 2008), have collaborated to discuss the ethical, sociological, and political dimensions of anti-aging medicine. Encouraging more public discussion regarding the ethics of biomedical intervention into the human aging process, this research asks important and thought

of genetic engineering and human cloning, critics of CRON (Stevens 2006), and some social gerontologists, philosophers, feminist theorists, and others who express concern about the biomedicalization, and resulting devaluation, of aging (Vincent 2006; Kaplan and Moody 2004 ; Gullette 1994; Holstein 2001/02; Binney & Estes 1991).

²⁰ More specific critiques were further directed towards the A4M and their purported dedication “...to the advancement of technology to detect, prevent, and treat aging related disease and to promote research into methods to retard and optimize the human aging process” with the promotion of books like *Stopping the Clock for a Younger, Sexier, Happier You*, and *Brain Fitness: Anti-Aging Strategies for Achieving Super Mind Power*. These critiques culminated in a \$150 million lawsuit and a counter suit, both of which were dropped in November, 2006, under undisclosed terms.

provoking questions which explore the repercussions of future technologies capable of delaying aging and/or extending the lifespan.

Sociologists have focused on illicit drug use, including human growth hormone²¹ (HGH), among athletes (Hoberman 2005; Monaghan 1999), and the use of HGH as biomedical enhancement (Conrad and Potter 2004). A number of researchers (Nichter and Thompson 2006; Nichter 2003; Goldstein 1992; Glassner 1990) have done extensive work to document participation in a wide variety of health movements including engagement in fitness, nutritional, and vitamin/supplement regimens that may intersect with the goals of the “healthy life extension community.” A national survey titled “Anti-Aging Medicine, Vitamins, Minerals and Food Supplements,” conducted for the International Longevity Center, and administered in October 2002, based on 1,010 telephone interviews with adults, revealed that while only five percent of respondents agreed with the idea that the aging process could be stopped, life style factors were widely implicated in helping people avoid growing old. For example, three out of four respondents believed that regular exercise and not smoking could provide “a lot” of help in keeping people from growing old.

²¹ HGH is by far the most controversial weapon in the anti-aging arsenal. A substance produced in the body, it was synthesized by several biotech companies in the early 1980s. The first products were approved by the FDA in 1985 to help short children grow taller. Lately the anti-aging industry has latched on to HGH as a tool for boosting immunity, memory, heart function, muscle mass, and more. Enormous controversy has existed in recent years around the use of HGH among athletes, as is evidenced by the detailed coverage of HGH testing among Olympic athletes in the 2008 Beijing games. It is arguable, in fact, that for some athletes, particularly those who are considered “older” by performance standards, like, for example, five time Olympian, 41-year old swimmer, Dara Torres, it is almost a case of “guilty” before proven “innocent,” as speculations fly about her potential use of HGH and other performance enhancement drugs following her remarkable record-breaking performance and silver medal win in Beijing. *Game of Shadows*, published in 2006, and written by Mark Fainaru-Wada and Lance Williams, created another stir by alleging that baseball slugger Barry Bonds took HGH, among other performance enhancers.

While this will be explored in greater detail elsewhere in this paper, it is also important to situate the broader scope of this research through the ways that it is informed by the heightened focus on the individual body, firmly established in sociology over the last four decades (Shilling 2003, 2005; Turner 1996; Frank 1990), aptly captured by Turner's (1992) coining of the term "somatic society," and perhaps institutionalized in part through the inception of a scholarly journal in 1995 dedicated specifically to the topic "Body & Society." Having described this heightened interest in the body, this research is guided by the ways that feminist scholars (Brooks 2008; Gullette 2004; Holstein & Minkler 2003; Twigg 2000; Woodward 1999; Davis 1995; Grosz 1994; and Martin 1989, 1994) and other cultural critics have revealed that bodies are not treated equally. For example, in Western culture women have long been considered aged before men (Haiken 1997), with the dominant social construction of the aging experience framed by images of decline (Gullette 2004; Woodward 1999).

Resistance to biomedical rhetoric associating aging with the decline narrative has been evidenced by the discourse surrounding "successful aging" (Rowe and Kahn 1999) and "agelessness," (Andrews 1999) initially inspired as a counterweights to long-standing negative stereotypes of older people as poor, frail, and powerless (see Binstock 1983). However, while the fields of medicine and social work still often embrace the ideals associated with "successful aging," the concept has suffered considerable criticism from critical gerontology in recent years as potentially victim-blaming, unrealistic, and limiting (Katz 1996), while it has been co-opted by marketers promoting consumer aging (Estes, Biggs and Phillipson 2004), who depict the aged as financially and physically

independent and capable, in an effort to tap into the “gold in gray” (Minkler 1989) which comprises the senior consumer market.

The experience of bodily aging is positioned within a contradictory narrative of decline and agelessness where body techniques are emphasized simultaneously through the medicalization of the body and the celebration of lifestyles affiliated with the “golden-age” (Powell 2006; Biggs and Powell 2001:97). Through the use of ageless and classless models, depicted in beige so as to also erase race, the issues of age, class, and race become depicted as “non issues” (Willis 1992:120) marking obvious contradictions with lived experience. As critical aging scholars have suggested, aging in the 21st century has been referred to as a “cultural bricolage” marked by “diversity, fragmentation, [and] blurring boundaries between young and old in a dechronologized life course” (Rexbye and Povlsen 2007:76). It has been suggested that this may lead to a decline in rigid age-based expectations and greater flexibility for those throughout the life course in terms of negotiating identity and self-representation (Biggs 1997). Yet as Biggs and Powell (2001:96-97) suggest, narratives of biological decline often coexist with narratives of agelessness “... talking to different populations and promoting contradictory, yet interrelated narratives by which to age.” In this respect, flexibility and fluidity of body and identity may lead to more confusion than clarity, and empirical evidence suggests that the experience of bodily aging may even evoke feelings of guilt among women (Brooks 2008). Recognizing this caveat, this research responds to Margaret Gullette’s (2004) call for scholars to think about the ways that the field of age

studies can reveal, promote, and nurture positive narratives of age as I consider the complex ways that age is discussed through an analysis of individual narratives.

At the turn of the 21st century, a wide range of beliefs and practices are implicated in the ability to potentially retard bodily aging and/or extend bodily life. Through in-depth interviews with men and women engaged in body regimens associated with the “healthy life extension community,” my own research explores the motivation underlying and inspiring such pursuits, which includes a consideration of how an engagement with body regimens may serve to shape, inform, and construct identity. Inspired by my own interest in understanding the meaning of individual participation in body regimens implicated in potentially slowing down bodily aging and even extending bodily life, I provide insights from in-depth interviews to explore individual involvement stories in such practices. Hand-in-hand with providing an overview of the political, social, and historical milieu from which current efforts to potentially delay aging and extend life evolved, I consider issues that include efficacy and embodiment, to better understand the day-to-day experience of those engaged, and through this effort, I turn to sociological concepts like, for example, “risk,” “control,” and “release.” I explore the social construction of “healthy” and “aging” bodies in multiple ways as I look more closely at the relationship between the individual and the social body, and this includes a consideration of the theories of bodily aging supported by different practices, along with an exploration of the external challenges experienced by those involved in such pursuits. Keeping in mind the reference to Pitts’ (2007) call in the beginning of this chapter – to focus not only on meanings but also on means – I explore the technologies implicated in

potentially delaying aging and/or extending the lifespan to gain insights into the means of “healthy life extension” practices.

Premised on the tradition of Symbolic Interaction (SI) (Prus 1995; Karp and Yoels 1979, 1993; Blumer 1969; Cooley 1962), which purports that humans behave towards things on the basis of the meaning that they have for them, meanings are derived from social interaction, and meanings continually transform through ongoing interpretive processes used during social encounters, this analysis will consider how people engaged in body regimens associated with the healthy life extension community work to construct (and reconstruct) meaning through their efforts. Using the sociological construction of knowledge perspective (Schutz 1970; Berger and Luckman 1967), which reveals the relationship between human thought and the social situation in which it develops, I explore the ways that body regimens are justified, created, and experienced through cultural and social processes. Premised on the idea that people’s beliefs about the world are socially constructed through language and structured and maintained through their use of narratives (Gergen 2000), my research will explore the way these realities help to shape beliefs and practices and to even constitute self identity.

While the social construction of meaning is central to constructionist perspectives, variation exists within the constructionist approach. In trying to make sense of the diversity that exists from within this perspective, Holstein and Gubrium (2007) detail two different approaches to the social construction of the life course. One approach concentrates on the ways that meanings are constructed over the life course while the other approach focuses on the ways in which the life course itself is socially constructed

and used as an “interpretive resource” for determining the meaning of experience as it relates to time (Holstein and Gubrium 2007:337). My own research is positioned more within the confines of the latter project since I am not looking at the experience of a given chronological age, per se, but rather at how people construct and use the discourse of age rhetorically as they describe their engagement in a variety of body regimens associated within the “healthy life extension community.”

Unlike the stacks of books, manuals, and reference guides currently available in a bookstore near you, chalk full of the “secrets” of longer life and a presumably younger you, this dissertation is not about “what works” and what doesn’t. I leave that pursuit to the scientists and marketers. By considering the social-psychological aspects of consumption and practice as it relates to various “techniques of the body” (Mauss 1972[1934]), I explore the link between body regimens and the construction of self and group identity – while considering the ways that the meanings of such practices intersect with the broader culture. With an interpretive framework leaning on symbolic interactionism and the sociology of knowledge, my project is informed and constructed out of an eclectic body of literature with topical areas that include sociology of aging and the life course and critical gerontology, medical sociology, the sociology of health and illness, and the sociology of the body. Rather than looking at individuals who are utilizing practices associated with the “healthy life extension community” as “consumers,” or “passive receptors of discourse” (Gubrium 1993:97), through my research I hope to provide an outlet for people engaged in these regimens to have a voice. The subjective interpretation of meaning is possible only through attempting to gain an

understanding of the motives which encourage a specific course of action, yet, as Schutz (1970) aptly realized, actions have different meanings for different people.

While this study may appear to be focused on a select minority, I argue that my work has much broader implications given our current historical, social, and cultural milieu. Aging, like gender, race, sexuality, and disability, is not a value-neutral term; an exploration of its meaning tends to reveal important insights about a given historical and cultural period. Suggesting that aging is socially constructed does not mean that it does not have a history or that it is not real. The concept of aging is a powerful critical lens through which ideological mechanisms that produce meaning are revealed. It is my opinion that this research is actually at the heart of one of humanity's most puzzling and existential experiences, since it involves the ways people understand, define, and grapple with health, the process of aging, the "problem" of the body, and ultimately, perhaps, with death, in what has been described as the era of "biomedicalization" (Clarke et al. 2003),²² and the age of "biological control" (Wilmot et al. 2000, as cited in Franklin 2005:66).

Sample & Method

Sample Overview

The participants in my study are drawn from what others have distinguished to be three areas within the "healthy life extension community," and this includes: 1)

²² "The shift to biomedicalization," as detailed by Clarke et al. (2003:164) "is a shift from enhanced control over external nature (i.e.: the world around us) to the harnessing and transformation of internal nature (i.e.: biological processes of human and non human life forms), often transforming 'life itself.'"

individuals engaged in the practice of caloric restriction optimal nutrition (CRON), 2) people utilizing anti-aging or age-management medicine, and 3) individuals involved in fitness/health regimens who believe that such practices may delay bodily aging and/or extend life. Recognizing the fitness/health enthusiast category as the most amorphous, as explained by the Longevity Meme²³: “It can be a short jump from ‘health advocate’ to ‘healthy life extension advocate,’” as professionals and the mass media increasingly implicate practices associated with lifestyle, nutrition, supplementation, and fitness, as having the ability to potentially delay aging and/or extend longevity.

It is important to note that blurred boundaries and overlaps exist between groups, and in certain instances, individuals in a particular grouping may have, at one time or another, engaged in practices associated with the other groups. Despite overlaps and commonalities between groups, a number of practice-specific differences exist, due, for example, to the differing (and sometimes contradictory) theories of aging and life extension associated with the scientific research guiding each approach. While I explore this issue in much greater detail in Chapter 6, in the mainstream press and in the scientific literature, caloric restriction is linked to a potential deceleration in bodily aging and an extension in lifespan through a decrease in calories combined with “optimal” nutrition, defined as at least 100% (and often times more) of the U.S. Recommended Daily Allowance (USRDA).²⁴ The theory behind anti-aging or age management medicine

²³ Refer to http://www.longevitymeme.org/topics/healthy_life_extension_community.cfm

²⁴ U.S. Recommended Dietary Allowances (USRDA) were first created during the 1940s by a committee appointed through the U.S. National Academy of Sciences in an effort to research nutritional related issues that may have an influence on national defense (Nestle, 2002). The committee devised nutritional standards and nutritional recommendations. The present day RDA comes from the U.S. Department of Agriculture (USDA) and the recommendations differ according to factors like gender, age, pregnancy

tends to involve the identification of, and supplementation for, age-based hormone and nutritional deficiencies to stave off aging. While fitness and health regimens are premised on a “use it or lose it” ethos, touting the link between optimal health, “age management,” longevity, and daily exercise (paired with specific dietary routines, vitamins, and supplements, along with other types of bodywork practices).

Caloric Restriction Optimal Nutrition (CRON) Participants

In 1934, while doing cancer research, Cornell University scientist Dr. Clive McCay found that rats fed nutritious diets with restricted calories lived significantly longer than rats fed “normal” diets. Four decades later, this calorie restricted approach to health and aging was popularized by UCLA professor Dr. Roy Walford, and by the 1980s, a number of scientists were using a variety of species to investigate physiological changes induced by nutritionally dense, calorie restricted diets (Harrison and Archer 1989; Weindruch and Walford 1988).

Individuals interested in the practice of caloric restriction (CR) were bolstered by research findings from Walford’s experience serving as staff physician for the seven members of Biosphere 2.²⁵ Because food did not grow as well as anticipated, Walford coached the team in his own practice of CR and this led to large scale declines in blood pressure, blood cholesterol, blood glucose, and insulin (Walford 2000). A January 2006 study of 25 CR enthusiasts published in the *Journal of the American College of*

status, and activity levels. More recently, the Food and Nutrition Board of the Institute of Medicine, has introduced the Dietary Reference Intakes (DRI) as a source for dietary recommendations in an effort to enhance the RDA by also offering additional recommendations including the Estimated Average Requirements (EAR), the Adequate Intakes (AI) and the Tolerable Upper Intake Levels (UL).

²⁵ Biosphere 2 is a 3.15 acre structure built as an artificially enclosed eco-system in Oracle, AZ, to explore the possibility of space colonization, and used between 1991 and 1993.

Cardiology revealed that individuals who consume thirty percent fewer calories have lower blood levels of inflammation-linked proteins and more “flexible” hearts that were said to appear to be around 12 years younger. Based on these findings, Dr. Luigi Fontana and colleagues (see Meyer et al. 2006) conclude that CR reduces inflammation, which generally increases with age and makes body tissues stiffer. With more than 3,000 current members and periodic national conferences, the Caloric Restriction Society formed in 1994, with the slogan “Fewer calories. More Life,” in order to provide a forum of scientific and social support for people interested in pursuing the caloric restriction optimal nutrition (CRON) lifestyle.

Practitioners of CR (sometimes self-referred to as “cronnies”) engage in careful dietary tracking in an effort to get 100% or more of the USRDA, while consuming reduced calories, typically between 1,000 and 1,800 per day, or between 20 and 50 percent less than an average American diet (Walford 2000).

Anti-Aging Medicine Participants

Described as a health care paradigm focused on prevention, early detection, and the “reversal of aging-related diseases,”²⁶ anti-aging medicine became a formal specialty in 1993 when the American Academy of Anti-Aging Medicine (A4M) was founded.²⁷ A turning point moment for the field of anti-aging medicine includes research findings from the lab of Dr. Daniel Rudman et al., (1990) which reported that growth hormone injections on one dozen older men at VA hospitals in Milwaukee and Chicago in 1989

²⁶ Retrieved on January 11, 2008, from <http://www.worldhealth.net/p/96,341.html>

²⁷ Two osteopathic physicians, Dr. Ronald Klatz and Dr. Robert Goldman, co-founded the American Academy of Anti-Aging Medicine (A4M) in 1992 in order to create the medical specialty of anti-aging medicine.

resulted in increased bone density, skin thickness, and lean muscle mass, combined with reductions in body fat levels. This tentatively proposed link between human growth hormone (HGH) and rejuvenation in men had far reaching ripple effects, reigniting the century-old interest in the use of hormone therapy to retard the aging process,²⁸ perhaps particularly the male aging process, since female aging had long become an established site of hormonal interventions with the rise of hormone replacement therapy (HRT).

An expanding interest in the field of anti-aging medicine has been documented in recent years. For example, in 1995, an estimated 1,400 people attended the organization's annual Anti-Aging Medicine conference, and by December, 2000, the A4M claimed a membership of more than 10,000 people, representing around 50 countries. Doubling in size over a period of eight years, in 2008, the A4M claims to represent a combination of three organizations with more than 20,000 members who represent over 100 nations. In an effort to further legitimize the field of anti-aging medicine, the A4M established a specialty board certification for medical professionals in 1999, and the number of popularized books on the topic surged with titles going so far as to detail longevity programs for household pets (e.g. Simon and Duno 1998).

The terms "anti-aging," "age management" or "longevity" medicine are used to describe a wide range of practices which may include aesthetic procedures (like Botox and topical skin creams), hormone supplementation (including, for example, the use of testosterone, progesterone, dehydroepiandrosterone (DHEA), melatonin, "bio-identical"

²⁸ This research was further bolstered by the fact that synthetic growth hormone (GH) was introduced to the market for the first time in 1985. Before this development, the hormone was obtained by harvesting the pituitary gland of the deceased; this made GH not only extremely expensive but also dangerous since it had the potential to transmit disease.

hormones, and HGH), medically supervised weight loss regimens, stress management, massage therapy, and pharmaceutical grade vitamins.

Fitness Regimen Participants

With roots that draw back to earlier times (Green 1986; Whorton 1982), the present day health and fitness boom is often situated in the late 1960s and early 1970s (Goldstein 1992), as the link between exercise and mortality re-emerged (Gillick 1984) to inspire the 1970s “health movement” (Goldstein 1992), often paired with challenges to traditional medicine (Starr 1982; Sontag 1978; Illich 1975; Zola 1975). The U.S. Surgeon General’s Healthy People Report (Department of Health Education & Welfare 1979), first issued in 1979, touted the importance of cardiovascular exercise, in combination with nutrition and other lifestyle practices, in order to “increase the quality and years of healthy life ...in an effort to educate people on how they could take more personal responsibility for their health through wise lifestyle choices.”²⁹ Hand in hand with government-sponsored public health initiatives, corporate-sponsored “wellness programs” were also introduced during this period (Ardell 1984), as activities such as jogging and aerobics captured growing public interest.

With chronic and degenerative diseases more and more regarded as manifestations of growing older, aging has been increasingly constructed as a medical dilemma requiring management (Estes and Binney 1989). What has been referred to as the “biomedical model” of aging depicts the aging process as pathological and positions

²⁹ Retrieved on March 15, 2007, from <http://www.surgeongeneral.gov/library/history/biorichmond.htm>

aging within a range of discourses that include theories of decline and decay, where the aging body is juxtaposed against a presumably healthy, active, youthful normative ideal (Powell 2006; Phillipson 1998; Achenbaum 1978). As the biomedical view of aging associated aging with chronic disease, and chronic disease onset was directly linked to “lifestyle factors” including diet, exercise, and stress reduction (Fitzpatrick 2001), the relationship between lifestyle practices and delaying bodily aging (“successful aging” and “agelessness”) has become increasingly blurred.

Certainly the most amorphous category in my study, the health and fitness enthusiasts that I interviewed represent individuals that were engaged in what could be described as extremely dedicated daily practices which included combinations of fitness, diet, and often times elaborate supplement and vitamin routines, paired with an avoidance of smoking, and moderate to zero alcohol consumption. These were not occasional participants in sporting activities – these were individuals that were deeply engaged in and committed to multifaceted health and fitness routines. Engagement in fitness activities and body work spanned a broad spectrum to include jogging/running, biking, swimming, racquet sports, team sports, walking, aerobics, pilates, yoga, the use of a wide range of exercise equipment, meditation, massage, homeopathy, aromatherapy, and acupuncture. Dietary practices varied to include vegetarianism, along with low-fat, low-carb, and high protein regimens. Vitamin and supplement regimens were commonplace and specialized.

Sampling & Recruitment

The methods that I used do not facilitate or require a scientifically designed random sample or an empirically “representative” sample since the results are not meant to be generalized to the larger population. My sampling approach is best described as purposeful sampling (Strauss and Corbin 1994), with my primary goal focused on getting near equal amounts of interviewees for each of my three sub-groupings (at least 10). I tried to recruit a balance of both men and women, and I was successful in recruiting people of differing ages with a variety of occupational backgrounds. Because of the amorphous nature of the health and fitness group, I was more selective in this category, interviewing only those individuals that were extremely dedicated, on a daily basis, to these practices. Presenting my research topic, during interviewee recruitment, as a study of people engaged in body regimens which were thought to potentially delay aging and/or extend the lifespan, my health and fitness sample includes those individuals who feel that their practices have some type of influence on bodily aging and/or lifespan.

Unfortunately, my sample is largely homogenous along a number of lines, most especially in terms of ethnic/racial diversity and, to a somewhat lesser extent, socio-economic status (SES). The challenge of interviewee recruitment largely limited my ability to be more representative and I see this as a limitation to my study from which future research would benefit.

The data collection period for this study spanned over a period of four months, ending in November 2007. All of the interviews were digitally recorded and transcribed. Twenty of the interviews were done over the telephone and twenty-four were completed in-person. Gaining access to study participants is an obvious milestone for qualitative

researchers. In order to recruit interviewees in a cost effective and timely manner, I used a snow-ball sampling (Patton 1990) approach which is a method of convenience sampling where individual respondents are used in order to seek assistance in locating additional study participants. Through snow-ball sampling, and by contacting and networking with personal acquaintances, both face-to-face and on-line, I was able to complete all 44 interviews over a four month period of time.

Sample Demographics

This qualitative study consists of 44 in-depth interviews with individuals engaged in practices situated within the “healthy life extension community” and who range in age from 22 to 68 years, with a mean age of 47. Thinking about my sample in chronological terms, the largest percentage (36%, n=16) of respondents were in their 50s, followed by 20 percent (n=9) who were in their 40s. Equal amounts were in their 30s (n=7) and age 60 or older (n=7) and approximately 11% (n=5) of the sample was in their 20s.

The sample included 26 women and 18 men, and almost the entire sample was Caucasian (with the exception of two interviewees, one person who was Hispanic and another of East Indian descent). Because of where I conducted the research, the majority of participants (64%) live in the Southern U.S. (n=28) followed by 18% from the Northeast (n=8), 14% from the West (n=6), and 5% from the Midwest (n=2).³⁰ Using educational attainment and occupational status as markers of socioeconomic status (SES), participants in this study are for the most part members of the middle and upper middle class. The majority of the sample is employed in the professional sector (52%), which

³⁰ Totals may not equal 100% due to rounding.

represents a range of venues including, for example, medicine, law, education, science, business, and public service. Participants also include the self-employed and entrepreneurs, students, stay at home parents, and retirees. More than half (57% or n=25) of the sample completed some college or college. Eleven percent (n=5) completed high school, and 32% (n=14) completed some type of graduate or professional school program.

Referring to each of the three subgroups within my study, for those interviewees engaged in the practice of CRON, my study includes a total of 15 interviews with nine women and six men, with a mean age of 44. For those interviewees who had visited an anti-aging medical provider and/or tried some type of “anti-aging” medicine, the sample includes a total of 15 interviews with nine women and six men, with a mean age of 53. For those interviewees who were engaged in health and fitness practices, the sample includes a total of 14 interviews with eight women and six men, with a mean age of 46. The sub-groupings were nearly identical in terms of educational attainment and occupation. The greatest variation between the sub-groupings occurred in terms of regional location, with approximately two-thirds of those respondents in the anti-aging and fitness regimen categories located in the South, compared to just one-fifth of those practicing CRON. Regional variations may be a limitation to this study that future research could explore.

Methods

The primary data for this research project involved qualitative, in-depth interviews. Starting with broad open-ended questions guided by a semi-structured survey

guide (see Appendix B for more specifics), participants were initially asked to provide their “involvement story,” – detailing how they got started in practicing/using various “techniques of the body” (Mauss 1972[1934]) which in this case centered around CRON, anti-aging medicine, and fitness routines. This included an exploration of “turning points” (Strauss 1959), to explore, for example, factors which interviewees described as particularly important to their engagement. The importance of this focus became readily apparent early in my interview process when I realized that people explained engagement in practices associated with the “healthy life extension community” through the telling of detailed life histories that typically started in childhood.

Using a grounded theory (Charmaz 2006; Strauss and Corbin 1990, 1994; Glaser and Strauss 1967) approach to my interview data, I engaged in a simultaneous process of data collection and analysis, in an effort to generate theory from my data. I utilized grounded theory as a way to identify and organize important and recurring themes from my interviews as I developed a coding scheme for my data analysis. I also partook in content analysis (Glesne and Peshkin 1999) in order to identify and organize important themes, metaphors, patterns, and units of meaning (including sentences, words, and rhetorical structures) in my interviews. As I coded my data, I engaged in the process of frequent memo writing and journaling. I paid special consideration to the common understandings which emerged to give meaning to individual experiences and this helped me to identify broad themes and sub themes through which to organize my data. This iterative analytical process required me to continually work back and forth between analysis, writing, and the data, a process that also proved helpful in assisting me to adjust

and fine-tune my interview guide. What began as an overly cumbersome set of questions, ended with a small index card of core thematic areas. I present both the vertical and horizontal dimensions of my data as I look across and within each of the groups that I explore.

The interviews ranged in length from 1 hour to, on occasion, 6 hours or more, over the process of several interviews. I was responsible for personally transcribing all of the digitally-recorded interviews, in full, and coding the data by hand. While overwhelming at times due to the sheer enormity of the task, I believe that the process was an important part of my analytic immersion, enabling me to get as close as possible to my data.

Another component to my research process, which certainly gave me greater insights into the worlds of my interviewees, involved my own engagement in some of their activities in an effort to gain a greater understanding of the practices of various body regimens in natural situations and environments. For approximately two years, I have “hung out” in three online groups that specifically discuss the merits, challenges, and latest research related to CRON and other biogerontological research efforts. This experience has enabled me to gain many insights into the concerns, debates, and areas of interest that a lot of the practitioners may have. At one point in this process, I actually attempted my own version of CRON, dusting off the old digital scale my husband used as an anthropology grad student to weigh faunal remains, in order to track my own nutrition and calories in the methods recommended by fellow practitioners.

In order to gain a richer understanding of the world of anti-aging medicine, I attended a national meeting of the American Academy of Anti-Aging Medicine (A4M) in which I took detailed field notes. Following this immersion, I interviewed and spent some time with an A4M certified doctor to gain insights from a “practitioner perspective.” During this period, I was also able to attend a local health fair which included an “anti-aging medicine” booth, where I sat, observing and listening to individual reactions as potential future clients were presented with information about anti-aging medicine.

While the milieu of the health and fitness enthusiasts is one in which I am very familiar, having been raised in the home of a 1970s self-proclaimed “health nut,” during this research I joined a gym and spent many hours there both participating, and observing, in order to try to gain insights into the less discursive dimensions of engagement (embodiment, affect, emotion). I participated in a couple of online groups focused on nutrition, fitness, lifestyle, and longevity, and at one point in this process, I also spent a period of three months working with a fitness trainer to learn more about the ways that “a teacher of fitness” presents the discipline. Intrigued by the popularity of yoga among my interviewees, which included popular claims that it could “limit the effects of aging,” I also delved into what was an entirely new experience (for me), frequenting a local yoga studio to gain insights into both “the scene” and the embodiment of such practice.

This ethnographic research is not conducive to generalization, yet it did give me insights into the worlds of my interviewees that I otherwise would not have had. This has

likely provided me with a greater sensitivity to, and understanding of, those individuals who were kind enough to share their time, their insights, and their lives with me to make this research possible. The emotional and embodied experiences of being a part of such efforts led to sensitivities and insights I would not otherwise have had, since, as suggested by Pfohl (2007:663): “We often learn more about the constructions we inhabit by being mindful about our emotions and bodily sensations than we do by attending to cognition alone.” While I certainly weave aspects of my own experience into this dissertation, I respect Riessman’s (2002:209) call to situate ourselves as researchers in responsible ways and not merely in confessional terms.

While debate ensues about the applicability of the concepts of validity and reliability to qualitative research, my research is informed by the work of Lincoln and Guba (1985:30) which substitutes “credibility” for validity and “auditability” for reliability. Credibility, for example, refers to “...such faithful descriptions or interpretations of a human experience that the people having that experience would immediately recognize it.” The strategies I utilized in order to obtain credibility include debriefing with colleagues, using multiple sources of data, engaging with informants for a prolonged period of time, providing thick description, and maintaining a journal to maximize reflexivity. In an effort to achieve auditability, I attempt to provide adequate details of the research setting, the data collection process, the study participants, and the data analysis, so that other researchers can follow my analysis. I also recognize and describe my own position in the project.

The goals of my data analysis are driven by an interest in achieving a greater understanding (Benner 1994) of individual engagements in body regimens associated with the “healthy life extension community.” While I recognize that grounded theory is positioned within what has been categorized as a “realist epistemology,” I am sensitive to the current “crisis of representation” in sociology (Denzin 1997), and my own research does not claim to make broad summaries or overarching generalizations. Yet through conversations, “hanging out,” and even participating in the worlds of those engaged in the “healthy life extension community,” my work strives to add to the ongoing body of research (Martin 1994) which explores the interplay between the individual, the group, and the broader socio-cultural milieu.

Research Notes

Direct quotations from study participants are identified by one of three regimen groupings which include “CR” for “caloric restriction optimal nutrition,” “AA” for “anti-aging medicine,” and “FR” for “fitness regimen.” In an effort to protect the privacy of those interviewees that agreed to partake in this research endeavor, only pseudonyms are used in the event that a name is mentioned. Further, when referring specifically to a respondent’s age, interviewees are divided into three categories, which includes those interviewees in their 20s and 30s (denoted by 2/3), those in their 40s and 50s (denoted by 4/5), and those sixty years or older (denoted by 60+). While listing gender or a specific age might not seem like an identifying factor, several interviewees expressed a reluctance to reveal this information. Respect for the privacy of my interviewees is of primary concern.

Brief Chapter Overview

Chapter 1: *Body Regimens Implicated in Delaying Aging and/or Extending Life – A Brief Overview and Introduction*

Chapter 2: *Body Regimen as “Career”*– Recognizing that engagement in practices associated with potentially slowing down bodily aging and/or increasing the lifespan cannot be regarded as an isolated event, this chapter details the engagement process, which includes identifying the course of the “body regimen career” as it involves questioning tradition, researching, experimenting, and teaching/mentoring others. Core similarities among those partaking in these varied practices associated with the “healthy life extension community” are identified as a marked ambivalence towards “mainstream” medicine is highlighted.

Chapter 3: *Body Regimens and the Construction of Identity* – After examining the concept of identity, this chapter explores the ways that people’s engagement in body regimen careers is influenced and shaped by social interaction. Identifying the concepts of specters and ideals, this chapter looks at the ways people use the example of others to help define and frame their own efforts. Despite implications in the literature which link engagement in practices associated with health promotion to moral rectitude, this chapter reveals some of the ways that people strive to hide such pursuits, in an effort to “pass” as “normal” and to avoid being labeled a “health nut,” “freak,” or “odd ball.” Finally, this chapter explores the ways that certain interviews can be captured by different overarching

characterizations or “imagoes”³¹,” (McAdams 1997) which may intersect with a respondent’s attitude towards a wide variety of matters, including bodily aging.

Chapter 4: Responding to “Risk Society” with the “To Do” Imperative – This chapter begins with a brief overview of the sociology of health and illness, as the concept of health is explored and is positioned within the discourse of prevention and risk.

Regarding health more as a pursuit than a location, this chapter considers the ways that respondents discuss perceptions of risk as they intersect with engagement in particular body regimens. Despite the diversity of practices, this chapter reveals the ways that all of the interviewees are motivated by what is referred to as the “to do” imperative – a morally powered justification to engage in body regimen careers as a way to “take care.” This chapter concludes by considering some of the contradictions and challenges shadowing the imperative “to do.”

Chapter 5: Shared Grievances about Allopathic Medicine: the Encounter, the Outcome, and the “Political Economy of Illness” – This chapter details the critique of biomedicine leveled by each of the three sub-groupings in this study. While individuals engaged in each of the practices associated with the “healthy life extension community” are critical of aspects of biomedical practice, such denunciation is expressed through very different tactics. In contrast, pharmaceutical medications draw significant condemnation across the board, with a distinction made between medicines thought to tamper with nature and those thought to enhance. This chapter concludes by exploring the ways that some

³¹ “Imagoes” (Bruner 1986; McAdams 1997) are defined as personifications of the self that serve a dominant role in narratives by providing an overarching coherence to the multiple selves that make up a person’s life story. For the purposes of this research, I will explore what I refer to as the “survivor” and “defender” imagoes.

respondents focus their critique of medicine and illness causation at the macro level, looking at the role played by a variety of dominant societal institutions.

Chapter 6: *Metaphors of Aging: Consumption and the Social and Physical Body* – After providing an historical overview of the intersection between aging, consumption, and the body, this chapter explores the connections scholars have made between the individual and the social body. Looking separately at each of the three practices that are explored in this study, this chapter considers how individuals in each of the three groups understand the ways that their particular practices impact bodily aging. Turning to the use of metaphor, this chapter explores the interconnection between theories of the individual body and the social body, linking each practice to a unique overarching theme.

Chapter 7: *The Body Inside Out* – While the sociology of the body has a rich history of revealing the ways that the external body is marked by culture and is used to signal identity, this chapter considers the ways that the internal body is an increasingly important cultural site of difference. After providing a brief overview of the historical factors involved in the exploration of the inner body, this chapter employs the use of content analysis, paired with a focus on the use of metaphor, to examine the ways that interviewees discuss their inner bodies. Because technological intervention is such an important source of insight into the inner body, this chapter considers the ways interviewees use technology in their practices. This includes an analysis of technology’s “double edge” as technological intervention is depicted as both a source of comfort and confusion.

Chapter 8: *Embodiment and Body Regimen Careers: Exploring “Control” and*

“Release” – In an effort to capture the embodied experience of those engaging in the practices associated with body regimen careers, the concepts of “control” and “release” are first sociologically situated, and then used to explore the ways that people discuss their engagement. This chapter also explores the historical and present day reference to “energy” as it is linked to practices associated with delaying aging and/or extending life. Despite being implicated with delayed aging and/or extending life in the mainstream press, this chapter examines the ways that participant motivation is often more focused on the daily (and often times embodied) rewards of such engagement.

Chapter 9: Conclusion: *Body Regimen Careers Respond to the Problematic of Living* –

While it may seem obvious that a discussion of death permeates this project, this chapter begins with an exploration of the ways that engagement in body regimen careers most importantly provides people with tools for daily living. This chapter considers how body regimen careers may help to assuage the phenomenon of disillusionment with dominant societal institutions like mainstream allopathic medicine and traditional religion, while detailing the ways that such engagement provides people with an important sense of community and belonging. An examination of humor and humility as it relates to body regimen careers is also included. Implications for a more positive age studies are explored in an effort to provide alternatives to the discourse of decline.

Chapter 2: Body Regimen³² as Career

Describing his novel *Everyman*, as a “medical biography,” Philip Roth (2006) details a man’s life, from boyhood to old age, and ultimately to death, by using important health and illness markers to identify the passage of time. Much like a biography based on a person’s professional career, Roth’s story marks what could be considered a man’s “health & illness career,” which, in this case, includes appendicitis, aging parents, robust health, death, near death, heart problems, and recovery, in order to reveal the powerful ways that a medical lens colors a person’s life. With the body as work-site, jealousy, frustration, confusion, pleasure, and grief are but a few of the emotions that this health and illness roller coaster unveils.

In many ways, the motivation behind people’s involvement in various techniques of the body implicated in delaying aging and/or extending the lifespan is, like Roth’s “medical biography,” part of a much larger life story. Turning to the conversations that I had with 44 individuals engaged in a variety of practices associated with the “healthy life extension community,” which includes caloric restriction (CR), the use of anti-aging medicines, and engagement in health and fitness regimens thought to potentially prolong life and/or retard bodily aging, it became evident that this involvement, rather than an isolated entity, served to signify stops along the journey of a lifetime that includes trips to

³² The Latin origin of *Regere* is “to direct,” or control. Merriam-Webster's online dictionary defines regimen as *a course of action, systematic plan, designed to improve and/or maintain health*. It is important to note that my work has been inspired by Shilling’s (2003) focus on “body projects” as a way in which people in contemporary life strive to exert and maintain some degree of control over the body, yet I felt as though the use of the term “project” insinuated a clear beginning and end. I have opted, instead, to use the term regimen, in part because I think that it captures the ongoing nature of what my participants described, recognizing that body regimens are long term engagements, and that they are typically comprised of many different body projects.

the hospital and visits to doctors, experimentation with various supplements, vitamins, and dieting regimens, the use of pharmaceuticals, participation in a wide variety of exercise and sports practices, efforts to ward off sickness and foster health, mixed with the random reminders of the inevitability of mortality woven through the fabric of any life...as each person must grapple with "...the knowledge that you are born to live and you die instead" (Roth 2006:103).

Sociologist Everett C. Hughes, credited with introducing the concept of "career" to the Chicago School (Kempf 1987 as cited in Kyvsgaard 2003), defined "career" as "the moving perspective in which the person sees his life as a whole and interprets the meaning of his various attributes, actions, and the things which happen to him" (Hughes 1937:409-410 as cited in Karp 1996:16). While the term "career" is most commonly associated with a person's occupation, sociologists have applied the concept to a range of phenomena including: criminal pursuits (Ulmer and Spencer 1999; Glueck 1943; Sutherland 1937), deviance (Becker 1963), morality (Goffman 1959, 1968), depression and pharmacological usage (Karp 1996, 2006), alcoholism/drinking (Rudy 1986), sexuality (Marsiglio and Hutchinson 2002) and violence (Sutterluty 2007).

While recognizing, and trying to honor, the considerable amount of diversity in each of my interviewee's stories, I explore the concept of "body regimen as career," in an effort to make sense of the ways that the people with whom I spoke articulated and experienced such engagement in the "healthy life extension community" as a "process," a

“path,” and a “journey,” rather than a marked and isolated event.³³ Through the lens of symbolic interactionism (McCall and Becker 1990:6) it is apparent that social events do not just occur spontaneously, but rather, they happen in steps, with one thing, followed by another, creating new conditions and changing negotiations. The engagement in a body regimen career implicated in the management of biological aging is a process that entails a series of events, as it exists and even demands to be understood as part of a much longer and ongoing journey situated within a person’s “course through life” (Hughes 1997: 389). I am aware of and sensitive to the connotations that terms like “sequences,” “stages,” or “careers” hold in the present day interpretive milieu and I think it is important for me to note that my articulation of the body regimen career makes the experience appear more linear and stage driven than what could be described as the messy reality of a lived life since “...histories are both retrospective constructions and constructions-for-the-moment” (Holstein and Gubrium 2007:346). Through their efforts to make sense and order out of what is often times a very confusing past (present and future), my interviewees helped to articulate experiences that I have interpreted into a career sequence framework.

Describing their engagement in body regimen careers, respondents work to articulate the fact that this is not a temp job...this career is for the long haul, as “anticipation” in terms of an ideally healthy and presumably long-lived future becomes an end in itself (Willis 1992). Consider the ways that some of my interviewees talk about

³³ In her life history research on master elite runners, Emmanuelle Tulle (2007:336) notes, “the first striking finding to emerge was that informants saw themselves as engaged in a lifelong endeavor during which the building blocks of their present competence had been laid.” This perspective intersects with many of the stories I heard, particularly those told by people engaged in fitness regimens.

their engagement in body regimens: “I am going to be doing this for the rest of my life,” “This is not a diet that you do for a few weeks, you have to live this way,” “it’s always a work in progress,” “I am not even scratching the surface in how well you could live. You could spend a lifetime” and “...you have to do it for the rest of your life” or “it’s a process, it’s a process.”

The body regimen career shares some similarities with the work force career. For example, much like a professional career, people set and are motivated by specific goals that provide them with markers to measure career successes (and failures). Goals may vary depending upon the specifics of a body regimen career, for example, individuals engaged in the practice of CRON talk about daily goals in dietary terms premised around meeting, and even exceeding, the requirements of the USRDA. In contrast, individuals using anti-aging medicines may discuss goals in regards to specific blood hormone levels, while those engaged in fitness regimens may be more focused on personal goals that involve specific exercise times (in terms of things like speed, duration, and level of exertion).

Degrees of dedication frame careers – with some people depicted as extremely dedicated and others as “slackers.” Some people describe “going in phases,” “getting off track” – at certain points along the career trajectory, they feel more or less motivated, dedicated, and driven. Knowledge in the body regimen career is cumulative, building through time. As one respondent explained when talking about his own body regimen:

Once you build up a momentum, it is like a psychological momentum or an intellectual momentum, you get a certain, you cross a certain threshold of knowledge and it feeds off itself and you get more and more to add to what you have got and then its like, you just never quit. You never stop. [Male, AA, 4/5]

Through the career process, the perceptions of, and embodied experience of health and illness, the reactions of others, and ideas about current and future risk, all serve as ways to evaluate past, present, and future career performance. Career expectations based on chronological age are also articulated, and through these evaluations, people decide how well what they are doing is working – many times tweaking, making adjustments, exploring new strategies, and turning to mentors as guides. People check out on-going opportunities for “continuing career education,” in order to learn new information, strategies, and skills, which sometimes serve to enhance career “performance” and “satisfaction.” Articulating the body regimen career as journey, people repeatedly look back on career milestones of their past, while they also look ahead, anticipating different junctures in the march of time. Responding to the request for a search for the “sequences” (Hughes 1997) which develop through individual careers, insights from my research reveal what could be described as a very general trajectory through which many interviewees journey as they partake in their body regimen career.

The Body Regimen Career Trajectory

The initial phase involves some type of identifiable turning point which signifies a dramatic shift in consciousness, attention or awareness, when a person’s perspective towards health, illness, and their body is transformed, as their taken-for-granted world view is challenged. In this period of ambiguity, transformation occurs, since as suggested by Burke (1945:xix), without times of ambiguity, transformations would not be possible.

This shift in awareness is characterized by the experience of questioning tradition, which is sometimes paired with disillusionment and doubt, as that which was formerly taken for granted is now open to debate. The second phase of the body regimen career involves a period of intensive information gathering and research, as people piece together information on what could often be described as an entirely new way of being in, and seeing the world. The third phase includes a journey into personal experimentation as people use their bodies as labs to explore the effects of various regimens. The fourth and final phase captures the experience of accumulated knowledge which is sometimes articulated through the role of mentor, teacher, and/or coach.

By exploring these sequences which mark what could be categorized as a general trajectory, it is important to note that with 44 different interviewees, variation truly is the rule rather than the exception. Each person's body regimen career involves its own unique set of "unforeseen contingencies and irregularities" (Hughes 1997). As relayed by some of my interviewees, life events (for example, divorce) sometimes disrupt careers. Similarly, biological events (e.g. the birth of a child, the death of loved one, sudden sickness or chronic illness), as also pointed out by Hughes (1997:392), sometimes serve as interruptions to careers. Given the physicality of the body regimen career – where the body is indeed work-site, biological events often make people rethink their particular body regimens, sometimes inspiring them to try something different, or to more fully dedicate themselves to the practices in which they are currently engaged.

Perhaps it is also important here to note one of the primary differences between the work career concept, and the body regimen career, which my research describes.

Body regimen careers do not adhere to the pairing of timing with chronological age that may characterize the trajectory of a more traditional work career (Karp and Yoels 1981). For example, someone can be a “newbie” in a body regimen career and be considerably older chronologically than a person who started on this career much earlier and now serves as mentor and coach. Living in what is sometimes referred to as the “bible belt,” I have heard fundamentalist Christians refer to recent converts as “baby Christians” – these are not babies in terms of chronological age – they are babies in that they are just recently being inducted into the beliefs of Christianity. Baby Christians may exist at any point in the life cycle in the same way that people may be beginners or “newbies” at any age when they start their body regimen career.

Finally, in the introduction to this dissertation, I briefly alluded to the possibility that this research topic, while seemingly focused on a small sample of 44 individuals, may have broader implications given our current cultural³⁴ milieu. I want to elaborate more on this possibility. Sociologists have suggested that postmodern culture may be shifting away from a focus on “work” as the primary motif (Bury 2000:94). While the “structure of work” certainly remains, as suggested by Kholi (1988:372), “...the domain of consumption and leisure is expanding, in terms of available resources and culturally, in terms of basic values,” and I would add, as have others (Woodward 2002; Featherstone and Hepworth 1991; Giddens 1991), in terms of the construction of self-identity, as the body becomes something to be worked on as the representation of the self (Shilling

³⁴ When using the word culture, I am thinking of Holstein & Gubrium’s (2007:348) definition: “Culture is not a set of rules for reality construction; rather, it is a constellation of more or less regularized ways of understanding and representing things and actions that must be actively applied or enacted.”

2003). Just like do-it-yourselfers working on a home renovation project to tile the bathroom, my interviewees are do-it-yourselfers grappling with self-improvement projects posed by living in a flesh and blood body.³⁵ Armed with concern over potential risks, for example, body regimen careers may serve as home security systems, alerting people in advance to potential dangers. In other cases, body regimen careers may be better described as home maintenance, a necessary part of the inevitable upkeep of an ever changing, aging body. While they sometimes sought the help of others, my interviewees were all consistently their own project managers, engaged in ongoing restoration and revitalization through long term commitment. While I explore this issue in greater detail in the following chapter, for the present purposes, I think it is important to consider the possibility that if indeed “work” as “job career” is becoming less central, and consumerism and the related emphasis on “lifestyle” are becoming more, an argument could be made that the importance of body regimen careers to both the individual, and to the larger society, will likely increase.³⁶

Turning Points

Throughout the trajectory of body regimen careers, interviewees across all three groups that are part of the “healthy life extension community” talk about times of changed consciousness – new ways of seeing the world – which intersect with and inspire

³⁵ Yet in comparatively stark contrast to traditional do-it-yourselfers who are often motivated by trying to save money, for many of my respondents, money was not the concern at hand, rather, it was quality of care. Doing-it-yourself, in this example, is more of a position of privilege (rather than a choice driven by financial necessity) in terms of having the necessary time, money, access to information, and additional resources to partake in a body regimen career.

³⁶ It is also interesting here to note that some research (Crawford 1984) suggests that in recent years, health has shifted from a “passive” to an “active” status. This shift, which requires people to “work at health” (White, Young and Gillett 1995:159), may help to provide insight into the rise of the body regimen career.

their efforts. These turning points (Strauss 1959), epiphany (Denzin 1989), or “aha” moments are transformative. They offer new understandings, which may include changed perceptions of clarity and awareness, an altered sense of destination, and even entirely different maps through which to navigate their lives. Turning points may destabilize ontological security (Giddens 1991), or *umwelt* (Goffman 1971), challenging people to “change habits and readjust projects” (Giddens 1991:132), as they serve as “...points in development when an individual has to take stock, to re-evaluate, revise, resee, and rejudge...” (Strauss 1959:100).

Turning points are transitional moments in people's lives when people begin to see themselves and/or some aspect of themselves in a different way. This new perspective pushes people to change – this can signify a dramatic (and sometimes less dramatic) shift away from a former identity (Marsiglio and Hutchinson 2002; Karp 1996). A consideration of Travisano’s (1970) distinction between alternations and conversions becomes useful to articulate variations in experience. Some individuals engaged in body regimen careers associated with the “healthy life extension community” experience this new career journey as abruptly and distinctly different than past engagement, similar to the process of religious conversion, while others ease into it as a related turn, in a series of other related life transitions, that becomes a fitting piece of a larger puzzle, likened more to Travisano’s (1970) concept of alternation.

Individuals engaged in fitness regimens associated with the “healthy life extension community” were more likely to experience the body regimen career as an alteration while those utilizing anti-aging medicine, and, to a somewhat lesser extent,

those engaged in CRON, were more likely to experience this new way of being as conversion. This is often articulated by stark variations in childhood experiences. While individuals engaged in fitness regimens often recount growing up in active homes where athleticism, health and fitness was more emphasized, those engaged in anti-aging medicine or CRON were more likely to describe a childhood home life in dramatic contrast to the ways they currently live.

Comments which emphasize greater cohesion between past and present, positioning engagement in regimens linked to the “healthy life extension community” as alternation, include the following examples:

When I had just finished Kindergarten...my parents started focusing on teaching me how to swim...they brought me to a pool that had a very organized program for children and they enrolled me in it...That is one of the things that I am so grateful for because I didn't come into it [interest in longevity, fitness] like a lot of people where all of a sudden at 30 or 40 you realize that you are not in shape, its just, its always been a part of who I am and so I don't think this is the case with a lot of people. [Female, FR, 4/5]

As I child, I was always very active. My family is a very athletic type family and as a child we were always you know, outdoors as children, so I think it is sort of embedded in me as a child, that you get outdoors and you get fresh air and you have exercise and that type of thing, so, I think that is something that just carried on from my childhood. [Female, FR, 4/5]

My dad was an athlete, he coached division 1 wrestling, played football...he was always doing various physical activities, so I did too. We grew up that way. I mean...I can remember when I was five, him getting out the jump rope and we'd jump rope in the yard. [Female, FR, 4/5]

Basketball, softball, you name it...my whole childhood life, I was playing sports...I always had the best times of my childhood with my cousin...I did always want to emulate him, and he was the athlete until I kind of took that role a little bit. I took it to the next level, I think, and I did more sports, and I think I was a little better at it, than he was...[Male, FR, 2/3]

To a degree, these memories stand in comparatively stark contrast to statements made by many of the respondents engaged in anti-aging medicine or CRON, who more

often than not, describe childhood memories that are marked by contrasts to their current practices.

My parents were smokers and my dad was a heavy drinker and we ate the typical junk food that everybody ate, you know...Zero focus on nutrition and health matters. [Male, AA, 4/5]

We thought we were always going to be fat...my whole path to better health and eventually to the practice of CRON, happened when I moved away from the influence of my family. [Male, CR, 4/5]

There was always this battle with the family tendency towards overweight... there were always huge quantities, and we ate large quantities...and my mother...she is funny because she considers an interest in fashion and how you look to be vain whereas I see it as an investment in my health and the aging thing. [Female, CR, 4/5]

I spent an entire two years of my life in the hospital when I was a child, in few month stints...when I was six and eight, and there were times that I would wake up screaming in bed because of the pain...and I remember that pain getting worse when I got older...I was told, when I was a child, that I wouldn't grow up and that I wouldn't walk and that I wouldn't be able to have children. [Female, CR, 2/3]

Points of transition – of changed awareness – typically occur at multiple junctures along a person's body regimen career. People repeatedly recount multiple turning points that sometimes dramatically, and other times, more subtly, inform, guide and shape their journey. Some of the people that I interviewed had experienced their first turning point decades prior to our conversation, while for others this feeling of transformation, transition, and changed awareness was much more recent. Marking the course for all interviewees engaged in "healthy life extension" body regimen practices was a turning point that involved questioning expectations associated with chronological views of aging, and a biomedical discourse pairing aging and bodily decline. For the biomedical model, "growing old would primarily be a process of inevitable physical and mental 'decline' and of preparation for the ultimate ending: death itself" (Powell 2006:43).

Rejecting the inevitability of the biomedical model marked by predictable chronological decline, many of my interviewees sought out an alternative course that included practices thought to potentially slow down aging, and ultimately, extend the lifespan.

While each of my interviewees' experience is certainly unique, most of the people that I interviewed recounted certain key identity turning points in their body regimen career. I will explore each of the following:

1. Questioning tradition – Things aren't what they seem
2. Researching alternatives – Gathering information about a new trade
3. Experimenting -- Using the body as a lab
4. Teaching & Mentoring -- Serving as a guide to others

Questioning Tradition

The questioning mind is dangerous. Some people don't like that type of person. They don't like what that represents so you have to be careful...if you have this questioning approach, that sometimes is scary maybe, but it is the only way for enlightenment or the finding of truth, and that is what science and/or philosophy has always been about, the finding of truth... [Male, AA, 60+]

I once went to a doctor who said that I was a very difficult patient. She said, "You know, most patients come in here and listen, and all you want to do is ask questions!" [Male, AA, 60+]

The first phase in the body regimen career journey is perhaps the most powerfully transformative. I say this because it involves a break from tradition – an awareness of new and different ideas that the person may have never before considered and/or experienced, as well as a different regard for past behaviors and ideas that may have been previously taken for granted. For many, this generates dramatic feelings of pain, disillusionment, and anger. For others, it is the source of inspiration, hope, and pleasure.

The most dramatic and pain-filled stories of questioning tradition,³⁷ which generally involve a time of personal crisis and suffering, tended to be told among those individuals who have been in some way personally disenfranchised by allopathic medicine. These are often times marked by tremendous physical and emotional turmoil. Pain is fundamental to the human experience and it provides us with a call to action. To use the words of sociologist David Karp (1996:17), in *Speaking of Sadness*, his powerful work on the experience of depression, pain "...insistently demands that something be done to relieve it." While many of these stories of pain and suffering exist among individuals who have turned to anti-aging medicine, examples exist in interviews throughout all three of the subgroups in my study.

Other significant junctures involving a questioning of tradition include a family member's struggle with illness, paired with the recognition that the body is not invincible and that allopathic medicine does not have all the answers, and exposure to what could be characterized as a "non traditional" way of being or healing, (for example, vegetarianism or massage therapy), that is significantly different than one's past experiences and which inspires an alternative way of being in the world that leads to other alternative ways of being, that eventually inspire current practices. Finally, some individuals experience a time when they come to realize that what they have always done, their personal, and often times, familial traditions – or ways of being in the world – are not working. They

³⁷ It is certainly possible, and perhaps quite likely that this phenomenon of "questioning" fits into the broader cultural milieu. Though decidedly pessimistic, as articulated by Wendell Berry (2000:94): "The general assumption now is that everybody is working in his or her own interest and will continue to do so until checked by somebody whose self-interest is more powerful. That nobody now trusts the politicians or their governments is probably the noisiest of present facts. More quietly, people are withdrawing their trust from the professions, the corporations, the education system, the religious institutions, and the medical industry."

question their taken-for-granted view of reality – as they begin to seek out an alternative course of action. Experiencing what may be described as a “loss of the destination and map” (Frank 1995:1) people set course on what ends up becoming what could literally be described as an alternate “less traveled” route, and, in the words of poet Robert Frost (1920), “that has made all the difference.”³⁸

As explored in greater detail in Chapter 5, some interviewees experienced this questioning of tradition through a trying experience with allopathic medicine when they, or someone they loved, felt overlooked or misunderstood by mainstream medicine. Refusing to accept what were often unpleasant and painful symptoms as an inevitable part of bodily aging, these respondents pushed for solutions, seeking anti-aging or age management medicine as an alternative³⁹ to allopathic providers who were perceived as unwilling or unable to offer help for discomfort that was often chalked up to aging or to processes of aging (for example menopause or andropause).

Other individuals experienced this questioning of tradition in an effort to avoid standard medical protocol for a particular health problem that was often implicated in the process of bodily aging. For example, rather than accept the idea that at a certain point in the lifecycle everyone eventually takes medication for high cholesterol or high blood pressure, these respondents (often those engaged in CRON and health and fitness regimens), sought out their own “alternative” solutions, questioning standard

³⁸ From the poem, *The Road not Taken*, retrieved on February 27, 2008, from <http://www.bartleby.com/119/1.html>.

³⁹ All of the individuals in my anti-aging sample regarded “anti-aging” medicine as “alternative” medicine since it represented something different than that which they had received from their mainstream physician. In part this is understandable since the American Medical Association (AMA) does not recognize the American Academy of Anti-Aging Medicine (A4M) and the specialty of “anti-aging medicine” as legitimate.

pharmacological remedies and veering away from mainstream medical protocol. A rejection of the inevitability of chronic disease (and sometimes chronic pain) paired with conceptions of biomedical aging was a recurring and related theme, as people watched family members grapple with what were perceived to be painful and undesirable conditions (diabetes, Alzheimer's disease, heart disease, arthritis) and they refused to accept this fate as a necessary part of their own aging experience.

Finally some individuals were exposed to alternative ways of being that were dramatically different than their previously taken-for-granted world views. Like the gateway drug theory (O'Donnell and Clayton 1982) which suggests that the use of a mild drug may trigger a cascade of involvement to more serious drug use, this exposure to one aspect of an alternative lifestyle, led people to other practices, eventually causing a more radical questioning of reality which opened up past assumptions about chronological aging and aging-as-decline to debate.

In the most dramatic breaks with tradition, consider the ways some of my interviewees recount questioning traditional medicine and turning to an "alternative" provider (often times an anti-aging or age-management provider) for help.

I was probably 30 years old at the time and I didn't feel good, physically. You know, my body looked good, but inside, I felt kind of sick and lethargic, and I was constipated. I had all these symptoms and I had gone to all of these different doctors and they had been real condescending, "its all in your head, take Metamucil twice a day and you'll be fine," and I remember getting mad, thinking, how dare they, at the age of thirty, I shouldn't be taking Metamucil twice a day, thinking, "what's wrong with me?" [Female, AA, 4/5]

I shouldn't be fatigued at 33 years old, I mean, I just shouldn't be there. Its hard to differentiate when doctors are saying, 'this is just a normal thing' because they don't know what they are really dealing with, its what I felt like, I was very frustrated, I mean, I went to at least four different doctors, and they are all telling me that, and I am

like, “that is just an excuse. Figure it out!...I am not going to accept that. You can’t tell me that this is normal. It’s not. It’s not normal!” [Female, AA, 2/3]

I’d been living with hot flashes and they just got so bad and they were not letting up. I mean, a year and a half had gone by and they were pretty bad, really bad, and I got to where I could not sleep, mood swings out the door, and you know, they [allopathic doctors] kept saying, ‘well, you know, this will go away fairly quick.’ Well, it didn’t go away. Everything got worse. And no sex drive, that just gone. But really, my main thing was that the hot flashes were so bad, and not sleeping, they were all day. Sometimes I’d get slammed with twenty a day. I had never had anything like it...I went to my regular OB here and she put me on synthetic hormones. And I kept telling her, the one she’d put me on was actually making me very nauseas all day. “Well that will go away when you have been on them for three months. That goes away.” I’d go back, tell her, “This isn’t going away. I am extremely nauseas all day. I don’t like this...” and it was like, she ignored me...I felt like she didn’t listen to me, and that’s when I said, “I am going to find a doctor that is going to listen to me...” I really didn’t have any reason to question regular medicine until I was going through this and these doctors were going, “you are too young for this,” or “I don’t care if you are nauseated, this is the best thing for you.” And I’m thinking, you know what, this is my body, and if you don’t have a better answer for me than that, then there has gotta be something else because you all don’t know what you are talking about! [Female, AA, 4/5]

I am going through a horrible time right now. Really, really horrible. All my life I have been extremely healthy. I didn’t have to do anything about anything. I was healthy...when I turned 50, I started feeling the odd aches and pains, you know, and I started going downhill after that, mostly described as fibromyalgia, and I couldn’t understand why I had no energy, why I had so much pain, couldn’t move, stiffness, achiness, and just, you know, feeling low, but I couldn’t get to the bottom of it... I mean...my last physical... everything was normal, pap smears, you know, the breast exams, all my blood work, normal, normal, normal, normal, so I said, “O.K. [Dr. M], I need to have a psych eval because I am losing my mind,” ...I mean, I questioned my sanity! Why is my result normal and I am sick? I don’t feel well. There is something wrong with me... I mean, this is driving me crazy. And its not like, this is not rocket science...I got so depressed from being so tired and in so much pain that I began to think, well is it psychosomatic, should I go and get an evaluation. I really questioned my sanity. [Female, AA, 60+]

A couple of years ago I had terrible, terrible, heart burn, and, it went on for months and I couldn’t get rid of it. I went to my regular medical doctor and they didn’t know what was going on. They put me on, you know, Prilosec, Prevacid, I tried all of those medications which are, you know, prescription, and then they said, “well, maybe you need to have an EGG,” which is where they put a scope down your throat and look into your stomach to see if there is anything there, and I had that done, and so I talked to the gastroenterologist that did the study, and he looked at me and he said, “There is nothing there. I think you are depressed. You need an anti-depressant.” And I’m like, “I’m not depressed!” I was like, “What are you talking about?” And he was like, “here is more Prilosec.” And I was like, “I have already done all that stuff. It has done nothing.” So I said to myself, I am going to go to somebody else ... that was really a telling time for

me, to think that, you know, these MDs, they are just so quick to give you a pill, “here, that will make you better,” or whatever, and you know...to me, that was a real eye opener, a real eye opener. [Female, FR, 4/5]

A couple of respondents went through this experience of changed awareness and questioning tradition based on the experience of a loved one. For example, one respondent locates her story of disillusionment in adolescence, as she talks about her mother’s cancer diagnosis.

Mom was so sick, you know, it is so bad to watch somebody go through chemotherapy. They are so sick. She was in and out of the hospital because her white blood cell count would drop so low and then she would have to be quarantined and no one could see her...to watch somebody, you know, I brushed her hair out, [pause], but obviously, who would ever want to see that again? [Female, AA, 2/3]

At one critical point during her mother’s struggle with cancer, this interviewee talks about a time when the doctors told her mother that she would lose significant mobility in her arm. Recounting how her mother questioned the doctor’s diagnosis, and refused to accept this fate, this respondent describes her mother’s pursuit of an alternative treatment, which turned out to be extremely effective, as a turning point moment.

They told her [mother] that she would never move her arm again and she took black strap molasses and would do these exercises everyday and now her arm is totally fine, you know what I mean? I mean, that kind of stuff, here are these doctors saying your arm will never be the same, and so anyway, that, yeah, that’s what interests me, and that has gotten me to where I am, here, today.

In another example of a time when a person begins to question tradition due to the experience of a family member, another respondent explains how a diagnosis for a loved one was a transformative moment in his own life, causing his entire family to eat in a completely different way, and eventually inspiring him to become much more critical of things he had previously taken for granted. He explains:

When I was in fifth grade, my mother developed diabetes, so of course, our eating habits severely changed, and I guess from about then on, a lot of the food that we would have in the house would be stuff that she was able to have. You know, skim milk, you know, you name it, everything that said “light” ...[Male, FR, 2/3]

While watching his mother’s struggle with diabetes, this respondent became increasingly cynical towards a health care system that did not offer more solutions to people suffering with this chronic illness. Questioning the overall effectiveness of allopathic medicine, this interviewee proceeds to explain:

You can do a lot to repair injuries on yourself if you do a little looking into it, you know? They told me I was going to have to have both of my shoulders operated on and I basically told them to kiss my behind, and I have basically self medicated, and it has taken me, probably, longer, but I have no scars on my shoulders...

This respondent’s questioning of the allopathic tradition led him to create his own rigorous fitness and health regimen which he believes is delaying his bodily aging and will ideally extend his life.

In what was a heart wrenching story of unexpected loss, another respondent describes a particularly difficult time when a close loved one suddenly and unexpectedly died, leaving this interviewee paralyzed by grief and shock. Immediately following the incident, he lost 20 pounds and was unable to manage the work at his job.

I was very stressed out. I had my blood work, and my blood sugar was through the roof, fasting. I had high cholesterol, liver enzymes through the roof, testosterone levels were like a 75 year old male, my body was knocked off kilter... [Male, AA, 2/3]

This interviewee recounts how visits to therapists resulted in "people trying to feed me antidepressants" but he resisted. Relaying a specific conversation that he had with one doctor after he was told, once again, that he needed medication, he recounts questioning the physician’s recommendations, stating:

I don't need an anti depressant to make me feel even more horribly...People are trying to feed me antidepressants, I don't need it! I'm grieving. I am not depressed. It's a natural thing. It's not a fun thing to deal with, and I'd rather not deal with it, but what is done is done.

Exploring alternatives to deal with what he described as “testosterone levels [that] were like a 75 year old male” this respondent ended up seeking out the help of an anti-aging practitioner.

In other examples of this break with tradition, some respondents describe receiving a “wake-up call” or “warning” about their current health condition. This was most common among individuals engaged in CRON and those partaking in health and fitness regimens. Instead of accepting the symptoms or conditions as inevitable aspects of biological aging requiring pharmacological solutions, these respondents recount periods of questioning and resisting, as they opt, instead, to carve out their own alternative regimen.

I went in and had a physical and my prostate was all fine and all that but my cholesterol was 273 and I remembered that when I retired...14 years earlier, that my retirement cholesterol was 283, and I had been tested several years before that and it was in the upper 240s, so I knew that I had a 20 year history of high cholesterol, and the urologist that I went to see said that I needed to...get me a prescription for Lipitor and all that. The idea of going on drugs for the rest of my life just was not appealing at all. [Male, CR, 4/5]

My cholesterol started going up so probably about 2 or 3 years ago my doctor gave me a prescription for Lipitor and I knew I didn't want to do that. My cholesterol was like 257...and I knew I didn't want to take Lipitor! [Female, FR, 60+]

I turned 50 in 2005, and the health problems I had weren't huge, but they were like, this is happening to me already, this shouldn't be happening to me until I am 60, and I'll tell you what they were, one was, I was having high blood pressure, the second was that I was having gum disease, and I had to have gum surgery, and the third was that...I had a problem with my eye, I suddenly developed blurry vision, and I ended up having something they call a nerve fiber infarct, which is basically a little stroke in the retina, and that freaked me out to no end, because...I was told that this was a rare thing, that it generally happened to people with high blood pressure and diabetes, and I was like, oh my god... so just looking at that whole picture, I thought oh my god, if I don't make

some changes I'm, I'm, this whole aging thing was really bothering me, and I started to research anti-aging and I came onto CR. [Female, CR, 4/5]

Not all of the challenges with tradition involved questioning allopathic medicine.

Some respondents described times when they were exposed to an alternative way of life – to something that was entirely different than what they had always done before – different than their own personal and/or familial traditions. This exposure generated a transformative experience that led to a positive awakening that eventually cascaded into a body regimen associated with the “healthy life extension community.” Examples include the following quotes:

I grew up in [name of city], where I ate fabulously famous food, but it wasn't particularly healthy, and then I just got introduced to a different consciousness that really expanded my whole being, and the first thing that happened was that I became a vegetarian...it changed me so dramatically in maybe the period of a month, I mean, my entire body changed, my energy field changed, I felt more alive, more creative, then I have ever felt in my life, and I knew it, even at 20 years old, I knew that something had shifted dramatically, even at that age. [Female, FR, 4/5]

I was an obese teen, and at age 21, I was out of [name of home town] for the first time in my life... I was offered a summer job in [name of town] and while I was there, in the beautiful sun...I learned to drive and...I learned to swim...and I lost an enormous amount of weight. When I went back to my parents at the end of the summer they couldn't believe what they saw. My clothes were dragging all over, and I kept the weight off from that age on. [Male, CR, 60+]

I was introduced to massage, to get a massage one day, and I think that that was a real turning point in my life. The woman who did massages...just knew so much about herbs and natural healing and things like that...and I think that was probably the first time that I had a real awareness of my whole self. I just could not believe, when I left there, I was just awed by having something done for me, because I was raised in a very sheltered home in a rural community and I had never heard of anyone getting a massage. I didn't even know what a massage was and to have something done to me like that, you know, its like, she massaged every finger, and I noticed around my, its funny, now I looked back and I thought, my goodness, I just never thought my fingers, never thought of them as individual, you know, but as she was massaging them... I just couldn't believe that I could feel that good [Female, AA, 4/5]

In these particular types of cases, while an initial turning point moment is detailed above, these individuals proceed to describe what could be characterized as a snowballing series of tradition-questioning which eventually leads to questioning and resisting biomedical views of bodily aging defined by inevitable decline, as these respondents opt to engage in practices they believe may delay bodily aging.

Finally, some respondents described challenging tradition after coming to the realization that they needed to make significant changes in their own personal lives. What they were doing, what they had always done, their taken-for-granted way of life, was no longer working. They begin questioning their traditional ways of being in the world as they determine that they need to find a different, alternative way, and in researching their options, which will be explored in the next section of this chapter, people are exposed to, and became very interested in theories and practices associated with life extension and age retardation.

About three months ago I started realizing how much weight I had gained, in my current job, we get lunch catered to us just about every day, and just by not paying attention to what I was eating, I had put on quite a bit of weight, just in the last year, and getting on the scale, one day, it dawned on me about how much I had put on and how much I had just not been paying attention about what I was putting into my mouth. At that point, I began to look closer into what I was eating. [Female, CR, 2/3]

My wife and I trained for the marathon together, we ran it, and I think the big eye opener for us was that all that effort, when we completed the marathon, and our bodies didn't really change. We looked in the mirror and we were like, how could we do this over a four month period, all these miles that we ran to get fit for the marathon, and we are still 15 to 20 pounds over weight, why did, you know, you would have thought, all this extra exercise, we would have lost some weight, and that is when we kind of came to the realization, we have to change our eating habits, kind of like a religious conversion, in a way. [Male, FR, 4/5]

I guess it [interest in a body regimen aimed at delaying aging] had started when I was in college. I was a competitive skier and I ended up one winter starting a semester late, and so I got back to school a couple weeks late into the semester and had to bear down, so I did nothing but study for several months and that summer, I just felt totally out of

shape, you know, really bad, and I decided that I was going to change a lot of things. [Male, CR, 4/5]

I have always eaten everything that I wanted and just never really paid attention, but, I guess, you know, well of course all of this, owning the store, puts a lot of pressure and stress on you, and when you don't take care of your body and you have got that excess stress on you, then you start to realize, oh my gosh, I am not the same person I was a year ago. I need to make some changes. And I think that happens to a lot of people, they get in these stressful jobs and their body can't handle it any more because they don't have the proper structure to fight it off, and so, then I started thinking, you know, I have got to get myself together. [Female, AA, 4/5]

While people arrive at this period of “questioning tradition” in a wide variety of different ways, this experience marks an important commonality among those individuals engaged in body regimen practices thought to delay aging and/or extend life. Exposure to alternative ways of being opens people up to question many other taken-for-granted aspects of life which includes biomedical characterizations of bodily aging based on inevitable decline paired with chronological age-based expectations. One of the most important outcomes of this process of questioning tradition involves the ways that it inspires individuals to take a much more primary role in their own health, well being, aging, and longevity. Instead of relying on others, namely allopathic medical providers as guides, people take the reins into their own hands, devising their own unique courses of action. As one respondent clearly articulates:

People just do that, “oh, that’s what my doctor told me!” I go, nuh uh, I’m not even, I don’t even go to those people. I mean, I’m sorry. I don’t believe in them at all! I had I had a wonderful doctor, in this little village we live in... he was wonderful, and after the first couple of times I went to him, when I would go to see him, he would say to me, “well Ms. [name], what is it that you want me to do today” [laughter], “you tell me because anything I say you are not going to listen to, what do you want?” ...I have a GP right now that I only go to for like emergencies or things, but I had asked her about growth hormone about a year or so ago, and she said, “oh no, no, I don’t believe in hormone replacement of any kind. Aging is a natural thing.” And I said, “Well, it is not particularly flattering or desirable.” So she wouldn’t even order the tests for growth hormone levels. She said, “No, I am not going to contribute to it, so.” And I said, “Fine then, I’ll just do it blind then, I don’t care!” [Female, AA, 60+]

In questioning tradition, people take “personal responsibility,” something that intersects with a considerable amount of the health prevention literature and public health discourse, and a topic that will be explored in greater detail in Chapter 4. Instead of living life in the ways that they always have, people research and carve out their own potential alternatives, seeking out and/or becoming exposed to information about body regimen practices implicated in delaying aging, “symptoms” of aging, and/or extending life.

Researching Alternatives

I enjoy getting as much information as I can, if there is anything new, like the Life Extension magazine or something...They say that information is power or knowledge is power and I definitely agree. [Female, CR, 4/5]

After questioning their taken-for-granted views of reality, people oftentimes cocoon into periods of intensive research, and many times this research process becomes part of an ongoing practice. This typically involves hours of reading everything possible about alternative courses of action and this dramatically informs the body regimen careers people carve out for themselves. This process of research was very apparent during face-to-face interviews that occurred at homes or in offices. On numerous occasions, I had the opportunity to peruse people’s book shelves which were filled with a wide variety of manuals, publications, and books related to health, medicine, delaying aging, promoting longevity, fitness, and wellness. On more than one occasion, people loaned me or offered to mail me books that were particularly helpful to them in their body regimen careers, and I was also offered a myriad of reading suggestions in follow-

up emails after telephone conversations. This research often extended far beyond the popular “anti-aging” literature found on display in bookstore chains and included detailed medical research written specifically for the scientific community and published, for example, on Pub Med and related online sources. Perhaps this interest in researching health, illness, bodily aging, and longevity, is increasingly part of a broader media-inspired “de-mystification of science and technology” (Williams and Calnan 1996:1618) which serves to construct “scientific citizenship.” As explained by Rose and Novas (2005:446):

The active search for scientific knowledge is particularly marked in the field...of health and illness, of medicine, genetics, and pharmacology – in what Rabinow has termed ‘the third culture,’ where an individual’s own vitality is at stake, or that of those for whom they care.

Instead of regarding practitioners of traditional allopathic medicine as expert, or engaging in past practices that were a commonplace part of daily routine, through the research process, individuals often strive to become authorities on illness, health, nutrition and the body. Statements purporting what could be described as the “discourse of bodily individuation” serve as both inspiration and justification as people repeatedly explain their need to become expert through commentary such as “one size does not fit all” and “everybody B-O-D-Y is different.”

People are often highly motivated by what I will discuss in the following chapter as the “specter of aging” which mirrors a biomedical discourse that associates bodily aging with chronic and degenerative disease, constructing it as a medical dilemma in need of management (Estes and Binney 1989). As chronic disease onset is directly linked to lifestyle factors including diet, exercise and stress reduction (Fitzpatrick 2001),

the bounds between body regimens, a desire to avoid degenerative diseases, and the desire to delay bodily aging (“successful aging” and “agelessness”), becomes increasingly blurred in people’s minds as they perceive the interrelationship.

Individuals often describe taking considerable time to become educated in complex scientific language so as to be able to read and understand publications specifically aimed at the medical and scientific community. The internet now serves as a repository for such information, and many talked about spending considerable amounts of time doing online research, and information gathering and exchange, in related chat groups and online communities, in order to educate themselves about what is often times an entirely new world of being.

Following research on health promotion, specific illnesses, diet, nutrition, delaying aging, and promoting longevity, interviewees recount getting involved, or expanding their current involvement, in various body regimens associated with healthy life extension. For example, after questioning a doctor’s recommendation to treat high cholesterol with medication, one respondent recounts his efforts to gather research on the changes he could make in his own life. Through this research effort, he is exposed to the practice of CRON, and this leads to his interest in, and his current efforts, to potentially delay aging and extend his lifespan.

I was watching...a program about aging, and the last segment was about diet and aging, and I got introduced to Roy Walford that way, and they discussed his mouse studies and his book *The 120 Year Diet*, which had been published in 86,⁹ and there were some excerpts, Walford quotes and so forth, and I thought, “My God, I’ve never heard of this before!” So I went out and I bought his book. And read it and I thought, “I am going on this diet right now!”...I told my wife, “I am going on the CR diet. I don’t know what you want to do. I’ll cook my own food, I’ll do my own shopping. I’ll buy another refrigerator if I have to, but I just want you to know, that’s what I am going to do, end of conversation...I’m going to be doing this the rest of my life.” [Male, CR, 4/5]

Following a college semester without any activity and eating in ways he described as “extremely unhealthy,” another respondent details his own research in order to figure out an alternative approach.

I was in school and somehow, I can't remember how I, somehow I ran across a reference to Roy Walford's 120 Year Diet and at the same time, I think, almost at the same time I was reading *Jitterbug Perfume*⁴⁰, by Tom Robbins, and so I was thinking, “ok, there is a way to get around this aging thing, maybe, sort of, and so I just decided, you know, I am a student, why not?” [Male, CR, 4/5]

After several years of struggling with body image and weight, another interviewee explains that she began her body regimen career by researching healthier ways to live longer.

I saw a couple that was interviewed on TV about CR, and that is how I first discovered it...and then I just went on line and found it, and just started looking at the discussion board to find out what it was all about, and thought, “oh my gosh, this is what I've been looking for!” you know, just health, and that kind of a thing, and so, I just started immersing myself... there is just so much information...and then I read the book, the basic book that they have, that Brian Delaney and Lisa Walford have written, it was a really simple book, it was really wonderful, and it really helped introduce me to the whole concept....of extending lifespan through diet. [Female, CR, 4/5]

Describing her pain as “excruciating” another respondent recounts how she engaged in extensive research in an effort to heal herself, and in turn, came across the entire field of anti-aging medicine.

...My hugest health challenge that I have been dealing with for the last seven years... made me start researching everything I could...I probably would have been a good research scientist or even doctor. I would have been a doctor who did research. I find it interesting to read medical literature and I am fascinated by how the human body works. I enjoy doing that. I do read medical literature as a hobby, you might say...I am at the computer most of the day, and I read a lot about it [anti-aging medicine, supplementation]...I just joined this new chat group...and when somebody raises a question in a post that raises a question in my mind, I look it up. You know, and I share the answer with them, if it is relevant...but there is so much to know, I mean, I feel as

⁴⁰ This novel, published in 1984, by author Tom Robbins, is based on the desire for immortality and the meaning of sex, love, and religion.

though I have scratched the tip of the iceberg... This decade, they have had the whole hormone revolution come about and now it is in nutrition books... Based on what I have read, we are programmed to live approximately 120 years if we have ideal health and good nutrition and exercise, and there are a number of things that determine that age clock. [Female, AA, 4/5]

Determined to make a major change in her life to try to recover from what she describes as “constant knee pain... fatigue” and “failing eyesight,” another interviewee recounts how she began to immerse herself in research, coming across the practice of CRON, and its link to delaying aging and life extension.

I started looking at all the different diets out there, and I read about cryonics... I read about the Zone and the Atkins... and then I found the Calorie Restriction Society and their, you know, *Beyond the 120 Year Diet* by Roy Walford, and I read that book and I loved it. I took little notes in it, you know, it was the whole thing, I earmarked the pages, and, it is the only thing known to extend lifespan, maybe even 10 or 15 percent, which some people don't care, but to me it was very compelling... [Female, CR, 2/3]

Describing her journey to practice CRON, another respondent explains how it started with a personal decision to make some significant life changes when she stepped on the scale and realized that she had gained an unexpected amount of weight. Initially inspired by weight loss, when she researched and learned that she could also engage in practices that might potentially delay bodily aging and extend her lifespan, she recounts her peaked interest and excitement:

I stepped on the scale and I weighed a hundred and ninety seven pounds and I almost died. Because that was just, you know, so not me... so I started looking at different things to do health wise, different things to eat, you know, bettering my nutrition and all that stuff... and I found an article in Elle magazine, and the article was titled “Starvation Diet,” and I thought, well what the heck is this, and that is not a magazine that I would usually pick up, you know, its just not something that I am into, but I found it in the lunchroom at work, and it was just kind of interesting. But I read the article and I want to say that it referenced Roy Walford and maybe his daughter, and I was really interested. The title of the article was kind of a put off, but the concept of eating less to extend your life was so interesting that I went ahead and I bought the longevity diet book and then a couple of others... and from there, you know, I just kind of immersed myself in everything that I could find. I found the CR society, the mailing list, and then I started reading blogs, and I was just off... it took a little while to kind of get through

all that data, and honestly, it was a little bit intimidating because it is really scientific, I think, a lot more so than other diets, but, you know, it was just so interesting, that I decided that I wanted to do it. [Female, CR, 2/3]

Feeling like her allopathic doctors did not understand the extent of her pain, chalking her symptoms up to “menopause” and “getting older,” and determined to find a better way, an interviewee who carved out her own body regimen based on anti-aging medicine explains:

I had been reading the books about natural hormones, trying to educate myself on that...I started reading up on the natural versus the synthetic. I read Suzanne Somers’ books and I tried to listen to the interviews with people who were on them [bioidentical hormones] and then I started talking with a friend...We actually went on the internet and did research. We had read an article about this [anti-aging] doctor and she was talking about...the natural hormones. [Female, AA, 4/5]

When she started having health problems that her doctor described as the early signs of what would become lifelong chronic conditions, another respondent decided to make some major life changes. She did not want to be on pharmaceutical medications, so she embarked on an alternative journey based on her own research. She explains:

I started to research “anti-aging” and I came onto CR. It started with researching, it started with turning 50 and suddenly having a bunch of health problems...and then I, when I first started reading about CR, I just started researching “anti-aging” on the internet, and you know, the first things were, looking at cosmetic procedures...so I looked up “anti-aging” and I came upon CR, but the first things that I read about CR was that it is difficult, it is very hard to do, you are going to be starving all the time, etcetera, etcetera, etcetera, and I don’t know why, but for some reason, I kept researching it, and then finally, about February, I joined the CR society...and got lots of information, read the Longevity Diet and the 120 year Diet by Roy Walford...and in February I decided that I would do CR. I had done the research and I decided that I would do it [Female, CR, 4/5].

Other respondents recount delving into periods of research to learn how to avoid “the heart problems that happen to all the old men in my family,” [Male, FR, 4/5], “the cancer that hit my mom when she turned 60” [Female, FR, 4/5], or the “negative experience with aging so many of my sisters have had during menopause” [Female, FR,

4/5]. This research phase is an integral part of carving out a particular body regimen, as one respondent clearly explains:

You have to be proactive. You have to be a person who seeks out information about all of this [body regimen career] because it is not going to be given to you. You can't find it unless you go and seek it, you know, and the person has to have a mindset to go and seek it and question why!...Knowledge is gold. [Male, AA, 2/3]

Many respondents describe an ongoing and oftentimes passionate interest in researching anything related to their body regimens, which includes an interest in anti-aging, age management, optimal health, and longevity. For example, one male interviewee engaged in a health and fitness regimen explained how, while he doesn't enjoy sitting down reading novels, he is happy to read anything related to fitness, nutrition, supplements, and anti-aging medicine "...for hours and hours." When asked whether she takes supplements, as one CR practitioner [Female, 4/5], explains, "Every day, absolutely, and I have researched those extensively..." and another CR enthusiast explains, "I'm online all the time. Probably a couple of hours a day I've devoted to that kind [longevity, health] of reading." Another CR practitioner [Female, 4/5] explains that while most people might read something like *People* magazine for "mind candy," she would much prefer to read anything related to health and fitness. "I don't care about the stars or the celebrities, but you know, tell me how I can increase my walking distance or something, and I am all over that!" Describing the relationship between research and body regimen pursuits, other interviewees articulate.

I just started reading about it [fitness, longevity, health, nutrition], and you know, the idea of increased longevity and really increased immunity and energy and things like that, was just appealing to me, and so I thought I'd give it a try...I was kind of reading all these things at once, you know, and they kind of all came together. [Male, FR, 2/3]

I was in a used book store just you know, discovering what's there, and I came across a book called *Life Extension: A Practical Scientific Approach* by Sandy Shaw and Durk Pearson, and after that I was just fascinated with it and carried on from there. I was about 34 and I had just started noticing the first tiny aspects of aging, and then when I, that was you know, happening at the same time, and then when I saw the book and I read the book, it just, that all clicked together, so it really peaked my interest. I noticed...feelings of energy going down a little bit, just general, just aesthetically, you know, little fine lines and stuff like that you start noticing in the mirror, just general, it was very, of course, mild at thirty four, but it just, that happening and then reading, you know, the book is about four or five hundred pages long, and getting through all that information and experiencing that, I just became really enthusiastic about it and I just sought out any other books that I could find and started tentatively taking supplements from what I could gather from that book and some other books that I was getting at the same time...a full complement of vitamins, and minerals, and...just basic nutrients. [Male, AA, 4/5]

I am always reading health and wellness magazines and keeping up on, you know, what I should be taking, and anti-aging type of things, too...I like to read. Every day I like to read. [Female, FR, 4/5]

I read nutritional suggestions and information. I read that closely on just about everything I eat now, to make sure that it's wholesome for me...and for example when I heard that [name of person] had basically broken the all time home run hitting record, so obviously he had some excellent results, I considered taking [name of supplement] for that very reason... for performance enhancement, you know, so I could be even better at the sports that I am playing. Be better at the competition level that I am at. [Male, FR, 2/3]

I bought books on CR probably, ten years ago, and I read through them and they were so fascinating and from that I was doing a lot of the recipes, because I have always been interested in nutrition, nutrition was like a hobby of mine, even on vacation one year, I brought the nutrition almanac to sit and read, [laughter], what a geek, but anyway, the recipes that were in these books, had everything balanced to where I felt like I was really going to be giving my body what it needed... [Female, CR, 4/5]

Research often serves as a source of ongoing inspiration to stick with a particular body regimen. For example:

I read lots of research and it keeps me motivated, if I start thinking, well, ice cream certainly sounds really good to me, then I go online and I find a new little study that says, you know, "it [current regimen] is good for heart disease, it clears the plaque out of my brain," and then I am like, see, that gives me that little extra incentive to behave myself. [Female, CR, 4/5]

I do all of the reading, because it is very reinforcing, and you know, I mean, daily, you can read studies about diet, and how it can effect your long term outcomes, anything from Alzheimer's to heart disease to cancer. That is certainly helpful. [Male, CR, 4/5]

Experimenting

Experimentation is a very important phase in the body regimen career since it is at this point where people begin to try different approaches and to decide whether or not something is working for them. While experimentation is often ongoing through a person's body regimen career, it may be most significant in the initial journey since it is at this point that it most often signifies a radical break from the past. Using the body as a lab, people explore a wide variety of practices associated with body regimens. In the words of a male interviewee engaged in CR, "to do CRON, you have to be a tinkerer with your diet." This same respondent describes how practicing CR makes him extremely sensitive and attentive to his body, "knowing internally what is going on..." Referring to science as "the best we've got," another male interviewee describes his experience with CR as an experiment, "I have just used myself. I've just done a three year experiment on my own when I decided to do CR." Talking about his experience with CR, another interviewee articulates his identity as an "experimenter" stating, "I'm kind of the type of person that is kind of always tweaking my system, you know, always experimenting, always trying to learn more... I am kind of an experimenter type, you know?" as another interviewee, describing his body regimen practice, relates, "I started it as an experiment."

Talking about his own personal interest in anti-aging medicine, when asked how he got interested in it, this interviewee explains:

Better living through chemistry... I grew up in the 60s and early 70s, so we thought about what we were doing and took a lot of substances that made us think even more about it and sort of got a different awareness about the possibilities that traditional medicines and traditional societies, societal norms are not, don't necessarily work, so that kind of opens your mind up to start looking at everything else, I guess that's why...I am into the nuts and bolts of the physiology and the bio chemistry. [Male, AA, 4/5]

After being told by her doctor that she needed Lipitor, and deciding that she would explore an alternative path to try to lower her cholesterol, a female interviewee engaged in a rigorous health and fitness regimen to delay aging and potentially extend life recounts doing a considerable amount of research and then embarking on her own self-experimentation. She explains:

I was already eating a healthy diet but I started taking an over the counter product called Cholestoff, and I started taking Metamucil which is extra bran. I did a couple of other things, but anyway, my cholesterol is absolutely optimal now...so yeah, I never have taken even one pill... It just seems to me that if you can fix it yourself with nutrition, why not do that, and save the expense and the side effects, so that is what I did...I just want to live, and I want to be there for my grandkids... you hear so [emphasis] many problems that people have, I mean there is so much diabetes, there's so much arthritis, and all that. And I like feeling good. I really do. I like doing anything I want to do, so that's, that is what motivates me. I just don't want to not feel good, and I want to live as long as I can. [Female, FR, 60+]

Describing the experimentation that she does in order to carve out her own body regimen, another respondent engaged in caloric restriction, elaborates:

I try things for about three months and if I feel better on it, I keep doing it. If I don't notice a difference, I don't do it, cause each time I read one of those articles, I'm really pumped up, like, "oh, more energy!" so I'll order these supplements and I'll try it for three months and you know, if I notice a difference, they stay, and if not, they go! ...And people I tell me I look good. And I feel, if I didn't know how old I was, I would say I was much, much younger than what I am, so it has to help...I enjoy looking into it, you know, checking my own blood work, doing it on my own, you know? I like to be my own physician. I mean, I live with me! [big laugh] [Female, CR, 4/5]

Another respondent engaged in CR, that is very interested in the potential for healthy life extension, and is very concerned about the diseases that are often associated with aging, especially Alzheimer's, explains her own experimentation with spices.

I also use turmeric. I don't take it in pill form, but turmeric has the curcuminoids, I can't pronounce the word, but it is supposed to help, well it helps with a lot of things, but the reason I sprinkle it on all of my food is that it is supposed to help with plaque in your brain so you don't get Alzheimer's. Alzheimer's seems like a terrible disease to get, so there is a lot of research that says that it is good. I take excessive amounts, enough that, when I wipe on a white towel, I think there is yellow stuff coming out of my skin, so, maybe a little too much, but Alzheimer's is a scary thing to me...Alzheimer's seems like a very sad thing to get. I find that I have great entertainment with my brain and I would like it to always work, function to its utmost, so...it just seems very, very sad, I don't think I would like that at all. [Female, CR, 4/5]

Starting first with vegetarianism, which led to a fascination with herbs, that inspired an interest in holistic healing, fitness, meditation, and now, a rigorous body regimen which she believes has had a dramatic impact on her experience with aging, another interviewee gives a detailed example of her personal experimentation:

At the time, I was just so passionate about herbs that I ordered herbs from [name of company] by mail order and...when they came, they filled up my whole living room in my apartment, [laughter], I had no idea what a pound of an herb would look like, and it was funny, I mean, it was comical, because ...what would somebody do with a pound of lobelia? I mean, that is a very potent herb and you could go your whole life and never use a pound of lobelia, and I started experimenting with them, I mean... I really began to experientially understand what herbs do...and I know I don't look younger than my age, but I feel younger than my age, I feel like I have more health, definitely, than most people that are pushing sixty...and you know I have never had any menopausal symptoms... if you want to know what the benefits of health are, you know, I've never had a hot flash...I have never had a sleepless night. [Female, FR, 4/5]

Describing his own experimental approach to learning about the effects of various supplements which he believes help to slow down bodily aging, another respondent recounts:

I remember using Vitamin E in the sixties, when I worked with [name of company] and we used the actual natural stuff...we used to get these big cans of Vitamin E and I did my own experimentation with Vitamin E because I used to pour this stuff into the batch

and there would always be stuff left in the beaker and I never let it go to waste. I'd clean it out with my finger instead of throwing it out and take it, so I, I tried huge dosages and it was staggering, I mean, talk about energy ... I came up with my own testing on my own body and it made a huge difference. All this crap that you hear where people say, "this test doesn't prove," they don't know what they are talking about, because if you take enough of a dose, the effects are, I was in my late 20s, ok, so, theoretically, I should not have felt that much of a difference because I was younger and in better condition, so you know... [Male, AA, 60+]

In an effort to determine whether or not the body regimen he is practicing is having the desired effects to delay aging, a respondent using anti-aging medicine describes doing his own personal experimentation.

I have done experiments where I have not taken it [my supplements] for a week or so at a time, and I feel like I am falling apart. When I don't take it, it is like I am aging five years in a week. And it's a, and then when I start taking it again, its like, I'm, god, oh, the good me is coming back, the healthy me is coming back. I can really feel it, so I know it is a real thing. It is not something that I am just imagining. I know it is actually doing something. [Male, AA, 4/5]

One respondent even described a time that an anti-aging supplement he tried made him feel too good. He recounts:

I could really tell a difference on [name of supplements]...you had to buy them and mix them in a certain proportion and you take it a couple of hours before bed, and a few hours after you had last eaten, and this stimulates the production of human growth hormone when you sleep, because all this takes place while you sleep, and I want to tell you what, there was one hell of a remarkable difference in the way I felt. I mean, I felt like "my god, I am 20 years younger," and my wife felt the same way, I mean, you just wake up totally exhilarated and alert and boom, just ready to go, and everything, but then, the more I read... I kept thinking, well you know, [name of supplement] is revving up my metabolism and that is not really what I want to do, I don't want to be producing more antioxidants... And I thought, you know what, this is all playing with unproven science, and I am just not going to experiment with myself on this until there is some, until other studies come out on this. Now talking to other folks ... who have tried this, the folks who are in their 20s and 30s, they don't get nothing out of this, so I think the problem is, you already have to have a degradation of your body, you already have to have some decent age on you in order to feel the effects of feeling youthful again, whereas if you are already youthful, you can't feel youthful again because you are already youthful, you know what I am saying [chuckle], but anyway, I figure, when I feel like I am on my way out, around my 105th birthday, maybe I'll start taking it again just to feel like it feels to be young again. [Male, CR, 4/5]

One important theme that arises through this emphasis on personal experimentation involves what could be described as a certain “pragmatic libertarian” ethos evident in all three of my interviewee groupings. This “pragmatic libertarian ethos” involves the idea that people should have the freedom to do what, at best, makes them feel good, and at worst, protects them from harm.⁴¹ When exploring individual opinions about a wide range of practices, respondents repeatedly reserved judgment, opting instead to chant the “if it feels good, you should do it” mantra. In the words of one respondent: “if it can help you, whatever it is, synthetic or natural, then you should incorporate that into your life!” [Male, AA, 4/5]. And as another respondent concludes, “I believe everyone has their own path to walk and I am going to support them, whatever their choices are, even if they are not my choices” [Female, CR, 4/5].

For many, this “pragmatic libertarian ethos” was backed up by the results from their personal experimentation using their bodies as labs. For example, respondents credited their CR experimentation with curing a variety of ailments and conditions including restless leg syndrome, vision problems, arthritis, and a 20 year history of high cholesterol. Similarly, experiments with anti-aging medicines were sometimes thought to reveal improvements in skin, hair, energy level, and overall mental outlook. Experiments with fitness regimens were credited with lowering cholesterol levels, improving and maintaining muscle tone, bolstering strength and endurance, and enhancing mood and confidence.

⁴¹ This spirit comes up repeatedly on the internet groups interested in practices and research related to delaying aging and/or extending life. As one internet group participant in a July 2008 posting clearly states (making the connection between the body as personal property): “I have every right to protect myself against human intruders who would rob and murder me, why not have the same right to protect myself against intruding germs or disease that would seek to rob me of my health and my life?”

One respondent who experiments with anti-aging medicines refers to his health and wellness regimen as “my own concoction” which includes an eclectic mix of allopathic medicine combined with alternatives like massage, rolfing, acupuncture, and what he describes as a large cabinet full of supplements and vitamins. He experimented with various hormone treatments, which he received from an anti-aging clinic for about six months, but decided to stop, after not feeling any desired positive effects. Even though the hormone treatments did not have the desired effects for this particular interviewee, he speaks about the experience matter-of-factly, in the same fashion that he describes the way rolfing does not work for his wife. He perceives it as just one option in a smorgasbord of possibilities in which he has been able to experiment, and he continues to remain open to trying additional anti-aging remedies as he discovers them. He, like so many of my other interviewees, also emphasizes what he regards as the importance of having the freedom to be able to experiment with what he feels is right for his own body. For many, most types of regulation, control, and restriction over access to treatments, including a wide range of supplements, is often a source of frustration and cynicism, as it is seen as contradictory to the ways many pharmaceutical products, (with high profit potential), are introduced to the market, and as a roadblock to getting important results in one’s practice of bodily experimentation.

Teaching & Mentoring

For many people engaged in body regimen careers, at a certain point in their journeys, they have a level of knowledge and expertise that they want to share with others. This was true of individuals engaged in all three of the sub-groupings that I

explored. As explained by Crossley (2007:88), when reflecting on Mauss' (1972[1934]) seminal essay on "techniques of the body":

Mauss reminds us that as body techniques these embodied forms of knowing and understanding are social, which means that their principles are communicated and passed on through networks. He thereby offers us a clue as to how we might open up these principles to analysis. Body techniques are both technical and bodily. They are revealed as technical because it is not obvious to everyone how to do them and they must be learned, sometimes with difficulty.

People engaged in CRON often communicated via the online community groups and they were frequently reaching out to new participants who would write to the list with basic questions and queries for help. Individuals engaged in anti-aging medicine also participated in a variety of online groups, where they were able to serve as mentor or guide to others, while also seeking answers to questions that invariably arise. Individuals using anti-aging medicines, and those engaged in fitness regimens, frequented gyms and a variety of fitness clubs regularly, and talked about sharing information with like-minded friends, and serving as mentor and guide to newer participants. Individuals in all three groupings sometimes joined together to purchase supplements at lower prices, in bulk, to trade stories and strategies about body regimens, to share insights, to ask questions, and to also express concerns. Finally, individuals from all three groupings talked at length of their desire to influence friends and family members to engage in similar practices. In fact, one of the major challenges to participation in the body regimen career involved living among those significant others who were not interested or engaged in such pursuits; interviewees often recounted their efforts to inspire loved ones to share in the same practices. Highlighting this important phenomenon of coaching and mentoring, as it links to the process of career, Strauss explains (1959:109-110):

When passages of status are more or less well regulated, those who have gone through the recognized steps stand ready to guide and advise their successors. This guidance is essential...the counsel of elders is requisite to status passages for reasons other than hazard, since all the future steps are clear only to those who have traversed them...coaching is an integral part of teaching the inexperienced—of any age.

After what may be months, and is oftentimes years, many interviewees come to a point where they want to serve as sources of inspiration to others. Some people actually have careers in a field related to healing, fitness, or anti-aging medicine, and are in some way engaged in aspects of their body regimen as a way to make a living. For example, a number of the respondents at one time or another partook in selling vitamins and supplements that were said to promote longevity, health, wellness, and to delay the effects of aging. Two of the respondents in my study are currently involved in body work and massage, while one respondent owns a fitness studio, and another hopes to start one at some point in the future. One respondent is a certified personal trainer, and two more respondents are currently in school, studying aspects of their body regimens which they one day hope to share with others. For example, as one interviewee explains:

Once I started, you know, making things happen for myself, I knew that I could probably help people, and I really wanted to, because it just sucks so bad to feel like you are out of control and to not know what to do...I have the chronometer installed on everybody's computer that will let me and I pass out longevity books. You know, it's just, its so, it's so exciting and my parents are people that would definitely understand so I have tried to explain it to them and give them the tools to get interested...[Female, CR, 2/3]

People talk about sharing aspects of their body regimen with many people in their lives. This frequently happens with family, as two respondents explain:

My dad is really fascinated by it all...I've got him on a supplement regimen and he is amazed. He says, "I can't believe it." I mean, just little stuff like going to the bathroom at night, you know, some men will get up all night long, well I've been able to stop that, so, he's like, "I feel great," and he is 70, he is actually 71, 72, maybe, and so he, he is very healthy, so, I think that people almost have to give it [anti-aging supplements] a try

and if they don't, my kind of thing is, "try it for a month," it is not anything that is going to hurt you... "Just try it for a month, and if you don't like it, its no big deal, but you tried it." [Female, AA, 4/5]

In my family, there is a history of osteoporosis, and there is also a history of heart disease. My grandmother, about three years ago, had to have a quadrupal bypass...I am hoping, at some point, that I'll be setting a good example for the rest of my family, because, at the moment, I have a sibling who currently weighs as much as I did when I was in high school, you know, to the point where he is overweight, and I'm attempting to set a good example for him... I mean, people who don't take care of themselves can age a whole lot quicker than people who do take care of themselves. [Female, CR, 2/3]

This mentoring role also happens at work. For example, as one respondent engaged in a fitness and health regimen explains, "Sometimes I help guys at work. 'Let's start playing this,' or I'll go, 'I'll meet you in the park and we'll bike.'" In his time off from his corporate job, this same respondent serves as athletic coach to a wide range of teams, enjoying his role as mentor to younger athletes. This tendency among those engaged in fitness and health regimens towards coaching athletics was commonplace and this mentoring role was repeatedly described with great satisfaction. Making the link between a body regimen that delays aging, and coaching children's athletics, one respondent explained her own theory of aging as it intersects with her desire to inspire a love of athletics among children.

If you look at what happens when you reach your thirties, you start to lose muscle tone, you move less quickly, and all of that, I mean, you can do some things to prevent that from happening... I think that you can maintain, sort of, a more youthful, I think you can maintain a more, you know, I think we were meant to work, if your muscles aren't working, they just go away, I mean, I have found a lot of joy in working and I think our bodies need to work to maintain some sort of, oh I don't know, what ever it is, ability, and I think what is going on in our society right now is, too many of us, really don't see the value in physical work, we are all, so much of what we do, is what we have to do, and unless we have to do physical work, I think people are a lot of times, even discouraged, from loving exercise... We focus so much on winning, and we forget that these are children who need to have a love of doing something physical and to feel what the joy feels when doing it and how to learn to make it part of their lives, and if there is anything that I could change, that would be it...it is too much about the adult ego and not enough about the kids enjoyment and development, and they are losing all of the

joy. I think everyone could and should find some enjoyment in some sort of athletic thing if they just get the right encouragement. [Female, FR, 4/5]

Some people go so far as to describe what could almost be called a spiritual experience in sharing their body regimen as testimony. For example, as one interviewee recounts:

I started having people over, one night a week, to get introduced, you know, I lived in a little college town in [name of state], and I started having some community of friends come over to eat vegetarian. I mean, that was my first, piece of sharing this, you know, I think that whenever you have a passion for something, and then you feel compelled to share it, then its almost a channeling of something bigger than yourself, you know, from looking back on it, I can see that was a clue, that I was being used. Cause I think of us as instruments of a divine intelligence and we don't want to go into religion here, and its not religious, its actually spiritual, but, you know, at the time, I just, that's what I was following my, my love, and that was it...and now I am thinking about doing a reading group, you know, sometimes I think, oh I would like to have a practice and teach these healing skills that I have...I know that I have a gift and I know that I could put out a shingle. [Female, FR, 4/5]

Talking about favorable experiences with their body regimens, including using anti-aging medicine, people caution against being too pushy with others in their enthusiasm, but they also emphasize their willingness to share what they have learned with those who are interested.

I was very pleased. Very pleased with it [experience at anti-aging doctor] and I will definitely go back, definitely go back to do it, and I don't know, it made a huge difference and I'll tell anybody about it. I mean, I don't push it on them, but I will tell anybody, you know, this is where I was, and this is what happened, if you are suffering with that, it is at least worth a shot, to get it looked at. [Female, AA, 2/3]

I would never push upon someone to make it, to say, "hey you have make it this way, you have to choose this route," but what I think is that you have to educate them and show them, "hey, why don't you try doing this every once in a while." ... just making small changes. Something simple, baby steps, you know? [Male, AA, 2/3]

Many individuals describe efforts to guide their significant others – sometimes serving as the body regimen guide for loved ones. A number of people recounted stories

of times that their vast knowledge helped to heal a loved one, sometimes much to the surprise of the health care provider. As one respondent describes:

There has been some research that people that have, like, gum disease, if they take Coenzyme Q 10 that it will help with their gums, and I truly believe it. ...My husband had periodontal disease, and I said, "I want you to be taking this Coenzyme Q 10," and he was like, "yeah, yeah, right," so anyway, he did, and he went to see his periodontist six months later, and the guy said, "your gums look great!" And he said, "well, my wife got me on some stuff, whatever, you know," and I brought it up to my dentist and he kind of pooh poohed it, you know, a lot of these medical doctors don't really believe in these kinds of things, but, I think it works, you know, with him, the periodontist was like, "I can't believe how great your gums look," you know, so...he [spouse] will listen to me, usually, he reads about everything, but this [anti-aging, optimal health], he sort of leaves in my hands. [Female, FR, 4/5].

Some respondents recount experiencing challenges in serving as mentor or coach to significant others. Individuals engaged in CRON, for example, refer to those who do not engage in the practice as "ad libbers" and they often describe challenging times when it is difficult to engage in CR while living among those who do not. In the words of a few interviewees:

I try to get my wife on an anti-aging regimen but she's resistive, you know, I've got her on some stuff, but I have never been able to get her on the, its just, she doesn't like taking pills of any kind, so it is difficult to get her on it. [Male, AA, 60+]

My husband is really resistant [to her body regimen which includes anti-aging supplementation, nutrition, exercise] now my husband is very healthy, physically, with exercise, and he sweats like crazy, so I know that he doesn't hold in a lot of toxins, cause he is sweating [laughs] but when I have been talking to him about the food that he eats, he's like, you know, really resistant [laughs] so um, he'll come around...but he laughs at me, he's like, "does this have MSG in it?" [makes a silly voice] so a, you know, he'll eat what I put on the table. [Female, AA, 4/5]

Despite the fact that almost everybody has their own kind of food idiosyncrasies, that you would think that, at times, would make for an allowance, my wife is at times kind of like, you know, "you are no fun because you won't eat anything" [makes a grumbly voice], Which is really not true, I mean, yeah, I won't sit there and eat a huge slab of meat loaf at a dinner or something but...I can find things to eat at almost any restaurant, and so, its not really as restricted as, I think people have more of a psychological kind of prejudice against it, the way I eat, more than anything else, like, you know, "you can't eat anything!" [Male, CR, 4/5]

I do force my wife to stay at work...I say “force her” and I would never force anything on her, but it takes my program [fitness] about an hour to do, and it is everything that I can do to get it all done in that one hour, even with the fellows in the gym helping, but that requires her to stay at work a half hour later, so I recommended that she, you know, if you have an extra half an hour to burn, why don’t you stop down in the gym or something, after work...when I see her abusing her own body by eating poorly or not working out, and just kind of sitting there like, she is staring at the TV...ahh, its like, something inside me stirs and says, “you know, I wish you could, I wish you felt stronger. I wish you felt more alive and I wish you weren’t sick. You know, I wish you weren’t” and so, I try to think of ways to inspire her to become more athletic and to stay in shape and try to get her to eat healthy or try to get her to at least stay away from the sweets and when she picks up on that, it pisses her off. I mean, I’ll be honest, it frustrates her big time. [Male, FR, 2/3]

As documented above, it is sometimes difficult to engage in body regimens associated with the “healthy life extension community” when significant others are not committed to the same pursuit. While some continue to try to encourage family members and significant others to get involved, even after being met with resistance, people sometimes describe giving up such efforts to serve as mentor or coach, keeping body regimen practices more secretive and private. Yet in some cases, individuals are able to serve as guides to those less experienced along the body regimen career path. The internet provides daily opportunities for this sort of engagement, and many recount additional ways they are able to share their knowledge and spread the word to others in the day to day.

Conclusion

The body regimen as career has provided me with a useful heuristic tool from which to understand the ways my interviewees discussed their engagement in a wide variety of practices associated with the “healthy life extension community.” In trying to capture the stories that I heard through hundreds of hours of interviewing, the body

regimen career as I describe proceeds through four broad sequences which include questioning, researching, experimenting, and mentoring. While people experience this career journey in distinct and personal ways, in marking out the body regimen as career, I am describing what I see as a general process that, as lived experience, is marked by many unique twists and turns.

Regardless of one's opinion about allopathic medicine, it is evident that for many, an important part of this career trajectory involves a break from the traditional medical model, where many turn from regarding the doctor as expert, to embracing a version of self-care that, (perhaps similar to "cafeteria Catholicism," where a person picks and chooses the aspects of the religion he or she wants to embrace, leaving other aspects behind), people piece together their own body regimen careers, turning to the occasional experts, but ultimately serving as final decision maker and authority. The shifts in identity that are inspired through this journey will be further explored in upcoming chapters but it is evident that people are significantly altered by the experience. In the words of one respondent, following her journey into CRON, "...I wish I could have done this years and years and years ago, I may have had a different life!"

Embarking on this journey which I am describing as a body regimen career, people experience powerful changes in identity. To use the words of Anselm Strauss (1959:93), people literally experience distinct "critical incidents" when they come to the realization, "I am not the same person as I was, as I used to be." Looking back, many talk in terms of a "past me" as they work to articulate the "me(s)" they feel they've become. For example, when she questions whether all that is entailed in her body

regimen career is worth the effort, one respondent recounts “I am doing the right thing. I can’t even think about going back!...There is no going back” [Female, AA, 2/3]. As Travisano (1970:596) confirms “...following the conversion process, regardless of whether one strays from the course, ‘one can’t go home again.’” Body regimen careers literally become a part of “who people are” – a topic to be explored in greater detail in the following chapter.

Chapter 3: Body Regimens and the Construction of Identity

Self-identity is a contested and amorphous concept that takes on a wide variety of meanings. It has been a source of fascination for philosophers and others for hundreds of years. According to Danzinger (1997:143), it was not until the fourteenth century that the word “self” was first used as a noun, typically with negative religious connotations pairing self with sinner. With the value placed on empiricism often associated with “Renaissance Enlightenment,” a marked shift in perceptions of “self” are described as it becomes a term used to express a person’s individualism, unity, and identity. Placing mind above body dramatically broke the centuries-old tradition which put primacy on the soul (Strathern 1996). As articulated in Descartes “Cartesian subject,” through his famous *cogito ergo sum*, first published in 1644, the stage was set for John Locke’s widely read *Essay Concerning Human Understanding* (1694) in which he dedicated an entire chapter to the topic of “identity and diversity.” Locke’s work on identity, depicting identity as stable and unchanging, served to relegate consciousness above body – since it was through consciousness that the personal self – Locke’s “sovereign individual” – was constructed. As Powell (2006:20) articulates, an important facet of the dualism involves a belief in the primacy of reason over nature, rational over irrational, and the mind over the body, as the body is regarded as a part of nature – something to be controlled.

More popular in the present day discourse, scholars interested in the concept of self-identity often refer to the foundational work of William James and his widely recognized *Principles of Psychology* (1890:294), in which James suggests that humans are comprised of multiple selves including material, social, and spiritual – as he states, “a

man has as many social selves as there are individuals who recognize him and carry an image of him in their mind.” Grounded in the pragmatist philosophical tradition of the late 19th century, James emphasized the importance of knowing through direct experience – a view of “self” sometimes offered in direct contrast to Descartes’ transcendental perspective (Woodward 2002).

Following James, sociologists including Charles Horton Cooley, George Herbert Mead and Erving Goffman, made significant contributions to the understanding of self and identity by emphasizing the social nature and multiplicity of selfhood. Describing the self as social in origin, created through a process best regarded with the terms “I” and “Me,” Mead contrasts the self which develops through social experience with the body that exists at birth (Mead 1934). Mead describes the “I” as the existential dimension of self -- the spontaneous and creative part of self that acts in the world, and the “Me” as the collected set of attitudes from others. Yet it is important to note, as Woodward (2002:9) clearly articulates, “ ‘I’ understand myself through imagining how I am understood by others – as ‘me’ ... ‘I’ only exists in relation to the ‘me’ upon whom I reflect.” “Taking the role of other” (Mead 1934), similar to Cooley’s (1902) “looking glass self,” serves to elucidate the processes of self-evaluation and identity construction. Offering the dramaturgical (1969) approach to the study of social life, Goffman’s (1963, 1968) influential work provides important insights about the socially constructed “self” which is presented on life’s stage. By revealing many insights through a focus on daily life, Goffman’s work served to elucidate the multiplicity of self through social encounter.

The symbolic interactionist position (Karp and Yoels 1993, 1979; Webster and Sobieszek 1974; Goffman 1963, 1969; Cooley 1902; Mead 1934) emphasizes the ways people, (through symbols, self, others and interaction), take on multiple roles in day to day life, in an attempt to construct meaning, navigate status, and craft a sense (however fleeting) of identity. Selves and society coexist in a mutually interdependent dialectic since it is through interaction that meaning making – and in turn, multiple selves – are continually created (and recreated). Emphasizing the importance of considering the “emergent nature of human lived experience,” Prus (1996:17-18) further details the interactionist/interpretive tradition with seven key points, suggesting that human group life is intersubjective, multi-perspectival, reflective, activity-based, negotiable, relational and processual.

Providing a challenge to many of the grand theories associated with modernity associated with progress and control over nature (Powell 2006; Bauman 1992), the postmodernist theoretical turn initiated in the latter part of the twentieth century has offered new insights and criticisms to theories of selfhood—fundamentally leveled at debate over whether a notion of “the self” can even be explored empirically in the way that one might study other social objects. Postmodernism offers a perspective that, to use the words of Manning (1995:245): “...rejects the assumptions of modernism, universal truths, theoretic systems, and social progress achieved via cumulative knowledge, and challenges the central assumptions of modern empirically oriented social science.” As detailed in part by Vincent (2003:100), some features associated with postmodernism include: flexibility, instability, insecurity, rapid change, breakdown of old

certainties and social conditions, self awareness, an ability to understand, control and manipulate ourselves and others in new ways, institutional arrangements which reveal these changes including consumerism, volatile global markets, less demarcated family structures, identity politics, and cultural manifestations giving primacy to display, irony, and ambiguity. Describing identity in traditional times as “relatively fixed,” Sweetman (2000:68) suggests that in “late, high or post modernity, identity is increasingly fluid, and the body is mobilized as a plastic resource from which a reflexive sense of self is projected in an attempt to lend solidity to the narrative thus envisaged.”

What could be characterized under the agency/structure debate, which some may regard as a fundamental part of sociological inquiry, revolves around the topic of whether, and how much, the development of identity is shaped by, or as Woodward (2002) notes, even *determined* by structural factors, which may include both the social and/or individual body. As Sack (1990:660) clearly explains:

Most of us believe that our sense of agency is not an illusion. Even though our actions are constrained by rules or laws, we are still able to create projects. We set our own goals and attempt to attain them. In so doing, we are reflexive.

Implicating the importance of societal factors that provide an underlying framework in which the self develops (Danziger 1997), a number of theorists turn to Foucault’s (1986, 1988) “technologies of self” for insight. Described as “...socially accepted, and often institutionally supported, procedures for action that have implicit or explicit implications for the types of selves that individuals can have,” (Ashmore and Jussim 1997:15)

Foucault’s influential research works to show how people understand and experience

selfhood in different ways, depending upon the “technologies of self” which exist in a particular historical and cultural milieu.

Using insights from feminist psychoanalysis and Marxist theory, Teresa Brennan (1993a, 2000) offers profound challenges to what she regards as the modernist dream of autonomous selfhood. Exploring the concept of the ego and identity, which arose amidst the development of capitalism, for example, Brennan (1993a:xii) articulates: “The ego depends on fixed points because it depends on its identifications with others, and ideas, to maintain its sense of its individual distinctness or identity.” Through her concept of the “foundational fantasy” Brennan (1993a) suggests that the individual ego “...comes into being and maintains itself partly through the fantasy that it either contains or in other ways controls the mother...” creating what Brennan (1993a:167) explains as “...the reversal of the original state of affairs.” Brennan (1993a:101) elaborates:

I am positing that the desire for instant gratification, the preference for visual and ‘object’-oriented thinking this entails, the desire to be waited upon, the envious desire to imitate the original, the desire to control the mother, and to devour, poison and dismember her, and to obtain knowledge by this process, constitute a foundational psychical fantasy.

Brennan suggests that consciousness based around the concept of the individual ego serves to promote death, deny replenishment, and repress the important ways that all people are powerfully “connected energetically” (2000:41), through emotion and affect, supporting instead a culture based on fragmentation, subordination, and objectification. Linking this fragmentation and objectification to the economic market, Brennan argues that commodities serve to represent the foundational fantasy, as the imitation is substituted for the real (1993a, 1993b). Any sense of “wholeness” based on the

individual ego becomes little more than mirage, and circumventing disintegration with the ego's embrace with the "foundational fantasy" becomes impossible since "this is a world where inertia, exhaustion and the sense of running hard to stay in the same place mark everyday life" (Brennan 2000:11).⁴²

The language available during a given time and place also serves to bracket, limit, enhance, shape, and structure the ways that the "self" is known. It is sometimes said that the Inuit language has many words for snow unavailable to English translation. While this example may be perhaps more cliché than truth, it serves to show the ways that the language we have to even talk about and understand the "self" varies depending upon a wide range of cultural, social, and historical factors. Growing up with a bilingual father who would at times appear tongue tied in his efforts to communicate a particular idea or description, "there are not the words, it does not translate" he would explain, referring then to a French phrase that aptly captured the exact point he was trying to make. Thinking specifically about notions of the "self," writers have suggested that the English or Anglo Saxon use of the term does not translate easily to Spanish or French without making marked changes in meaning (Harre and Gillett 1994).

Gergen (1991:71), describing the self as a "text" that is continually created through social discourse, explains:

⁴² Yet Brennan is ultimately an optimist (Jardine et al. 2007) and her theory of energetics provides a foundation for an alternative course of action through enhancing transfers of energy. Brennan contemplates an alternative economy based not on scarcity but generosity. It is impossible for the illusory ego to contain its energy and since people are energetically connected, when a person does not "impose a negative image on the other" instead choosing to "resist and reverse moments of objectifying aggression" such acts "...may reverberate throughout the cosmos..." (Brennan, 1993:188) causing the unleashing of resistive and potentially transformative energetics.

Under postmodern conditions, persons exist in a state of continuous construction and reconstruction; it is a world where anything goes that can be negotiated. Each reality of self gives way to a reflexive questioning, irony, and ultimately the playful probing of yet another reality...”

Since texts are inherently indeterminate, the self-as-text resists reducing an individual life to a single pattern or identity. Yet as explored by McAdams (1997:60), and others (Langellier and Peterson 2004; Woodward 2002), the contemporary individual may express unity in trying to construct a particular self-conception through a life story or narrative. Referring to identity as the “spiritual problem of our time” (Langbaum 1982) or “the problem of unity and purpose in human life,” (McAdams 1997:60), twenty-first century self identity may be regarded as part of an ongoing project “...best found in one’s capacity to keep a particular narrative going” (Giddens 1991:54). The multilayered (Taylor 1989) self which is sometimes thought to be developed through time (Linde 1990), is perhaps best understood through narratives which may combine past, present, and possible future events, into a coherent story (Polkinghorne 1988). It has been argued, in fact, that narratives imbue life with purpose and unity (Polkinghorne 1988); the stability and unity expressed as “identity” may then be more a product of the story, than “identity” per se. As articulated by Riessman (1994:114): “Narratives allow us to create who we are and to construct definitions of our situations in everyday life.” McAdams (1997:63) explains the process: “By binding together different elements of the ‘me’ into a broader narrative frame, the selling process can make a patterned identity out of a scattered and pluralistic me.” While variability is still present in individual narratives about identity, “...there remains the desire for unity” (Woodward 2002:28).

Using an interpretive and symbolic interactionist approach to identity, yet sensitive to existing critiques of the concept of self, I am particularly interested in the ways people engage in “the storying of the self” (Woodward 2002:45) moving beyond just the “who I am” to think more about the matters related to the how, when, and where I am (Woodward 2002; Trinh Minh-ha 1992), since in explaining one’s self, a person reveals greater understandings of society and social change (McCall and Becker 1990). Answering the call for greater sensitivity among symbolic interactionists to consider the body and physical experience of the self (McCall and Becker 1990), my research explores ways that we can consider bodies, as well as minds, when exploring issues around identity. While I am sensitive to the critiques leveled at any type of “identity talk,” throughout interviews, when discussing body regimen careers, people often spoke in the language of identity, referring to past selves, changed selves, new selves, the self-that-has-always been, and the striving for idealized, imagined future selves. Identity is constructed in past, present, and future, since as Stuart Hall (1990:223) explains, identity “belongs to the future, as much as to the past.”

Inserting the body into understandings of self through the lens of postmodernity or hypermodernity, Varga (2005) argues that during postmodern times, the body is increasingly occupying the space of the sacred. Varga (2005:228) articulates:

Postmodernity largely, albeit not fully, accomplishes the mind-body separation by giving primacy or at least preference to the body. The preoccupation with the body and corporeal processes is a strong indication that the body has become sacred, if not ‘the sacred’ but at least ‘a sacred’, in hypermodernity.

Varga suggests that present day hypermodern conditions dominated by technological intervention and enhancement introduce the sacred “virtual body” which in certain ways

parallels religiously inspired dreams of otherworldly bodily rejuvenation and immortality. The body, as noted by Woodward (2002:2), offers both boundaries and constraints to identity, while at the same time, serving as a site of identity construction. “The body itself is no longer regarded as a fixed symbol of identity, but is subject to a variety of technological practices, (such as plastic surgery or the gymnasium), which enable the reconstitution of the ‘natural’ body into a more open network of signification” (Cooper 2002:11; see also James and Carkeek 1992). Stories of the body are “fluid and changing” (Langellier and Peterson 2004:200), just like stories of identity.⁴³ Turning to my interviews, evidence of this interconnection between body and identity abounds. In one particularly poignant example, an interviewee literally describes the changes in her “body identity” that she has experienced through her body regimen career. Changes in her physical body literally make her feel like a “different woman.” In her own words:

My body identity is like, when I first found my ribs and my hip bones, it was like, wow, I have never seen you before, because I must have weighed 118 for a nanosecond when I was 11, and I was always a chubby child, so I never, like, my body is new to me, and when I am in bed with my husband, it is like he is with a different woman, because the body is so different. It just feels different. I can feel my spine, you know, I can see my hip bones. I can see my rib cage, like, it’s really weird. [Female, CR, 4/5]

Repeatedly making “I” statements with the “I” as “self as knower” (James 1890) – (I am a body builder. I was a huge walker. I hope to be a triathlete. I am a foodie. I am a highly active person. I am a health nut. I used to be a believer in vitamins. I am a walking pharmacy. I am not the food police) – throughout our conversations, people used stories which depicted multiple “elements of *the me*.” Statements such as these

⁴³ It would be beneficial to think more about the ways that technology has been a part of this more fluid identity. As stated by Cooper (2002:107) “...human relations when conducted through electronic communication become more flexible and transient. Techno-science allows for a constant process of redefinition....identity is not alienated, but opened up, subject to a continual process of reinvention.”

provide a partial window into the ways that people work to assert, articulate, construct, and manipulate senses of selves through conversation. Recognizing that the self is always socially located (Woodward 2002), and less interested in identity per se, and more interested in the process of identity construction, I will turn to the concept of the looking glass self (Cooley 1902) to consider the ways that a person's perception of age is constructed through interactions with others.

The Looking Glass Self

*Each to each a looking-glass
Reflects the other that doth pass.*⁴⁴

Coining the term “the looking glass self” over a century ago, Cooley's (1902) concept has three key components (Yeung and Martin 2003). First, we imagine how we appear to other people. Second, we imagine the judgment of that appearance. Finally, we develop our self through the judgments of other people.

Self-identity, it is argued, is shaped through this social process, as people begin to see themselves as they perceive how they are regarded by others (Yeung and Martin 2003). In the words of Strauss (1959:9)

Everyone presents himself to the others and to himself and sees himself in the mirrors of their judgments. The masks he then and thereafter presents to the world and its citizens are fashioned upon his anticipations of their judgments.

As people engage in self appraisal, Strauss (1959) argues, they take into account the anticipated responses of others. Strauss (1959:35) goes on to explain that when people receive what they interpret to be validation (or lack of) from others, it often leads to a “reinterpretation of one's activity” which includes a certain “self-feeling” like “pride

⁴⁴ Kenneth Burke (1945:19) as cited in Strauss (1959:34)

or mortification” (Cooley 1964[1902]:184). This ongoing, never ending, open ended process of identity construction then, is made clear, since, as noted by Erikson (1954:57, as cited in Strauss 1959), identity in and of itself is “...never gained nor maintained once and for all. Like a good conscience, it is constantly lost and regained...”

Focusing specifically on middle age, Neugarten (1968) shows how people construct a consciousness of “middle age” through their perceptions of the evaluations of others. The concept of the looking glass self plays in very powerfully with my conversations with people engaged in body regimens of all types. People repeatedly refer to the ways that they perceive themselves based on stories about the interactions with, and perceived evaluations of others. While the examples are many, I will narrow my focus for this discussion to the intersection between individual body regimens and perceptions of aging, in order to explore the ways that people refer to the perceptions of others as they determine whether or not their efforts are delaying their bodily aging. When asked whether their particular body regimen is influencing their aging process, consider the ways that people responded by referring to their perceptions of the way others perceive them.

People tell me that I look younger! ...I also sense that they, especially men, when they look at me, expect somebody younger, because my body looks younger, my face still looks, you know, I do look younger than my age, though, I look younger than 52. I would say I look like I am in my late 40s. [Female, CR, 4/5]

My daughter’s mother in law is younger than me. She has diabetes and high blood pressure, and she is not sure what else, and practically everybody I talk to has some aches or pains. And I’m sure that my health regimen is why I don’t. You would think that I would have some ache or pain, but I don’t... [Female, FR, 60+]

I’ll be sixty years old in February, but everybody says, “God, you don’t look sixty.” And I say, “well, that’s good because I don’t feel sixty!” And I go to this Thursday night cigar party every week, and there are several young girls there, and all that, and

the girls like to talk about diet, and health, and stuff like that, and...one of them asked how old I was, and I said, "well, how old do you think I am?" and she said, "ummm, forty two, forty five?" and I said, "well, I certainly appreciate that," I said, "I am fifty eight." And she said, "well, you don't move like you are fifty eight!" So...[Male, CR, 4/5]

We had a [name of company] rep come over to our clinic... basically, I remember a situation where, this was two weeks ago, but she thought I was young, 25, I'm like 25, I go, "25?" She's like, "Surely you can find someone in your age group?" and I'm like, "what age group are we talking about?" "You know, 21, 25, range like you" and I started laughing, you know, I was like, "well, thank you about that, but I am 35." She was like [gasping sound] "Oh my gosh! You are thirty five!" and I'm like, "yeah." And she's like, "You don't look 35!" and I'm like, "well, you know, that is something that is the result of what I am doing, I guess." You know, your lifestyle, making a choice to do some things, you know, and I guess that is the tell tale sign, when other people don't consider you to be your age. That is the greatest sign in the world, when you get carded sometimes, [laughter], you know, "let me see your I.D, please, you know, sir," You know, "great, here you go," "you can't be that old!" You know, so I think I am definitely in that group of being probably at least 10 or 12, I feel like a probably a 19 or 20 year old. I act that way. I have a lot of energy, I don't feel fatigued unless it is a long day, and anyone would feel fatigue then, you know...I'm thirty five, I'll be thirty six by next summer...and I think I am definitely biologically younger, you know. I think I am much healthier and better shape than I was at 21 and 20, you know. [Male, AA, 2/3]

People say I look youngish for my age...[Male, CR, 4/5]

I've been carded at the age over 40 in restaurants by you know, like young women, 30 year old girls and so, yeah [Male, CR, 4/5]

People tell me that I look good and I feel, if I didn't know how old I was, I would say that I am much, much younger than I am, so it [body regimen] has to help. [Female, CR, 4/5]

It sort of irritates my wife because I've gotten carded for beer...we always joke back and forth about that, cause I tell her that she gave me all my grays, but I just keep my hair short so she can't see them, the more grays, the shorter it goes...[Male, FR, 2/3]

As is evident from the examples above, when talking about feeling (and looking) younger than their chronological age, people repeatedly mention their understanding based on important social interactions. While some may regard quotations like those above to be rife with vanity, I want to argue that this tendency to judge one's self based on the perceived assessments of others cuts much deeper than skin. The charge of vanity

– leveled against, for example, those individuals experimenting with supplements sometimes associated with anti-aging medicine, does not begin to capture the complexity of the human experience. In what was a particularly poignant example of the powerful ways that people are affected by the experience of the looking glass self, I will recount Natalie’s story.

*The Story of Natalie*⁴⁵

In an effort to come to terms with the expanding market for anti-aging products and services, the FTC and the FDA joined forces in 2001 to implement “Operation Cure.All,” an online initiative designed to “combat health fraud against seniors and other vulnerable consumer populations.” In a report first published on September 7, 2001, titled “Health Products For Seniors: Anti-Aging Products Pose Potential for Physical and Economic Harm,”⁴⁶ issued to the U.S. Senate Chairman of the Special Committee on Aging, the risks faced by seniors who use products making “anti-aging” and “cure all” claims included potential health problems paired with economic harm. The motivation to use such products was apparently self evident, since, after all, who wouldn't be attracted by claims to a magic bullet “cure all”? The initiative's efforts were focused on FDA enforcement actions to protect the “victims” of fraudulent marketing. Users of anti-aging medicine were vulnerable and in need of protection.

Role the clock forward six years to *Operation Raw Deal*, a nationwide multi-agency initiative to stop the smuggling and distribution of Human Growth Hormone

⁴⁵ This is a pseudonym to protect privacy and confidentiality.

⁴⁶ Retrieved on February 26, 2008. from www.gao.gov/new.items/d011129.pdf

(HGH) and anabolic steroids for illicit use, and the framing of users of anti-aging medicine shifts from that of “vulnerable victim” to one of “risk-taking narcissist.” U.S. Attorney Robert Clarke Corrente asserted on September 24, 2007, that “the driving force behind the smuggling and illicit use of performance enhancing drugs such as HGH is false vanity – the desire of some to become artificially younger or stronger through the dangerous use of pharmaceuticals.” Charging that the users of “performance enhancing drugs” are on “a fool's errand,” Corrente proceeds to warn of the health dangers posed by such substances.⁴⁷

During the same time that Corrente was making these accusations, I was immersed in the data collection process for my dissertation. In starting my own research to explore the individual meaning and motivation for using anti-aging medicine, it would be fair to admit that just like the stereotypes – vulnerable, in need of protection, and chasers of false vanity, I entered this project with my own preconceptions. Inspired by Monaghan’s (2001a) exploration of the experience of “vibrant physicality,” and having recently attended an A4M conference chalk full of talk about slowing down aging, health prevention, health promotion, and wellness, I expected to be hearing stories about the pursuit for optimal health, sandwiched among wishes to be “forever young” (Boia 2004), and “better than well” (Elliot 2003).

Charges of “false vanity,” “vulnerability,” and “better than well,” all proved overly simplistic and reductionistic – haunted by the reality of “complex personhood” (Gordon 1997) which serves to erase such uni-dimensional characterizations. The

⁴⁷ Retrieved on February 16, 2008, from http://www.usdoj.gov/usao/ri/press_release/sep2007/usa_remarks_gensei.html

conversations in which I was engaged were with people who were well aware of the meaning of false advertising and marketing hype. These were conversations with people who firmly accepted the inevitability of death. And these were not conversations with people who had never had a bad day in their lives. The stories that I was repeatedly hearing involved real people living in real bodies which made it clear to me that while the experience of aging is certainly socially constructed, we also must reckon with what Woodward (1999:xviii) describes as a "...real embodied existence that involves birth, growth, maturation and death." The story of Natalie helps to further articulate what I am trying to explain.

During my conversation with Natalie, she spoke at length about how much her current body regimen, based in part on her use of anti-aging supplements, had changed her life. When I asked her to explain further, she launched into what was a very powerful story. Talking about her body regimen career, she explains it in her own words:

It gives me acknowledgement. It gives me a certain reinforcement from the outside world. As I say, I am pretty isolated right now and have been during this marriage, except when I went to college, and when I...was in my middle forties, I'd been gaining all this weight on Prozac, so I was maybe 46, I'd been on it 2 years already...my skin was maybe a little better than it had been at 38 but not much, and my color was really zapped, I was really feeling pretty awful. I probably weighed in the 170s then, and I was at the University, for some reason. I think I had already finished my studies but I went down there...and I was coming out the university door and just looking ahead and somebody was coming towards, you know, one of the buildings, the door, and it was a guy, and I noticed he was good looking, a student, and it was a nice day outside, and he was just looking ahead and I was too, just like you do, you know, you look where you are going, and notice it is a nice day, and so just as I looked at him, all of a sudden, our eyes met briefly, and then he went past me to the door and he gave a big smile and I thought he was going to open the door for me, and I went to say "thank you" and he didn't even hear me. There was this lovely blond, slender, gorgeous girl, who was, you know, coming right up behind me, or something and she was going into the university, too, and he went to open the door for her and I had just been to him, like a tree or a rock, or you know, and *I felt all of a sudden just totally invisible* and that was the first time that had ever happened to me. And women talk about feeling invisible but that had

never happened to me before and that doesn't happen to me now. So what does it [body regimen] give me? *It sounds strange but it gives me a sense of self.* It helps to give me my sense of self. Because, other people, you know, I exist for them again, whereas I didn't for a long time... I mentioned this to an older friend of mine, in fact, my counselor, I said that to her and she said, "Well that happens more as you get older," and I said to her, "no, I don't think it has to." That doesn't happen to me anymore and I am sure it is a lot of things. The way I carry myself. My husband, since he has lost thirty pounds, is just thin enough that people behave differently toward him, and it is not because he is maybe more outgoing. I think it is something else, more than that, because people make overtures, and will start talking to him now when we go into a restaurant, whereas before, they didn't, they would just not want to look at him before, so, it makes a big difference and I think health at any age is attractive. I think my mother-in-law, being as healthy as she is, I don't think she feels invisible at all. So if that's vein, [laughter], I mean, you know, the government says, they talk about vein older people with false vanity that take growth hormone for false vanity, I couldn't believe it when I read that, that is on the FDA site, they don't want people to have it, and its like, o.k., wait until you get there. Wait until you start feeling sick and people are looking past you. Its terrible, I mean...butif you are healthy, and you feel good, you are going to exude something, you know, we have electrical fields, you know, and we relate, it changes how we relate if you are healthy than if you are not...who knows what it is, something changes, and its our bodies preparing us to die, you know, or preparing us to live, helping us to live, nature cooperates.

Resisting the pairing of invisibility with aging, and more specifically the female experience of aging, that feminist writers, cultural critics and others (Calasanti and Slevin 2006; Calasanti 2005; Gullette 2004; Woodward 1999; Woolf 1991), have successfully brought to light, Natalie explains that in making her self feel better internally, the practice of her particular body regimen literally makes her feel externally visible to the world, giving her a sense of self, giving her a feeling that she "exists," helping her to struggle against the "mask" of aging that some conceive to betray the underlying ("essentialist") ageless self (Featherstone, Hepworth and Turner 1991).

Revealing the powerful ways that humans are affected by their relationships with others, this story provided me with a keen awareness of the importance of others in the constructions of our sense of self – clearly, at least in this particular instance, the issue of

vanity is much more than skin deep.⁴⁸ This intersects powerfully with the work of Kathy Davis (1995) who suggests in her research on cosmetic surgery that women seek cosmetic surgery, not to be “more beautiful,” but rather, to be “more normal,”⁴⁹ and she concludes that cosmetic surgery is about identity, and not merely vanity.⁵⁰ Naomi Wolf (1991:259) explains that aging women who opt out of aesthetic interventions “...appear to disappear from culture,” while Elliot (2002:189) asserts:

If Americans are willing to risk this much money and discomfort for a better body or face, there must be some powerful reasons behind this choice, and this is precisely what worries many critics of cosmetic surgery. People may not be getting cosmetic surgery for its advantages but because they are dreading the alternative – a body or face of which they are deeply ashamed.

Developing under the influence of particular cultural and material conditions, identities are literally embodied (Woodward 2002:36). Natalie’s story was not the only narrative to detail the powerful connection between embodiment, aging, body regimen careers, and gender. For example, as explained by another interviewee:

Most middle aged women just disappear. They feel that they just don’t get noticed anymore but sometimes I notice that people are noticing me and then they sort of, I also sense that they, when they, especially men, when they look at me, they expect somebody younger, because my body looks younger, my face still looks, you know, I do look younger than my age. [Female, CR, 4/5]

⁴⁸ As Rose and Novas (2005:450-51) also suggest, “Whilst some might deride these techniques of the biomedical self as a kind of narcissistic self absorption, we think that they show an admirable ethical seriousness. Like those techniques that Foucault found amongst the Greeks, they identify an aspect of the person to be worked upon, they problematize that field or territory in certain ways, they elaborate a set of techniques for managing it, and they set out certain objectives or forms of life to be aimed for.”

⁴⁹ With findings that in many ways support Davis’ research detailed above, Debra Gimlin (2006:711) describes “normalcy” as “the ability to either ignore or attend to the body at one’s own behest.”

⁵⁰ This brings to mind a poem by William Butler Yeats (1865 – 1939) “A Woman Young and Old” [If I make the lashes dark/And the eyes more bright/And the lips more scarlet,/Or ask if all be right/ From mirror to mirror/ No vanity’s displayed: /I’m looking for the face I had/ Before the world was made]. Retrieved October 20, 2006, from <http://classiclit.about.com/library/bl-etexts/wbyeats/bl-wbye-wom.htm>

Referring to one of the books that first inspired and “invited” me to study sociology many years ago, talking about self-identity, Peter Berger (1963:100) explains:

Identities are socially bestowed. They must also be socially sustained...one cannot be human all by oneself and, apparently, one cannot hold on to any particular identity all by oneself.

I remember a few years ago being playfully asked the question “if a tree fell in the woods and no one was around to hear it, would it make a sound?” This story beckons the question, if only one person was left on the planet and no one was around to interact with them, would they even exist?

As a final thought on Natalie’s story, I find myself turning to a quote from Giddens as I think more seriously about the meaning of body regimen careers that are part of the “healthy life extension community” – firmly believing that they are more than just “vanity-driven” quests. Talking about the times in which we find ourselves, Giddens (1991:75) states:

Where large areas of a person’s life are no longer set by pre-existing patterns and habits, the individual is continually obliged to negotiate life-style options. Moreover – and this is crucial – such choices are not just ‘external’ or marginal aspects of the individual’s attitudes, but define who the individual ‘is’. In other words, *life-style choices are constitutive of a reflective self*. [emphasis added]

While I find myself less optimistic than Giddens in terms of his emphasis on life style “choices” and what might be described as “agentic personhood,” (since as Bellah and colleagues 1985:80, convincingly argued when critiquing the “American” notion of self: “it obscures personal reality, social reality, and particularly the moral reality that links person and society”), I do think Giddens offers important insights in the connection he draws between lifestyle, the body, and selfhood. For Giddens, lifestyle literally *defines* a person...and people are *obliged* to negotiate lifestyle. The first chapter in my

dissertation involves looking at body regimens using the concept of career (Hughes 1937). At some fundamental level, understanding a work career can be crudely summed up in one word – survival. Without a source of income (and many times even with one) the world is a harsh place. Thinking about the way that Giddens explains the cultural imperative to “negotiate lifestyle options,” which certainly includes matters related to body regimens, since these matters serve to define *who a person is*, (and perhaps, as Natalie’s story elucidates, *whether they exist at all*), the body regimen as career may be understandable as a reflection of the times in which we find ourselves. The need for a body regimen career and a work career may indeed spring from the same well – *existence and survival*.

Specters & Ideals

Identity is about difference; it is about marking out ‘us’ and ‘them’...this difference is... marked through direct oppositions, which exaggerate the dualisms that so often characterize identity formation...in order to lay claim to an identity there seems to be some necessity to say what or who I am not; by stating where we do belong we mark ourselves off from those to whom we do not belong (Woodward 2002: viii and 147).

An overarching phenomenon that I noticed throughout the interview process was the tendency for people to talk in terms of what I describe as “specters and ideals.” Specters, which are commonly defined as haunting or disturbing images or prospects, and ideals, or concepts of something that are regarded as a standard or model of excellence, tend to frame the way people talk about aging, their engagement in body regimens, and identity, more generally. Thinking about Kath Woodward’s quote above, which suggests that difference, in and of itself, is at the root of identity construction, through my data I explore the way “oppositions become tools that we draw upon to chart the world...[since]

we possess an understanding or ‘essence’ to what we are, only by excluding that which we are not” (Bauman and May 2001:30).

Arguing that “social knowledge is formulated and acquired through the structural language of distinctions,” Bourdieu (1984:1) asserts that “by setting up contrasting conceptual categories we bring a sense of order to otherwise unfathomable experience.” Similarly, Kai Erickson (2004[1966]) details in his widely read *Wayward Puritans*, that in order for people to reveal who they are, they turn to examples of what they are not for contrast and comparison. Paired with a potential sense of “order,” this language of distinction may also become a language of separation. Considering, for example, contrasting conceptual categories of the body, prior to the 18th century, the human body was largely thought of as generic and genderless, with the male body perceived as the norm, and the female, an inferior copy (Laqueur 1990). This “biology of difference” marking the late 19th century served to inspire a dualistic regard, (favoring the domination of certain societal groups over others), for a wide range of factors related to the body, for example, as feminist theorists and critical race scholars have detailed, a diverse range of oppressive discourses justifying hegemony based on race, ethnicity, and gender, have originated out of this differentiation, as binary oppositions like male/female, reason/emotion, and young/old, have served to provide half of this dualism (Griffin 1978) with greater cultural capital (Bourdieu 1986) than the other. As Hazan (1994:27) suggests, in relation to the aging body:

The body, with its material needs, somatic changes, and physiological functions, becomes the pivotal point for our relationship to old age. Having given the body a prominent role in the presentation of the social self, our society has turned the aging

body into a carrier of collective stigma which falls short of the objectification and dehumanization sometimes termed “social death”.

Some people compare and contrast “specters” and “ideals” in an effort to articulate the goals of a given body regimen and/or to provide clear “do’s and don’ts” in relation to the body regimen career. For example, in referring to the warnings aimed at non drug users about drugs, Wills (1992:148) explains, “it creates a sense of difference between those who see themselves capable of saying ‘no’ and their imaginary other who by contrast is felt to be weak and easily propositioned into saying ‘yes.’” What, for example, do the “do’s and don’ts” of body regimen careers say about those who are unable or unwilling to comply?

In his post-colonial critique of “Orientalism,” Said (1978) details what he regards as the false assumptions the West holds about the East, providing insight to the concept of Other. The Other, as Said’s (1978) work reveals, is often the object of another person’s fantasies, but without voice or agency. People construct their identities in part based on comparison to the imagined other – which is often regarded as an extreme -- with exaggerated admiration or disgust (Joffe 1999). As succinctly explained by Mary Russo (1999:25) and also evidenced throughout my conversations: “we experience age in relation to the ages of others.” While “ideals” serve as that for which to strive, “specters” represent all that people hope to avoid. Consider the following excerpts:

I have quite a few clients who are in their 80s right now who work out at the gym three times a week with geriatric trainers, people who are specifically trained to work with people at this age, and these people are still traveling to Europe, they still carry their own carry-ons, they open jars of food, they are just amazing, and its with weight training, but you know, I can’t even get some of my people to walk down the street, and then they are complaining about, “my shoulders hurt, my hips hurt, my legs hurt” and they are losing, I watch them just losing strength and bone density, and then they end up disabled, or dead, way before their time. [Female, AA, 4/5]

The goal I have had, you know, I want to be the dad when his kids are in high school, the friends come over and say, “man, your dad is still in good shape even though he is you know almost fifty” [laughter]. I don’t want to be one of those guys where its, “oh god, put your shirt back on,” you know, it’s always a work in progress...[Male, FR, 2/3]

I think diabetes, my mother was the only one in her family that ever got it, well you know, she spent a life time of eating processed starches, mostly, and fats like bacon, she’d have an egg once in a while and she thought she was so healthy, well you know, your body can’t subsist on that...My husband’s mother is 85 and she looks 20 years younger than my mother looked when my mother died at 76. My mother looked like a prune, yeah, diabetes ages you extremely. ...My father died in his sleep, a young man, at almost 74. Yeah. He was born with an enlarged heart and he was planning on going to work the next day and so if I have a choice to age like my mother or my father, I want to age like my father. He also never wore eyeglasses or a hearing aid, he was a young man... so I have seen both, and I want to be healthy for as long as I can.
[Female, AA, 4/5]

My mother couldn’t get up and down out of the chair, yet my mother was healthy, and they kept giving her ibuprofen and she’d say, “ah, that doesn’t work”, and she’d throw it away, but she didn’t have the, I don’t know, the tenacity or the insight or the intelligence or the resources to look past, if the doctor said, “Its black,” than she would say, “yes, right, ok.” She never questioned anything...and it was a way of life, “I’m old so I expect to have aches and pains,” (makes voice like it is her mother’s) see, and I know that you don’t have to! I mean, just a few weeks ago, one of my favorite sports is tennis, and there is a famous singer, Tony Bennett I think, plays tennis and he is 80 years old, hello?! You know, it’s possible. So its things like that, that inspire me....
[Female, AA, 60+]

The coupling of the specter and the ideal are clearly outlined in the quotations above, as people work to explain their motivations in their body regimen careers through a, “this is what I am striving for” a.k.a. Ideal – and “this is what I am not” a.k.a. Specter. Specters may serve as projections of fear – fears, for example, of dependency and loss of control. As suggested by Shakespeare (1994) in his research on disability, people who are not disabled sometimes project fears about losing control onto people with disabilities.

While the above examples offer insights into the ways that people sometimes explained the specter in contrast to an ideal during conversation, many people tended to talk about one, or the other, in varying points of conversation. Here are some examples of so-called “ideals.”

Ideals

People engaged in all three different interview groupings recounted stories of “ideals” to which they were in a constant striving through the various practices related to their body regimens, yet these depictions were much more common among individuals engaged in anti-aging medicine or fitness regimens. They were also more common among male interviewees. Examples of the ways that people are inspired by “ideals” in their body regimen pursuits include the following:

I don't think you can reverse aging, but I think you can slow it down, and I have seen guys, I read an article in Esquire about a year ago about how these older guys, say, like 65 or 70, were taking injections of HGH and it was remarkable, the level of, the way their body changed, I mean, the loss of fat and the build up of their upper body muscles, and they said they felt wonderful and this that and the other, only the HGH, I would like to do that.... [Male, AA, 4/5]

I am interested in [name of supplement]. [Name of person] swears it re-grows neurons and he is 101 and he has been taking it for 60 years and he is still lucid enough to stand up and give a 2 hour speech. [Male, AA, 4/5]

I asked my mom, when I was 12 years old, to take me to a yoga class, to do a yoga course with me, which was like an 8 week course or something at like the YMCA, and she did that with me, and um, I loved [emphasis] it, I loved, I remember to this day, my teacher, I don't remember her name, but I remember she was beautiful, and I remember she was just, like, so graceful, and peaceful, and um, an older woman that looked very healthy and alive, I remember that...and yoga affects the aging process...it causes the aging process to slow down. I strongly believe that it works. [Female, FR, 4/5]

There are a couple of men that I have known, these are two completely unrelated people, they don't know each other, but both just happened, both happened to be fathers of some of my best friends, and they are probably the two most, just professionally, and even interpersonally, successful people that I have known, and...both of these

men...they both were always in the habit of sleeping something like only four or five hours a night and just eating on meal a day, in the evening, you know, and so I kind of knew them, talked to them, talked to their kids, and you know, was kind of enthralled with them...[Male, FR, 2/3]

He [referring to a personal acquaintance] has started this [anti-aging regimen] over the past five years and he is probably upper fifties, early 60s, but his appearance has dramatically improved as has his fitness level, and ... he is fitter than he used to be, his skin is much richer and tighter and he has had no plastic surgery... he has lost weight, I mean, it is all a part of an overall fitness package ...” [Male, FR, 4/5]

The human body does not do well without a lot of exercise, and a finely tuned body with exercise and strength training, for example, is always more effective and more efficient. I mean, a guy like Jack Lalane, has proven that many, many, many times over, I mean, he’s 80 plus and he is still in reasonably good shape, but even when he was in his 60s, he was doing things with his body that most people couldn’t do when they were 20, ah, so, and, there has been a number of studies showing that if you don’t do exercise and you don’t do stress bearing exercise, and I am talking about weight training, and when you get old, you get osteoporosis that is uncontrolled [Male, AA, 60+]

My cousin is a big health nut. He is preparing for a marathon now...I did always want to emulate him and he was the athlete...he was always whooping me, so I had that constant, you know, you have to try harder. The only way to beat him was to get better...to this day we stay in contact at least two or three times a week. [Male, FR, 2/3]

In [name of city], I met this guy, and he was five years older than I was, and he could still run a 4:40 mile, 4:39 mile was his fastest one, and so I started running some with him. He only weighs 120 pounds, by the way, he is really what got me thinking about the weight thing over the years. I was with him one morning and he looked like he was getting a beer gut, and I said, “[name], what is going on there,” and he said, “well I had five beers last night,” and I said, “what do you weigh?” and he said, “I think I am over 120 now,” and I am looking at the other guy and I go, “well no wonder he’s so fast.” He is 10 years older than I am and we were about dead even. You know, I want to be like him! [Male, FR, 4/5]

As briefly noted above, compared with female respondents, male interviewees were much more likely to talk in terms of ideals, and most of the societal role models listed as “ideals,” like, for example, fitness, exercise and nutritional expert Jack LaLane, were men. While this is too small a sample from which to make broad generalizations, it is possible that this may represent a key difference in the cultural standards to which men and women are defined. It appears, for example, that male respondents more often have a

clearly articulated sense of an ideal to which they may strive, whereas female respondents were more likely to recount their efforts to forever avoid the specter of aging – a presumably endless pursuit without destination since there is a cultural deficit of ideal representations of female aging.

Further, as also mentioned previously, individuals practicing CRON were less likely to talk in terms of “ideals” and this may be in large part because the practice of CRON is different given that most “cronnies” sense of, and experience with a CRON community, is over the internet. While people engaged in anti-aging body regimens and fitness regimens see idealized others face-to-face at gyms, fitness clubs, in the waiting rooms at anti-aging medical providers, and as presented in the mainstream media, most of the people that I interviewed who practiced CRON had never met another “cronnie” in the flesh. While individuals practicing CRON did talk about the influence of idealized others, such idealizations tended to be based more on a person’s mind – perceptions of how smart and knowledgeable a given person was about issues related to CR – and less about a person’s body (in terms of things like strength, speed, endurance, or youthfulness). For example:

Have you ever heard of [name of person]?... he is sort of a famous guy...he is kind of an interesting guy...and I've been in contact with him for years and he's really into longevity in his own kind of way which is very scientific, very rigorous and very demanding...and he has all of the supplements that he takes which are, you know, its just like an encyclopedia, it goes on and on, he takes like a gazillion things, and some of them are experimental chemicals which can only be acquired under you know, very, sort of, intensive methods of going out and searching them out, so yeah, I've been in contact with him for many years, and find what he has to say, at least, thought provoking, if not something I would do myself...[Male, CR, 4/5]

When [name of person] posts an article to the list, it is extremely technical, his knowledge of biology is very, very great and [name of person] knows his bio quite well. I have the greatest respect for [name of person]. He is one of the most brilliant people

that I have ever met. I think he is a genius... I think that he is at a higher level of brilliance than I have ever been. [Male, CR, 60+]

While people engaged in CRON were less likely to talk about ideals, they did, however, refer to a number of examples which could be characterized as “specters” since these examples were often framed as exemplifying negative traits found in the broader cultural milieu.⁵¹

Specters

Many people talked in terms of “specters” which served to symbolize that which they were working against. This was sometimes relayed in terms of an example of a specific person, and other times it was depicted more as a matter of circumstance, largely in terms of physical dependency. Sometimes people referred to certain diseases as specters which both haunted and inspired their imaginations and their efforts. And others framed specters in terms of the “to do” imperative (discussed in Chapter 4); specters, in these cases, were simply those individuals who were not *doing something*. In the words of my respondents:

I don't want to be one of those people...who is on 20 medications...I just see all these people, creeping along the road, and they are 80 and they are infirm and I don't want to be like that! and so what am I doing? I am doing CR...I do not want to spend my old age sitting around with other old farts eating too much! [laughs] I want my life to be about something different. [Female, CR, 4/5]

I feel like I am preparing myself for a healthier life. I see my grandmother, my grandmother lives, like, literally, in the apartment complex behind my house, and I see her at least once a week, she uses a walker, she has trouble walking, and she is still recovering from her quadruple bypass when they had to take the veins out of her legs to do the bypass, and while she is a lot more mobile than other women her age, I feel like I am preparing myself, I won't, like when I am her age, I won't have those same

⁵¹ As noted by Woodward (2002:77) “...culture includes all the ways we have of making sense and of making meanings.”

problems...when I turn 80, if I don't have the same problems that I seem my grandparents going through. Now if I can turn 80 and be the way they were when they were 60, and then, eventually be able to turn 120, that would be fantastic, you know. I am not going to turn that down! [Female, CR, 2/3]

Alzheimer's seems like a terrible disease to get ...it would just be terrible to, you know, not know, maybe where you lived, or go away and not know who people are, or recognize people, when they are younger, but not recognize your children anymore, it just seems very, very sad, I don't think I would like that at all. And then to be dependent on other people, that is probably not good either. [Female, CR, 4/5]

One of my sister's is really quite heavy, and my mother had coronary artery disease. She was heavy in the abdomen, and I don't want to be like that, you know, cause my sister is on heart medicine, I am the only one out of the seven that is not on blood pressure medication, and you know, taking drugs for things, and I don't want to be doing that! [Female, FR, 4/5]

Where you get into your problems, I think, is with all your processed crap... I think that its hard on your liver, I think a lot of it starts there, and then, of course the, you are getting all those starches and carbohydrates and you are not doing anything, and then it just turns to flab and here comes the diabetes, and the breathing issues, which all, you know, when your heart has to beat 140 beats a minute to walk up a flight of steps, you know, that's gotta be a little rough on it, you know, I think, when one thing gets old, its just kind of the domino effect with everything else. [Male, FR, 2/3]

I just went and visited my great grandma, and she's just, you know, she's just so sharp, but, you know, her body is wearing out on her, so if that's something, and she's just, she is the greatest painter ever and I just can't wait until I am that good. She can paint anything. She is 88 and she can paint anything in the world, but sometimes she doesn't have enough energy to get up and do it, so I'm like, I want the energy! [Female, CR, 2/3]

For me it means being able to be self sufficient, not being in pain, to feel good, have some energy, you know... it's about getting around, feeling well, having energy and enjoying my life, that's my main thing, and just not being in such bad health that you can't get around and someone's got to take care of you. I don't ever want to be like that! [Female, AA, 4/5]

While interviewees across groupings spoke in terms of the specter, it is important to note that female respondents tended to talk more in terms of the specter of aging. Further research needs to flesh out this important gender difference, but recognizing that the experience of aging is heavily marked by culture, and as feminist theorists (Brooks 2004, 2008; Davis 2007, 1997; Calasanti and Slevin 2006; Woodward 1999; Wolf 1991)

have aptly noted, women's negative experiences with aging are often amplified and accelerated in a culture that places primacy on a female beauty ideal based on youthful normative images. The specter of aging as presented through consumer culture envelopes women at every turn and this may in part explain the emphasis on "specters" of aging that I found through my conversations with female respondents.

Food as "Specter" and "Ideal"

Another way that people used the concept of specter was to refer to categories of foods. The link between food and identity is powerful, as Brillat Savarin stated in 1826 in his essay *La Physiologie du gout*, "Tell me what you eat and I will tell you who you are" (cited by Caplan, 1997:9). Food may be used as a means of distinction (Bourdieu 1984), as it helps to shape our sense of self since, as Fishler (1988:277-279) explains, "incorporation is an act laden with meaning...the action in which we send a food across the frontier between the world and the self, between 'outside' and 'inside' our body – we become what we eat." Referring to the term "gastronationalism" James (1997:72) suggests that food is a dominant way that ideas about "otherness" are expressed since food is a distinguishing sign (Gans 2000), and our choice in food literally expresses who we are and what we value (Willett 1997).

The foods we eat tie us to particular body projects (Falk 1994). Making the connection between food and body, Probyn (2003:234) explains:

Those who reflect seriously on food tend to think about their bodies in different ways....The body is not an empty receptacle for food; there is a constant multiplicity of contact between what goes in, where it comes from, what it means, what it feels like, whether it makes you feel good or bad...

Hand in hand with the embodied experience of eating particular foods, it is also noteworthy that the consumption of certain foods is often imbued with identity signaling, political, and moral responsibility (Heldke 1992). As stated by Shilling (2005:156):

It would be wrong to think that the influence of religion has disappeared in the West. Puritan values of bodily abstinence and purity continue to inform the attitude, increasingly common among the urban middle classes in the USA and in Europe, that the consumption of 'healthy food' is a marker of ethical worth and that 'only the consumption of sugar-free food that is non-fattening and non toxic' can permit the individual to occupy the moral high ground.

While body regimens vary, there is a shared “idioculture” among interviewees. As defined by Fine (2002:233): idioculture is “...a system of knowledge, beliefs, behaviors, and customs shared by members of an interacting group to which members can refer and which they can employ as the basis of further interaction.” The issue of food is at the heart of this “idioculture” as many of the people that I interviewed, across interview groupings, described foods with morally charged language – labeling things along a scale that could generally be depicted as great, good, sometimes o.k., bad, and never to be allowed to touch the lips. There are, as Shilling (2005:154) clearly asserts, “an enormous range of foods that can be regarded as culturally preferred or taboo” since the foods that people eat are shaped by powerful societal norms. In terms of the conversations I had with my study participants, “great” foods tended to be those regarded as packed with nutrition, but very low in calories and fat, while “bad” foods – sometimes termed “gak” by cronies – were often described as “anything processed.” Yet the most villainous of foods for people engaged in body regimen careers are the so-called “fast foods” which tended to be categorized under what I started referring to as the “M word” in my coding process. McDonald’s served as specter for many interviewees trying to

make a point about that which they were not. For example, talking about her teenage daughter eating healthfully, as one female interviewee explains: “I mean, she would *never* go to McDonald’s ...” Consider some of the statements made by other interviewees:

I don’t eat unhealthy. You know, it is not like I go out to *McDonald’s* and have a, I forgot what a *McDonald’s* hamburger is called, but you know, with French fries and a coke, I still eat pretty healthy [Female, CR, 4/5]

If you get someone who’s blood pressure is 200 over 100, you are going to need some blood pressure medication, but with a change in life style, diabetes and things like that, there are cases where medications are imperative, but if someone’s cholesterol is 210 and they eat *McDonald’s* every day and don’t exercise and you want to give them Lipitor, the maximum dosage, which causes heart disease at high dosages because it reduces nutrients that are important for your heart that are located in the heart, wait a minute, why don’t you just tell him to eat better? [Male, AA, 2/3]

When my kids were little, I was really into everything really healthy. The first time they had *McDonald’s*, you know, its all over, you know, you think, for a long time I had them convinced that *McDonald’s* was just gross and if their dad or anybody would ask them, they’d be like, “that’s gross!” [Female, FR, 4/5]

I don’t care how good *McDonald’s* thinks or says that they are, I don’t trust em’ and I don’t think they are good, so, and to be honest, after a long period of eating healthy and wholesome foods, or what I deem wholesome and healthy, not only do salads and what otherwise might seem like rabbit food, not only do they look better but they taste better. I don’t have that film that you get from eating French fries, that oily film, right, that you get on your tongue, I think, from eating their hamburgers, it’s a, I think it deadens your taste buds. [Male, FR, 2/3]

I think that because my daughter had such an effect from eating, and see, at the time, I wasn’t really sure, I mean, I knew that she had trouble with sugar, but I also felt like she was having trouble with the dyes. I didn’t really know. All I knew that if my daughter spent the night with somebody who’s parents took them to *McDonald’s* she could, maybe even die, and I say that because she would be so nuts, her judgment was so bad...[Female, FR, 4/5]

A final way that body regimens got expressed through the juxtaposition of “specter” and “ideal” is through references to health and illness. In contrast to aesthetic anti-aging treatments which may juxtapose culturally-defined images of the beautiful and

the ugly, individuals engaged in body regimen careers associated with the “healthy life extension” community positioned health as the desired the goal, while illness became that which to be avoided. This contrast sometimes served as a way to judge whether or not a particular body regimen was having the desired effects.

Perceived favorable effects from body regimens were experienced in terms of absence – namely absence of illness. For example, when asked about the benefits of engaging in their body regimen careers associated with the “healthy life extension community,” consider the following responses:

I don't miss a lot of time from work because of illness and I think that is all connected to my routine and what I do eat and how I plan the time for exercise. I think a lot of times if I am coming down with something and I take that time for exercise, I am able to get whatever is in my system out, and I ended up avoiding illness, so in my opinion, there are many, many benefits. [Female, FR, 4/5]

I never get sick, I mean... I haven't been sick in 7 years. Not even a cold, nothing, absolutely nothing [Female, CR, 4/5]

I don't get colds. I can't remember the last time I had a cold or the flu. [Female, AA, 4/5]

We are older and we definitely don't get as many of the annoying coughs and colds and things, so I think, what you are eating and your exercise, affects that. [Male, FR, 4/5]

I suppose, generally, I'm not, hardly ever had the flu or cold or anything like that. [Male, FR, 4/5]

All of this discussion about specter and ideals, “good” and “bad,” that which to embrace, and that which to avoid, could lead one to conclude that people engaged in body regimens may be very proud of their efforts – willingly exhibiting such pursuits as a “cardinal sign” (Glassner 1989) of morality and goodness. And while some certainly did express comfort in the “faith” they had found in their practices –I found that many described times when they engaged in impression management (Goffman 1963), hiding

their body regimens from others in an effort to “pass” –a phenomenon through which you “...disguise what you are in order to appear what you wish to be” (Strauss 1959:16).

Respondents repeatedly emphasized a desire to avoid being overly judgmental of others in regards to nutrition, exercise, and body regimens, more generally. Respondents recounted their own struggles in tandem with the struggles they witnessed friends and family members having with body regimen careers, and due to this exposure-inspired sensitivity, many were careful to note their desire to avoid being perceived of as “the food police,” often opting instead for a more libertarian-inspired “to each their own” ethos.

Passing

A number of writers talking about what could be described as the “discourse of health” have highlighted the ways that such discourse is imbued with morality, since it works to institute and reaffirm some dominant cultural values (for example, self-discipline, self-control, and personal determination) and to depict what it means to be a moral individual (Crawford 1994, 1980; Featherstone 1991; Whorton 1982; Haley 1978) in a society defined by “...the imperative of health: at once the duty of each and the object of all” (Foucault 1980:170).

Talking about the fitness industry, for example, Glassner (1989:187) talks about how fitness “retheorizes selfhood” as it “...provides people with independence (from doctors and medical professionals) and protection from potentially stigmatized social categories including those associated with obesity, drug abuse, depression and other health risk factors.” And certainly there are many examples of times when interviewees

spoke about health, fitness, and body regimens more generally, in ways that insinuated a certain morality, (in fact some of the examples discussed above could be used to reveal this phenomenon), however, it is also interesting, and I think important to note, that individuals engaged in body regimen careers did not always feel a sense of pride or moral rectitude for their efforts. My own research and observations confirm that which Monaghan (1999:278) notes in his research on body builders, that the “exercised and dieted body is prescribed and valorized within our larger society only up to a certain point.”

In fact, being too preoccupied by nutritional concerns, (like being too thin-- anorexia, too muscular--bigorexia, too surgically enhanced -- body dysmorphic disorder) is becoming increasingly regarded as a medical problem. The process of medicalization individualizes the illness experience (Loci and Kaufert 1998), turning attention away from what could broadly be described as the political economy of health and illness. Occurring at distinct stages (Conrad 1992), medicalization includes the identification of behaviors considered deviant in public perception, the connection between the behavior to some area of medicine, the psychiatric recognition of the “problem,” and legitimacy constructed through societal institutions (medicine, legal, education).

In 1997, Dr. Steven Bratman coined the term “orthorexia nervosa,”⁵² defined as an eating disorder characterized by a fixation on eating what the sufferer considers to be healthful food. Constructing a division between a normal and an abnormal interest in healthy eating and nutrition, Bratman goes so far as to link orthorexia with early death. A

⁵² See <http://www.orthorexia.com> or refer to Bratman, Steven and David Knight. 2001. *Health Food Junkies: Orthorexia Nervosa*. Broadway.

brewing online debate over the parallels between anorexia and CR has also emerged, with researchers at the Rudd Center for Food Policy and Obesity⁵³ at Yale University repeatedly challenging the efficacy, safety, and desirability of the CRON practice, and critical journalistic articles like the one published in Slate, on April 24, 2007, titled: “Calorie Restriction, the Newest Eating Disorder.⁵⁴” Also, the term “worried well” is sometimes used to describe a certain hypochondria among the young and healthy, and it is considered a managed care menace since it may drive up expenses. Described by Managed Care Magazine (2003) as a “drain on the system” the “worried well” are sometimes thought to use more services than their less healthy counterparts.⁵⁵

Individuals engaged in body regimen careers realize these culturally imposed boundaries and they often recognize themselves as different, odd or unusual, and struggle to pass as ordinary. Many of my interviewees recounted examples of times when they actually tried to hide their engagement in a particular body regimen in an effort to “pass” – to, as some put it, appear “normal” – in a culture that may perceive their pursuit of the body regimen career as odd, freakish, obsessive, annoying, strange, abnormal, weird, nuts, inconvenient and even crazy. Consider the following examples:

There are just certain things about a person that just make you more and more odd ball and you just feel like, well, that’s really personal stuff, and why am I going to appear more and more freakish just by saying that, you know? What I find the best defense for me, in terms of eating strangely, is, you know, that I, they know I am vegetarian, that, I don’t care saying. [Male, CR, 4/5]

I am private and I don’t really want people to think, “oh god, she is weird, she is doing this.” I’m fairly private. I haven’t told very many people about this. [Female, CR, 4/5]

⁵³ See, for example, http://ruddsoundbites.typepad.com/rudd_sound_bites/2006/10/starving_yourse.html

⁵⁴ Retrieved on July 7, 2007, from <http://www.slate.com/id/2164436/entry/2164438/>

⁵⁵ Retrieved on April 16, 2007, from <http://www.managedcaremag.com/archives/0306/0306.worriedwell.html>

You can become ridiculed quite quickly, in corporate America. You don't want to start talking too much about, you know, health foods or vitamins or whatever, because you know, cause its like, "the guy is a fanatic," you know, or "the guys got weird ideas" so you know, you generally try not to advance that, and you don't want to become too open in terms of, you know, like if you turn down too many cookies or donuts or cakes, at company picnics or things like that, people are, "the guy is weird, man" "he only eats bird food" so, you have to be careful, but it is difficult and it is, even in your own family, you know, I mean, you'll have people who think you are fanatical, that won't accept your ideas...[Male, AA, 60+]

When I asked a respondent engaged in CR whether he ever hid his involvement in this practice, he explained:

In some settings where I am with people that I don't know that well, or something, and I don't want to just stand out as being totally bizarre... I let myself go...if people are interested but most of the time I kind of hold off. [Male, CR, 4/5]

When talking about the way she hides her engagement in her fitness regimen, (which includes rigorous exercise combined with an avid interest in nutrition, vitamins, and longevity), from her current boyfriend, another interviewee explains:

I have tried to be subdued to him about it. I mean...he does not, he doesn't quite understand it, that it has been like a career for me. He doesn't get that. I try not to tell him because, for a lot of men, that is very intimidating and it also makes them feel very competitive. My last relationship was like that with a person who was very competitive that way, to the point where he felt like he had to exercise when I was exercising and so I am trying very hard not to do that with this relationship, so I am trying to make it seem like I am subdued about it, but I am really not. I have to do a lot of self talk to take a day off from, for example, my exercise, to make me, you know, calm down about it. [Female, FR, 4/5]

A varied number of respondents also described how they perceive others to regard them as different – for example, when one respondent talked about how people perceive his use of a broad range of anti-aging supplements, vitamins, and minerals, he loudly exclaimed: "Freak! Freak! Freak!" [laughter]. Other examples include the following:

I am the odd man out in the family...I am the health nut in the family... They all think I am kind of strange. Everyone in the family thinks I am a little extreme as far as always wanting everything to be whole grain. [Female, AA, 4/5]

My friends think I am kooky and crazy...and my boyfriend thinks I am off my rocker.
[Female, AA, 2/3]

I've not dated in quite a while, because I feel like, and I go out to restaurants, I'm not so crazed, but I think that a man who is not aware of this at all or who isn't interested in this would think I'm nuts, you know? [Female, CR, 4/5]

I really just snack at work, like, I don't, like I'll bring like cauliflower and the girls will be like, "ewe!!!" you know, but they just kind of just think I am a health freak....they are like, "ewe, you are eating broccoli or cauliflower or whatever." [Female, CR, 2/3]

My daughter looks at me like I'm nuts....Just that weird [name] eating that crazy diet starving himself [Male, CR, 4/5].

My mother in law had my children on a Sunday morning for breakfast and Tommy said "I can't have potatoes because I am taking the protozoa kit" and Rick said and "I can't have cookies because I can't have sugar," and my mother-in-law said, "eat your potatoes, eat your cookie, your mother is crazy!!!" [Female, FR, 4/5]

One respondent recalls how her engagement in CRON became a serious matter of contention in her marriage. Her ex-husband would tease her about body regimen. She explains:

I remember him making fun of me being an education Nazi or a health nut, and even saying, like, "oh I had a coke today, I guess that's infidelity," you know, joking about stuff, and he would hide candy bars, and things like that, and so of course, when you don't have somebody that has the same beliefs in a healthy lifestyle, that can be hard.
[Female, CR, 2/3]

And another respondent recounted a memory of a time that her interest body regimen became the topic of a joke for her adult children.

My kids are really best friends now, and one day, in the last couple of years, they were both here, and I walked up the stairs and they were in one of the bedrooms up there and as I came up the stairs, I could hear them laughing and I stuck my head in and said, "what's so funny?" and they looked at each other kind of like, "well, should we tell her?" and then one of them said, "well, we were laughing at you and we were saying you know, how much freedom you gave us except what a Nazi you were about food!"
[Female, FR, 4/5]

Reflecting back, this same respondent does question the ways that her body regimen career, (and the control she exerted over her family due to it), has affected her

children over the years, yet she also explains that she did what she did, (and does what she does), out of love, and a desire to protect and take care of them.

Other interviewees recounted challenging times with coworkers where they were made to feel uncomfortable and different based on the perceptions of others.

Some people probably think I'm anorectic and other people probably think I am just naturally thin. I have one friend who has the poorest social skills known to man. I love him to death but he drives me crazy...He is a coworker and so one day we were at a meeting and I went to get a cookie, and he said, "Oh My God!" in front of the whole committee and I was mortified. And I called him later and I said, "you know, you really embarrassed me and you wouldn't have said that to someone who was overweight, right? And he said, "You know, I'm sorry, you know, I didn't think you were so sensitive about it." And I said, "Yeah, I am," [Female, CR, 4/5]

As discussed by the respondent in the above paragraph, several people brought up what they considered to be a double standard where people were allowed to make "thin jokes" at their expense, not realizing that there was a stigma to being perceived as "too thin"⁵⁶ or "too healthy." As one CR enthusiast articulates, "I have a friend that always says 'You are too skinny. You are too skinny... You are too thin...' Why do people feel like they can comment if you have lost weight but no one comments if you have gained weight?"

Another respondent recounted ending a friendship over this same issue.

I have actually stopped running around with probably, one person who, every time she would hug me she'd go, "You need to gain weight, or you're, you know... she was always uncomfortable with my weight, and I just, I don't know, I just don't need to hear, "god your skinny," I don't like it. [Female, AA, 4/5]

⁵⁶ It is interesting to note here that there is a long history detailing what could be described as the "suspicion of thinness." For example, in William Shakespeare's (1919:11) *Julius Caesar*, Caesar talks to Marc Antony about his suspicion of Cassius as a potential conspirator. Caesar states, "Let me have men about me that are fat; Sleek-headed men and such as sleep o' nights. Yond Cassius has a lean and hungry look; He thinks too much: such men are dangerous." Antony tries to reassure Caesar, referring to Cassius as a "noble Roman" but Caesar persists: "Would he were fatter!" and proceeding to argue that while Cassius "reads much" and is "a great observer...such men as he be never at heart's ease."

Describing a painful and frustrating family memory that could be characterized by the stigma of being “too thin,” another respondent explains:

Here I am with my [family members]...and we are in the ocean...and they are all accusing me, here I was, unfortunately, I wore the wrong swim suit... it was the wrong size, it was medium, and now I am small, but it was swimming around me, and I looked very, I looked thinner than they are used to seeing me because I was always overweight, and they started accusing me of being anorexic, you know, it was so offensive, and actually, I got angry, you know, I said, “I can’t believe you, am I calling you overweight?”...that really upset me... and then ... I would go to family reunions, “Your too thin, your too this, you are too that.” You know, it was insidious, so I just kept on. That is where I think the group [online community] helped. Because I had people, I could complain here, and then I told my family, “Hey, I don’t care that you have insulted me, I just complained about it to my group and I am receiving support from my group.” And all they could do was laugh. [Male, CR, 4/5]

As the respondent above clearly articulated, having a sense of community – a group of like minded others in which to turn to for support, helped him to feel less isolated, alone, and crazy in his engagement with a body regimen career.

Strategies to “pass” at work were recounted as one woman described how she was able to avoid drawing attention to herself since she consumed what was visually, a huge salad.

Everyone sees the volume of the foods I am eating just because I can eat an entire bag of salad and that is only 20 calories, that entire bag. I don’t go around saying, “oh, that’s only 20 calories.” All they see is this huge salad on my plate... I don’t think it even registers with them that I might be restricting my calories. [Female, CR, 2/3]

And while many did engage in efforts to “pass,” some people, still recognizing themselves as “different” than others, tended to embrace their identities as being different, crazy, weird or unusual.

Some people might worry that others will think that they are weird but I am just weird naturally...My friends...think its [body regimen] crazy. But they think in general that I am kind of weird...I am always up to some sort of crazy mischief so they, they have gotten to the point where they know, you know, you can’t really whine or fuss or think I am going to change my mind about something. You just have to kind of sit back and watch. [Female, CR, 4/5]

My friends always, they made a joke out of it, kind of after a while. You know, they would say that they were going to get me drunk, but it was always, you know, but not, to where they ever, where it every cost me anything, and I thought, in a way, it made them like me more, you know, I guess, even my kids, you know, “oh, healthy mom, you know, never eats at McDonald’s,” they make those comments, but it is always sort of playful... I have always almost seen it as, “I wish I could do that,” or, you know, “what a great example,” I have never seen it as a negative...It’s just me. [Female, FR, 4/5]

Then & Now -- Past Me’s & New Me’s as Conversion Conversation

As discussed earlier in this dissertation, engagement in the body regimen career involves key “turning points” (Denzin 1989) where people see themselves in a different way. Many respondents worked to express these changes by talking about “the old me’s” and the “me’s now” and by using examples of past behavior, ideas, beliefs, and values, contrasted with the present. Religions, and particularly new religions (Nietz 1990:105), have been a rich site through which to study meaning and identity due to the ways such engagement focuses on “the therapeutic transformation of the self.” According to Travisano (1970:600), the experience of religious conversion involves a “radical reorganization of identity, meaning and life.” Thinking about turning points in religious context, in what could almost be described as a “conversion experience” which contains a “temporal marker” of the “conversion experience” with a “pre-conversion” and “post-conversion” biography (Sutterluty 2007), some interviewees repeatedly talk in terms of the past or old self of the “pre-conversion” days, contrasting it to the now of the “post-conversion” biography. Just as members of Alcoholics Anonymous (AA) give testimonials about time spent as alcoholics (Rudy 1988), people in my study may give what could be described as testimonials to the past behavior from which they have distanced themselves.

Because food was an important topic for nearly every person with whom I spoke, many people talked about the ways that they eat now in comparison to the ways that they ate in the past. It was common for people to discuss “changed taste buds,” paired with “changed identities,” as people compared and contrasted the foods they ate “pre-conversion” with the foods they now eat, post. In what was probably one of the more vivid examples of this type of talk, consider the following interviewee’s reflection:

I remember not liking cottage cheese...maybe it was like a texture thing...but cottage cheese, being a good source of calcium and protein, I decided one day that I was going to try it. I got a little cup with the fruit that it comes with, you know, even if I don’t like the cottage cheese, I’ll just mix it with the fruit topping and manage to get it down, and it turns out that I loved cottage cheese and I didn’t even want the fruit topping... and plain salad, I can eat a plain salad, mixed green salad, no dressing. And you know, I can eat an entire bag of that. *I used to be one of those people* where I had to have ranch with everything, not just with my salad, but *I was one of those people* where I had to have ranch with my French fries, or, I even would dip my bread in it, *but now*, it is not that I don’t like ranch dressing, but that I just prefer my salad without ranch dressing... *I was one of those people* that if there were three kinds of desserts out. I would want a little bit of each, so that I didn’t have to make a choice between them. *That is just the way I was*, I wouldn’t turn down dessert...and you almost could not pay me to eat a tomato. Tomatoes were just one of those things that I just could not stand.... But when I started CR and tomatoes constantly came up as being one of those foods that, you know, low calorie, high vitamin, that one particular antioxidant, lycopene, you know, it just, there were so many good things about tomatoes that it seemed really silly that I would freak out when I found one on my sandwich, so I started leaving them on the sandwiches when they would come into work, leaving them in the salads, just kind of gradually working up to the point where I can eat a handful of cherry tomatoes and just really enjoy them. [Female, CR, 2/3]

It is likely that one of the reasons the above interview was full of these types of examples is the more recent nature of the interviewee’s engagement with a “healthy life extension” body regimen career. Just like an eager new “convert,” this respondent expresses great excitement at this new world that has opened up to her as she recounts a funny story which helps to elucidate her excitement:

I still have coworkers who tease me about the day that I discovered out that you can eat an entire cucumber, get 130% of your Vitamin K for the day, and still have only eaten

45 calories, and it fascinated me to find that sort of information out. I went around the entire office, and was like, “did you know that a cucumber only has...they all started teasing me about that!” [Female, CR, 2/3]

Directly likening his engagement in his body regimen career to a “religious conversion” that involved “a total lifestyle change,” another respondent talks at length about his pre-conversion days, which serve to provide a stark comparison to his current beliefs and practices. For example, he recounts:

We ate so unhealthy, I mean, a bag of Doritos, one after another, in one sitting, to eat that Dorito now, would just be so awful tasting...vegetables were non existent, now I eat and crave vegetables a lot, very little meat now, a lot more fish. I am almost a vegetarian right now... Someone gave me, they had come back from a trip, and they gave me some chocolates, which was very nice, and they were the typical processed chocolate, and I like chocolate. I buy dark chocolate, and I’ll have some of that as snack in the afternoon, but I had a bite and it tasted so terrible that I had to get a napkin and spit it out in the garbage, it tasted that bad. I looked at the wrapper and it was all chemicals. I just gave the chocolates away. It just tasted horrible, just horrible...I buy chocolate now, with the ingredients as chocolate. I eat it and I like it but I look at the ingredients in chocolate, the cocoa. [Male, FR, 4/5]

Expressing her identity as “a CR person,” another interviewee provides an example of how this has created a shift in her outlook towards food.

I think... as a CR person, you change your views of what is good food, or, because of what is good for your body, like, what is a treat for you, as something as a CR person, it’s a treat because you are being good to your body and are giving yourself a longer life, and I’ve just come to, you know, avoid, or I haven’t been eating sugary things for so long that I don’t like the taste of them, now, you know...[Female, CR, 2/3]

In what could be considered one of the classic sociological texts on identity, in *The Outsiders*, Howard Becker (1963) revealed that one of the ways that people acquired the identity of “drug user” involved learning to favorably interpret the experience of using marijuana. In similar fashion, for example, in acquiring the identity of a cronnie, people learn new “roles” which provide direction in “what to do and expect during a given interaction” (Travisano 1970:597), as they positively regard behaviors and beliefs

associated with the practices of their given lifestyle, eating new foods, taking new vitamins, and engaging in new physical activities. Further, I also found that, similar to the description of addicts' narratives of recovery from drug use (McIntosh and McKegany 2000), my interviewees also engaged in the opposite behavior, negatively reinterpreting elements of their past which serve to challenge or contradict this new sense of self, as specific identities served to guide people in what they should do, experience, and anticipate, through particular circumstances.

Two Dominant Imagoes in Narratives of Identity

A shared feature of identity narratives includes "imagoes" (Bruner 1986; McAdams 1997) which are defined as personifications of the self that serve a dominant role in the narrative, helping to provide a degree of coherence to a life story imbued with multiple selves. Examples of imagoes that McAdams (1997) has identified in his own voluminous research on identity include, to name just a few, "the clown," "the peacemaker," "the good soldier," "the worldly traveler," and "the person-who-never-gets-into-trouble."

The concept of "imagoes" was particularly useful to me as a way to capture some of the similarities and differences between the ways individual respondents talked about their lives and this included the ways they explained their engagement in particular body regimen careers, their experience with illness or threats of illness, and their depictions of bodily aging. While many other "imagoes" could be identified to characterize my interviewee narratives, for example, "the pioneer," "the eccentric," and "the independent

scholar,” the two which I will explore for the purposes of this chapter could be described as “the survivor” and “the defender.”

Survivor

The survivor imagoes captures a narrative in which the person repeatedly tells stories that reveal life challenges that the narrator has faced. Yet with each challenge, instead of collapsing with exhaustion, or fear, or frustration, a story of struggle, fight, and defiance, unfolds, as the story teller embraces the identity of a person who always gets back up when they are pushed down. The following interview excerpt provides a good example of the survivor imagoes:

I was an artist all my life, from the time I was six or seven years old when I decided that was what I was going to do. So that is what I studied in high school. That is what I did when I went to art school, that was my major in college...I just kept working at it and working at it and working at it and so that is what I did for 11 years and I was getting a really nice, you know, eight hundred or nine hundred or a thousand dollars for a pastel or a charcoal and then I had a minor stroke....The only thing that happened was I couldn't do my art work any more, it was on the right side of my head, it was very minor, it really didn't do anything, but it just knocked my art work muse out or whatever...and something had just altered as far as the way my right brain saw things artistically...I have really struggled with this a lot because I have tried to go back to doing my art work... its really a struggle for me to go back to it because I want to judge myself by what my work was like when I lost it. [Female, AA, 60+]

This example is one of a number of other major life challenges this interviewee discussed through the course of our conversation. Near the end of the interview, trying to make sense of it all, this same respondent explains:

I am sort of phoenixy, I guess. I have gone through these really bad things and I always just pop back up and I guess it is some sort of determination to have some sort of vitality and to stay as young as possible for as long as I can. [Female, AA, 60+]

Referring to herself as a phoenix, a mythical bird from ancient Greek and Egyptian mythology that never dies, renewing itself from the flames of burning ashes, this

respondent hints at the types of hardships that she is able to overcome. She perceives her use of anti-aging medicine to be just one more part of her own fight for survival.

In another story that aptly captures the survivor imagoes, another interviewee refers to herself as “a survivor” from early in life.

I won't accept anything. I'm *a survivor* because I was kicked out in the world when I was pretty much 14 years old. I came from a poor family. They had nothing, absolutely nothing, so I knew that if I wanted anything, I had to get it myself, you know? So I have always been independent, stubborn, anything you call it, name it, that's it, so I don't accept it. If you are going to tell me it's black, you had better explain why. I need to know that. [Female, AA, 60+]

Throughout our conversation, this interviewee talks about the hardships she has successfully endured over the last decade as she has struggled with chronic illness. In an effort to get better, she recounts how she saved up \$1,300 to pay for a three month supply of anti-aging hormones.

I am not rich, by any means, I do not make much money. I am totally self-supporting. I do not have a husband or a child or anyone that will take care of me. I have to do it myself and I always have done so... I don't want to just take [name of anti-aging hormones] because it will build muscle mass or any of that stuff. I just want to get out of this funk...I didn't care if it made me look 10 years younger or, dad a dad a dad a, I just wanted the old [interviewee's name] back and I still do [laughter]. [Female, AA, 60+]

Though this respondent's symptoms have been extremely debilitating, she manages to excel at her job in order to pay the bills. Her identity as a “survivor” is reflected in her determination and struggle to find a way to feel better, and she considers anti-aging medicine as a possible solution to this goal.

In yet another example of the survivor imagoes, an interviewee recounts a difficult childhood, explaining, “I was the product of divorce...” With a mother who

“...was always drinking wine,” this respondent explains his current passion for fitness, athletics, and health which stems from early childhood:

I have been going to the gym to make sure that I can play these sports, mostly because my whole child life, I was playing sports. I think it really stemmed from that fact that my mother needed a place to kind of seat me, you know, it was kind of almost like a babysitter... so after school I'd go to my buddies house, you know, because practice would start at five, so those two hours would be at a friends house, go from friend's house to practice, and mom would pick me up from the practice or whatever, and then back home...[Male, FR, 2/3]

Heading first into the military, straight out of high school, this interviewee worked hard to quickly establish his own independence from his family. While he laments that he wishes he had been able to go straight to college, with determination, he perseveres, going part-time during the evenings, while working a full time job during the day. Confronted with a long list of various injuries due to his passion for organized sports, his “survivor” imagoes remains strong as he recounts:

Three years ago, I dislocated my shoulder during a [name of sport] game and shortly after that, I mean, I had it set that day, I took a few weeks off, as directed by the doctor, and they said, “well you know, its been out once, you snapped off a ligament and chances are, it is going to happen again,” ...and sure enough it did and by the time it was all said and done I had had 13 dislocations. Finally my shoulder got so bad that at one point, just in the middle of the night while I was sleeping, I woke up with a dislocation... You could call it stupid and it certainly was, but I wasn't about to stop playing... It really is engrained in me, and...so I persist. [Male, FR, 2/3]

Stories which depict a person charging head-first through life, struggling, fighting, and resisting, despite it all, the survivor imagoes is characterized by a determined, and sometimes rebellious spirit. This is similar to the way that “illness narratives” or “pathographies” (Langellier and Peterson 2004; Hawkins 1993) are described. Typically involving a story of heroic struggle, illness narratives are premised on survival and recovery or closure. While individuals may experience additional

challenges, they are perceived of as future hurdles down-the-road-of-life, and not as ever present threats, similar to the way that Charmaz (1991:13) describes the “illness as an interruption” perspective, which characterizes illness as a temporary disruption. While a number of other respondents in each of the three interview groupings recounted narratives that could be considered to represent the Survivor imagoes, I’ll now turn to those narratives that could be characterized by what I refer to as the defender imagoes.

Defender

The defender imagoes captures a narrative in which a person recounts stories in which they identify themselves as continually “at-risk,” often times explaining the beliefs and behaviors which characterize their engagement in a “healthy life extension” body regimen career as defense against silent and invisible invasions and attacks. If the body is a house, the body regimen career is like an alarm system, providing a person with early notification of about any potential invasions. While the narrator in the defender imagoes may have experienced a serious illness or may only be guarding against a perceived threat, stories of this type tend to be characterized not by the survival/closure scenario previously described, but rather, by what could be described as a looming veil of omnipresent threat. While they are not stories of chronic illness per se, these types of stories have more in common with what Charmaz (1991) refers to as “immersion” stories characteristic of the chronically ill. Health, in these types of stories, remains in a permanent “precarious” state and people persist on the defensive. While the stories Charmaz (1991) details, of the chronically ill, position illness as ever-intrusive, in the narratives that I am describing, it is not illness per se, but the ever present perceived

threat of illness leading to aging, (which is depicted as decline, and eventually, death), which interferes. Defenders are diligent in their efforts to do whatever they can, yet they also are aware of their limitations. Feelings of vulnerability, of being permanently “at-risk,” and “on the defense,” often inspire them to take “preventive” action. Defending the body/self against life’s curveballs, defenders are keenly aware of the limitations to their capabilities and the overall emotional state of their interviews is characterized more by anxiety and worry than spitfire confidence and a gritty fighting spirit. Consider the way this interviewee provides an example of the defender imagoes:

I am well known for my approach to health. I think several people in the office were extraordinarily surprised when I did have the diagnosis of cancer. It was threatening to them because they thought, “you are the one that we never expected! You have been so healthy,” and my husband, he is very active, he runs all the time, he plays soccer, he does a lot of hiking and goes on very long hikes, so I guess we are seen as a healthy couple and it is was very surprising and scary for people to see. [Female, CR, 4/5]

This cancer diagnosis, which the interviewee described as causing a “major shift” in her thinking, made her what she describes as “obsessed” with her “health history.” In her own words:

I was reading absolutely every little article I could get on cancer...what is the likelihood of me getting this back again, and of course, I was absolutely certain that I was going to be in that 2 percent that you know, even with surgery, would ultimately fail all of the statistics...[Female, CR, 4/5]

Re-evaluating all that she had previously done, she explains:

There was a ten year period where I was a lot looser, about accepting what I was eating, and [I would] indulge in the occasional cookie, two, three, times, and that was actually more than the occasion, that was actually quite normal, and it was all the things we typically do, with the typical American diet, so...I mean, I do actually wonder, it was that 10 year period in my life where it was probably the least healthy that I was eating, if it was caused by that time in my life. [Female, CR, 4/5]

Living her life in a state of “heightened alert” for more potential signs of disaster, this interviewee focuses her efforts on ways to potentially defend against the inevitable future threats that will come her way, which has morphed into her efforts to delay all signs of “bodily aging,” yet like holes in a sieve, many questions remain as she is keenly aware of her vulnerability. In stark comparison to the brazen confidence of those embracing the “survivor” imagoes, those narratives which reveal the spirit of the “defender” are rife with fear and feelings of vulnerability.

In another example of the defender imagoes, another interviewee recounts the varied list of potential risks that she perceives on a daily basis. She explains:

I'd really like to avoid a lot of illnesses, like diabetes, chronic illnesses, like heart disease, or cancer, of course the big C word is always the big fear, you know. My mother died from cancer a few years ago and I think about ways that I can do my best to try to avoid it and I do worry about the environment. I worry about the air quality. In the summer I pay attention to reports about the air and the safer times of day to exercise. You know, versus times of day that it is more dangerous. I worry about the sun in ways that I never used to. And now I am very ritualistic about applying sunscreen even in the winter. Any exposed skin I put sunscreen on...I never used to do that. So I've become more and more aware. [Female, FR, 4/5]

While this respondent has not experienced health threats in her personal biography, she was deeply affected by the experience of watching her mother die of cancer. She sees her own body as a site of potential risk and she expresses concern about a great number of things, over many of which she perceives that she has no control. She explains, “I think everyone should do what they can to promote their health but I do believe that that is not always in a person’s control.” In another interview characterized by the “defender” imagoes, an interviewee draws a similar conclusion after watching her sister die unexpectedly, “It makes you want to say, o.k., you live for today, and you enjoy today, because you don’t know what tomorrow will bring, what you are going to get hit with!”

[Female, FR, 4/5] Describing stories which recount a defensive and more fatalistic posturing against all that the fate that the world throws their way, examples of the defender imagoes characterize a number of narratives relayed by my interviewees.

Imagoes and Aging

In a closing observation, it is interesting to explore the ways that the dominant imagoes of an individual's narrative are sometimes linked to perceptions of aging. Individuals who clearly used the fighter/survivor imagoes throughout their narratives generally expressed similar attitudes when talking about the process of aging. Their discussions around aging tended to involve a certain *esprit de corps* that celebrates fighting, resisting, and struggling against that which they characterize as "aging." In contrast, those with narratives characterized by the defender imagoes were more likely to take a defensive posture – regarding aging as ultimately inevitable (while not necessarily desirable), and expressing a message marked more by defensive acceptance than hostile resistance. While narratives exhibiting both imagoes regard aging, (largely through a biomedical lens), as a problem to ultimately be assuaged, the variation between imagoes comes more in terms of what is perceived of as possible. Those using more of a fighter/survivor imagoes talked about putting up the "good fight" until the bitter end, while those upholding more of a defender imagoes talked in terms of feeling forced to accept the inevitable, however painful and undesirable that might be.

For example, consider the way the following respondents, in the spirit of the fighter/survivor imagoes, talk about aging:

I am not saying that you can reverse the aging process, but I do believe that you can

slow it down...I can fight it [aging] every step of the way. What I can do is make my body look and feel as good as I possibly can, every day, today is the first day of the rest of my life, and I can make it as good as I want to or I can just accept the fact that I'm going to have to stop doing the things that I enjoy and I am not ready to accept that just yet! [Male, FR, 2/3]

I was always very active and I always had really good energy...I want to have the energy and the stamina to go and venture and travel and surf again and do all of those things that I still want to do ...I don't want to go gracefully into being old, you know? I still wear shorts and still wear the clothes I want to, and not feel like some haggard old woman when I go out in public, and I'd also say for me. I don't want to look in the mirror and see an old woman looking back at me. [Female, AA, 60+]

This talk about “fighting aging every step of the way” or “not wanting to go gracefully into being old” stands in marked contrast to the way some of the other interviewees talk about aging.

For example, in contrast, one of the respondents who could be described as using the “defender” imagoes talks about aging by explaining that while she doesn't particularly like aging, she feels that the only way to potentially slow it down is through “severe [caloric] restriction,” something she explains that she does not know if she is willing or capable of doing. At another point in the interview, while describing some health challenges she is experiencing, this same interviewee concludes, with an underlying tone of defeat, “I am just getting old.” This personification stands in marked contrast to the fighting spirit that was such a part of the “survivor” imagoes narratives.

In another example, the interviewee who details all of the perceived health risks she is attempting to avoid, talks about aging, explaining that while she will continue to defend as best she can, ultimately, she works hard to accept that aging is an inevitable “...chemical process, some of which a person can control by how they

live their life and how they treat themselves...[but it] is not always in a person's control." [Female, FR, 4/5] A certain degree of acceptance and even resignation towards aging characterizes these less common defender imagoes when contrasted with the confrontational spirit of "the survivors."

Of course it is important to note that despite her apparent "acceptance" towards aging, this interviewee – in "doing the best that I can" – engages in a very rigorous daily body regimen career that includes a wide range of intersecting practices to stave off bodily aging and promote longevity. Yet in contrast to the interviews marked by the survivor imagoes, interviews characterized by the defender imagoes are less likely to depict their efforts as a struggle or fight against a specific attack, and more likely to depict their body regimen practices as a general effort to postpone and defend against the inevitable.

Conclusion

While rejecting claims of an essentialist self which promotes what Rochberg-Halton has characterized as the "fiction of modern individualism" (1986:38) and turning to the fundamentals of interactionist and interpretive sociology, including important concepts like the "looking glass self," I explore the ways that people engaged in body regimen careers work to construct self conceptions of age through social interaction. Using the terms "specter and ideal," I consider the ways that my interviewees look to others to determine and define that which they want (and do not want) to be. These efforts include a sense of shared commonality and "idioculture" (Fine 2002) among others engaged in body regimen careers associated with the

“healthy life extension community,” and this may include the coining of regimen-specific phrases, like for example, the use of the term “cronnies” to describe those engaged in CRON, or reference to “gak” to describe foods that are considered unhealthy and undesirable. Individuals engaged in fitness regimens also used some regimen specific language. For example, one respondent used the verb “treading” to describe her daily treadmill fitness routine, and many spoke in the language of athletic performance, referring, for example, to “P.R.s” (short for personal records). Those engaged in anti-aging medicine frequently talked about alternatives to what could be described as “mainstream medicine,” and this included, for example, lengthy descriptions of “bio-identicals” when talking about hormone therapies, instead of the standard allopathic hormone replacement therapy (HRT).

In her efforts to connect psychoanalytic theory with the political economy, Brennan (1993b) describes the current state of Western culture as the “age of paranoia” which stems from a need for control in the era of the ego. As Brennan (1993b:100) articulates “...it results from a subject's belief that the object, the objectified one, is out to get it, but this paranoia originates in the subject's own projected aggressive desires toward the other. Nonetheless its paranoia makes the ego anxious and its anxiety makes it want to control.” With insights from Brennan, we can explore people's fears about potential health risks, and even concerns over whether and how the practices involved in their current body regimen careers might actually harm them, and the more heightened the desire for control becomes, the greater the fear of lack of control. Engaged in what

could become an endless tug of war of what, how much, and whether “to do,” it is possible to understand the adage that “ignorance is bliss.”

Thinking about alternatives to what might be described as a dualistic pendulum, insights of Brennan’s (2000) discussion of energetics, for example, could provide a powerful alternative effort to transmit a different, and ultimately perhaps more vital and life-giving type of affective exchange. Brennan suggests that when an individual refuses “to impose a negative image on the other . . . resist[ing] and reverse[ing] moments of objectifying aggression . . . these decisions may reverberate throughout the cosmos” (1993b:188). This type of resistance to objectifying the other, according to Brennan, releases powerful energy that can serve to “...perturb the established pathways which otherwise guide and limit understanding...” (Brennan 1997:283 as cited by Caputi 2001).

Exploring the phenomenon of impression management, I think about the ways that people engaged in all three types of body regimen careers may at times try to hide their efforts in an attempt to “pass” in a culture where their practices may create tension and even draw ridicule. Looking at the way interviewees talked about transformed selves over time, I consider the concept of “conversion experience” as it applies to my data. Finally, applying McAdam’s (1997) use of the term imagoes to the stories within my interviews, I considered the way two different imagoes may serve to inspire different interpretations of the process of bodily aging. Turning to children’s literature as a way to further illustrate my example, the difference between the “survivor” and the “defender” imagoes is like the difference between the

Gingerbread Man and Chicken Little. While the Gingerbread Man confidently sings out “Run, run, as fast as you can! You can't catch me! I'm the Gingerbread Man!” Chicken Little fearfully warns all her friends and neighbors “The sky is falling! The sky is falling!”

Recognizing the influence of the greater social milieu within individual stories of identity (Ricoeur 1991), I am mindful of the ways that narratives must be regarded as a melding between personal and social. Given this, in the next chapter I will consider some of the influence of the social on the ways that these stories of identity are relayed – regarding society as, for example, part author in the “survivor” and “defender” narratives.

Chapter 4: Responding to “Risk Society” with the “To Do” Imperative

Sociology of Health & Illness

Talking and writing about her struggle with chronic fatigue syndrome (CFS), two-time World Cup champion and Olympic gold medalist Michelle Akers elaborates, “The illness demands attention in every detail of my life and if I don't pay attention, it punishes me mercilessly.”⁵⁷ For soccer star Michelle Akers (and for countless others), illness, often accompanied by pain, is an embodied experience that insists on recognition, requiring a heightened sense of vigilance, paired with increased awareness. The common twenty-first century farewell phrase, “take care,” assumes new dimensions when it is applied to situations of illness, as such efforts may include detailed dietary, medicinal, and lifestyle regimens in order to heal or even to cope. From the standpoint of illness, the world of health and wellness certainly appears as a much simpler existence, devoid of much of the pain, worry, and frustration that so often captures bodily malaise. Given this, it is not surprising that many of the key scholars in the field of the sociology of health and illness, for example, Brown (1996), Bury (1991), Charmaz (1991, 1995), Conrad (1987, 1992), Corbin (2003), Frank (1991, 1995), and Karp (1996, 2006), to name a few, have placed primary emphasis and concern on the latter half of the subject matter.⁵⁸

Health, as suggested by Frazer and Greco (2005:20), has been largely defined as a “lack of bodily awareness...a ‘silence of the organs.’” And this focus is understandable

⁵⁷ Retrieved on May 29, 2008, from www.usolympicteam.com/26_37757.htm

⁵⁸ When the matter of health is addressed, it is largely in terms of “morality,” with a consideration of, for example, “wellness as a virtue” (Conrad 1994:385), “health Nazis” (Edgley and Brissett 1990), and the discourse of “healthism” (Crawford 1980).

since it could readily be argued that the body in pain and illness both demands and deserves to be understood. As feminist theorists, disability theorists, critical race scholars, and others have successfully emphasized, all bodies are not treated equally, going so far as to suggest that bodies that are sick, disabled, and aged are disqualified from full personhood (Hockey and James 1993). Yet just like an understanding of poverty and wealth, focused only on poverty, would be missing important areas of insight, a sociology of health and illness, which largely explores the illness experience, may be detrimentally partial.

In an effort to flesh out distinctions between the body in health and illness, Juliet Corbin (2003) draws on eight core concepts, which she argues are experienced differently depending upon vantage point. Touching on a few of these concepts, for example, Corbin suggests that in regard to the concept of time, in health, time is scheduled around what people want to do with their time, while in illness, time becomes scheduled around regimens, and periods with lessened fatigue and/or pain. In another contrast, Corbin (2003) notes that in health, space is more open since one can move in and through space with less constriction, whereas, in illness, space may be interrogated by what Corbin (2003:260) refers to as “diagnostic poking and probing, X-rays and other invasive laboratory tests [that] make the invisible body spaces visible.” Further, Corbin (2003) suggests that while the healthy tend to take pride in their bodily achievements since it bolsters their self worth, people struggling with illness may be more likely to experience moral repercussions and stigma. Finally, Corbin (2003) suggests that while technology is a part of most people’s bodily experience, it takes on a greater role in the lives of the ill,

since it may refer to medications, life support systems, as well as tools for diagnosing and monitoring conditions.

While Corbin's (2003) work provides engaging insights into the nature of health and illness, I struggled to see where many of my interviewees engaged in body regimens associated with the "healthy life extension community" fit into the equation. While many of them would likely be categorized as seemingly "healthy" at the time of interview, and would likely describe themselves to be in "good health," my interviewees often times had far more in common with the people that Corbin (2003) described as ill. For example, many were engaged in extensive body regimens that took up a considerable amount of their time -- to the point where they sometimes expressed frustration. Most were accustomed to regular "diagnostic poking and probing" in order to try to make the invisible body more visible, and many were demanding additional "invasive laboratory tests" from doctors, and even paying out of pocket for such exams, when necessary. Likewise, as discussed in greater detail in chapter three, individuals engaged in practices associated with the "healthy life extension community," talk of the stigma of being considered a "health nut," odd, weird, or alternative, as they describe their "passing" strategies (Goffman 1968) and related efforts to avoid drawing attention to their bodily pursuits. Further, as will be explored in greater detail in chapter seven, the role of technology in the lives of people engaged in body regimen careers was pervasive, as people described their experiences with a long list of vitamins and supplements, combined with the use of different types of equipment including diagnostic tools, fitness/exercise machines, and monitoring and tracking devices.

Part of the outcome of my own research focused on those engaged in body regimens associated with the “healthy life extension community,” is to reveal what could be described as the elusive and precarious position of “health,” which is certainly not a static or stable destination. As articulated by Fox (2000:343) who credits Parse (1987:160):

Health is an unfolding, a lived experience which cannot be qualified by terms such as good, bad, more or less... it is not the opposite of disease or a state that man [sic] has, but rather is a continuously changing process.

Perhaps even more so than wealth, since it is completely conceivable that a person die with a lot of money and assets having never known poverty, health, for all, is a temporary resource, since, at least at this point in time, during the first decade of the 21st century, humans have not yet found a way to conquer the call of death. Edward Bellamy’s utopian novel *Looking Backward*, powerfully depicts the relationship between the rich and the poor by using the analogy of a chariot traveling across dangerous and hilly terrain. While the poor masses carry the chariot and drag beneath the chariot, holding on for life, the wealthy elite secure comfortable seating on the top. Though this seating was regarded by most as desirable, the actual experience of being in the seats was much less secure. Bellamy (1960[1888]:27) writes:

By rule of the coach, a man could leave his seat to whom he wished, but on the other hand there were so many accidents by which it might at any time be wholly lost. For all that they were so easy, the seats were very insecure, and at every sudden jolt of the coach persons were slipping out of them and falling to the ground, where they were instantly compelled to take hold of the rope and help to drag the coach on which they had before ridden so pleasantly. It was naturally regarded as a terrible misfortune to lose one’s seat, and the apprehension that this might happen to them or their friends was a constant cloud upon the happiness of those who rode.

This passage stands out in my mind as a powerful parallel to the experience of many seemingly “healthy” people who are engaged in body regimens careers. While they may enjoy health at present, they are keenly aware that this is a fleeting and precarious position, and that it could conceivably be taken away at any minute.⁵⁹ As Clarke and colleagues (2003:174) articulate in their description of the current era of biomedicalization:

It is no longer necessary to manifest symptoms to be considered ill or ‘at risk.’ With the problematisation of the normal and the rise of surveillance medicine, everyone is implicated in the process of eventually becoming ill. Both individually and collectively, we inhabit tenuous and liminal spaces between illness and health, leading to the emergence of the ‘worried well’. It is impossible not to be “at risk.”

Perhaps it is even possible that the more effort one puts into a body regimen career, the greater the investment in terms of time, money, effort, emotion, and additional resources, the greater the concern over potential risk and loss. For as Strauss (1959:37) emphasizes, “A problematic world implies the continual danger of losing hold of objects into which great investments have been poured, objects with which we are heavily involved...” Using the language of the market, as one of my interviewees articulates, “There is no more precious commodity than preserving your health” [Male, AA, 2/3].

While attempting to “preserve” the “precious commodity” of one’s health, one’s experience in the flesh and blood of the lived body makes these efforts an ongoing challenge. As stated by Bauman and May (2001:101,105): “Taking care of our health may be quite time consuming and aggravating and it often generates a good deal of

⁵⁹ The recognition of the angst that this awareness may cause is not recent. As Edgley and Brissett (1990:269) make note, Plato explained in *The Republic*, written 360 B.C.E, “Too much attention to health is a hindrance to learning, to invention, and to studies of any kind, for we are always feeling suspicious shootings and swimmings in our heads...”

anxiety...since we are responsible for every part and function of our bodies, with almost everything having the potential to be changed for the better.” In the words of Benson (2000:25):

For in truth we do not own our bodies, they own us, that the only thing that is certain about our bodies is that they will let us down, that in the end they cannot be mastered or bent to our will. In this sense what these practices bring into sharp focus is the impossibility of Western ideas about the body and self, and of these fantasies of permanence, control, autonomy, that they seek to negotiate.

Melding what could be described as an “endless quest for health” within a consumerist culture, it becomes “...each person’s duty to improve themselves and their lives, to overcome their shortcomings, as if all had equal access to the means for this purpose and our relations with others and the environments which we inhabit were not of fundamental significance in this process” (Bauman and May 2001:154). As the moralizing approach to consumption “...reduces everything to the individual” (Willis 1992:134), health consumerism inspires a constant pursuit of action through the “self preservationist conception of the body” (Featherstone 1991:170). Consumerist culture, as noted by Gilleard and Higgs (2005:120), is “...not really about instilling physical self-confidence. Its success comes from achieving the very opposite.” Confronting this contradiction head on while standing in line at the grocery store I am faced by the August, 2008, edition of Vogue magazine. Thirty-four year old supermodel Kate Moss serves as poster child for the magazine’s so called “age” issue, drawing readers in with the large heading, “The Age(less) Issue: Vogue's Guide to Looking Amazing at Every Decade, on any Budget, through every Season.”

Bodily insecurities may be further inspired due to the conceptualization of the body in the late 20th and early 21st century. For example, as suggested by Martin's (1994) research, a major consequence of regarding the body as a complex system, (something that will be explored in greater detail in chapter 7), helps to inspire a paradoxical feeling, where people feel simultaneously powerful and powerless over their bodies, as efforts to exercise control over the ever expanding sphere of influence which affects the body, may appear increasingly overwhelming. Whether it is the daily practice of CRON, vitamin and hormone supplementation, rigorous dietary requirements, and/or daily fitness and exercise regimens, paired with a constant review of the latest "expert" advice, there is not a destination where one can say, "I have arrived and achieved what I set out to do, now I can relax" (Bauman and May 2001). This is a career track that requires ongoing vigilance and dedication.

While the marketplace feeds off of, and inspires, the body regimen career, people often times talk in the language of "prevention" when navigating a daily barrage of perceived risks. This "at-risk" (Baric 1969) awareness often creates angst and a certain restlessness to do whatever possible to continue to strive for, and/or maintain this desired yet precarious and ultimately fleeting, state of health. Many people experience "body anxiety" which is, as Shilling (2003:32) explains, "linked to the experience of the environment as dangerous and out of control, and the fear of aging, illness and death."

Articulating this "body anxiety" in greater detail, Woodward (2002:138) elaborates:

Even if many people now have much longer life expectancy than in the past, especially in the continents of North America, Europe and Australia, there is a much higher awareness of the possibilities of risk. This takes the form of anxieties about food, the

external environment and health, and in the more affluent areas of the world there is an enormous emphasis on taking responsibility for taking care of the self.

While risks are perceived to exist in many different locals in both the individual, (for example, in terms of DNA and genetic inheritance), and society, (think here about environmental pollutants and the stressors of the post-industrial world), many of my interviewees relayed powerful first hand accounts of perceived risks. Highlighting the contradiction in much of this discourse around “risk society,” Shilling (2003:5) explains: “At a time when our health is threatened increasingly by global dangers, we are exhorted ever more to take individual responsibility for our bodies by engaging in strict self-care regimes.” Yet despite what could be described as a growing public health rhetoric focused on health prevention and promotion, as noted by Brown (1996), “key measures of a nation's health such as life expectancy, infant mortality, and maternal mortality show the United States to rank fairly low among major industrialized countries.” In “doing whatever is possible” to navigate perceived health threats, people engaged in body regimen careers turn to what are sometimes called “preventative health behaviors.”

Prevention

Prevention typically refers to some actions, goals, and strategies that are done in order to avoid something undesirable in the future (Mellencamp 1992). Prevention science is a multidisciplinary enterprise based around the goal to prevent or moderate what are labeled as major human dysfunctions, by mobilizing the body's own defenses.

Preventive efforts occur, by definition, before illness is fully manifested, so prevention research is focused primarily on the systematic study of potential precursors of dysfunction or health, called risk factors and protective factors (Coie et al. 1993:1013).

Over the last century, the emphasis on prevention has grown significantly. There are many interesting examples which illustrate how health prevention efforts have been of growing interest both to business and to the state. For example, health screenings were conducted in schools during the late 19th and early 20th century in order to screen for contagious disease, and some American corporations, during this same period, regarded preventative health efforts as a way to inspire worker efficiency. By 1917, more than 10% of the biggest 300 corporations in America paid for frequent employee health exams (Reiser 1978:404). The Life Extension Institute (LEI), formed in 1914, with strong connections to the insurance industry, operated for about two decades by promoting preventative health evaluations for insurance companies and private individuals, with the goal to detect disease and to encourage specific hygiene and lifestyle habits (Hirshbein 1999). LEI leadership included the guidance of economist Irving Fisher, recognized for his 1909 publication “A Report on National Vitality” in which he surveyed the means to extend the life expectancy in the U.S. by emphasizing the importance of personal and public hygiene, complete with “rules for healthy living.” In 1922, the American Medical Association (AMA) endorsed the need for annual health examinations (Emerson 1922 as cited in Reiser 1978), and the National Health Council started an annual campaign in an effort to generate 10 million preventive health examinations (Tobey 1923 as cited in Reiser 1978).

In the 21st century, it could be argued that preventive science is firmly established as a call to individual action. As explained by Frazer and Greco (2005:2),

“the medical emphasis on prevention means that the body – even in the most technical aspects of its internal workings – is no longer the exclusive province of specialist interest and curiosity.” As Rose and Novas (2005:451) further articulate:

Part of the obligation of the active biological citizen [is] to live his or her life through acts of calculation and choice. Such a citizen is obliged to inform him or herself not only about current illness, but also about susceptibilities and predispositions. Once so informed, such an active biological citizen is obliged to take appropriate steps, such as adjusting diet, lifestyle and habits in the name of the minimization of illness and the maximization of health.”

While public health campaigns warn against the dangers of smoking, the importance of a “balanced diet,” and regular exercise, some scholars have described the “rhetoric of prevention” as a socially constructed product of modernity (Freeman 1999) that may serve as a way to regulate and control bodies (Fitzpatrick 2001; Davies 1998; Foucault 1980). Further, with chronic disease predominating morbidity statistics, and with little cure for chronic conditions, preventive strategies become emphasized as a means to prolong life quality and ward off chronic illness (Gannon 1999; Fries 1989).

Perhaps despite the socially constructed nature of prevention rhetoric, the scientific imagination has been captured by the “possibility of prevention through advances in molecular biology” (Marshall and Katz 2002:62) as individuals are instructed to stay tuned to learn more about what they can and should do since “preventive medicine...demands constant vigilance on the part of the individual” (Featherstone 1993:183). Conceptualizing risk at the level of the biological body,

responsibility is firmly situated at the individual and familial level, blurring many of the complicated socio-economic and political factors linked to disease.⁶⁰

Preventative practices related to potential illness are often framed within the “risk factor” discourse which involves identifying psychological, social, biological, behavioral, and environmental factors which contribute to the emergence of a given problem; if people have certain risk factors, they are more likely to get a particular disease. Risk factors are often regarded as cumulative so that the more risk factors, the higher the level of risk. Risk factors are also used to predict future outcomes. For example, certain internet sites offer people the opportunity to take a variety of tests which assess risk factors along with protective factors, to tally an individual's projected future lifespan. The living to 100 life expectancy calculator,⁶¹ designed by Dr. Thomas Perls, asks people 40 questions and then estimates how old they will live to be. People are also offered a personalized “to do” list of things to do differently, with information about how many years of life you can add on if you make these changes.⁶² For many individuals, including those engaged in body regimen careers, the rhetoric of prevention serves as an important guide – a personal call to action– as people navigate through what some describe as “risk culture” (Beck 1992).

⁶⁰ As aptly highlighted by the title of a talk delivered June 11, 2008, by Dr. Adewale Troutman, the Director of Public Health and Wellness in Louisville, KY, “Creating health equity through social justice; More than an apple a day and a walk in the park.” For more specifics on the socio-economic and political inequities of health, see:
[http://healthpolicy.wustl.edu/.../dcdaa3ace6f12e0c86256e4a0059af8e/\\$FILE/Adewale%20Troutman%20presentation.pps](http://healthpolicy.wustl.edu/.../dcdaa3ace6f12e0c86256e4a0059af8e/$FILE/Adewale%20Troutman%20presentation.pps)

⁶¹ Available at: <http://www.livingto100.com/>

⁶² Other tests are available which claim to estimate a person’s biological age and calculate an individual’s rate of aging, (see <http://www.growyouthful.com/quiz.php>) complete with a “personalized plan to feel younger” and a list of “what’s making you younger or older” (as featured on the Oprah show and on the Oprah website, refer to <http://www.realage.com/>).

Risk Culture

How extraordinary! The richest, longest lived, best protected, most resourceful civilization, with the highest degree of insight into its own technology, is on its way to becoming the most frightened (Wildavsky 1979:32).

Risk is a central phenomenon in modern societies (Lupton 1999, 2005; Beck 1992, 1999; Giddens 1991). In pre-modern times, the concept of risk referred to objective dangers, acts of God, and perils that humans could not remedy (Ewald 1993). Human fault and responsibility were not a central part of this pre-modern notion of risk which was bolstered on fate and chance. By the 19th century, the concept of risk had significantly changed to include both nature and human beings and their behavior (Powell 2006:122), as the world of probability, risk profiling, risk management, and rational calculation, came to the fore (Mitchell, Crawshaw, Bunton and Green 2001) through increasing attempts at rationalization (Bauman and May 2001).

Defining risk in *World Risk Society*, Beck (1999:3) states: “Risk is the modern approach to foresee and control the future consequences of human action, the various unintended consequences of radicalized modernization. It is an institutionalized attempt, a cognitive map, to colonize the future.” Gaining control over risks symbolizes a means to gain control over one’s own future (Hallowell and Lawton 2002; Giddens 1991).

The concept of risk, related to health, is intricately tied to the notion of personal responsibility and self control as the navigation of risk is placed on the personal rather than collective level (Hallowell and Lawton 2002). “Risk to health,” Ogden (1995:412) writes, “comes from the individual’s presence or absence of self control which manages and masters the changeable drives that expose the body to threats.” As the healthy body

is defined as a body that avoids that which is depicted as a risk (Williams 1998), individuals who do not “take care” by engaging in what are considered healthy lifestyles may be regarded as morally inferior (Lupton 2005, 1995; Fitzpatrick 2001; Crawford 1994, 1977; Petersen and Lupton 1996).

Many people believe that risk exposure is worsening (Slovic 2001), and that, compared with the past, they are exposed to ever greater risks.⁶³ Martin (1994:229) elaborates: “These days, we are often warned that an apocalypse of disease is coming soon, in which all of us will be tested but only some of us will survive...The position of ‘the public’ has been moved from safe witness to participant in impending disaster.” In a humorous and ironic essay appearing in the *New England Journal of Medicine* in 1994, Clifton K. Meador describes a phenomenon which he describes as the disappearance of “well people.” He explains:

Well people are disappearing. I should have known it was coming...I began to realize what was happening only a year ago, at a dinner party. Everyone there had something. Several had high cholesterol levels. One had ‘borderline anemia.’ Another had a suspicious pap smear. Two others had abnormal treadmill-test results, and several were concerned about codependency. There were no well people. After that, I began to look more carefully. I have not met a completely well person in months. At this rate, well people will vanish. As with the extinction of any species, there will be one last survivor. My guess is that the extinction will occur sometime in late 1998...Why are they vanishing?...How long will it take to find every single lesion in every person? ...Who will be the last well person?” (Meador 1994: 206)

Petersen (1997) suggests that the line between healthy and unhealthy populations has faded since everyone is “at risk” for some ailment. While research by Lindbladh and Lyttkens (2003) reveals that people often regard risk related information as contradictory

⁶³ Risk factors encompass a broad range of concerns including bad water, depleted soil, harsh UV rays, and light pollution, increased stress and obesity, cosmetics, cooking pans, carpeting and wallpaper, car exhaust, plastics in food, insecticides, herbicides from lawn care, artificial sweeteners and related ingredients, to name a few.

and inconsistent, Nichter and Thompson (2006) document how people engage in harm reduction as a mode of self management, to reduce a broad range of perceived risks including genetic, health history, environmental, lifestyle, and occupational. Yet according to Giddens (1991:124) daily life at present is not necessarily riskier than life in the past; it is just that compared to the past, people today must think more in terms of risk and risk assessment.

Social location works to shape risk perceptions and behaviors (Douglas 1985) yet entire populations can also be defined as “at risk.” For example, the U.S. Central Intelligence Agency’s 2004 World Fact Book, describes the aging population as a risk to the financial safety of Western nation-states (Powell 2006), and individuals in their 60s and 70s have been described as being “at risk” for particular chronic illnesses, based on chronological age alone.⁶⁴ Regarding the concept of “risk” as part of a meta-narrative linked to neo-liberal ideology (Bourdieu 1998), risk awareness is sometimes linked to a change in social welfare policy that emphasizes individualization, personal choice, and market solutions, as opposed to a more communitarian, egalitarian, and universalistic welfare state values (Powell 2006; Gilleard and Higgs 2001). Risk may also be seen as

⁶⁴ Aging and old age are identified by the NIH as risk factors for multiple primary tumors (retrieved on March 27, 2007, from <http://grants.nih.gov/grants/guide/pa-files/PA-99-030.html>). People with a lifetime high calcium intake are identified for increased risk of osteoporotic fracture in old age, while smoking is said to double the risk of eye disorder in old age (Retrieved on March 27, 2007, from <http://www.virtualrespiratorycentre.com/news.asp?artid=6240>). Obesity is linked to elevated heart disease risk http://www.medindia.net/news/view_news_main.asp?x=12460 and cardiovascular risk in old age is associated with weight changes, while early retirement may increase risk of old-age poverty <http://www.scienceblog.com/community/older/archives/K/0/pub0003.html>. “Old age,” it is suggested, may be the biggest risk factor for the onset of Alzheimer's disease, and in order to reduce risk, people are urged to take precautions which include eating vegetables, exercising, getting plenty of sleep and keeping one's brain active <http://www.pbs.org/theforgetting/risk/index.html>.

an outgrowth of the mass media emphasis on the “dangers of modern life” (Seale 2003:521) and the resulting “culture of safety” (Reinharz 1997).

In order to make sense of how people construct their own body regimens, the concept of risk is important. In the words of Bauman and May (2001:98), “Given the large volume of risk and uncertainty in the ‘world out there’, the body emerges as what we hope to be the last line in a set of defensible trenches. The body can become a trustworthy shelter because it is a site that we can control and so feel secure, unvexed and unharrassed.”⁶⁵ In an effort to understand the social factors that inspired the jogging craze of the 1970s, Gillick (1984) for example, suggests that jogging provided a personal solution to larger social problems that included the Vietnam war, social rights movements, and challenges to the “Great Society” as people tried to improve America by pounding the pavement, a symbolic gesture signifying efforts to “pull ourselves up by our bootstraps” (Gillick 1984:381). Shilling (2003) also suggests that a sense of mastery of the body can offer a source of certainty in a world filled with uncertainty – yet when thinking about this in relation to my empirical data, it is questionable as to how much certainty people engaged in body regimen careers actually experience. The heightened awareness and focus may actually lead to more uncertainty – a greater awareness about all that can, (and eventually will), go wrong, rather than a feeling of greater security and control.

⁶⁵ In her book about plastic surgery, Haiken (1997:15) writes, “given the complexity of the modern world, it is not surprising that individuals conclude that it is easier to change the self: the problem, in other words, clearly lies with the world, but the easiest solution, just as clearly, lies with the patient.”

According to Leder (1990), while embodied awareness and body visibility is often the result of physical disease and injury, body visibility may also occur in the anticipation of future dysfunction (as in the case of genetic risk – see Hallowell and Lawton 2002). The anticipation of risk, I argue, brings the body to the fore for many. Describing the body as “perennially at risk” (Giddens 1991:126), managing risk through bodily manipulation is more ambiguous than what may be revealed through biomedical discourse (Hallowell and Lawton 2002; Kroker and Kroker 1988). As Bauman and May (2001) highlight, no matter how much care people devote to the body, the anxiety that sparks bodily concerns never completely dissipates since it stems from the society in which we live.

Navigating Perceived Risk – Life is a gamble!

We are all woefully ignorant about physiology, nutrition and health. Humans just don't know enough. So *everyone gets to make their own bets*. (Newsgroup participant, Retrieved on November, 6, 2007, from calorierestriction.org).

There are a lot of conflicting viewpoints... especially when it gets to the point of whether a diet with or without animal foods or products is good for you, or... the whole soy causes dementia topic, you know, that is one of those things that I do kind of want to read up on, because I eat a fair number of soy products. I go to a Japanese restaurant once a week with a friend of mine, and you know, Miso Soup, which is a soy based soup, you know, I'd hate to think my weekly cup of Miso Soup is going to cause me to lose my mind some time down the line. But then you kind of have that side where you kind of go, “well, you know, people in Japan have been eating this stuff for ages, and they don't seem to be too badly off.” *So you do kind of have that, which, you know, who do you listen to, which side of the coin are you going for?* [Female, CR, 2/3]

Living less than three miles from one of the most famous horse tracks in the United States, perhaps it is not surprising that the topic of gambling would somehow find its way into my story. Whether in the form of the race track, lottery ticket, card room, bingo game, or slot machine, gambling represents a major source of entertainment in the

U.S. Starting in 1931, Nevada enjoyed its status as the only state with legalized casino gambling for nearly five decades, followed by New Jersey in 1976, and in the last 20 years, the industry has experienced rapid growth with nearly every state in the U.S. offering some type of legalized gambling activity.⁶⁶ Expenditures in the U.S. for casino gambling in 1999 reached approximately \$30 billion, and by 2002 this number had increased by about a third to tally more than \$40 billion. Gambling, as defined by Webster's New World Dictionary, involves playing games of chance for money or some other stake, or, taking a risk in order to gain some advantage. Gambling is at the heart of a culture based on risk, as articulated by Dunstan (1997)⁶⁷:

Gambling activities are extensions of the risk and chance in life. The activity of gambling becomes play, it becomes a game. Gambling allows the person the choice of engaging in the activity, the amount of risk and, in many cases, the stakes. The stakes are a necessary element for many people. It turns the bet into not just an opinion but a commitment.

Likening the phenomenon of gambling to the navigation of risk as it pertains to the body regimen career, it is evident that whether at the tracks or at the fridge, life is perceived of as a gamble, with risk being one of the only certainties in a sea of potential outcomes. An engagement in gambling can be regarded as a mirrored extension of everyday living and the important point for my own purposes involves the notion that even calculated efforts towards healthy life extension are perceived of as a gamble -- a game of perceived risks and chance. The stakes in the healthy life extension career being the possibility for delayed aging, enhanced health, and prolonged life, which turns the efforts associated with such potential into more than just a possibility, but a commitment.

⁶⁶ Retrieved on May 26, 2008, from www.equotient.net/papers/casino.pdf

⁶⁷ Retrieved on May 26, 2008, from <http://www.library.ca.gov/crb/97/03/Chapt7.html>

Regarding genetic inheritance through the lingo of risk estimates and chance, the analogy between DNA, genes, and gambling is frequently made, depicted in part by the lingo of gambling – e.g. “luck of the draw,” or the “flip of a coin.”⁶⁸ For example, an August 7, 2007, headline reads, “How a genetic roll of the dice paves the way for lymphatic cancers,”⁶⁹ while a story on genes and cancer published in the *New York Times* explains that mutations sometimes occur “with the luck of a crap shoot” which damages the DNA that controls cell division, and eventually leads to cancer. While chance, luck, and fate, remain a part of the gamble, skill, preparedness, and the influence of individual agency are also emphasized as, for example, we are told that research reveals a continual interaction between the way our foods and supplements enhance, protect against, and/or suppress the potentially harmful actions of various genes.⁷⁰

Turn on the news, flip through a magazine, open a newspaper, at any given time, and you are bombarded by messages couched in the language of prevention and risk. Consumption and health risks are increasingly conjoined (Monaghan 2002) as people stay tuned for the latest. Take Soy. Don’t take Soy. Take E. Don’t take E. E causes cancer. Only take a certain type of E. HRT is good. HRT is bad. HRT is sometimes good and sometimes bad. Fish oil is good. Fish oil is contaminated with mercury. The

⁶⁸ Recognizing the potential for unfair discriminatory practices based on genetic variation perceived as beyond individual control, on April 24, 2008, the U.S. Senate passed the Genetic Information Nondiscrimination Act which mandates equal treatment in employment and insurance regardless of a person's genes.

⁶⁹ Retrieved on May 27, 2008, from <http://www.vetscite.org/publish/items/003861/index.html>

⁷⁰ See for example, Diet and Genes: It Isn't Just What You Eat That Can Kill You, and It Isn't Just Your DNA That Can Save You--It's How They Interact, by Anne Underwood and Jerry Adler, first published on January 24, 2005, and retrieved on June 8, 2008, from <http://www.washingtonpost.com/wp-dyn/articles/A26787-2005Jan21.html>

list is long, familiar, ever changing, and confusing. In the words of two of my respondents:

Sometimes I get totally worn out and I get frustrated, they used to say “an apple a day keeps the doctor away,” and then, years later they say, “oh, by the way, if you have been eating the apples with the pesticides on them, you are probably harming yourself more than your [helping].” [Female, AA, 4/5]

It is very confusing, and sometimes you read, and you read, and you read, and you think, oh, are you reading too much [laughter] you know, its like, oh, you know, you read one article that says, “oh you should be using this” and then something else says, oh you should be using this,” and then they say, “oh, vitamins aren’t that great for you,” you know... [Female, FR, 4/5]

So, amidst what could be characterized as confusing and conflicting information, how do people engaged in body regimen careers navigate the gamble that risk culture represents?

While the call for prevention in an effort to circumvent risk is intertwined in many of the narratives in my study, a recurring theme throughout my conversations involved the issue of family history and perceptions of risk. While some of my interviewees had personally experienced the effects of illness, many had not, yet interviewees repeatedly talked about the health challenges of family members, explaining and even justifying their own body regimen careers as efforts to potentially prevent what are perceived of as very real familial-based risks. Concerns about side effects and long term effects from medications, coupled with perceived inherited health risks, served as motivation and justification as people tried to navigate what many consider to be puzzling terrain. Consider some of the ways people talk about perceived health risks in terms of their body regimens.

I don’t want any diseases. There is cancer in my family and I wonder about that. I wonder, you know, if I could be at risk, and I hope that, you know, by eating better, eating a little bit less, that that might lessen my chances. [Female, CR, 2/3]

I have a history of, every male member in my family has had a heart attack... so I figure I am doomed... but I'm good so far, which is one reason why I continue to run, I'd like to do the iron man. [Male, FR, 4/5]

My parents who are now 80... my father has type 2 diabetes and Alzheimer's, my mother has type 2 diabetes and heart disease, and I am sure that my father has heart disease as well, so just looking at that whole picture, I thought oh my god, if I don't make some changes I'm, I'm... Since my father has Alzheimer's... I did some reading and starting realizing that all of these diseases of aging are inflammatory processes and that a lot of excess eating causes inflammation and that all that extra fat you are carrying, you know, sends inflammatory messages through your body. I just thought it made sense to lose the weight. So yeah, if I can avoid type 2 diabetes, and Alzheimer's and heart disease, and keep moving, hopefully, my old age is not going to be a total abject misery. [Female, FR, 4/5]

My father was very active... he watched what he ate... My father had early onset Alzheimer's in his late 50s and died about ten years after that... and there is a strong genetic link. For a while I was taking Vitamin E, on a regular basis, until they came out with a new study that said, "No, you shouldn't be doing that." I kind of generally follow the research about new treatment modalities, which they seem more directed now toward alleviating the symptoms or slowing the progression of the disease, as opposed to prevention, but that is something that I follow, and I am always a little bit concerned about because he had, you know, onset so early... [Male, FR, 4/5]

I am an only child. I spent most of my time with older family and they were just always eating crap and always having problems, so I was like, Ok, there has got to be something to do with this... I am an athletic woman on birth control, that is a few points against me for osteoporosis, so that does concern me, and you know, diabetes definitely concerns me, that's one of the major things in my family, and so I don't want that, you know, and I don't think I can do anything about arthritis, or anything like that... [Female, CR, 2/3]

I had been reading the books about the hormones, about the natural, trying to educate myself on that because my aunt died of breast cancer four years ago, so I wanted to be careful, since cancer is in the family ... I really prefer to not be on any hormones if I don't need them, because I have a history of cancer in the family. [Female, AA, 4/5]

I thought I came from this really good gene pool [chuckle] until, I don't know, maybe ten years ago, everybody, I'm the second oldest, my brother died at 44 from a heart attack, my sister, who is four years younger than me, I think she was 38 when she had her first one, and forty when she had her second one. My younger brother, who is 10 years younger than I am, it was, of course it was when my dad, he had had quadruple bypass surgery, something happened after the surgery, supposedly the surgery went well but somebody didn't watch afterwards and he didn't get oxygen for like seven minutes, the blood coagulated around his heart, and nobody noticed, so he ended up brain dead, so it was a, I don't know, it was a bad time for my family... my dad's brain wasn't working, it wasn't aware, nothing was going on, so, I think that has a lot to do with it, that I just, have no desire to have a heart attack, and then my mother had a

stroke, she was still pretty old, but she lost her eyesight, she didn't get that, you know how, when I think the left side and the limpy arm, she didn't get that, she just ended up blind... I'm not sure what that's about, but I don't want that either! [Female, CR, 4/5]

My mother died of a heart attack when she was 57, she really, you know, she smoked. She started smoking when she was 16 and smoked, and her mother smoked, you know, she was surrounded by it her whole life, and her diet wasn't good, and so all that factors in, but I think there is still the genetic thing, and so, I have always been a little bit concerned about that, for me. [Female, FR, 4/5]

Quotes such as these reveal the vivid ways that people internalize what they perceive to be very real risk factors to their own personal health as linked to family history. People also perceive additional risks to health to exist in the external environment. For example, in the words of two respondents:

There are a lot more environmental issues, lot more chemicals and toxins in the atmosphere, cause, you know, preservatives, hormones in the food supply, you know.... low levels of sperm counts, with the rise in stress together with the environmental issues and stuff like that, we are seeing it more and more... [Male, AA, 2/3]

The toxins in the environment interfere with our hormones and the action of our hormones... we are getting so many toxins from our water, our tap water, that we need to be drinking purified water, the additives in our food, I mean, its, its amazing, I feel like I am killing my children. Once you get into it, you really feel like you have killed them, and it is hard, it is hard to get high fructose corn syrup out of bread, you can hardly find a bread, and MSG, everything has MSG, well MSG breaks down into three of what they call excitotoxins, that cause excess brain activity and nerve activity, and just, something that we don't want in our body, aspartame, artificial sweeteners, they are excitotoxins, and its just, its almost sickening. And you know, the pesticides in our food can interfere with how our hormones work. Here the media tells us to eat soy and eat more soy, well a lot of soy can interfere with how our hormones are working! [Female, AA, 4/5]

Based on this perceived sense of risk, which may be entwined in family history and the environment, people take on efforts to create body regimens which they hope will prevent such perceived risks, justifying such efforts with a phenomenon I refer to as the "to do" imperative.

The "To Do" Imperative

In *The Protestant Ethic and the Spirit of Capitalism*, sociologist Max Weber (1971[1902]) revealed the ways that the Protestant ethic linked steadfast hard work to personal salvation and morality. The Calvinist tradition prompted the faithful to work hard for the fruits of salvation in afterlife. During the late 19th century, a conflux of forces, including rising secularism, paired with an expanding professional cadre of moralists, helped to establish the importance of hard work for a successful life on earth, as exemplified, for example, by the Horatio Alger-inspired “rags-to-riches” story line, which reveals diligence and hard work as the stepping stones to the so-called “American Dream.”

The importance of activity for both men and women as a key to a long and healthy life was emphasized at the turn of the century. As noted by historian Thomas Cole (1992:152), a manual published in 1905, written by Nicholas Smith, which highlighted the way to “preserve the integrity of mental powers” through the age of 90 and beyond placed great importance on keeping bodies “pure and active.”

While the discourse linking hard work to earthly prosperity might serve as moral guide for some, as the concept of retirement and chronological age become institutionalized during the 20th century, Ekerdt’s (1986:239) research considers the “moral continuity between work and retirement,” as he proposes that in order to morally rectify what the lifestyle of retirement signifies, retirees often embrace a “busy ethic” which places emphasis on active living – regardless of employment status.

With the Protestant work ethic conjoining hard work to virtue, Ekerdt (1986) suggests that retirees need a way to maintain legitimacy during this “non working” phase

of life – descriptions of retirement years comprised of activity packed leisure time help to do this. A preoccupation with activity is of utmost importance, as Ekerdt (1986:243) explains: “It is not the actual pace of activity but the preoccupation with activity and the affirmation of its desirability that matters.” The moral obligation to be active and independent throughout the life course also intersects with popular medical and health discourse (Rexbye and Povlsen 2007) as it becomes further bolstered by theories of aging promulgated by the social sciences during the latter 20th century.

The activity theory of aging, for example, introduced in the early 1970s, suggests that through the life course, people give up roles that they had during their mid-life years. This decline in activity, it is argued, challenges people's sense of self identity, happiness and general life satisfaction. By comparing aging in the U.S. with Japan, activity theory was formalized, suggesting a link between activity and healthy and happy later years (Neugarten and Havighurst 1969). As starkly and succinctly articulated by Rexbye and Povlsen (2007), “activity is ‘life’ and inactivity is ‘death.’”

With the term “ageism” first coined by Robert Butler in 1967, social scientists, social workers, and researchers during the late 1960s and 1970s were focused on rebutting the negative stereotypes of old age that were often promulgated by professions like medicine, as aptly captured by Binstock’s (1983) concept of “compassionate ageism.” Opting instead for a re-characterization of old age that focused on the well earned fruits of this unique phase of the lifespan, the concept of “successful aging,” was

introduced in the 1970s by Bernice Neugarten and colleagues, and operationalized using a five point “life satisfaction”⁷¹ measure.⁷²

Health, as defined within what some have described as the “new era of health consciousness” (White et al. 1995:159), is not a passive location; it is much better described as an active pursuit (Crawford 1984, 1994) obtained through determination, effort, and action. Paired with the discourse associated with positive or successful aging, health becomes more than just a means of good living, to become an end in and of itself (Cole 1992:238). A solution, perhaps *the* solution, to health and “successful” or “positive” aging has involved the notion of activity (Rexbye and Povlsen 2007; Hepworth 1995).⁷³ As Katz (2000:135) explains:

The association of activity with well being in old age seems so obvious and indisputable that questioning it within Gerontological circles would be considered unprofessional, if not heretical.

Through this lens, equating health with moral goodness, and old age with decline (Casalanti 2005), in order to avoid aging, people are expected to engage in a type of discipline that involves activity (Katz 2000). Through activity people demonstrate social

⁷¹ This five-point measure explored a person's pleasure in their activities of daily life, whether a person regards their life as meaningful, feels they have succeeded in achieving life goals, holds a positive self-image, and maintains optimism.

⁷² Other optimistic theories of aging followed Neugarten's important work, for example, the theory of gerotranscendence, introduced by Lars Tornstrom (2005), and described as a final developmental stage characterized by a shift away from a worldview marked by materialism and rationality, towards one characterized as “cosmic and transcendent.”

⁷³ In talking about Hanna Arendt's work, as it relates to the pursuit of scientific truth, Pieter Tijmes (1995) reveals the way that *doing* eclipses contemplative thought and observation. Tijmes (1995:242) states: “The conclusion Hanna Arendt draws is not that truth and knowledge are no longer important, but that they could be won only by ‘action’ and not by contemplation. The reasons for trusting ‘doing’ and mistrusting ‘contemplation’ and ‘observation’ became even more cogent after the results of the first active inquiries. Scientific truth need not be eternal. It need not even be comprehensible or adequate to human reason. Thinking – traditionally thought was conceived as an important way to contemplation of truth – became less relevant than doing, whereas contemplation, in the original sense of beholding the truth, was altogether eliminated.”

worth (Hurd 1999). Whatever the activity, the ultimate goal involves avoiding, or at least slowing down, the aging process entirely (Andrews 1999).

Throughout my interviews – as diverse and far ranging as they were in so many respects – a theme which provided connection across and between interviews involved the importance of “doing.” To do, in this case, defined as the performance of some type of body regimen practice, was the fundamental moral imperative. It did not matter so much what people did, since, as described elsewhere in this paper, each individual's health and illness career is a site of experimentation which involves a buffet of possibilities, and a spirit of pragmatism typically prevailed over more moralistic discourse. *What mattered is that people did something.* In doing something, I argue, people feel a sense of protection against moral judgment if (and when) something undesirable (a disruption in health) does happen. As Emily Martin (2005:202) aptly states, “...health and harmony are by no means guaranteed...instead, sudden, catastrophic eruption or collapse can, and indeed eventually *will*, occur.”

In risk culture, where risk is perceived to exist within the individual body, within the family of the individual, within the community, and within the culture at large, societal pressure makes it desirable that we do everything we can do to “...bring our bodies to a condition that is recognized as being right and proper” and if we do not, we often experience “...feelings of shame” (Bauman and May 2001:97). Jonas (2005:55) goes as far as to argue that our very existence is defined based on what we do. He explains:

Organisms are entities that...exist only in virtue of what they do...being for them consists in doing what they have to do in order to go on to be...to cease doing it means ceasing to be.

Given the “long-standing American obsession with self improvement” (Brown 2002:102), in a culture where the body is increasingly regarded as the site of identity construction, and as “...the last line in a set of defensible trenches” (Bauman and May 2001:98), perhaps it is not surprise that people would apply what was once an ethic associated with one's working career, to their body. Though the “nuts and bolts” associated with individual body regimens may change over the life course, my research suggests that *doing something* is an imperative. It is possible that what I refer to as the “to do imperative” intersects with what Rose and Novas (2005) refer to as “scientific citizenship,” as they explain, “the role of biomedical authority...is not to encourage the passive and compliant patienthood of a previous form of medical citizenship. Citizenship, here as elsewhere, is to be active.” Examples of this “to do imperative,” found throughout my interviews, include quotes from some of the following respondents:

The plan is that *I try to do something* every day, and depending on how the day at work went is whether or not I get to do something that day...and if I didn't, you know, if we were up all night, then generally, if I do get some moment, the next day, then its later on, but *I plan to do something everyday!* [Male, FR, 2/3]

You just have to accept that you have to eat less, and you have to do it for the rest of your life, because, the point isn't that you are just going to lose weight so that when you lose that weight you can eat you know, chocolate cheese cake, you know, stuff like that, its not that, *you have to do this*, you know, continually...[Male, CR, 4/5]

I usually do something every day, whether it is playing squash, lifting, biking, when I am traveling, I'll hit the fitness room, or, I like to go on a run when I travel because it is a good way to see new places without getting into the car, *so I try to do something*. [Male, FR, 4/5]

When I stop running, I can tell differences, it doesn't affect my sleep or anything, I don't know, I don't feel as good, I probably am slightly grouchier... I mean, running is

my one athletic thing that I do now and *I have to do something*, all I do is plod along in a straight line all the time, I am losing muscle, and coordination and agility, *I have got to do something* [Male, FR, 4/5]

We alternate between going to the gym and running; we both do it together, usually. It is some combination of the five days during the week and we have rest days. We just make sure that five days out of the week *we do something*. [Male, FR, 4/5]

Many recount the sense of joy and pleasure that they experience based on doing their particular regimen.

I just had recent blood work done, and I am going to try to increase my protein for the next three months and have more blood work done and then I'll compare the results, so I am going to do my own testing, *so that is what I like to do!* [Female, CR, 4/5]

I think more people should consider it [CRON], or consider doing something like it, it makes you feel better. [Female, CR, 2/3]

I look at it [body regimen career] really joyfully. It has never been like a burden to me, like "*oh I have to do this.*" It has always been a real positive thing in my mind. [Female, FR, 4/5]

I love what I am doing... I couldn't be any happier ... I am literally living the life that I created and love... [Female, FR, 4/5]

I like doing it [running] because it's a great stress reliever; it kind of allows me to just go out and meditate for a few hours and just let my mind kind of wander.... [Female, FR, 2/3]

I have been doing this forever and I will do this forever– I'm going to be doing this when I am 90! My dream would be to drop over dead at age 70 running down, on a beautiful day, running down [name of a road]. You know, of the choices of ways to go out, I mean, I'd rather do that... [Female, FR, 4/5]

Some respondents explain that they will engage in their body regimen career, even if they don't like it, because it is the "right thing to do!" When asked what motivates them to continue their body regimen, people respond:

I've just gotten wiser, and my self-esteem, I like myself better, and I am more willing to take care of myself, even if its things that I don't necessarily like to do or want to do. [Female, CR, 4/5]

The sense of well being in that you really are *doing the right thing*. [Male, CR, 4/5]

I am doing the right thing, I can't even think about going back! [Female, AA, 2/3]

It would be stupid to do anything else. [Male, CR, 4/5]

Still others suggest that in doing, they gain a sense of security and a feeling like they are, at the very least, “doing the best they can.”

...You try to eat healthy and being human, you are not going to be able to all the time, *you do the best you can* ... [Male, FR, 2/3]

I am doing the best I can... [Female, CR, 4/5]

Doing— as expressed by engaging in a particular body regimen—makes people feel a sense of purpose and accomplishment – it literally makes them “feel right.”

Interviewees emphasize the value of “just doing it” without even thinking:

Once you start doing that [fitness regimen], you don't stop...now I walk five miles a day, every single day, and *I don't feel right unless I do it!*...I always do it first thing in the morning...Its just sort of like my day feels right if I exercise, it just feels like my day is complete....I just know that it is going to give me the edge on being healthy, for one thing, so *I just do it*, without thinking about it, really... [Female, FR, 60+]

I just do it. That is like my motto: *Shut up and just do it!* [big laugh]. [Female, CR, 4/5]

It [body regimen career] just makes me feel good throughout the day. It's almost like brushing my teeth in the morning, for me...I don't even think about it. *I just do it!* [Female, FR, 4/5]

Some people talked about their body regimen career, almost in terms of a calling.

These people expressed such a strong connection with what they did that, as they explained it, “they can't not do it!” Once a commitment is made (Becker 1960), it is difficult to break. For these respondents, their regimen represents a way of life and a way of being in the world.

My views have incorporated meat back into our diet, though we really focus on the locally grown meat, you know, I don't buy meat that is not locally grown...I am really conscious of the hormones, and it does cost me a lot of money, and for a while [name of partner] was really like, “We cannot do this!” You know, we don't make a ton of

money. And, you know, my dad is just bringing in three or four hundred thousand dollars a year, and he's like, "oh, how do you do that, it is so expensive," you know, well you know, *this is just something we just can't not do*. I mean, it's just a way of life now. [Female, AA, 2/3]

I drank prodigiously when I was in my 20s, and I really didn't do anything health wise, I didn't know anything and didn't care. I just ate what I felt like eating, you know, ate greasy trans fat laden crap. I didn't know any better. But now I don't, I mean, I know about all that and I couldn't do it. Its just, if I know something is bad for me, I just can't put it into my system, its just like, you know, damaging yourself, sticking a needle or something in your hand or whatever, you don't do it. [Male, AA, 4/5]

I do have to say that I think that I have really good genetics as far as my skin, just my body conformation and stuff, so, that is helpful but I think that if I hadn't worked at it and done the things that I do, I don't think it would have been like this, because I have seen myself in the times when I get sick and there is really a big difference, and so yeah, if I didn't say, "oh I am not going to stay looking like this," you know, I could have just said, "Who Cares!" but I can't some way or another be like that. [Female, AA, 60+]

Another important theme that was evident throughout the interviews involved the contrast between effort and luck. While as I highlighted at the beginning of this chapter, people often articulated an ongoing "at risk" status that was linked to a degree of luck and chance, interviewees also repeatedly emphasized the effort required to engage in their particular body regimen career. They made it clear that the fruits of their labor could not merely be chalked up to luck alone; a considerable amount of on-going dedication was required as the following interviewees explain:

I was in the bank the other day and this very pretty younger girl, she was like watching me, I'm at the teller, and you know, she's just watching me, she finally comes over and she goes, "how did you get your legs like that?" [laughter] and actually I have people do that a lot, so I just kind of, well I'm like, I don't think people would really want to know. "Do you really want to know? *Do you really want to do what I do?*" Cause, and I've been doing it for years... I have done it so long...you know, it doesn't happen overnight! [Female, FR, 4/5]

I try very hard *to do the things* that I know make a person healthy and I try not to judge people. I try to encourage them. In my workplace, I work with a lot of women, and most of them are very overweight and they are always struggling with one diet and another... and they are always commenting about me and how thin I am and they call

me “lucky” and I always try to explain to them it is not anything about luck, it is all about planning! [Female, FR, 4/5]

Given this widespread attachment to “doing” it only makes sense that people would experience some discomfort when they were not able “to do” some aspect of their body regimen careers, as the following interviewees explain:

I had an episode where there was like, probably 2 ½ months where I couldn’t exercise and that was really difficult for me, really difficult, psychologically, because for me, its just a part of, you know, it make me feel better to exercise and so therefore when I couldn’t exercise, I became almost depressed, because it was like, I just can’t do anything, you know?...I mean, I was just like really down, depressed, low energy, found myself eating more, you know...it just was really difficult. I was down and depressed. [Female, FR, 4/5]

When I get an injury, if it is a long injury, I am not fun to live with. I get down, I don’t feel good about myself and I don’t feel like I am doing what I should be doing, it is almost like, a, part of your identity is wrapped up in, I am a runner, that is what I am, so if you are not doing it, or can’t, then you are, it is like part of your identity is not clear, and so it is not a good feeling, and I do other exercises, I’ll go to the gym and do weights, but none of it is the same, because you are a runner and you are not running, so it is just kind of like something is missing from who you are, that is kind of how I feel about it. [Female, FR, 4/5]

Challenges to the “To Do” Imperative

One of our problems is that we humans cannot live without acting; we have to act. Moreover, we have to act on the basis of what we know, and what we know is incomplete. (Berry 2000:10)

While the “to do” imperative provides individuals with a powerful source of justification, motivation and direction, important caveats that certainly deserve mention did arise during conversations. Perhaps one of the greatest challenges to the imperative involves the fact that these pursuits do not exist in isolation. Consequences of the body regimen career have ripple effects, reaching far beyond the individual to, for example, family, friendships, and work occupations. I will begin by considering the challenges to the “to do” imperative based on the different aspects of the body regimen career:

questioning, researching, experimenting and mentoring/coaching, and will conclude by considering the ways that the imperative “to do” places what are sometimes stressful demands on people’s limited resources – namely time and money.

Questioning Tradition

While questioning tradition can be a source of disillusionment for many people which may generate confusion and turmoil, engagement in body regimen careers, as noted above, has ripple effects which often times traverse beyond individuals to assert powerful influence on significant others. At times this can be quite problematic.

Because engagement in body regimen careers often involves a broad range of questioning – that which was once taken for granted now becomes open to debate. For example, the vast majority of my interviewees recount stories of questioning the nutritional value of what is typically considered typical “mainstream” American fare and a number of respondents describe challenges when significant others do not hold similar beliefs. For example, when one interviewee first started a body regimen which included caloric restriction, his spouse was eating very differently, and they were, as this interviewee explains: “...constantly at odds over what to eat, how to cook, and what to buy.”

Another respondent engaged in CRON talks about a similar tension describing her partner as a “horrible influence” and explaining that he has foods in the house which make her engagement in a body regimen career “...a constant struggle.”

Because his family does not have the same interest in the body regimen career that he does, one interviewee described how he ended up physically separating his food

from his family's food, in an effort to make it a little easier for him to engage in his body regimen.

At home, I eat out of a separate fridge, completely from the family, I stock tuna, and oatmeal and chicken in a refrigerator down in the basement, along with wheat breads and eggs and yogurt... The separate fridge was my own idea because I find it difficult to look in the regular refrigerator at all the junk food, or you know the carbohydrates. It is difficult to look at mashed potatoes and stuffing or whatever my family is eating today, and deny myself that day in and day out because I basically crave it. Your body craves those carbohydrates, those sugars. It would be like looking at a cookie jar every time you opened up the refrigerator, you know, if you are hungry for cookies or something like that, its, your body reacts and it says, "I want that!" you know, so to avoid that temptation, to avoid leaving the program or basically straying from the program, I just chose to separate my food from theirs, and I would say that that is a big change in my family life, and the reason that I had to do that is because my wife really isn't a health food junkie like I am. [Male, FR, 2/3]

Another respondent engaged in CR talked at length about how she hasn't dated in a few years. The dating scene became, as she put it, "too stressful, too disappointing, and just too much a waste of time..." This interviewee talks about the challenges that her body regimen presents while dating, as she laments, "I don't know what my preferences had to do with their preferences..." While dating, she recounts a story of a time when her vegetarianism was problematic.

One guy said that he doesn't trust women that don't eat meat...now I guess my food preferences have always been a little different than the average person, around this area, anyway, because I am in a [name of region] area. It has only been recently that vegetarian fare is on some menus of the restaurants. [Female, CR, 4/5]

Recounting their experiences questioning family tradition, a couple of respondents talk about the specific reactions of family members, namely mothers, to their body regimen careers. This was often paired with conversations about the ways family traditions associated with food and lifestyle, interconnected with particular ethnic

identities, sometimes clashed with the goals of body regimens associated with the “healthy life extension community.” As two respondents explain:

My mother kicked me out of the house for a while because I wouldn't eat fried chicken, she is of [name of ethnicity] descent, she is heavily into cooking, she is a very good cook, an excellent cook, but we, as a kid, we had a subscription to Scientific American, and I, when the early cholesterol studies came out from Framingham, they were in there, and I was reading them and stuff and thinking, maybe we shouldn't be eating all of this fried chicken [laughs] and what not, and butter, you know, ladling everything with tons of butter and margarine and pouring oil and Crisco all over stuff, and she got infuriated at me and threw me out of the house for doing that, [laughs], which, you know, has sort of turned around over many years...[Male, CR, 4/5]

My mother's reaction [to her body regimen career] has been really negative. Every time she sees me, its, “oh my god, you've lost more weight,” you know, and a, even though when I have dinner at her house, you know, I have the meat and I have the vegetables but I won't have the potatoes and I won't have the pasta and I won't have the dessert, I'll say, “I would like a piece of fruit please,” but you know, she is funny because she considers interest in fashion and how you look to be vain, and maybe she sees it as that, whereas I see it as an investment in my health and the aging thing...For some reason, my background is [name of ethnicity] ...and when people get together socially, they have to have coffee in the mid afternoon and...all these different cakes are there, and you are expected to have a piece of each. Like there would be like five cakes and you are expected to have a piece of each.... [Female, CR, 4/5]

As detailed above, questioning established ethnic and familial traditions based around the consumption of certain foods, may challenge relationships with family.

Spousal relationships can also be tested as the “tradition” of marriage becomes grounds for heightened scrutiny. As detailed by another respondent:

When you go into a deep, deep process like you do, I mean, just like cleansing your colon and your liver and your kidneys, and your pancreas and doing the kind of body cleansing, when you go into the kind of work that you need to do [for the body regimen career]...it will take out every distortion you have, you can't hold it, so I mean, that is what really happened to us [self and spouse], is that every thing that I had held so that I could make harmony with [name of spouse] came out, and so we did go through a period where, a whole summer where I thought for sure that we would divorce, and I just said, “you know what, we are not going to make any major decisions until July,” and then in July it was so bad and I said, “you know what, we are not going to make any major decisions until September,” and that is how we got over it, because we were willing to live together and not know what was going to happen to us. I felt like we could not even know if we loved each other because we didn't even know ourselves, we were so out of touch, each of us, with ourselves, that there was no possibility of a

relationship...and the interesting thing was that we found each other and our love for each other renewed...you know we learned how to have fun again, really talk again...and I just learned to say what was true for me, you know, I just took back some power that I had given away... [Female, FR, 4/5]

A topic to be explored in greater detail in Chapter 6, traditional medical practice, and religious traditions, became further sites of questioning, as interviewees talked about a growing skepticism of all kinds of authority, custom, and convention.

Researching

As touched upon earlier in this essay when detailing the concept of “risk,” sometimes amidst the cacophony of competing recommendations, in the medical literature and in the popular press, people get confused about what exactly they should do. This same confusion is played out in empirical data. For example, according to the 1999 Nutrition Flip Flop Survey for Cornell National Nutrition Information Center, respondents report that they are particularly confused about the information they read about vitamins and supplements, nutrition, and alternative health maintenance. One in five consumers states that they no longer pay attention to new nutrition information due to this confusion. In her research on people’s conceptions of health, anthropologist Emily Martin (1994) explains that in regarding the body as a “complex system” and “health” as something that is affected by a multitude of factors, many individuals experience “empowered powerlessness” or the feeling that they are “responsible for everything and powerless at the same time...” Martin (1994:123) goes on to explain:

If you see everything about your health connected to everything that exists but also accept the possibility of managing and controlling at least some of the factors, the enormity of the management task of controlling one’s body and health becomes overwhelming. Who will manage all this? Is anyone in control? These are questions that give form to anxieties expressed in many of the interviews.

Turning to a few of my own respondents as they articulate their own experiences

grappling with confusion:

I just started immersing myself, but I still feel overwhelmed by it, because there is just so much information, and you know, sometimes these discussions are just, god, you could take hours and hours and you could become obsessed....Sometimes it's hard to figure out on my own, what I need to do... Keeping up with the damned research ... it is a full time job in itself. [Female, CR, 4/5]

It is very confusing, and sometimes you read, and you read, and you read, and you think, oh, are you reading too much [laughter] you know, its like, oh, you know, you read one article that says, "oh you should be using this" and then something else says, "oh you should be using this," and then they say, "oh, vitamins aren't that great for you," you know, that glucosamine or Vitamin E don't do what they are supposed to do... [Female, FR, 4/5]

I just got finished reading a book about hormones that told me some opposite things from what I learned, and I'm like, [makes a wincing sound] I just don't know, I am confused on a couple of things... Here the media tells us to eat soy and eat more soy, well a lot of soy can interfere with how our hormones are working... There was an article that came out just recently that said that...one in four supplements are tainted...they are tainted with lead and all kinds of things that we don't want...everyday I learn something new...because it is an evolving, growing field [Female, AA, 4/5]

I was taking Vitamin E, and then [I read] a message about, you know, over the counter Vitamin E being primarily Alpha Tycopherol, and how there is such an imbalance, there are eight varieties of vitamin E and if you eat them imbalanced and if there is an excess of Alpha Tycopherol, your Vitamin E actually becomes a pro-oxidant rather than an anti oxidant. And so I thought, "holy shit!" [laughs] [Male, CR, 4/5]

Dr. X had put me on progesterone, and Dr. Y said, "I don't know why these two doctors are putting you on progesterone, you shouldn't even be on that." And Dr. Z said, "you see, that is where Dr. Y is not educated." ...So then I'm thinking, "Ok, so who's telling the truth." Because you've got two doctors saying this and then one saying this...[Female, AA, 4/5]

There is so much out there it is hard to really nail it down. If I ever have a question about whether I think it is worth taking, I don't even get near it. [Male, FR, 2/3]

I am still confused about calcium...I was told that I should take calcium, but then you realize that some of the things that happen when you are aging is that, you are using a whole bunch of calcium, and everything in your body, like your veins, become calcified, and that people in cultures where they don't eat a lot of dairy, you know, they don't have as much osteoporosis as we do, where we eat a lot of dairy, so its, to me, the

jury is still out on this whole business. I think it is still controversial of whether we should take calcium, and sometimes I think I should take magnesium but I am still researching this question. I am not quite sure. I am still looking into what would be good to take and what would be good not to take, and I am not sure. [Female, CR, 4/5]

For diabetes prevention, they tell you more about eating, you know, five small meals a day, and that just doesn't make sense to me. It just seems like you would always have glucose in your system... you would always have insulin in your system, so that doesn't make sense to me, somehow, the five meals a day... you would always be flooded with insulin, so that would never give your body a chance to rest and to be more efficient. Do you know what I am saying? [Female, CR, 4/5]

It just sucks so bad to feel like you are out of control and you do not know what to do! You don't know if you should avoid soy, now, you know, early in life, or you don't know if you should stop drinking milk because of the growth hormones in it, or eating meat, or things like that, its just hard to say what to do, and its, you know, I am kind of at this point where if you take out everything in your diet that somebody says there is something wrong with, you would be at a point where there is nothing left, so, then I am kind of back to what do you do? I just don't, I don't really do anything. I mean, if I want soy, I'll have some soy. You know, I just, its so, it takes up so much time to worry about all these things, and I just don't have the energy to. And you know, that is kind of another reason why I got off the list, the forum, just because I, there are so many other things to worry about, and its hard, you know, when you are introducing all these other things, too, to think about and to worry about. [Female, CR, 2/3]

For some people this confusion gets so great that they decide to shut themselves off from the flow of information, engaging in a process of what could be called “information abstention” in order to protect themselves from the daily onslaught of advice. In an attempt to circumvent continued discomfort and frustration based on conflicting and confusing information, people remove the source of the ambiguity, opting instead to be less informed and less aware. This process often involves a vacation from technology since the information flow is often acquired via technological means. In the words of a two respondents:

Sometimes I have to take a vacation from the [names of health information websites], because it is so easy to get obsessed and afraid, its ridiculous sometimes...I fall into a depression, and I just, its like, ok, *I am doing the best I can*, and I just need to get away from it. So, there are often discussions, often, I mean, god, you know, supplements, this and that, I mean, blah, it happens often, I could give you a million specifics but it

happens a lot... I mean, my god... it is great to be informed, but dear god! [Female, CR, 4/5]

There are some things that I just...I just choose not to pay attention to, more than anything else. I mean it's not like I avoid the whole thing because usually there are a diverse number of subjects that are being discussed and some of them I am kind of interested in but I do avoid certain subjects after a while....I think it is difficult at any time, because there is always some fad of the moment.... [Male, CR, 4/5]

Experimenting

Using one's body as a lab can create a variety of challenges both on a personal level, and interpersonally, with family and friends. Sometimes the physical effects of specific body regimen practices may lead to certain side effects. For example, the practice of CR is often associated with a decrease in libido and an increased sensitivity to cold, while certain skin conditions may result from hormone supplementation, and exercise-induced injury is commonplace among fitness regimen enthusiasts. The effect of slow heart rate, or bradycardia, was also experienced among a few interviewees, which is sometimes associated with low blood pressure, lightheadedness, and dizziness. Typically interviewees recounted stopping the consumption of various supplements and vitamins if negative side effects were suspected. Other possible regimen-based side effects detailed in online groups, and through the course of my interviews, which rarely occurred, but may be worth noting as sources of confusion and challenge, included occasional numbness in fingertips or toes, difficulty with sleep, amenorrhea or irregular menstrual cycles, difficulty feeling comfortable sitting on hard surfaces, unwanted hair growth, longer recovery time for some illnesses, muscle fatigue, soreness and stiffness, and changes in mood. While people may accept these as the price they pay for their

engagement, sometimes people wonder whether they have over done it – leading to too much of a good thing – which could backfire, causing shortened longevity, and heightened illness, rather than longer and healthier living. One interviewee, who believes that his body regimen may have actually enlarged his heart, recounts a time when he was getting a routine physical exam as part of a health fair:

I had a physical and...at one point... I don't know, they [medical staff] did all descend upon me during the physical, you know, the doctor in charge started asking me questions, "do you exercise?" you know, I said, "yes" and "how would you classify it, sir, *what do you do?*" "I run." "How much?" I go "Oh, 10 to 12 miles a day," they said, "ahhhh, o.k." Apparently I have an enlarged heart and that is not uncommon in runners. I mean, I have probably run 60,000 miles, it is not uncommon, they didn't really explain it to me. [Male, FR, 4/5]

Stories about how "too much of a good thing" can lead to injury, physical health problems, or emotional turmoil abound. Experimenting with supplements, large amounts of certain foods, vitamins, herbs and spices, and certain fitness activities, may also lead to undesirable or negative side effects that could be deleterious to one's overall health and longevity. Some individuals described what they perceived as the negative side effects of certain supplements or vitamins. For example, talking about a negative experience with Resveratrol supplementation, one respondent explains:

I bought Resveratrol, and then I started taking it, and I was taking it...and I felt these odd twitches and feelings that I can't really describe, but I thought, this isn't good for me! I am not taking this! [Female, CR, 4/5]

Another interviewee attributes her inability to get pregnant to her fitness body regimen, stating:

When I was 46 I got pregnant...and I always wanted to have kids. I never could. I didn't ever research, spend, go to any length of why I couldn't...but I just knew that I couldn't get pregnant and ...I think that it's because of [my regimen] that I was not able to get pregnant...[Female, FR, 4/5]

Others describe multiple injuries paired with negative descriptions of what happens when you do “too much of even a good thing.”

I started running, and oh, I love aerobics. I was doing aerobics all the time. I love aerobics, and I was doing the aerobics and got a stress fracture from just over use...[Female, AA, 2/3]

I think it is definitely possible to be too obsessed with being healthy and have that adversely impact your relationships and your work, and, cause I know with both [name of spouse] and I, that we have come to rely upon exercise so much that we both admittedly are, you know, more irritable and not as civil as we should be when we don't get to exercise and sometimes you just can't. You are injured. And [name of spouse] has got a host of injuries... or you are traveling and it just doesn't work out. I think that is probably the downside... so, I think that you can still be healthy, I don't think there is anything wrong with that, but I think there is a problem if you are obsessed about it...I think you get a little bit addicted to the rush and the feeling of being near complete fatigue, and you know, just inching out that last, you know, I think that that is a little habit forming...[Male, FR, 4/5]

I think you can be too health focused. I know someone who couldn't understand why she got breast cancer. She got up every morning at seven o'clock and ran for three hours, two hours, 7, 8, 9, and she was older than I am, she was doing that in her fifties, she was my age, in fact, when she got breast cancer, well they know now that if you over exercise, that creates free radicals that over compensate, you know, and its hard on your body, you want to do moderate and occasional vigorous exercise, and she took lots of health supplements, probably still does, so you can be too health focused. [Female, AA, 4/5]

I used to be kind of an exercise aholic, when I was younger, and in pursuit of that perfect body... if I missed a day, I was depressed. I think I was addicted to it. And it was, you know, it's a great coping skill but *I think one can over do it*, too, and when I couldn't do it, I really sort of felt depressed and got scared, and that's not a healthy relationship with exercise. And then I went through a real transition of getting healthy, and getting un- addicted to things, and not being so self-destructive, you know, the older you get, the less the body can take and you have to make changes. [Female, CR, 4/5]

The practices associated with engaging in a body regimen career may also pose difficulties, challenges, and annoyances to significant others. During one of my telephone interviews, I had the rare opportunity to talk for a few moments with the spouse of someone engaged in a body regimen that included caloric restriction. While all in good humor, the spouse eloquently explained one of the challenges:

Coming from a spousal viewpoint... I have to say I am so [emphasis] proud of [name of person]. Number 2, it drives me nuts! There are little sheets of paper where [name of person] is recording what she has eaten in grams. These little sheets of paper are literally stuck everywhere. So I'll have a little date on them and put them together in little piles and she records it eventually on her excel spread sheet. "Little sheets of paper syndrome" really hits hard.

Mentoring/Teaching

While mentoring, teaching, and inspiring others about practices related to body regimen careers is a common theme throughout many interviews, sometimes one's engagement in a body regimen career can be a burden. Just as it can be a challenge when friends and family resist, reject, and resent engagement in body regimen careers, it can also be a challenge when a person's body regimen career becomes the primary way they are identified by others. The perceptions and expectations of others who look to you as "coach" and "mentor" may lead people to feel as though they can never take a break from the demands of the career. The following interviewee explains what it is like to experience what could be described as "superman syndrome."

When you are in a certain state of health, you do things differently, you take care of yourself, you exercise, people expect you to be superman, its like, you don't get down time, sometimes, you know, when I get home, sometimes its like, do you mind if I just relax and watch a show, but you know, you still get in this situation where you are always helping someone. It is a good form of stress but it also becomes, you can't avoid it sometimes, you can't avoid it, and you know, its kind of like if you are a stock broker, you leave your office, you get done you leave, and you are done, you are done, you don't need to talk about stocks, when you are involved in preventative health care, you have to live it and you have to know it, and people are always asking you questions, you are at a restaurant and you order a certain food, people are like, "are you on a diet?"
[Male, AA, 2/3]

Another interviewee who decided to try to earn a living through her engagement in her body regimen career, after having spent two decades of her life serving as a

mentor, coach and teacher to others, powerfully articulates her experience with feeling “burned out”:

I woke up one day, my feet hit the floor, and this horrible, horrible feeling hit me that if I have to...do one more [name of exercise] class, I am going to shoot myself, like it just came over me like [snap], it was like the burn out factor just set in so bad one day, it was so bad, and then I said, “*I am going to do something else,*” ... it was just like... I have gotta do something to keep my interest here! [Female, FR, 4/5]

Finally, others explain the ways that their engagement in various body regimens has made significant others feel uncomfortable, judged, upset, and sometimes angry and resentful. Rather than serving as mentor and coach to friends and family, people sometimes find that they must downplay their practices in order to coexist with significant others.

I have friends that I cannot talk about, calorie restriction to...because I run into making people upset. Making people feel like crying and not, I mean, because I very much hurt their feelings or make them feel like a bad person...I mean, I have gotten into some conversations with friends of mine and that’s another hard one, because, if they are very overweight and they are struggling with diabetes and just, plain, wanting to lose weight, and you talk about how you lost 85 pounds with calorie restriction and your experiences than they kind of start avoiding you, you know? [Female, CR, 2/3]

Since a couple of my family members smoke, and I’ve given them a hard time about smoking, it is very touchy so we avoid health related subjects among us, and everything stays nice... [chuckle] [Male, CR, 60+]

You can be a pain in the ass to other people, you know, so, I try to be very careful not to criticize. If someone else is having a cookie, I try not to criticize. I let them be, cause you can’t force your lifestyle on other people, and I find it hard sometimes. I bite my tongue. [Female, CR, 4/5]

Challenging limited resources – time & money

Hand in hand with the challenges that intersect with various aspects of the body regimen career, people also describe additional obstacles they experience in trying “to do” their regimens. Limited resources pose barriers to individual engagement in body

regimen careers and this may greatly influence social class based variations in such pursuits. As articulated by Martin (1994:239), when referring to activities related to health promotion, “training of the elaborate sort takes money, time, information and opportunity, things in short supply for many people.” Researchers have repeatedly described the influence of social class on behaviors and activities linked to “health promotion” (Goldstein 1992), many of which intersect with practices associated with body regimen careers. While the origin of the values associated with “health promotion” is debatable, a number of scholars situate such efforts in the late 19th century Victorian culture, drawing parallels between the individual body and the larger society, in this case the marriage between so-called “fit” bodies with the values of modern capitalism. While this topic will be explored in greater detail in Chapter 6, for the purposes of the present discussion it is important to recognize the issue of SES as it intersects with the demands body regimen careers place on what are described as precious resources.

As expressed by a number of my interviewees, money, hand-in-hand with other limited resources, represents a recognized impediment to body regimen careers. Along with access to, and an understanding of, a constant flow of ever changing information related to body regimen practices, paired with a support network to provide guidance and encouragement, and the time needed to experiment, explore, and partake in body regimen practices, individuals engaging in body regimen careers also require the money necessary to pay for various components of the pursuit. The demands of family, jobs, and other competing responsibilities and disruptions, paired with limited resources, may make it

very difficult for people to consistently “Do” and this may greatly determine who is able to fully partake in such efforts.

While my sample is admittedly limited in terms of diversity based on socio-economic status (SES), with most of my respondents representing middle and upper-middle income and educational groupings, I did note that a number of respondents clearly articulated ways they were limited in their body regimen careers by their financial situations. In terms of expense, body regimen careers spanned the gamut from relatively low budget to elaborate and costly, and in terms of specific products, many times the marketing industry recognized this differentiation in expendable income through targeted segmentation. For example, those individuals that could not afford expensive hormone injections might opt for tablets that were said to stimulate the body’s own hormone production. For those individuals unable to go to a physician to order specific medical tests, organizations like the Life Extension Foundation offered blood test analyses at a set fee, without the added expense of a doctor’s office visit. Those that could not afford studio yoga or fitness classes might opt for less expensive DVDs to engage in such practices from home. It is also important to note that the potential drain on limited resources as detailed above sometimes created interruptions in the body regimen career trajectory. Describing the phenomenon of what could be referred to as “stoppers and starters,” one interviewee explains:

It’s always a trade off, you know, what can you do in the time you have to do it... once you get in the business world routine, you don’t have a lot of time, sometimes, and if you are putting in a lot of overtime, and you are trying to get ahead in your job or whatever, you don’t follow the things you know you should be doing, you don’t tend to eat right, especially if you are traveling, you don’t work out properly and all the rest of that, so it is a difficult lifestyle to follow, for everybody...I think most people who are

in to trying to take care of themselves stop and start and go through periods, “well, I know I should be doing this, but right now, I have got to get this done, I have got to do this”, and then feel regret later, for not, and then will tell themselves, “I’ve got to get back to doing what I need to do,” and so on and so forth, so most people who are into either quote life extension or fitness or whatever the hell they want to call whatever they are doing to try to maximize their own lifespan, or health or energy level or whatever, are probably [sigh] stop and starters, because of all the differing life effects that happen....[Male, AA, 60+]

Time

Practices associated with body regimens can take up a considerable amount of a person’s time and this can prove both stressful and challenging. While Benjamin Franklin is credited with recognizing the economic value of time in his simple and widely quoted quip “time is money,” in recent years a number of sociologists, economists, and public intellectuals (Schor 1991) have noted the widespread experience of time depravity in the U.S., as the pace of life is often thought to be accelerating. The challenge of time for those engaged in body regimen careers was an important theme. Turning to my field notes, while at the gym one morning while engaged in this research project, I jotted down a brief conversation between two friends on nearby elliptical machines, which went something like this: *“I haven’t seen you here in a while!”* “It’s hard to find the time!” *“You’ll never find the time! You have to make the time!”*

A number of interviewees detail the challenges surrounding the time commitment involved in partaking in a particular body regimen career.

One of the really disturbing things is that as you get older you think, ok, I am already going to yoga three times a week. I am already spending a hell of a lot more time preparing food because of all these fresh vegetables and all these things that I make for dinner, because, you know, a lot of convenience foods are out, and then I should go and do weights too? *When am I going to have time to live my life?* Is my whole life going to be self maintenance, you know, trying to stay fit as I age. So I think part of that is like, really *do I have to do all this*, you know? [Female, CR, 4/5]

I think the hardest thing [about body regimen career]...is just the effort you have to put into finding your meals, and counting your calories and things like that, and I think ideally, I would be, you know, wealthy and have a personal cook or a personal chef, that managed what I ate, but you know, that is not going to happen, so *as long as I have take the time to do that, it is almost impossible*...I have kind of striven for the ideal but never really kind of maintained it, and so that is kind of where I am at now...[Male, FR, 2/3]

Sometimes engagement in body regimen careers is challenging on relationships with significant others due to time constraints. For example, as two respondents explain:

Shortly after getting married, my wife realized that I love [activities associated with body regimen career]. I mean, I was playing in seven leagues and practicing in between, but I was single and didn't have anything else to do with my time, so that is how I occupied myself. ..She felt like she was competing with [activities associated with body regimen career] for my time and she was, she truly was, and so we had a bit of an argument and her comment to me was, "Sometimes I feel like [activities associated with body regimen career] are more important than I am," and I said, "Sometimes it is." That didn't go over so well [Male, FR, 2/3]

Every day it is challenging to do my regimen [laughter], it's a, jockeying the schedule, family and work come first, you know, but I look at the, and I truly believe this, that being active and healthy and exercising, you know, having a good high level of fitness helps both family and work....the problem, for me, is time, you know, you work, you have children, you try to take as little time away from family as possible. [Male, FR, 2/3]

Finally, another respondent describes how, because she spends all of her time "doing," her biggest challenge in life is to sit still and meditate. In the words of this interviewee:

Meditation, that is my biggest failing, is the refusal to sit down and truly get calm, I'm usually always kind of moving around and doing...[Female, AA, 4/5]

Money

Hand in hand with time, engagement in a body regimen career can also require a considerable amount of another limited and precious commodity -- money. Organic and/or fresh foods high in nutrition, gym memberships, vitamins and supplements,

equipment, and visits to medical providers not covered by insurance, can place large financial demands on people. Consider some of the ways my interviewees detail this challenge:

I went off of [name of vitamins], I stayed on that for a while, and then I thought, well, that's a lot of money... I'll do something for a pretty long extended period of time, and then one day I'll wake up and think, "gosh, I'm spending two hundred dollars or one hundred and fifty dollars a month on vitamins, is this really what I want to be doing?" I've thrown a disproportionate amount of my money to health...[Female, AA, 4/5]

I think I am interested in certain supplements but I think I probably got quickly disinterested, I think, when I saw how much it cost. I am pretty cost sensitive. And maybe in ways that I shouldn't be, you know, like I think I have been holding off getting some blood work done because, well, like I don't want to pay the life extension foundation four hundred dollars to do all my blood tests, so, but you know, I really should do it, I mean, I am dependent on my body. [Female, FR, 2/3]

It can easily run two to three hundred dollars a month, just for your hormones and nutritional supplements, now, you, you go to an anti-aging clinic and you pay usually a two to three thousand dollar fee just to get your initial work up... they spend a lot of initial time with you and they are testing for everything [emphasis] that you can imagine so, and I'd say that the blood work alone is probably 6 to 8 hundred dollars, so I don't think that its an overcharge. I don't think that they are doing it to get rich, because they are spending a lot of time, so... I would love to see ... if I have any cancer markers. I am fascinated by it, and probably one day I will, when I get, you know, extra cash. [Female, AA, 4/5]

The same thing that always happens, in all of this, [pause], area, is, trying to find an economic, viable approach, because you can't really do all of the things that you'd like to do, because, just of the money, nutrition problems can be very expensive, especially good ones, the right medications that could be used, say, hormones or certain things, or HGH or stuff like that, they all require a prescription, and then of course the doctor has to, you know, and insurance companies are very loathe to pay for those, um, unless there is some kind of medical required use for it, well you can't always get a, its very difficult to get a required use for human growth hormone, you may get a prescription, but for an insurance company to cover it, they are not going to cover it, so, and that stuff is really expensive, so, there again...You could break yourself trying to take all the things that are out there...Its how much you got money and what you want to take, so, if I have a choice and I have a limited budget... the thing of it is, I do try to go the cheapest way... [Male, AA, 60+]

I am not rich, by any means, I do not make much money. I am totally self-supporting. I do not have a husband or a child or anyone that will take care of me. I have to do it myself ...I've spent thousands this year... I swear, this year, if I pulled together what I've spent, it will scare me, and... when I saw my holistic healer yesterday she gave me

a list of supplements that I need to take to heal my body, and you know, I have one, two, three, four, five, six, seven, eight, nine, ten items, and I haven't added it up yet, but...you are looking at hundreds of dollars here just for supplements... I go for massages as well... and of course it is money, money, money, all the time! [Female, AA, 60+]

The only way that I have ever stopped taking a supplement is that I have run out of it and didn't buy it again, you know, kept it in my mind, but some of the supplements are expensive, well all supplements basically are. I spend about 130 dollars a month, that's about average, you know. [Female, AA, 4/5]

The issue of money may become particularly challenging when a person's significant other does not believe in or engage in similar practices. For example, talking about her partner, one respondent describes how she has learned to be secretive about the money her body regimen career requires. She explains that she regularly tucks a little extra money aside from her paychecks in order to supplement weekly purchases on products and services related to her body regimen career. Talking about her significant other, this respondent explains:

He has come a long way...little by little, you know, and see, because we are not married, we have this funny thing, but my money is mine and his money is his, and there is a portion, there is this funny thing, if he really knew what we were spending on our food, he might fall over. I have a little extra that I go and I get a few other things at the market. We spend a set amount a week at the grocery but then I am also spending another thirty or forty every Saturday morning at the market, you know, okay? [Female, AA, 2/3]

Conclusion

I have a friend who once made close to ten thousand dollars on a \$2 bet at the horse tracks. His secret to enjoying his winnings for as long as possible – to stop placing bets and to leave the tracks immediately following receipt of his loot. While a person can always walk away from the tracks, the choice to play or not to play is far less straightforward when it comes to perceptions about the status of one's entire well being.

When science, technology, and consumer culture offer an ever widening selection of bodily solutions to an expanding range of bodily problems (including the “problem of aging”), it becomes particularly difficult for people to refute, reject, or ignore the call. People are terminally “at risk” and this realization has ongoing and lasting effects as people continually strive “to do” the right thing in terms of health prevention and promotion. Unlike Parson’s (1951) “sick role” which may serve to threaten what Parson’s identified as the dominant American values of individual responsibility and productivity, the “at risk role” attends to these highly regarded values, as the dutiful “at risk” individual partakes in the “to do imperative” to *do something* to circumvent perceived risks. Yet regardless of the time, money, and effort people put into their body regimen careers, it is important to emphasize that many interviewees consistently realized that doing something does not come with guarantees. The burden of individual responsibility (Breslow 1990) weighs mightily and just as an investor may lose on good investments that go sour, practices that are part of body regimen careers may not always yield the desired outcomes. As one respondent clearly articulated:

I did what I thought was the right thing. I ate healthy food and I exercised. And I have always been active. My job has always been active, where I have never sat behind a computer at a desk or whatever. I have always been very energetic. And you know, my father and my mother both have good health, so, it is, you know, in the genes, so I felt like, “oh, you know, I am o.k., I don’t have to worry about it [aging].” Then Bam!
[Female, AA, 60+]

The “bam” that the interviewee above is referring to marks the beginning of her own 10 year journey with illness, which was kicked off by what this interviewee identifies as her first “twinges of aging” or “menopause.” Throughout her interview, this respondent recounts a long, arduous, and painful journey in and out of doctor’s offices,

on and off various medicines, with very little relief for her pain. While she did everything that she felt she possibly could to “age successfully” – that was not good enough to prevent or heal her ailments.

Other respondents articulate what could be characterized as the recognition that fate is alive and well. Describing what he refers to as “psychotherapeutic rebirth” sociologist Howard Becker (1973:58) explains that, like a member of Alcoholics Anonymous (AA), someone who has gone through psychotherapeutic rebirth “...can never take his cure for granted, and the best sign of the genuineness of the cure is that he lives with humility.” A similar recognition is expressed by some interviewees:

I think my routine helps, yeah, it helps. I mean... I think certain kinds of cancers and heart disease are related to nutrition and exercise, but I mean, if I got cancer tomorrow I am not going to have a guilt trip because I didn't do the right thing, I mean, stuff happens. Some of it is connected, some of it isn't, so. [Female, FR, 60+]

I feel like, you know, anything can happen to anybody, but I don't think that I am doing anything to exacerbate it, and hopefully, I'll stave it off! [Female, FR, 4/5]

I try very hard to do the things that I know make a person healthy and I try to encourage the people around me to do the same thing without being judgmental...I think everyone should do what they can to promote their health but I do believe that that is not always in a person's control. [Female, FR, 4/5]

Concern and guilt about past behavior that may contradict current body regimen careers was also a source of angst. For one respondent, her fear of a decade spent as a smoker literally haunts her dreams nearly four decades later. She explains:

I smoked for 10 years. I gave it up when [name of child] was a baby so that's 37 years ago...I had been concerned about the health aspects of it for a while and had not been able to quit, but then I saw a picture of somebody smoking through a stoma, and then I read about a child that had died from eating a cigarette and...I thought, oh my god, how awful, and so we [spouse] quit cold turkey...I still have dreams about it, so I know that subconsciously I must think, “*God, that was a terrible thing to do!*” Maybe once a week, maybe twice a week, I'll have a dream that I know I shouldn't smoke but I will bum one from different people and then suddenly I'll realize that I am smoking again and I am just petrified. Isn't that interesting? [Female, FR, 60+]

While comments from my interviewees do suggest that the very act of “doing something” may provide people with a sense of peace, I would suggest that for many, a peaceful state is temporary at best, since just as Giddens (1994:32) suggests, in late modernity, many forms of risk are not conducive to straightforward assessment, and are considered valid only “until further notice.” Further, my own research and insights also corroborate what Shilling (2003) articulates – rather than leading to greater transparency, the more we know about the body, the more confused and uncertain we may become about our understandings of the body.

Detailing the cycle of fashion, Gullette (1999:35) explains that an object moves from purchase through consumption (involving public display of an object), to decline (where the object goes out of fashion), to begin the cycle anew. Dissatisfaction, Gullette (1999) explains, is the most important product in this cycle since it motors the endless cycle of consumption. Likening the fashion cycle to engagement in bodybuilding, Gullette (1999:52) explains that both provide the promise of potentially delaying the passing of time (shadowed by decline) but without an exit from the demands of the cycle. Indeed the demands of the “to do imperative” that I describe in this chapter are ongoing, endless, and many times perceived of as exhausting and difficult. With little opportunity to ever escape the imperative, it is easy to see the potential prison in such demands.

Despite the confusion individuals may experience over the benefits and burdens associated with the “to do imperative,” the social interests biomedicine represents are consistently reaping enormous rewards, largely in the form of capital accumulation. Through a biomedical lens, human adversities, to which there are many, and may include

disease, sickness, illness, potential illness, and to a greater or lesser extent, the changes and challenges associated with aging, tend to be individualized, where historical influences and structural inequalities are often overlooked, while the social interests that biomedicine represents, rewards, and reproduces, are eclipsed or ignored (Brodwin 2000). As articulated by Lock and Kaufert (1998:14) “medicalization and more recently geneticization (the process whereby diseases are labeled as genetic in origin) individualize illness and deflect attention away from social relations...a displacement occurs from social and political issues to the body, for the maintenance of good health in which individuals can be held responsible.” By defining the problems associated with aging as biological, responsibility becomes firmly positioned within the individual and familial body, and the political and cultural influence on this period of life are downplayed or altogether ignored.

In further consideration of the burdens which may haunt the “to do” imperative, I turn to A. A. Milne’s Winnie the Pooh as a source of reflection. In Benjamin Hoff’s (1983) Tao of Pooh, the “bisy backson” character type (as exemplified by Rabbit) is described by a story attributed the ancient Chinese philosopher, Chuang-tse. The story is about a man who doesn’t like seeing his footprints and his shadow. In order to avoid seeing them, he starts to run, but the more he runs, the more footprints appear. He figures that he is running too slowly so he runs faster and faster until he collapses to his death from exhaustion. Describing “bisy backson” characters as “desperately active” Hoff

makes a call for a greater awareness, achieved by *less time doing and more time being*, something he warns the backson's are too busy to achieve.

“Say, Pooh, why aren't you busy?” I said.
“Because it's a nice day,” said Pooh.
“Yes, but ----“
“Why ruin it?” he said.
“But you could be doing something Important,” I said.
“I am,” said Pooh.
“Oh? Doing what?”
“Listening,” he said.
“Listening to what?”
“To the birds. And that squirrel over there.”
“What are they saying?” I asked.
“That it's a nice day,” said Pooh.
“But you know that already,” I said.
“Yes, but it's always good to hear that somebody else thinks so, too,” he replied.
(From *The House at Pooh Corner*, by A.A. Milne, 1953 in *The Tao of Pooh*, by Benjamin Hoff, 1983, Pg. 100).

In the next chapter, I will consider why the universal imperative “to do” exists amidst what could presumably be regarded as an socio-cultural environment offering ample expert guidance from the authoritarian sphere of allopathic medicine. By exploring the shared grievances directed at mainstream medicine, I will provide greater insights into the body regimen career journey, and this includes stories which describe the medical disillusionment which often serves as an initial impetus to engage in a body regimen career, and continues to fuel ongoing motivation to stick to this career path.

Chapter 5: Shared Grievances about Allopathic Medicine

In his book *Shadows in Wonderland: a Hospital Odyssey*, Colin Ludlow (2008) documents his experience going into the hospital for what was to be a relatively routine procedure. Ludlow needed to have a small and potentially cancerous polyp removed, and he expected his hospital admission to be very brief. He explains:

Before I was admitted to hospital, I was in ostensibly good health. I had not seen a doctor for several years, was reasonably fit, and the only symptom of my nascent cancer was a tiny trace of rectal bleeding...So it was a surprise to everyone when, in the days following my operation, my ileostomy stopped working and my temperature started to soar. I was prescribed ibuprofen to bring it down, but this led to internal bleeding. That took the form not of some invisible leakage, but of...spectacular vomiting... While the nurses mopped my blood off the floor, I was rushed away for an endoscopy, which revealed massive hemorrhaging. Suddenly, my condition was in crisis.

Proceeding to document a handful of unanticipated roadblocks to his recovery, Ludlow was finally discharged from the hospital more than five months following his surgery. Reflecting on this experience, Ludlow explains:

I have developed an intense yearning to be free of hospitals and to take as few drugs as possible. Every intervention or course of pills carries its own set of consequences...I have come to realize the risk or danger involved in any medical treatment...Doctors who are administering treatments and prescribing drugs every day can easily become blasé about the cost to the patient that accompanies them. They also tend not to tell the full story about the risks involved, because they do not wish to cause alarm and prompt the patient to refuse the intervention.

At the outset of this research endeavor, I had no idea that I would be hearing so many stories that involved critiques of biomedicine. Yet through my research, I have come to the realization that engagement in body regimen careers associated with the “healthy life extension community” are often viewed as a more desirable alternative to what could be described as the practices of “standard Western allopathic medicine.” Like Ludlow’s dramatic story detailed above, a number of my interviewees recount dramatic

stories of illness and pain; “illness narratives” (Langellier and Peterson 2004) that describe dramatically changed perspectives towards biomedicine. By regarding individuals engaged in body regimen careers associated with the “healthy life extension community” as part of what could be described as “therapeutic culture,” an understanding of the shared grievances about allopathic medicine may be made clearer. As noted by Rice (2002:84):

A profoundly anti-institutional orientation lies at the heart of therapeutic culture, the core premise of which is that the self must not be subordinated to the externally imposed and collective demands.

Partaking in what could in some ways be categorized as a “self-help movement,” (Brown 1996; Withorn 2009) many of my interviewees turned to body regimen careers after exhausting what they perceived that mainstream medicine had to offer. Because of the tremendous importance of this theme throughout many of my interviews, I believe this topic merits further elaboration.

What is wrong with Allopathic Medicine?

In his Pulitzer Prize winning book *The Social Transformation of American Medicine*, Paul Starr (1982) traces the history of American medicine through two centuries. According to Starr (1982:410), the late 20th century represents a time of dramatic change, in part due to financing challenges (from economic recessions in combination with an increase in the use of expensive medical technology), and in part due to what he refers to as “therapeutic nihilism.” This so called “therapeutic nihilism,” inspired a more general questioning of whether allopathic medicine actually made people healthier, marking the end of what has been called the “golden age of doctoring”

(McKinlay and Marceau 2002).

Social movements including the feminist women's health movement (Oakley 1976; Boston Women's Health Collective 1972), a movement debunking psychiatric medicine (Illich 1975; Szasz 1970; Kesey 1962) and the alternative or holistic health movement, were influential in the "loss of confidence" (Starr 1982:379) aimed at allopathic medicine. The holistic health movement of the 1970s, often associated with the practice of complementary and alternative medicine (CAM), and premised on the values of self-help and personal empowerment, sprung from this critique, and the movement's influence is readily apparent in many of the criticisms leveled by a number of my respondents. For example, in the words of one interviewee who was reflecting on generational differences in regards to perspectives on biomedicine:

My mother couldn't get up and down out of the chair, yet my mother was healthy, and they kept giving her ibuprofen and she'd say, "ah, that doesn't work", and she'd throw it away, but she didn't have the, I don't know, the tenacity or the insight or the intelligence or the resources to look past, if the doctor said, "Its black," than she would say, "yes, right, ok." She never questioned anything...and it was a way of life, "I'm old so I expect to have aches and pains," (makes voice like it is her mother's) see, and I know that you don't have to!... [Female, AA, 60+]

From a sociological perspective, interest in CAM is sometimes linked to a push towards "demedicalization" (Leiser 2003) – a resistance to the medicalization process (Conrad 1992; Illich 1975; Zola 1972) whereby an ever expanding realm of human life becomes identified as a medical problem in need of treatment. Through medicalization, social control is exercised over threats to social order, and as detailed by Nichter (1998:327), this is achieved in several different ways which includes the diagnosis and treatment of individual ailments, the ways in which people are socialized to engage in

sick role behavior, practices surrounding self-surveillance and monitoring, along with discourse about prevention and risk which place the language of personal responsibility at the fore.

A turn towards holistic or alternative health may represent a democratic challenge to the traditional authoritarian doctor/patient relationship in an effort to advocate for what Lowenberg and Davis (1994:581) describe as “a more egalitarian exchange.”

Researchers also note that individuals turning to CAM sometimes represent an alternative worldview and their engagement with alternative medicine may enable them to express broader societal dissatisfactions (Leiser 2003; Douglas 1994). Other research has suggested that some individuals, (sometimes those with certain chronic diseases), turn to CAM after having exhausted the remedies offered by traditional biomedicine (Leiser 2003). Further, empirical research on individuals using alternative therapies revealed that a majority turn to such practices for illness prevention or in an effort to maintain and optimize vitality and health (Ramsay et al. 1999; Eisenberg et al. 1998).

Turning to my own data, even among those respondents who do not have dramatic stories of changed consciousness towards biomedicine, a strong underlying skepticism of so-called “mainstream” Western allopathic medicine often exists. This type of disillusionment and/or distrust is noteworthy, given that the cultural significance of medicine has been so powerful that it has led some theorists to suggest that in advanced capitalist society, medicine has actually replaced religion as the primary moral ideology (Turner 1996). Medicalization, through this line of reasoning, is sometimes attributed to growing secularization (Conrad 1992).

Research by Siahpush (1999) reveals that a turn away from traditional Western allopathic medicine is connected to one of two factors, the medical encounter and/or the medical outcome. While people's frustration with allopathic medicine is multifaceted, my research reveals a similar conclusion – the two factors which were most powerful in leading my interviewees to question allopathic medicine included what could be characterized as the lay experience with the medical encounter, largely in terms of the nature of the doctor/patient relationship, and the medical outcome, which centered around negative experiences with pharmaceuticals and a frustration over the perceived lack of focus on prevention in standard allopathic care.

Frustrations with the medical encounter often led people to resist or reject the way biomedicine was being practiced, more than biomedicine in and of itself. In contrast, a critique of the medical outcome typically led interviewees to reconsider the overall treatments offered by biomedicine and to consider alternative courses of treatment. It is important to note, however, that some of the alternative treatment courses were indeed “biomedical” – yet interviewees discerned between these and doctor-prescribed pharmaceuticals based largely on three factors, the most powerful being the embodied physicality of a given treatment modality, i.e.: how specific products make people feel. Other considerations included perceptions of whether or not something was doctor mandated/prescribed or optional/voluntary, and whether it was thought to compliment and enhance, or manipulate and mask, what were described as the body's “natural” functions.

The medical encounter: doctor/patient relationships

Individuals in all three groupings in my study expressed frustration with their perceptions of the social interaction in the medical encounter, and this centered on negative perceptions of treatment from allopathic medical care providers. This included feelings of being misunderstood, misdiagnosed, ignored, and overlooked. Many respondents felt as though standard allopathic care was not sensitive enough to individual variation, with statements such as “One shoe does not fit all,” [Female, AA, 4/5], and “Everyone’s nutritional requirements are different. Centrum is not the answer!” [Male, CR, 4/5], opting instead for practices that they felt could be more customized to their unique situations and bodies. While individuals from across body regimen practices expressed a wide range of these frustrations, they often reacted to them in different ways. Looking separately at each of the three populations in my study provides important insights into the different ways individuals engaged in different body regimen careers dealt with ambivalence, frustration, disillusionment, or even hostility, towards mainstream medicine.

Shared grievances among users of anti-aging medicine – “seeking alternatives”

As compared to those individuals in the other two sub-groupings, individuals engaged in what could be referred to as anti-aging body regimen careers had the most powerful criticisms of the traditional biomedical encounter. This is largely because many of them, having experienced very dramatic times of crisis (often paired with severe pain and discomfort), felt let down by their doctors. These respondents expressed frustration over the minimal amount of time they were given to see their physicians, echoing

feelings of not being heard or understood by their doctors, as they experienced resentment over the ways that medical care providers worked to maintain their expert status, even at times when they did not necessarily have all the answers. This experience is not uncommon as a number of researchers (Karp 1996) document the ambivalence and frustrations people feel based on their encounters with conventional medical care providers. Zola's (1996) research, for example, suggests that people are most likely to end medical treatment, (and presumably to seek out alternative options), when they do not feel understood by their doctors, particularly in cases where physicians do not recognize the reasons people give for seeking medical help.

Turning to the criticisms leveled at the biomedical encounter by interviewees engaged in anti-aging medicine, it is apparent that a number of my interviewees felt as though traditional Western allopathic doctors were reluctant to admit gaps in their understanding. One respondent explained his frustration over his doctor's tendency to call his physical ailments "idiopathic," which is a term used in medicine to describe ailments which arise from unknown causes. Refusing to accept "idiopathic" as a diagnosis, this interviewee in turn crafted a rigorous and devout body regimen career, which involved a combination of anti-aging medicine, acupuncture, rolfing, specific dietary and vitamin regimens, and other treatment modalities, in an effort to find answers to physical ailments which the standard biomedical establishment had called "unknown."

The perceived tendency for allopathic physicians to avoid admitting confusion was also a source of frustration. As another interviewee boldly articulates: "Doctors don't tell you when they don't know something! They will not tell you that!" Working

in the health care field, this particular interviewee proceeds to tell a story of a time that a doctor told a patient that consuming flax seed would cause cancer. He describes his own response as follows:

I'm like, "excuse me?" I go, "ma'm, I'll send your doctor clinical research that shows that flax seed is shown to cause *a reduction* in breast tumors." You know, research that is actually found in the same journal that he is a member of, hmmm, maybe he did not look at it? Obviously, you know, and he probably didn't have the time to do that. He probably didn't have the time. [Male, AA, 2/3]

Another respondent expresses her frustration in having to spend so much time, money, and effort, while enduring considerable pain, to figure out some answers to her health problems. This time consuming, frustrating, and exhausting journey, in and out of doctor's offices, ended up being part of why this particular interviewee decided to turn to anti-aging medicine as a potential alternative. She elaborates:

We are caught up in this system of health care providers where they have to work from within the confines of whatever the health insurance provider [requires], "you have to do this, you have to do that, you've got two minutes with your patients, you have to do that." People like me get flushed down the toilet because they don't listen, you know, they just don't hear. They don't think outside the box, they haven't got the time. [Female, AA, 60+]

Contrasting her experience with her allopathic doctors and her visit to an anti-aging doctor, another respondent emphasizes differences in the amount of time and thoughtful attention that she was given.

The [anti-aging] doctor sat there for an hour and a half with me, took a full history, and ...was very knowledgeable about what she was talking about, and confident that this was the issue. I'd never once, never once had that. You know, every other doctor, its tops, 20 minutes, you know, tops...it [appointment with anti-aging doctor] was "I can spend three hours with you if I need to"...it was like, it was my time and...she really wanted to know what was going on in my life, like, "what is going on in your life, too?" you know, and so yeah, it was very different...I was very pleased. Very pleased with it and I will definitely go back, definitely go back to do it, and I don't know, it made a huge difference and I'll tell anybody about it. [Female, AA, 2/3]

Another respondent discussed his frustration at the emphasis on pharmaceuticals in the practice of mainstream medicine. He feels as though doctors do not really have first hand experience with the medicines that they are distributing and he contrasts this with anti-aging doctors who he describes as embodying the practices that they promote.

Talking about his own anti-aging doctor, this interviewee explains:

He [anti-aging doctor] is about 60 I guess and he has a picture of himself completing the Iron Man triathlon so he does practice what he preaches. I mean...he is a very fit looking, robust man, and I know he has committed himself to exercise. [Male, AA, 60+]

Describing her practice of “doctor hopping” as being an integral part of her experience with medical care providers, one respondent recalled several times when different allopathic doctors made her feel as though they did not take her seriously. In her own words, she states:

I am always looking for a physician that listens and who would be progressive. I had one physician who rolled his eyes one time...and of course, he got a scathing letter from me, “when you leave medical school, you don’t stop learning!” And he’d say things like, “well, if you want to spend your money *that way*” [uses sarcastic voice] because I’d say, “This is what I am doing,” and it would be alternative therapy, and it was like, ahhhhhh! And so I doctor hopped....I want a partnership with my physician. I do not like feeling like I am being dictated to.” [Female, AA, 4/5]

Regardless of when or how the changed awareness occurred, I heard multiple stories which centered on a belief that physicians representing traditional allopathic medicine do not hold all of the answers or solutions to matters related to health and illness. For one respondent, traditional medical school training was partly to blame for this.

Doctors still don’t know anything about nutrition, they aren’t taught anything in medical school about nutrition...If you take your one a day Centrum or something like that, that’s all they think is necessary, which is nonsense....You shouldn’t ever trust a doctor’s opinion on nutrition. That’s like going to a neurosurgeon and asking him to fix

your horse, you know, they are not related. [Male, AA, 60+]

Even the respondent that I would characterize as the least critical of allopathic medicine, described allopathic doctors as “less nutrition oriented” but still “helpful.”

Consider, for example, the following interview excerpt:

Most doctors I have met, you know, are genuinely trying to do a good job...I don't have any doubts about that. But a physician is a clinical person who is trying to apply what they know with the situations they are faced with. They are not a research person trying to figure out new stuff... I think that research would reveal a lot of things that they should do differently. [Male, AA, 4/5]

Because allopathic doctors are unable to offer some of the information that these interviewees find important to their overall health and wellness, people decide to do their own research, while seeking occasional help from anti-aging doctors who are perceived to be more research-oriented, specialized, nutritionally minded, informed, and even authentic – since these practitioners are thought to “talk the talk and walk the walk” – to be engaged in the very same practices that they so strongly advocate.

Shared grievances among practitioners of CRON – “strategic utilization”

In contrast to those individuals who turned to anti-aging medicine for physical ailments after exhausting all perceived options using traditional allopathic channels, my interviewees engaged in the practice of CRON were most frustrated by their doctor's perceived lack of knowledge about health and nutrition, and about issues related to what might be characterized as the "biology of longevity." A number of these interviewees felt as though they could not be honest and open with their doctors about their practice of CR, so they were secretive about their engagement. In the words of one respondent:

Because I am underweight and my doctor doesn't know about CR, and she is busy, she gives me twenty minutes, she tells me every year, kind of the same thing, “you need to

gain weight,” [laughs], and here we go. But I never get sick; I mean...I haven't been sick in 7 years. Not even a cold, nothing, absolutely nothing, so you know, in that sense, she doesn't worry about me too much... So, I don't discuss CR with her. I would love to find a CR friendly doctor in town, so, but, at this point I have not. [Female, CR, 4/5]

Others who chose to discuss CRON with their doctors sometimes felt as though their doctors were not supportive and that they were even openly negative about the practice. As another interviewee explains:

My doctor is very negative about CR. In fact, she was telling me, at a point when I had a BMI of 20.5, from my height at 5' 7" I am supposed to be between 118 lbs and 158, that's a BMI of 18.5, so I was right at 130, 135, and she was saying I was way too thin, way too gaunt, and that it wasn't healthy to be at that, and here I am right in the middle of where the BMI range is supposed to be. So, I guess I am also prejudiced about her own opinions because she is quite overweight herself, and so, I'm thinking to myself, well, she really doesn't know what she is talking about! [Male, CR, 60+]

Only one respondent spoke enthusiastically about his doctor's favorable attitude towards CR. Many of my interviewees engaged in CR used traditional allopathic medicine strategically, in an effort to get access to the desired blood measurements and related tests. Yet instead of turning to the allopathic doctor for assistance in the analysis of test results, they were as likely, or often times more likely, to personally analyze their own test results, as this interviewee explains:

I like to be my own physician...you know, checking my own blood work, I mean, I live with me... my mom had a lot of home remedies, too. We didn't go to the doctor for every little thing, because I guess, her thought was, if you have a cold, you know, you'll get over it, meanwhile, if you are feeling crappy, she'll treat some of the symptoms with something at home, so we didn't run to the doctors a lot. [Female, CR, 4/5]

When questions do arise, instead of turning to allopathic doctors, CR enthusiasts are just as likely, (and probably more so), to turn to online support groups and other CR practitioners for guidance, insights, and analysis. For example, is not uncommon for people to post their entire blood test results to the CR online group in order to get

feedback and insights from experienced others.

Some respondents talked about trips to their doctor as “a waste of time and money” because they did not learn anything new from the encounter. Talking about her most recent visit to a doctor as “useless” because she had to pay three hundred dollars “...to be told what I already knew...” one respondent explained that despite her struggle with a chronic illness, she is better off doing her own research and seeking out her own alternative treatments, which she considers more effective, more affordable, and less harmful than conventional options.

Many respondents felt as though they were engaged in a dramatic doctor/patient role reversal as they spent time educating their doctors about the nuts and bolts of longevity – a stark contrast to the traditional authoritarian one-way transmission of knowledge and information (going from doctor to patient) that has characterized so many biomedical encounters. For example, in the words of one respondent talking about his relationship with his doctor:

I think I have actually influenced her. [Allopathic doctor]. I have watched her over three years, and she herself has really lost weight... she herself, now I look at her, she looks healthy, and she is not letting herself go. I tell her exactly what I am doing, you know, and... when she orders medical tests, she orders a lot of extra things... [Male, CR, 4/5]

Shared grievances among individuals engaged in fitness regimens – “opting out”

Finally, those individuals engaged in fitness regimens, instead of using allopathic medicine strategically, or seeking out alternatives, were more likely to opt out entirely, often choosing, instead, to entirely avoid all forms of medicine, including allopathic medicine, whenever possible. This conscious and deliberate avoidance of medicine was

much more common among those individuals engaged in fitness regimens. For example, one male interviewee engaged in a fitness regimen career recounts how he waited two decades to have a physical, while another interviewee explains that she purposely avoids doctors, but tries to do what she can, in her own life, to maintain her health and delay bodily aging. In the words of another respondent:

I am not really one that likes going to see doctors so that is probably an area that I could improve upon, and I've always been like that and I don't know what that comes from. [Female, FR, 4/5]

When asked about his experience going to the doctor for check-ups, another respondent engaged in a fitness regimen career quickly responds, “*If I go to the doctor! I don't normally go to doctors!*” [Male, FR, 4/5]. Similarly, as another interviewee explains:

I probably *should* go to the doctor, but I don't. I'll be completely honest with you, I think the last physical I received was my exit physical out of the Air Force in 1996. As much as I like to think that I take perfect care of my body and what not, or pretty good care of my body, I would say that I neglect to go to the doctor on a regular basis...I take pretty good care of myself. [Male, FR, 2/3]

When asked about his own experience with doctors, another respondent asserts: “If you can even get me into the doctor!” He goes on to explain:

Not that we don't need doctors but people tend to run to them way too much and believe, and take what they say for you know, “the word,” and they are human, just like we are. They make mistakes and there's, there are a lot of successes but there are a lot of people out there that have been screwed up by doctors as quickly as they have been healed...[Male, FR, 2/3]

Finally, one interviewee went so far as to suggest that her angst about doctors actually causes her to have a medical condition – “White Coat Syndrome.” She explains:

It's a common thing. It's a syndrome. They call it White Coat Syndrome...When a doctor takes my blood pressure, its higher...it is probably some kind of anxiety, like, you know, you don't want it [blood pressure] to be high so that it kind of revs you up.

[Female, FR, 60+]

In avoiding visits to the doctor, many of these same interviewees described what could be characterized as a “do-it-yourself” esprit de corps, as several described the various ways that they turned away from the guidance of doctors and other specialists to instead rely on their own knowledge, experience, and wisdom. Consider, for example, the following excerpts:

If I hadn't figured out how to fix my injury, I probably would have had orthotics, but...with some reading and experimentation... I was able to fix it myself. [Female, FR, 2/3]

I'm very anti go get help, to get people to help me, I would rather try to fix things on my own, and to not necessarily go to the doctor. [Male, FR, 2/3]

I am not really interested in Atkins or things like that because I think I know enough about nutrition to know what it is that I should be eating and I don't need the system, you know, of this thing or that, to kind of adhere to. I kind of know, I think, enough to kind of do it myself. [Male, FR, 2/3]

Despite what could be described of as a generalized avoidance of physician care, sometimes it was not possible to circumvent a trip to the doctor's office – for example, in order to obtain a required physical for work, or in cases of exercise-induced sports injuries. During these times, respondents often critiqued their experience with the medical encounter – sometimes going so far as to question whether such interactions actually do more harm than good. For example, one interviewee, who is required by his employer to have regular physicals, expressed his frustration after being told by his doctor that he is obese. He objects to this summation, and he questions the doctor. Recounting his story, he explains:

When they have our physicals at work...its not very good...we have a little running joke, its like your death notice...by the time the doctor gets done with you, you are dead, dying, on your way...he told me I was obese, well you know, I am six four and

about 230, so you know, I am not a little fella, but you know, ...and I got him about it one time, I said, “you know, you need to re-look that. Yes...I could drop four or five pounds and be all right, but obese? No!” and the doctor doesn’t like...any kind of questioning of what he says! [Male, FR, 2/3]

Other respondents do not necessarily doubt the general effectiveness of the biomedical protocol, but may feel that ultimately they can best heal by following their own personal protocol that diverges, to a greater or lesser extent, from the “doctor’s orders.” For example, talking about his recovery and rehabilitation following surgery for a sports-induced injury, one respondent explains:

After the surgery... I didn’t complete...my rehabilitation appointments as directed, because I didn’t feel as though I needed their rehabilitation methods. I took them under advisement. I did the exercises that they recommended at home, but then, did not follow up with the appointments that they recommended, and my results I believe were every bit as good as or better than what they had expected. I think my own rehabilitation methods were every bit as good or even better than theirs. [Male, FR, 2/3]

Finally some respondents describe how, when in fact they do require biomedical attention, they network with others engaged in similar fitness regimens in order to find physicians who are knowledgeable about, and sympathetic to, their body regimen practices. For example, one interviewee who was an avid long-distance runner, was tired of being told by doctors to gain weight; finally she sought out medical care from the doctor-spouse of a running friend who she felt could better understand her desire to maintain a below-average BMI. Another respondent who needed to have knee surgery explained how he asked his friends, who also engage in similar fitness regimen pursuits, for physician referrals. This interviewee further explains:

I see certain orthopedic surgeons, for knee problems and other orthopedic problems, who know that I want to be active, and who I think are going to tailor their care to that, and I think that that is very important. [Male, FR, 4/5]

While a critique of the practice of traditional biomedicine is commonplace among

respondents in all three interviewee groupings, another primary area of concern involved the standard treatment protocol widely common among traditional allopathic physicians which typically involves pharmaceutical solutions.

*The Medical Outcome – A Critique of the Pharmaceutical Experience
When Solutions Cause the Problems*

In children's book author David Shannon's (1998:14-18), *A Bad Case of Stripes*, Camilla Cream is forced to miss the first day of school due to a mysterious ailment. A trip to the pediatrician, "Dr. Bumble," provides no answers. Dr. Bumble brings in "the specialists." After the specialists squeeze, jab, tap and test, ruling out mumps, measles, chicken pox and sunburn, they give Camilla "...a bottle filled with different colored pills" recommending "take one of each before bed." The medicine doesn't work. Having tried the specialists to no avail, Dr. Bumble decides to bring in "the experts," described as "the finest scientific minds in the land." The Experts "poked and prodded...huddled together and whispered..." finally telling Camilla and her family: "we'll call you when we know something." But (in the words of the story's narrator) "the experts didn't have a clue, much less a cure."

Fortunately, the tale of Camilla Cream has a happy ending, when an "old woman" offers to help. Immediately recognizing Camilla's ailment as "a bad case of stripes" the woman offers the sick child some "small green beans." Camilla's mom questions, "Are those magic beans?" and the kind and wise woman replies "Oh my, no...there's no such thing. These are just plain old lima beans..." After eating a handful, Camilla is cured.

The story of Camilla Cream is in some ways not unlike many of the stories

recounted by some of my interviewees. A number of respondents from all three of my interviewee groupings describe negative experiences with pharmaceutical medicines which include undesirable side effects and concerns over potential health risks from long term use, paired with medications that simply do not have the desired effects. These experiences serve to inspire a desire to try something different, or to resist taking anything at all.

Many interviewees in my study talked about the undesirable side effects of pharmaceuticals, and their experiences using pharmaceuticals sometimes led them to seek out alternative treatment options which often signaled the beginning of a body regimen career.

The relationship between the pharmaceutical industry and aging has existed for nearly a century, when, for example, 1930s drug manufacturers (like Merck, Schering, Eli Lilly, and Squibb) sought hormone supplements as a cure for “female ailments,” many of which were specifically linked to the biology of aging, for example, menopause, hair thinning, skin wrinkles, libido declines, and infertility (Seaman 2003). One significant change in the last decade has led to dramatic growth in the pharmaceutical industry. While the pharmaceutical industry, itself, had identified bodily aging as a target for pharmaceutical intervention a century prior, in 1997, the FDA loosened restrictions on direct-to-consumer (DTC) advertising, enabling pharmaceutical companies to more liberally market drugs, (including those drugs linked to discourses surrounding bodily aging, like, for example, Viagra, Levitra, and Cialus, prescribed for erectile dysfunction (ED), and Premarin and

Prempro for symptoms associated with menopause), to the general population, in print, radio, and television advertisements. Spending on DTC advertising increased from \$266 million in 1994 to about \$2.5 billion in 2001.

The pharmaceutical industry is regarded as the most profitable industry in the U.S. (Loe 2004), with 2007 gross revenue for U.S. pharmaceutical spending estimated by IMS Health, a market research consulting firm, to be around \$287 billion.⁷⁴ Based on research published in a report by the U.S. General Accounting Office (GAO) in 2002,⁷⁵ spending on prescription drugs is the fastest growing segment of U.S. health care spending, comprising approximately 10 percent of all U.S. health care expenditures, and increasing by approximately 18 percent each year between 1997 and 2001. These increases are attributed to three factors that include a rise in the number of prescriptions written, an increase in the cost of prescriptions, and a transition away from less expensive, older medications, to newer and more costly options. The GAO (2002:9) report also attributes increases in pharmaceutical utilization to an expanding "...aging population that is more dependent on multiple medications for treatments..." With approximately 150 million pharmaceutical prescriptions written each year in the U.S. (DeYoung 2008), this multi-billion dollar industry has become a prominent centerpiece of the practice of medicine, and it was an important part of the stories my interviewees told about body regimen careers.

Telling the story of what finally led her to the office of an anti-aging doctor, one respondent begins her interview with the tale of personal crisis. Initially turning

⁷⁴ Retrieved on August 10, 2008, from <http://projects.publicintegrity.org/rx/report.aspx?aid=985>

⁷⁵ Retrieved on August 10, 2008, from www.gao.gov/new.items/d03177.pdf

to an allopathic doctor during a time of personal crisis over a challenging family situation, she was put on Cymbalta for depression. The Cymbalta caused insomnia which led to her to try Ambien. This interviewee recalls not wanting to try any pharmaceutical product – and then suddenly being on two. While she did feel that the Cymbalta made her calmer, it wasn't a feeling that she particularly enjoyed, she felt, as she described it: "...middle lined with kind of a drugged effect." She regarded it as a temporary quick fix – "...maintaining me so I didn't lose my mind during a very stressful time" [Female, AA, 2/3].

Another respondent who utilizes various anti-aging supplements and medicines talks about his desire to stay off many pharmaceutical products due to what he considers to be the negative side effects.

I don't really want to be taking cholesterol medication, blood pressure medication, because, you know, I was looking at them last night, before I took them, every pill has on there, I think four to five of the things that I take say "may cause dizziness," so, I mean, and I do have some dizziness, I notice it when I walk from time to time, or when I play golf and I move to put the T in the ground... its the side effect thing. [Male, AA, 60+]

Experiencing dizziness periodically, throughout the day, this interviewee describes it as a constant source of frustration, discomfort, and anxiety. This interviewee, like several others, regards anti-aging medicines in sharp contrast, because he views one as voluntary, and the other as prescribed, and while perhaps necessary, also more dangerous and undesirable.

Another interviewee that turned to an anti-aging doctor recounts her struggle with mood swings which started to become increasingly severe around menopause. This interviewee's allopathic doctor put her on standard hormone replacement therapy (HRT)

and after a while, she began to question whether or not it was good for her. She recounts:

My ob/gyn had been giving me Premarin and I had been hearing a lot of things about how it was extracted from pregnant horse urine and things like that, and I was like, well, I don't know why that would be right for my body, something that comes out of a horse...I just felt like maybe there was something not right...[Female, AA, 4/5]

In an effort to find an alternative to HRT, she recounts the journey that led her to seek out other options, eventually leading to her exploration of anti-aging medicine.

Individuals engaged in the use of anti-aging medicines were not the only respondents who recounted negative experiences with pharmaceuticals; in fact, interviewees from all three of my study groupings described similar stories of frustration with these remedies. For example, talking about her current experience with menopause and her desire to resist pharmaceutical solutions to her symptoms, another interviewee engaged in a fitness regimen career explains her desire to stay away from pharmaceutical medications:

I am going through menopause and having a lot of trouble with hot flashes, and whatever, and my MD wants me to take Amoxil which is a, you know, anti anxiety, and its also been known to help with hot flashes, and I am just very reluctant to do it, you know... I don't like taking any medications like that cause I know that there are always side effects to these things and I am just hesitant to get on something like that and not knowing what the side effects are, so that is my hesitation, just, I guess I have this mindset that I am trying to stay away from taking medications if at all possible.
[Female, FR, 4/5]

This same respondent turns to a large daily cache of vitamins, minerals, and supplements, but she regards them as beneficial and helpful, countering the deleterious effects of the aspects of her life over which she has little or no control. In stark contrast, she perceives most pharmaceutical medications with great suspicion, ultimately believing that they do more harm than good.

Another respondent engaged in the practice of CR discussed the multitude of

health challenges she has faced since the childhood. Part of this involves living in what could be described as a state of chronic pain. She explains:

I live with constant pain that is at the level of a 7 to 9...when I was six and eight, there were times that I would wake up screaming in bed because of the pain...I remember going to bed...and crying just because the pain was so bad, like just debilitating.
[Female, CR, 2/3]

This interviewee elaborately described the multiple ways that she has sought out every possible solution for this pain, but in the end, she is always guided towards pharmaceutical pain medications, and this is extremely unsettling to her. She is especially worried about the unknown long term risks of these pharmaceutical products.

She explains:

I have seen all kinds of body workers and doctors. I have done acupuncture, you know, just anything, you name it, rolfing, in addition to Western medicine, everything...and in the end I just get referred to pain management specialists and I don't like that. I don't want to take things that are bad for my liver or for my longevity and it's, I also don't like how they affect my brain. It certainly doesn't take away the pain....[Female, CR, 2/3]

Concern over the unknown long term risks of pharmaceuticals was commonplace among my respondents, as a number of people referred to circumstances of “pharmaceuticals gone wrong” – as with, for example, the use of Diethylstilbestrol (DES) to reduce the rate of miscarriage during pregnancy, which was later associated with an increased risk of cancer in the daughters of the women who took the drug, or the National Institute of Health's (NIH) 2002 decision to stop the 16,000-participant hormone replacement study due to research findings that suggested that Prempro, the leading U.S. pharmaceutical drug for hormone replacement therapy (HRT), significantly increased a woman's risk of

breast cancer, stroke, and heart attack.⁷⁶

Talking about, for example, an inherited condition that he believes he passed on to his son, one respondent explains his concerns over the long term risk of pharmaceuticals:

I've got what they call athletic induced asthma, you breath fine all the time until your body gets to a certain exertion point and then you close up. They say all that stuff is hereditary, and we found out that my son had it when he was about nine months old, so I started looking for alternative stuff and what not, because I really hate the fact that my son takes any medicines, and who knows what the effects will be on him in 30 or 40 years, yet the doctor just says, "Here, take this take this, no try this one, this one is not working." And I say, "Whoa, wait a minute!" And doctors don't like it when I ask, "Well, what are the effects in twenty years going to be?" Ahhh. Yeah, you can't tell me. You are telling me that this is a cure but you can't explain to me what the side effects are going to be 20 years from now. So yeah, he might have a decent childhood but then when he gets to be a young adult, you know, everything is all jacked up again and he's sick....its so frustrating! [Male, FR, 2/3]

Another interviewee who utilizes her own anti-aging regimen describes her disillusionment with conventional allopathic medicine and pharmaceutical treatments based on a story she tells about her mother. In her own words:

My mother took cortisone for probably ten years in great huge amounts and I kept going, 'mother, mother, don't do this,' and then her osteoarthritis got so bad, and you know, it just really wrecked her health. She died of liver failure and when I talked to her doctor afterwards, I said, 'well, she hadn't been thinking clearly for about a year and she was brilliant. She went to [name of school]. She studied pre law. She was a really brilliant woman,' and he said, 'well it was the toxins in her body from her liver not functioning properly' and he said, 'you know, she had cirrhosis, she had cysts in her liver.' My mother never smoked a cigarette or had a drink in her life and so the only thing it could be is all the pharmaceuticals that she took! Yes, people just do that, 'oh, that's what my doctor told me!' I go, no way, I'm not even, I don't even go to those people. I mean, I'm sorry. I don't believe in them at all! [Female, AA, 60+]

This interviewee regards her mother's experience as a powerful example of the ways that the very same drugs given to heal, are, in the end what often hurt us. She uses the story of her mother to highlight her own frustrations with allopathic medicine and she regards

⁷⁶ Retrieved on August 12, 2008, from: www.guardian.co.uk/society/2002/jul/10/research.medicalscience

anti-aging medicines to be complementary and healing for the body – offering bodily rejuvenation rather than multitudinous side effects. When pushed to explain the difference between anti-aging medicines and pharmaceuticals, it is evident that anti-aging medicines are regarded, by the above respondent, and many others, as enhancing nature, while pharmaceutical counterparts are thought to be tampering with nature.⁷⁷ In the words of this particular respondent:

I am very suspicious of pharmaceuticals that alter the natural processes of the body...I don't think we should tamper, alter, or interfere with nature. I think we should try to enhance the stuff that is working right. [Female, AA, 60+]

In trying to make sense of what she regards as an allopathic aversion to “natural” products, another respondent explains how standard biomedical practice inspires a suspicion of the term “natural.” Talking about anti-aging medicines, including the use of “bio-identical hormones,” this interviewee explains:

Physicians are skeptical of and hesitant towards bio-identical hormone treatment. Their attitude is like: “Well I don't know, that's not FDA approved, it's natural,” and they don't like that natural term. I think that a lot of nutritional companies, they are not regulated by the FDA, so what that says on the bottle doesn't have to be in there, I mean, it can be in there in a minute amount, and really, one in four supplements are tainted... so I think that that has given “natural” a bad rap, so doctors are like, “oh, well that is just a placebo,” they kind of just push it aside. [Female, AA, 4/5]

Reflecting about what are perceived to be the problems with pharmaceutical medications, two other interviewees explain:

I am very suspicious of all of the anti depressants. I am very suspicious of much of the modern medicines that I think that we are producing today. They interfere with the function of the body. They don't enhance it. I think it is terrible. We don't even know what the side effects are going to be, the long term side effects. We hear about the short

⁷⁷ It is interesting to note that a number of individuals talked favorably about their efforts to “trick” nature, but this was only in the context of doing things external to the body, and not in relation to the consumption of supplements and medicines. For example, several respondents talked about using weights to “trick” their bodies into thinking that they were heavier so that their bone structures did not change (in an attempt to prevent osteoporosis).

term ones and we talk those up, but I think we have released a lot of them into the market in the last 20 years that we have no idea what's going to really happen. I mean, look at Prozac, the great savior of the depressed, and we have got suicidal ideation with a very high percentage of those taking the SSRIs [Selective Serotonin Reuptake Inhibitors]. I mean, that's nuts, and now I look at this Chantix, the anti smoking, and that's causing some severe psychological abnormalities. [Male, AA, 4/5]

I don't like their drugs. Their Pergaset, their Dilaudid, my stomach doesn't deal well with it. If I don't take it with food, I become ill. I don't like that a whole lot...I stopped taking medication that was given to me, I believe for a week or 10 days, I stopped it after essentially four days because the first day I couldn't take it, I mean, I tried, but I just couldn't hold it down, and after the fourth day, it was like, you know, I would rather just deal with the pain because, um, the pain was the smaller side effect. The pain was more tolerable than the queasy feeling to me. [Male, FR, 2/3]

Talking about his own use of a pharmacological product that he took during a time he was suffering from what he described as “mild depression,” another interviewee recounts the embodied experience of being on the pharmaceutical medication – an experience he interpreted to be very unpleasant and undesirable:

I took Celexa, it's an SSRI. I tried that. I took it for thirty days and I felt that that made me stupid and I quit taking that. I probably quit taking it after two weeks actually, I had a thirty day prescription. I had one time of a pretty severe crisis and I quit, I just quit, I said, “this is terrible!” ...I think intelligence, cognition and emotion are really closely related and ... I don't know how to explain it but it can be dulled, and I think that some of these anti depressants do that, there is a certain joy, a certain sharper edge feeling about life, and then if you take it away, you become, I don't know if it is stupid but it is like a neutered cat. I mean, I'm not sure if you would get the same score on an IQ test but I think that what you think about and what you actually do in a day is considerably diminished and I know that I experienced that. I would rather have ups and downs of mild depression, which I rarely, rarely have. I would rather have that than be stupid or lazy. It's kind of like flat-lining. I think it flat-lines some of the brain. You know, that constant dose of serotonin availability, I think is not, we need adrenalin. We need to be excited and stimulated. [Male, AA, 4/5]

As is evidenced by the excerpt above, this respondent would rather live with his symptoms, than experience what he perceives as the negative side effects of the pharmaceutical product he tried. In stark contrast, he regards his anti-aging regimen which includes a variety of vitamins, minerals and supplements, as healing and

enhancing, making him feel better, smarter, more energetic, and healthier, rather than “dull” or “flat-lined.”

Recounting her negative personal experience with pharmaceuticals, another respondent describes a time in her life when she was struggling with feelings of hopelessness. Between jobs and experiencing relationship problems, she recounts how her doctor recommended that she try Prozac to help her grapple with her emotional pain. Shortly after beginning the medicine, she started gaining weight, and this led to health problems, and to additional prescriptions. In her own words:

[After starting on Prozac] the weight gain also started and it was the final edge going into a series of foot surgeries. I didn't let them touch my knees, but that would be next, if I had kept gaining weight. I went from 127 pounds to 183 and I started researching, by then, I was on about five or six different medications, and going from taking none, I found that weight gain is a side effect of the type of drug Prozac is, the serotonin uptake inhibitors, and so I my doctor dropped me as a patient because I stopped taking the Prozac against medical advice. [Female, AA, 4/5]

This interviewee recounts how the Prozac actually made her feel “worse” and how taking it led her to take a mounting series of other medications. After six to eight weeks on Prozac, this respondent explains:

I started feeling worse, so the doctor doubled my dose, started me at 20 milligrams and he doubled it to 40, and then...I thought, well maybe I am doing a little better, and then...I got worse, I got worse. I started getting allergies, and then I was given Entex for post nasal drip, and I started getting body aches and the doctor prescribed Seldane which made it worse. I got bad muscle cramps. I was so flexible but I got stiff. I could hardly get out of bed and the doctor upped the Prozac to sixty milligrams, and added Elavil to the mix, so now I am on about a half a dozen drugs, going from a perfect weight and being unhappy in my home life, to on about half a dozen medications, gaining nearly 60 pounds, from being able to walk five miles a day six days out of the week, to having my feet just killing me, and so I was, I just didn't know what to do...Meanwhile, I was seeing my husband blow up like a balloon, the more drugs he took, and so with his experience, you know, with prescribed medicine, I thought, well, something is not, maybe it is the medicine, after all, I think that's what it was. [Female, AA, 4/5]

Reflecting back on it all, this respondent talks about how she has stopped taking all of the

“prescribed” pharmaceuticals, stating, “I don’t take any drugs, except voluntarily, now.” As an expression of her disillusionment with conventional medicine, she concludes, “I don’t believe much of what I read anymore unless I have it from a few different angles...” This interviewee regards her use of a wide range of anti-aging supplements, vitamins, and minerals, in dramatic contrast to her pharmaceutical regimen, in part because all of what she does for her body regimen career is voluntary rather than prescribed, and in part because she feels so much better now, much of which she attributes to the practices of her current regimen.

Talking about his father's struggle with congestive heart troubles, another interviewee emphasizes how little the pharmaceutical medications the doctors give to his dad seem to help. This respondent has tried to help his dad access what he describes as “alternative” supplements, and he feels hopeful that these have “made him better, somewhat...” but, he adds:

I think a lot of it [allopathic medicine] is bogus. The pharmaceutical industry, I think, is corrupting medicine...big pharma is slowly corrupting doctors. I wouldn’t go to one [allopathic doctor] myself, unless they were, I would trust a naturopathic doctor, and people like that, but as far as standard, middle of the road, standard doctors, I wouldn’t trust em’. [Male, AA, 4/5]

This interviewee is extremely negative about pharmaceuticals. He explains:

I don’t like to coerce things. I like to let my body have access to things that it may decide to use or may not decide to use, but it isn’t forcing it. It is giving it leeway to kind of deal with it on its own. And that is why I don’t like pharmaceutical drugs and I wouldn’t take any!

Though he takes his own anti-aging supplement regimen, he views this to be very different than the pharmaceutical products offered by conventional medicine since he sees pharmaceutical medications as “coercive,” and his own regimen as complementary

and enhancing.

Employed in the health care field, another interviewee engaged in the practice of CRON reflects from her own vantage point on allopathic medicine and pharmaceutical treatments. She explains:

Working in an [name of medical specialty] practice, I do see the good that medicines and pharmaceuticals and you know, all the drugs and everything else. I see the good that they do, but I also see the bad that they do. You know? There are a lot of times when we'll get a [name of disease] patient in, the [name of disease] patient looks perfectly fine before they start their treatment and by the end of their treatment, you know, they are throwing up, they are losing weight drastically, all their hair is falling out, and it is almost as if the cure is worse than the disease...[Female, CR, 2/3]

Even a respondent who believed that she really benefited from being on a pharmaceutical product, to help her manage obsessive compulsive disorder, talked about her ongoing ambivalence regarding her usage, as she explains:

I take a medication that is prescribed for depression. But mine is not depression. Mine is obsessive compulsive disorder ...anti depressants are commonly prescribed for OCD...I tried to go off of it. I've been on it for 20 years, I've tried to go off of it probably 20 times in 20 years, and it takes like 2 weeks to get out of your body, so I'll be fine for like 2 weeks and I'll be like, you know, and then all of a sudden, I can't, it's a feeling that I can't describe to you that comes over me, I can't describe it to anybody but its, its an overwhelming feeling of, that, I don't know how to describe this feeling, but it hits you like a ton of bricks, and its like, I can't take the next step, because I don't know what direction to take it in, its weird, its very weird, but yeah.... I don't want a drug in my body. It is the passion for health. I don't want it in my body. I want to be all natural! [Female, FR, 4/5]

Recounting conversations with her doctor where her doctor explains to her that she needs to stay on the medication for her entire life, she responds to the doctor, "This is your business. This is what you are in business for, to prescribe drugs to people, and I don't want to be on mind altering drugs!" She partly distrusts her doctor's motivations because she feels that a doctor's job is to dole out drugs, drugs she certainly doesn't want, and wishes that she didn't need. Yet this same respondent does take a range of supplements,

vitamins and minerals yet she sees these as “enhancing” her health and making her feel “great” while she worries about all of the “hidden side effects” of the pharmaceuticals she has taken and continues to take.

The perception of doctor-as-salesperson, as dispenser or peddler of pharmaceuticals, instead of doctor as healer, was articulated by a number of interviewees. For example, another respondent, using the metaphor of the body as a car (which will be discussed in greater detail in Chapters 6 and 7), likened his allopathic doctor to a car salesperson. For this particular interviewee, as for others, the depiction of doctor as salesperson, served to create and sustain an image of suspicion and distrust that was much different than the perceptions created through the depiction of doctors as healers, guides, and so-called “partners” in health.

“Upstream Criticism”

Finally, while a critique of the “medical encounter” and the “medical outcome” are commonplace throughout many of my interviews, as relayed in the above paragraphs, it is important for me to describe a third phenomenon that involves interviewees who are focused on what McKinlay (forthcoming 2009) has described as the “upstream” events in the health care industry. Arguing, for example, that most resources in the health care field are used to target crisis situations – or “downstream endeavors” – McKinlay (forthcoming 2009:578) explains that more attention needs to be paid to the roots of causation – to important socio-cultural factors that might be best described as the “manufacturers of illness.” For example, research by Null et al. (2003) revealed that nearly 800,000 people die each year in the U.S. due to mistakes made by conventional

medicine, and, according to this research, one of the most important aspects of health that the emphasis on “prescription cure all” overlook is exposure to environmental toxins. Like McKinlay’s (forthcoming 2009) call for more attention to the “political economy of illness,” many of my interviewees would have made C. Wright Mills proud in their ability to connect the dots between their personal health care struggles and the broader societal milieu.

For example, when criticizing the practice of traditional allopathic medicine, a number of my interviewees ended up leveling condemnation towards a range of societal structures including the government, public education, the food industry, the insurance industry, the pharmaceutical industry, and consumer culture, more generally, all of which were thought to have a hand in a wide range of health problems, including ailments that are sometimes referred to as the “diseases of aging”⁷⁸ (DHHS 1999), like for example diabetes and heart disease.

Profit as the driving force behind a wide range of industries was repeatedly criticized since it was thought that such a goal was in direct conflict with efforts aimed at the greater good. For example, people questioned medicine’s true ability to heal when making money was thought to be held in higher regard than the “first commandment” of medicine (Szasz 1977) based on *primum non nocere*, or “first, do no harm.” Describing the medical field as “the biggest good ole’ boy system around” one respondent, for example, explains:

You do not see a lot of alternative medicines other than pharmaceuticals on health insurance plans because there are a whole lot of companies that can lose a whole lot of

⁷⁸ See for example: www.cdc.gov/nccdphp/publications/cdnr/pdf/cdfall99.pdf, retrieved on August 6, 2008.

money if you take care of yourself. [Male, FR, 2/3]

Many of my interviewees used the language of “health prevention” to describe a goal many perceived as far more desirable than the industry’s typical “band-aid” or “crisis” approach towards healing. For example, another respondent, himself a practicing physician, details his frustration with the way medicine in the U.S. is practiced:

I think U.S. medicine does a horrible job with prevention and I think there would be tremendous implications financially, with the patients themselves, or with U.S. healthcare more broadly, if there was more of an emphasis on prevention. Unfortunately it’s not. I think primary care physicians, and I am not dumping on them, but I think they have done a very poor job in giving patients information, and being firm with patients, and saying “this is what you need to do to be more healthy and to live longer and its for multiple reasons. A lot of it is that it’s easier to prescribe a pill and it can be economically more lucrative to do so...I think primary care physicians, a lot of them don’t live a healthy lifestyle themselves and I think a lot of times they are scared to tell patients, “you need to lose weight and you need to quit smoking,” because the patient won’t come back. Our health care system rewards intervention, it does not reward prevention, so I see it everyday in my work. [Male, FR, 4/5]

Some respondents went so far as to suggest that matters related to health, wellness, longevity, and prevention, were perceived as antithetical to the true motives of the health care industry since, theoretically, if people were healthier, hospitals and doctor’s offices would suffer from a decrease in business and revenue. As articulated, for example, in the words of one respondent:

I just believe that the doctors and the drug companies are more interested in making money and not interested in actually making people well because then the money would dry up. I try not to be too overly critical of the whole process...but it just seems like if we really wanted to come up with a cure for cancer, we would do it. [Female, CR, 4/5]

Similarly, another interviewee believes that the potential benefits of certain supplements, like for example, HGH, are hidden from the public because of how such a product could hinder the profit of the medical and pharmaceutical industries. He suggests that these industries “try to hide” positive information because:

...if you are taking something that is going to basically help you as you get older, they [doctors, pharmaceutical companies] don't want to promote something that you can take and not need multiple other medicines, in my opinion. I don't think that there is a big push to find real answers in a lot of those areas. [Male, FR, 2/3]

Some respondents spoke with disgust about what they perceived to be the unscrupulous marketing of junk food to children, while others questioned the quality of the institutional foods served in places full of "vulnerable" populations like, for example, schools and hospitals. Talking about the role of government in the so-called "obesity epidemic," and in a food industry which supports cheaper and less healthy processed foods over fresh and vitamin-rich alternatives, other interviewees connect health problems with societal institutions that not only ignore but even promote the consumption of products that literally make people sick. In the words of two respondents:

I do blame the U.S. government for propping up the corn farmers and so on. You fly over Colorado and you look down from the plane and you see these circles where they have got these huge irrigation pods and they are growing crops in the desert, well, and the only reason they are doing this is because the U.S. government has a government that allows all this corn to be grown. It doesn't need to be grown. Those places should be abandoned, we don't need to grow all this corn, and yet they are growing it, and then it becomes junk food that people eat...the food industry makes it so easy to pick up stuff and stuff it in your mouth without thinking about it. [Female, CR, 4/5]

I think the government wants us all to be fat and stupid, you know, cause its like they subsidize corn fructose that's, you know, Little Debbie's, you can go buy for a dollar, a box of Little Debbie's, but you are hard pressed to get an apple for a dollar. Instead of subsidizing food that it is good for us... it just seems like if you are going to subsidize something, it should be that, you know, not flour that has been processed to where there is no value to it! Maybe our government should subsidize fresh fruits and vegetables you know, instead of this quota that food companies think we have to eat of bad food for them to make enough money for them to be billion gazillionaires. [Female, CR, 4/5]

Turning to a critique of the insurance industry, other interviewees expressed frustration over the times that their insurance companies would not provide reimbursement for less expensive, and more effective treatments deemed "alternative," or "experimental," while they were willing to pay for much more costly, (and potentially

more damaging and less desirable), testing and medications.

Conclusion

Arthur Frank's (1995:172) important work on the body, illness, and ethics, reveals that illness stories are often based around the theme of "becoming a victim of medicine." My own research reveals that this fear of victimization may actually represent a broader concern that includes even those without a personal illness story to tell. When exploring individual engagement in practices associated with the "healthy life extension community," it is readily apparent that such engagement is haunted by a rather bold and persistent critique of biomedicine. Changes in the latter part of the 20th century, which include the rise of managed care plans, and an increased emphasis on "patient rights," have dramatically challenged the practice of medicine, including occupational autonomy and financial reward (Tomes 2001). Some argue that the field of medicine has lost status (McKinlay 1988; Haug and Lavin 1981) while others purport that medicine remains the dominant health care profession (Hafferty and Light 1995), yet regardless of position, it is inarguable that the experience of medical practice has changed.

Individuals engaged in body regimen careers, including the practice of CR, the use of anti-aging medicine, and involvement in fitness routines, have powerful personal opinions and critiques of allopathic medicine that served both to inspire, and continue to motivate, their current body regimen career journey. While multiple frustrations with biomedicine were expressed, for some respondents, it was not biomedicine in and of itself that was the problem, but rather, the particular delivery of this practice. This was particularly relevant among those individuals utilizing anti-aging medicine. While anti-

aging doctors were perceived of as different, and often times more desirable than traditional allopathic practitioners, both doctors used the tools of biomedicine to administer treatment.

In contrast to traditional allopathic physicians, providers of “anti-aging medicine” were often favorably described as better at listening and responding to individual health problems, more attentive, less formal, more likely to engage in the practices which they promote, more knowledgeable about specific health problems, and more thorough. While individuals engaged in anti-aging medicine were more often likely to express frustration about the traditional doctor/patient relationship in terms of what could be characterized as “bed side manner,” those individuals engaged in CR and fitness regimens expressed greater frustration with the lack of information many doctors had about nutrition, health, longevity, and wellness. As noted by Todd (1996), allopathic doctors have been reluctant to recognize a connection between dietary intake and disease – something important to interviewees in all three of my sub-groupings, but likely most relevant to those engaged in the practice of CRON.

While CR practitioners often opted to instrumentally turn to doctors to receive desired medical testing, and then, to on occasion, attempt to educate physicians about the nuts and bolts of the CRON way, individuals engaged in fitness regimens were more likely to avoid the allopathic medical encounter altogether, opting first to treat themselves through their own research, reading, and experimentation. Across all three interviewee groupings, the engagement in extensive research that marks body regimen careers, can be looked at as a way to potentially equalize doctor/patient interactions, as biological and

medical information becomes increasingly demystified through this research process.

Pharmaceutical drugs were consistently regarded as extremely negative, as my interviewees felt concerned about the perceived long term effects of pharmaceuticals, and they felt discomfort over the embodied side effects that they, (and/or someone they loved), experienced while taking these medications. Research in the mainstream medical literature suggests that this critique of pharmaceuticals may clearly be justified. For example, according to 2007 research by Dr. Michael Stern⁷⁹, a specialist in geriatric emergency medicine, working at New York Presbyterian Hospital/Weill Cornell Medical Center, the average older adult living in a nursing home or some other type of “community dwelling” takes 4.5 prescription drugs and 2.1 over-the-counter medicines. Sterns holds “polypharmacy” (defined as an individual's use of multiple medications) to likely be responsible for more than a quarter of hospital admissions in the U.S., which suggests that it could be considered the fifth most common cause of death. Because people take an increasing number of prescribed drugs as they age, polypharmacy-based risks increase over the life course, with older adults experiencing twice as many negative drug reactions than their younger adult counterparts (Stern 2007).

Intersecting with Stern’s (2007) forceful critique of “polypharmacy,” a number of my interviewees recounted the cascading effect of the pharmaceutical career (Karp 2006), and this included the ways that taking one pharmaceutical medication often led to another, and then, another and another. Supplements and medicines associated with the

⁷⁹ Retrieved on August 14, 2008, from <http://www.nytimes.com/2007/09/18/health/18brod.html?n=Top/Reference/Times%20Topics/Subjects/D/Drugstores>

“healthy life extension community” were often perceived of as complementing or assisting natural bodily processes, while pharmaceuticals associated with traditional biomedicine were more often regarded as tampering with or interfering with the body’s own natural rhythm. This differentiation was also determined through embodied effects where supplements and vitamins associated with “healthy life extension” often made people feel good, while pharmaceutical products frequently made people feel “off kilter,” “flat-lined,” “sick,” and even “miserable.” Frustration was expressed over what was sometimes perceived to be contradictory access to drugs and supplements, when, for example, products associated with “anti-aging medicine” like bio-identical hormones, and HGH, were thought to generate skepticism among mainstream medical practitioners, while research reveals that U.S. doctors write around 65 million prescriptions for presumably highly profitable drugs not yet approved by the U.S. Food and Drug Administration.⁸⁰

Thinking more seriously about consumption as it relates to body regimen careers associated with the “healthy life extension community,” the next chapter will explore the historical discourse surrounding practices associated with potentially delaying aging and/or extending the lifespan, starting with Hippocratic theories of bodily humors and concluding with scientific theories of bodily hormones. Turning to my own data to consider interviewee understandings of bodily aging and the effects of specific body regimen practices, the following chapter will conclude with a focus on the nexus between consumption, aging, science, and the body.

⁸⁰ Retrieved on July 15, 2008, from <http://www.cnn.com/2007/HEALTH/conditions/09/26/unapproved.drugs/index.html>

Chapter 6: Metaphors of Aging: Consumption and the Social and Physical Body

Aging, the Body and Consumption

One night while out to dinner with my family, I could not help but overhear a conversation at a nearby table as two doctors were commiserating about their residency work and all of the time that their specialty degree programs entailed. In an effort to comfort his colleague, the more optimistic of the pair blurted out, "Look, it could be much, much worse. I mean, at least you are not getting a Ph.D. in sociology!" At this point I couldn't help but join in the conversation, humorously asking the pair to lower their voices so as not to discourage me further from my own personal goals. Perhaps in an effort to make amends for such an innocent slap-in-the-face, I was asked what my dissertation topic was, and was then offered a joke that went something like this: A man went to his doctor looking for the key to an extended life and the doctor elaborated: "Avoid all sugar, chocolate, caffeine and anything with fat. Never finish a meal satiated and eat all of your favorite foods sparingly, or not at all. Do not drink any alcohol. Do not date and do not engage in any sexual activity. Avoid travel and all high risk sports. Partake in repetitive and monotonous employment at least 40 hours per week." "That will make me live a longer life?" the patient asked, and the doctor responded: "Well, even if it is not longer, it is sure to feel like an eternity!"

A fascinating history exists at the nexus between the relationship of aging, the body, and consumption. Acts of consumption have long been acts of rejuvenation (Armstrong 1998) as a wide variety of things, from organs, to blood, to special foods, and liquids, have been implicated in having powerful effects on bodily aging and/or

longevity. For example, during the Tang Dynasty in 7th century China, alchemists took close to a year to create a “golden elixir,” (made of cinnabar, red sulfate, arsenic, potassium and mother of pearl), and those who drank it were said to live eternally. Similarly, the *Ebers Papyrus*, a medical text thought to be around 3,500 years old, recommends ingesting the organs of young animals for vitality and immortality (Novil and Novil 2005), while in Ovid’s *Metamorphosis*, Medea is said to have the ability to rejuvenate by creating a concoction that turns the elderly Aeson into a younger man, making his white beard turn black and his wrinkles disappear.

Starting with an historical overview of the confluence between theories of aging, the body, and consumption, I will begin this chapter with an abbreviated historical overview in order to juxtapose past and present (Martin 1994) in an effort to “...defamiliarize present practices and categories, to make them seem less self-evident and necessary” (Sawicki 1991:101, as cited in Martin 1994:4). While it would be possible to consider the link between consumption, aging, and the body, with a sole focus on present day practices, I hope that contemplating and documenting the historical roots to such endeavors works to position such practices in a broader context—implicating far more than individual actors—and inspiring readers to think about past, present, and future practices in different, and perhaps more complex and critical, ways.

As noted above, and as described in the beginning of this dissertation, the dream of potentially extending life and/or delaying bodily aging is long lived. Philosopher Gerald Gruman’s (2003[1966]) historical research on the dream of delaying aging and/or extending life explores fountain legends based on the idea that through the consumption

of certain substances, including water, food, and other miraculous healing remedies, people may retain youthfulness and live life indefinitely (Gruman 2003). The Indian legend of Cyavana, dating back almost 3,000 years ago, describes the ‘Pool of Youth.’ Becoming upset after realizing how much older he was than his wife, Sukanya, Priest Cyavana searched for and found the ‘Pool of Youth,’ and after bathing in it, he became youthful again (Parpola 2004/2005). Perhaps one of the most famous fountain legends in Western culture involves the popular rendition of Ponce de Leon’s quest to discover the fountain of youth when he departed from Puerto Rico in 1513. The overriding premise of fountain legends involves the belief that the secret to longevity can be found in nature, or made by humans. The roots of alchemy, and the quest for the “philosopher’s stone,” were also grounded in this tradition, as regimens associated with fountain legends inspired experimentation with a wide range of materials and substances. While efforts to consume various substances in order to control bodily aging and lifespan date back thousands of years, I will begin my story in the Renaissance when scientific understandings, explorations, and interventions into the body gained momentum and the dream of longevity was increasingly grounded on earth, rather than in the heavens.

Science, the Body, Aging and Consumption – the Renaissance through the Mid 19th Century

Immortality is not a new objective. It has been the implicit goal of post-Enlightenment science and its aim of perfecting humans through progress (Vincent 2006:692).

While the goal of delaying aging and potentially extending life existed well before Renaissance science, it was during this period that the dream of achieving immortality experienced a profound shift from otherworldly to earth (Post 2004). As cultural

historian Carole Haber (2004) notes, during the Renaissance, an interest in life extension developed from the idea that people could exert influence over both the length and quality of time that they spend on earth. The growing interest in understanding and controlling nature to delay aging and/or to extend the lifespan is evidenced in numerous influential Renaissance writings. For example, in his book *The New Atlantis*, Sir Francis Bacon defines the goals of science to include “the prolongation of life, the restitution of youth to some degree, the retardation of age” (Post 2004). Similarly, the French doctor Laurent Joubert, suggested that the life span could be extended “...by medicine, even further than is ordered by nature...” (Gale 1971; Haycock 2006), while Rene Descartes, in the *Description of the Human Body*, discusses his ideas about delaying the aging process: “I believe it may be possible to find many very sound precepts for the cure of disease and for their prevention and also even for the retardation of aging” (Boyle and Morriss 1987). Directly linking longevity to consumption, William Harvey, sometimes credited as the founder of modern physiology, performed an autopsy in 1628 on the famed Thomas Parr,⁸¹ said to have lived 152 years, and to have suddenly died due to what was identified as a sudden change in consumption, with a shift towards a richer (and presumably less healthy) diet, after a move from the rural English countryside to London.

While the burgeoning fields of anatomy and medicine were offering new “anatomical” perspectives on the body, as the development of new instruments, (including the telescope and the microscope), enabled the examination of previously

⁸¹ The Legend of Thomas Parr or “Old Tom Parr” “Old Parr” (Parr’s Portrait Hangs in the National Portrait Gallery in London) involves the story of a hard-working English farmer thought to have lived 152 years (1483 – 1635) and to have organs in perfect condition at death based on an autopsy from physician William Harvey.

invisible worlds, the dream of scientifically-inspired intervention into aging and/or the lifespan remained largely a theoretical goal throughout the seventeenth and eighteenth centuries. Popular discourse, for example, as evidenced by the “perfectibility of man,” made famous by writers like Kant, Rousseau and Condorcet, inspired a belief that scientific intervention into bodily aging was a desirable future possibility⁸² that would unfold with the forward march of scientific progress through an increasing control over nature.

Through the 18th century, ideas about aging continued to largely borrow from the theory of bodily humors, first espoused by Hippocrates, and later by Aristotle and Galen, which described aging as a process involving changes in bodily moisture and temperature; aging was, in effect, a drying and cooling process, and efforts linking the potential to delay aging with consumption focused on practices thought to maintain bodily moisture and heat (Shapin and Martyn 2000). Religious discourse still played a prominent role in understanding aging, and while aging was not necessarily considered desirable, it was often regarded as inevitable, and old age was sometimes thought to be a reward for a life well-lived (Achenbaum 1978). It was largely assumed that the aging body would naturally experience a variety of physical changes which could include changing virility, sexual function, and energy (Achenbaum 1978; Parkin 2005).

As noted by historian Andrew Achenbaum (1978:15), before 1860, many Americans upheld the belief that following certain principles associated with lifestyle

⁸² Consider, for example, the letter Benjamin Franklin wrote to his friend Jacques Barbeu Dubourg, dated April 1773, detailing his desire to be preserved at death in a vat of Madeira and expressing disappointment that he lived during a time when science had not yet evolved enough to make this possible (Bostrom 2005).

(regular exercise, cleanliness, dietary moderation, cheerful disposition) would improve individual chances for a healthier and longer life. Body regimens thought to potentially affect bodily aging and/or longevity during this period were inspired by the writings of people like George Cheyne, an ardent advocate of vegetarianism, touting his “principles of dietetic management,” and Luigi Cornaro, a Venetian nobleman, who, at the age of 86, published *Discourses on the Sober Life* (2006[1558]), a widely popularized book of dietary and lifestyle advice for those seeking a “long and healthy life,” which was said to have been translated into more than fifty English versions by the eighteenth century (Gruman 2003).

Science, the body, aging and consumption– the late 19th & early 20th century

With the rapidly developing and expanding scientific world view, the process of aging (along with many other areas of life) during the late 19th century, and throughout the twentieth century, became increasingly medicalized⁸³ (Starr 1982; Conrad and Schneider 1980; Pfohl 1977; Illich 1975; Zola 1975), as scientists studied, measured, weighed, compared, and distinguished between bodies (Laqueur 1990). By the mid nineteenth century, researchers were suggesting that diseases originated in bodily cells (Oudshoorn 1994), and the fields of bacteriology and microbiology gained ground as the germ theory of disease linked certain diseases to specific pathogens. Traditional religious understandings and explanations for aging were eclipsed by scientific discourse as science increasingly became “...the ideological institution par excellence” (Brodwin

⁸³ As explained by Conrad and Leiter (2004:156) “Medicalization occurs when previously non medical problems are defined and treated as medical problems, usually in terms of illness or disorders.”

2000:3), and the focus on aging depicted the elderly, less as virtuous role models, and more as burdensome aged bodies replete with symptoms to be solved (Achenbaum 1978; Cole 1992). As explained by Burt (1954:299):

While God was being deprived of his duties by the further advancement of mechanical science...men were beginning to wonder whether the self-perpetuating machine...stood really in need of any supernatural beginning.

Detailing changes in the way that the body has been regarded and treated in society over time, for example, Foucault's (1979) work reveals that by the 18th century a decided shift had occurred in which the body was no longer viewed as a unity "en masse," but was instead considered individually, at the level of "mechanism" and "efficiency," through the "biology of difference" (Laqueur 1987), which characterized late 19th and early 20th century medicine. As previously touched upon in Chapter 1, prior to the 18th century, the human body was largely thought of as generic and genderless, with the male body perceived as the norm, and the female, an inferior copy (Laqueur 1990). This "biology of difference" marking the late 19th century served to inspire a dualistic regard (favoring certain more dominant societal groups) for a wide range of factors related to the body, for example, a diverse array of oppressive discourses justifying racial and ethnic hegemony have originated out of this differentiation, as binary oppositions like male/female, reason/emotion, and young/old, have served to provide half of this dualism (Griffin 1978) with greater cultural capital (Bourdieu 1986) than the other.

After establishing a clearly defined hierarchy between young and old bodies, it was during the early 20th century that the discipline of "gerontology" was founded, first

defined by scientist Elie Metchnikoff in 1903, (the year following Peter Pan's bold assertion in James Barrie's *The Little White Bird* "I don't want to grow up!"), to describe what he envisioned as a new scientific field dedicated to fix the "problem" of the aging body (Achenbaum 1995). By the end of the 19th century, living a long life was less likely to earn people respect, status, authority, or love (Mangum 1999:83), as public discourse was replete with rationalizations for the undesirable consequences of possible class and generation-based antagonisms. The elderly and the feminine were depicted as outcasts, with economic, social, and national concerns projected onto those societal members perceived of as weaker (Mangum 1999). This ousting of the female body and the aged body, both culturally connected to depictions of nature, reveals important insights into fear-inspired depictions of the specter of nature in need of control.⁸⁴ Aging bodies of both sexes increasingly represent a burden (Shilling 2003), since, as Gullette (1999:37) articulates, the link between masculinity, and "work-related savvy," becomes paired with younger and younger bodies.

The influence of industrialization, bureaucratization, and urbanization worked to radically reshape American culture and more specifically the means of production during this period. With mass production and the factory workplace coming to the fore, the less expensive labor of youth was increasingly valued, as speed, efficiency, and the ability to quickly complete repetitive tasks, took precedence over the accumulated knowledge and wisdom of age associated with a more agrarian time (Achenbaum 1978). The link between the body, aging, health, and fitness gains momentum— as the development and

⁸⁴ Thank you to Stephen Pfohl for helping to make this important connection.

maintenance of strong and virile bodies (consider, for example, the advent of modern day bodybuilding – popularized by people like the turn-of-the-20th-century-Prussian born Eugen Sandow, author of five books, organizer of the first bodybuilding contest, and publisher of a magazine devoted to “physical culture”) are of prime cultural significance (Marshall and Katz 2002). The truths and illusions associated with scientific management regarded illness and bodily aging not as something natural but as problems to be prevented or fixed (Cole 1992). As articulated by Armstrong (1998:57):

In the progressive era, the disposition of the body becomes a moral duty; stepping outside of a plot in which it expands comfortably with age and prosperity, suffering from the infirmities that time brings, it becomes forever an indicator of moral rectitude and vitality, implicated in a technological praxis.

The link between the body, aging, and consumption during this period widely expanded as medical discourse gained prominence, since, as Bull (1990:255) insightfully suggests, “...as religious beliefs and taboos...lost their force, medically-defined compensators ... take their place promising such unverifiable benefits as general well-being and eternal life as the result of conventional wisdom.” Instead of a natural given, the body increasingly became “...a site of interaction, appropriation and reappropriation” (Giddens 1991:218). Enlightenment ideology also promoted the belief that through the pursuit of happiness, an individual could remake her or himself (Gilman 1999:17), and values like individual autonomy and freedom, emphasized by well known philosophers like Kant and Mill, were integral to this vision. The transformative ability of the individual, initially in the political and social context, become increasingly positioned in the realm of medicine and biology (Gilman 1999:19), as happiness and well being in the

individual body was increasingly depicted as indicative of the general condition of the broader societal conditions –referred to here as the “social” body.

Early 20th century concerns brought the health and virility of nations to the fore, as the meaning of food shifted away from its role as reproducer of communal identity, to increasingly become an expedient fuel for the body/machine turned instrument (Shilling 2005:157). Health reformers during this period included the likes of Horace Fletcher, also known as the “Great Masticator,” due to his clearly defined rules of food consumption which were premised on a belief that food should be chewed thirty two times before being consumed. Premised on the value of the body that mirrors machine-like efficiency, a variety of healing strategies, including internal cleansing, were regarded as techniques to prevent premature death caused by intestinal matter (Green 1986; Cole 1992), and the nineteenth century preachers Kellogg and Post, both suggested that consumption of their cereals would help to prevent aging (Morley 2004:1133). Protecting against constipation became associated with protecting against “early death,” and the “water cure” became a cure-all for many ailments as internal bathing manufacturers promised users “a longer life with tranquility” (Green 1986: 288). For example, Enno Sanders Mineral Water of St. Louis, Missouri, promised to “bring back youth”⁸⁵ and a growing number of health resorts, like Battle Creek, Michigan’s Battle Creek Sanitarium, first known as the Western Health Reform Institute, opened which

⁸⁵ This is the same promise made in 2006 by the Forever Young Medspa in San Clemente, CA, which uses modern technology "instead of mystical water sources" to "bring back youth" to "age-ravaged skin." Retrieved on August 29, 2006, from <http://www.foreveryoungmedspa.net/>.

increasingly combined pleasure and relaxation with practices associated with health and wellness.

Developments in medicine during this period include the introduction of patent medicines and other elixirs implicated in delaying bodily aging and/or extending the lifespan, and as noted by Falk (1994:167) “By the end of the 19th century all patent medicines had redefined themselves not only as a cure for the sick and frail, but also as a preventive elixir for the healthy.” In Merck Manual Diagnosis & Therapy, for example, published in 1899, Ovarin tablets were suggested for “climacterica” – ailments related to the ovaries associated with menopause. The division between medicine and other oral substances was blurred, in part due to what Porter (1999:39) describes as “the Enlightenment’s dream of perfecting health and prolonging life.” The medical obligation to prevent death, paired with an overarching faith in scientific progress, served to favorably align the goals of medicine with the dream of immortality; a goal which may implicitly devalue old age by transforming it into a realm of failure (Vincent 2003:148).

Bolstered by dominant cultural values including personal responsibility, self-discipline, self-control, restraint, and critiques of excess, the nineteenth century health reform movements (Green 1986; Goldstein 1992; Armstrong 1998), which involved mind cure techniques, Christian Science, the Alexander Technique, colonic irrigation, Fletcherism, electric therapies, mechanical devices and glandular treatments, also emphasized asceticism as weight loss or “slimming” as a type of “makeover,” or a solution to personal struggles (Brumberg 1997). New ways to measure, compare, and contrast bodies, including variations in consumption, become available as access to

monitoring technologies expands, like, for example, the ability to weigh oneself, previously only available at drug stores and county fairs, becomes increasingly possible through the introduction of home scales (Brumberg 1997). Visual orientation (Ewen 1988; Berger 1977) as a field of social control (Foucault 1970) becomes increasingly prominent during this period, marking a notable shift in emphasis on external bodily parts to help create a so called “dermal consciousness” (Brumberg 1997:61) where culturally prescribed “good looks” become increasingly equated with social success, health, and well-being.

Vitamins, introduced to the market during the 1910s, “...represented the hope of better things to come,” as they “...demonstrated the power of science to disclose the secrets of nature and to use that knowledge in the service of humanity” (Apple 1996:2). Miracle cures, the link between vitamins and health, the notion of “nutritional diseases,” and the potential connection between vitamin consumption and increased efficiency, productivity, energy, and “nutritional balance,” all worked to rapidly expand this incipient market—a prelude of what would later become a mass multi-billion dollar vitamin and supplement industry.⁸⁶

Turn of the century theories of aging intersected with, and largely helped to inspire, justify, and shape, scientific efforts aimed at bodily rejuvenation. As Achenbaum (1978:41) explains, “In contrast to earlier medical opinions, scientists gradually concluded that the debilities of age were not simply the result of natural decay, but stemmed from more deplorable causes.” As argued by Sontag (1978:61-62), diseases in

⁸⁶ Market research firms like Mintel, Inc., estimated the U.S vitamin and mineral market to increase from \$8.6 billion in 2004 to \$11.4 billion by 2009, representing a 13% increase after adjustments for inflation.

the late 19th century (as aging was increasingly depicted) “echo the attitudes of early capitalist accumulation. One has a limited amount of energy, which must be properly spent...” Through this perspective, energy, (like savings), was depicted as something that could be depleted if people were not careful (Sontag 1978).

A similar attitude is easily identifiable in theories of aging in the 19th and early 20th century, as the “problem” of aging and fitness (Marshall and Katz 2002) inspired scientists (for example, Brown-Séquard, Voronoff, Starling, Steinach) studying surgical techniques and endocrinology, to use animal sex glands for organotherapy to rejuvenate “vital energy” in aging humans. With the concept of “hormones” first introduced in 1905 by British professor Dr. Ernest H. Starling, the “hormonally constructed concept of the body” helped to distinguish between bodies, serving to shape scientific theories about both the biological roots of differences based both on sex (Oudshoorn 1994:8 - 9) and age. Scientific procedures like the “Steinach operation” (a unilateral vasectomy) – popularized by famous people like Sigmund Freud and William Butler Yeats – enabled recipients to symbolically and quite literally save/conservate so-called “vital energies” (e.g. sperm through the cutting of the vas deferens). While results were contested, some recipients claimed to experience heightened “youthfulness,” a decline in blood pressure, softer skin, and greater muscle strength, along with an amplified overall sense of happiness (Romm 1983). While perhaps the most famous, the “Steinach operation” was one of a wide number of other possible efforts in pursuit of rejuvenation. For example, L.L. Stanley, a California-based physician, gave patients shots that contained crushed testicles, while others opted to consume Spermine or Orchis extract, concoctions said to

enhance bodily rejuvenation and vitality (Cole 1992). The ovaries were the site of technological interventions into the bodily rejuvenation for aging women, and chimpanzee ovary transplants and irradiation treatments on the ovaries were also offered as a form of female rejuvenation (Romm 1983). Menopause was increasingly regarded as a “hormonal deficiency disease” (Oudshoorn 1994:96) as bodily aging was looked at as a glandular phenomenon, and the consumption of technologies and medicines were offered to rejuvenate these failing organs. A pamphlet published in 1932 by chemists with Hancock & Company, for example, noted that “Age is not a wearing out process but a cessation of glandular activity,” and the company sold a variety of products aimed at “symptoms of aging” that included impotence, weakness, low vitality, sadness, inefficiency, and nerves. The company’s “glandular elixir” was purported to stimulate hormonal (ductless) glands (Armstrong 1998:144).

“Cultural values and expectations... were integral to the science and practice of rejuvenation” (Sengoopta 2000:463) as the confluence between the body, consumption, aging, and culture, during this period of “regenerationist biology” (Weindling 1989), also intersected with nationalistic beliefs that the rejuvenation of the individual body symbolized societal rejuvenation; solutions to biological challenges were linked to solutions to societal challenges. Rejuvenation – as it intersected with the eugenically inspired dream of the attainment of human perfection – was hoped to bring humans and therefore societies to a higher plane of being (Sengoopta 2000:465) as the body was regarded as a representation of the state (Synnott 1993). Ideas embedded within anthropometry and social Darwinism, for example, inspired theories based on a

differential hierarchy of bodies with features such as height, cranial size, and bodily proportions justifying ideological discourse based on racial inferiority and superiority (Varga 2005).

Writer Gertrude Atherton (1857 – 1948), author of *The Black Oxen*, a widely read novel detailing her own personal experience with bodily rejuvenation, went so far as to suggest that the aging elite should be rejuvenated in Germany so that the country could re-establish nationalistic strength (*New York Times*, 6, April, 1924, Sec II, p. 7, as cited in Sengoopta 2000), and doctors like Norman Haire, author of *Rejuvenation* (1924), and widely recognized for his use of the Steinach Operation techniques, served on the Council of the Eugenics Society and did work for the Malthusian League (Armstrong 1998).

One hundred years prior, we see the momentum behind the current intersection between science, medicine, health, aging, the body, and consumption (of hormones, exercise/fitness, vitamins and specific foods) gain ground as books like G. E. D. Diamond's *The Secret of a Much Longer Life* (1906), emphasized the curative benefits of olive oil on bodily aging, and Sanford Bennett's *Old Age: Its Cause and Cure* (1912) depicts old age as a biomedical puzzle to be solved (Woodward 1999). Theorizing old age to be a disease caused by poisonous microbes in the intestines, Russian born zoologist, microbiologist and Nobel Prize recipient, Elie Metchnikoff (1845-1916), recommended the consumption of lactic-acid producing bacteria in sour milk and yogurt

(Achenbaum 1978) to stave off bodily aging.⁸⁷ From this vision, the field of gerontology expanded through the twentieth century with a number of scientific theories of aging, paired with medical and technological curatives to be consumed for bodily “rejuvenation.”

While I take responsibility for the element of risk in presenting a (partial) history of theories of aging, consumption, and the body, that could be regarded by many as humorous at best, I emphasize to the reader that this is not my intention. Rather, by reflecting on the ways that past practices aimed at bodily rejuvenation, delayed aging, and increased longevity intersected with and were situated within the dominant cultural milieu, I hope to reveal some of the interplay between the body, science, theories of aging, consumption, and culture -- past and present, in showing some of the ways that legitimacy “...varies across time [as] need links the technology and its historical location” (Jacobson 2000:6).

Science, the body, aging, and consumption– 1950s to present

Developments in the decades following WWII were important to the study of aging, consumption, and the body. During the 20 year period between 1950 and 1970, medical care grew to become one of the biggest U.S. industries, with expenditures expanding from \$12.7 billion to \$71.6 billion (U.S. DHHS 1981). Following World War II, the field of science continued to gain significant support, as increasing numbers were

⁸⁷ Yogurt manufacturers like Dannon capitalized on Metchnikoff’s research, promoting the benefits of yogurt for longevity. Creating the first American TV commercial made in the Soviet Union, Dannon made the connection between Metchnikoff’s research on yogurt and longevity, featuring an aged native of the Caucasian republic of Georgia eating Dannon yogurt with a voiceover that says: "And this pleased his mother very much. She was 114."

convinced that it was necessary for efforts directed towards U.S. security (Starr 1982). During the latter half of the 20th century, developments in science and technology (atom bomb, radar, penicillin) served to convince even the skeptical of the potentially limitless power of science. Further, postwar prosperity gave more people the luxury to think of health, less as absence of illness, and more in terms of optimization and prevention.⁸⁸ As Starr (1982:336) articulates:

Prosperity gave Americans the opportunity to worry about their health, and it also changed the health problems they worried about. ...facing the medical problems of peace, scientists and the public became more concerned about cancer, heart disease, and those conditions such as obesity and neurosis, on which only an affluent society can afford to dwell.

The potential dream of life extension experienced marked change during this period, in part through notable scientific developments, which included things like the inception of space travel, the pharmaceutical revolution, and the introduction of cryonics. Championing a belief in scientific progress, Robert Ettinger, author of the *Prospect of Immortality* (1962), proposed that freezing a person's body to stop chemical activity, and preserving it until scientific advancement can repair the damage, may provide humans with the opportunity for future life extension. A number of people endorsed cryonics enthusiastically, including F.M. Esfandiary, a professor at the New York City-based New

⁸⁸ The very idea of health” writes Rose (1996:17), “was re-figured – the will to health would not merely seek the avoidance of sickness or premature death, but would encode an optimization of one’s corporeality to embrace a kind of overall ‘well-being.’” Early signs of this shift are identified at the First World Health Assembly of the World Health Organization (WHO) in 1947, when health was no longer defined as merely the absence of disease, but as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity” (WHO 1948). The burgeoning fields of health promotion and health prevention would later use this definition (which emphasized the interrelationship between mind, body and environment) as a springboard to develop widespread public health campaigns and health prevention initiatives.

School for Social Research and founder of the UpWingers, an organization for futurists interested in transhumanism and posthumanity (Bostrum 2005).

During the 1970s Romanian physician Ana Aslan gained fame through the establishment of spas and a research institute aimed at turning back the clock of time. Aslan developed Gerovital, a tonic sold in tablet form, and touted for life prolonging abilities, changes in skin tone, a reversal in arthritic damage to hips and joints, and as a possible treatment for depression (Keeton 1992).

The scientific study of aging was provided further legitimacy (which included a direct source of funding for scientific researchers) when the National Institute on Aging (NIA) was established in 1974. The increased attention to the biology of aging worked to broaden the number of theories used to understand the aging process.⁸⁹ Gerontologists during this period began developing a set of measures, “biomarkers of aging,” to be used to assess the life lengthening effects of various interventions.

In 1980, science journalist, cryonics enthusiast, and author of *The Life Extension Revolution* (1980), Saul Kent, founded the non-profit Life Extension Foundation (LEF), to promote and sell a wide range of dietary supplements, and to provide financial assistance to scientists working to extend the lifespan.⁹⁰ Other charismatic supporters of life extension included Durk Pearson and Sandy Shaw, authors of *Life Extension: A*

⁸⁹ Since the 1970s, theories of aging have including the connection between aging and the shortening of cellular telomeres, oxidative stress, and the generation of free radicals, glyceic theory which includes reactions from glucose, proteins and DNA, angioplastic pleotropy, which purports that genes whose expression supports us early in life turn later hinder our development, and system or chaos theory.

⁹⁰ Retrieved on April 18, 2007, from profiles.nlm.nih.gov/JJ/B/B/Z/S/_/jjbbzs.pdf

Practical Scientific Approach (1982), which provided readers with a detailed regimen professed to slow down five of the six identified causes of aging.⁹¹

Attention to the life-extending potential of reducing food consumption through the practice of caloric restriction⁹² increased during this period, as a number of scientists,⁹³ inspired by the work of Dr. Roy Walford, investigated the physiological changes induced by a nutritionally dense calorie restricted diet⁹⁴ to explore whether these changes were linked to disease prevention and age retardation (Fontana and Klein 2007; Walford 1988; Harrison and Archer 1989; Weindruch and Walford 1988).

Further, the interest in consuming hormones to delay aging experienced a surge in popularity when research by Dr. Daniel Rudman and colleagues (1990) reported that growth hormone injections on one dozen older men at VA hospitals in Milwaukee and Chicago returned hormones to youthful levels, resulting in increased bone density, skin thickness, and lean muscle mass, combined with reductions in body fat levels. This tentatively proposed link between HGH consumption and rejuvenation in men had far

⁹¹ Pearson and Shaw appeared on “The Merv Griffin” TV show more than a dozen times and Durk’s second visit on the talk show provoked more than 100,000 letters from viewers—one of the most popular appearances ever recorded for a talk show at that time. Retrieved on September 6, 2006, from http://www.lef.org/magazine/mag2005/aug2005_report_antiox_01.htm restriction" and

⁹² It was at this point that a research study first conducted in 1934 by Cornell University research scientist Dr. Clive McCay was to gain prominence. While doing cancer research, McCay found that rats fed nutritious diets with restricted calories lived significantly longer than rats fed “normal” or so-called “ad-lib” diets.

⁹³ A search of the term "caloric restriction" on Pub Med (a medical research data base with research back to about 1950) identified 18 articles in the 1950s, followed by 28 in the 1960s, and 69 in the 1970s. Retrieved on April 18, 2007, from <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed>

⁹⁴ This diet is now commonly referred to as Caloric Restriction Optimal Nutrition (CRON).

reaching implications, reigniting the century-old interest in the use of hormone therapy to retard bodily aging.⁹⁵

The competing research interests in delaying bodily aging and/or extending the lifespan burgeoned during the 1990s as a number of professional organizations formed to explore the topic of anti-aging medicine and life extension. Dr. L. Stephen Coles co-founded the Los Angeles, CA-based Gerontology Research Group in 1990, which included (and still includes) monthly meetings and guest lectures dedicated to the topic of anti-aging medicine. This same year, Robert N. Butler, M.D., former founding director of the NIA in 1975, organized the International Longevity Center, a New York city-based non profit research, policy, and educational organization with a focus on aging and longevity. Joining together to formally establish the medical specialty of anti-aging medicine, two osteopathic physicians, Dr. Ronald Klatz and Dr. Robert Goldman joined forces in 1992 as co-founders of the American Academy of Anti-Aging Medicine (A4M).

Another significant event in the history of science which had a significant impact on life extension pursuits involves the month of October, 1990, which signifies the formal beginning to the human genome project (HGP), a 13 year scientific effort to identify all of the genes which comprise humans in order to make them available for biological research. The potential link between genes and aging was of great interest to many scientists studying the biology of aging, and in 1993, these pursuits garnered international attention when UCSF molecular geneticist Dr. Cynthia Kenyon reported

⁹⁵ This research was further bolstered by the fact that synthetic growth hormone was introduced to the market for the first time in 1985. Before this development, the hormone was obtained by harvesting the pituitary gland of the deceased; this made GH not only extremely expensive but also dangerous since it had the potential to transmit disease.

that research from her lab revealed that the suppression of the gene DAF-2 dramatically extended the lifespan of a nematode. During this same period, on the opposite U.S. coast, Dr. Leonard Guarente's lab identified a yeast strain that was able to live 50 percent longer than what was considered typical, which led to the identification of the gene, sir2. Further research suggested that the deletion of this gene drastically decreased the lifespan in yeast (and worms), while the insertion of additional copies of sir2 promoted longevity.⁹⁶

Individuals interested in CR were also bolstered by research findings from Walford's experience serving as staff physician for the seven members of Biosphere 2.⁹⁷ Because food did not grow as well as anticipated, Walford led the team in his own practice of caloric restriction and this led to large scale declines in the blood pressure, blood cholesterol, blood glucose, and insulin of all those involved (Walford 2000). The Caloric Restriction Society formed in 1994, in order to provide a forum of scientific and social support for people interested in the practice of caloric restriction optimal nutrition (CRON).⁹⁸

In tandem with all of the scientific and technological developments of the period, (and this list is long and should include the successful cloning of Dolly the sheep in July, 1996, developments in medical imaging, massive growth in so-called lifestyle drugs and

⁹⁶ Guarente's lab started the career of a number of now prominent scientists in the biology of aging, including David Sinclair, a biologist at Harvard Medical School and cofounder of Sirtris Pharmaceuticals, who worked on the SIR2 mouse gene with Guarente, and is recognized for identifying the life extending effects of resveratrol in yeast and mice.

⁹⁷ Biosphere 2 is a 3.15 acre structure built as an artificially enclosed eco-system in Oracle, AZ, to explore the possibility of space colonization between 1991 and 1993.

⁹⁸ Advocates of CR engage in careful dietary tracking and the consumption of reduced calories, typically between 1,000 and 1,500 per day or between 20 and 50 percent less than an average American diet (Walford, 2000). See www.calorierestriction.org for detailed information about these efforts.

pharmaceuticals aimed at enhancement, and the introduction and widespread popularity of the internet), several other issues are important to recognize for their effect on the discourse surrounding consumption and aging from the 1970s to the present and these include the health and fitness boom (Glassner 1989; Goldstein 1992), challenges to conventional medicine (Everts Mykytyn 2006a; Rogers 2003; Illich 1975; Zola 1972; Sontag 1978), government sponsored “Healthy People”⁹⁹ health promotion initiatives, demographics (Haber 2001-02), and the impact of new laws.¹⁰⁰

With chronic and degenerative diseases increasingly regarded as manifestations of growing older,¹⁰¹ aging has been more and more depicted as a medical dilemma requiring management (Estes and Binney 1989). What has been referred to as the “biomedical model” of aging depicts the aging process as pathological and positions aging within a range of discourses that include theories of decline and decay where the aging body is juxtaposed against a presumably healthy, active, youthful normative ideal (Powell 2006; Achenbaum 1978; Phillipson 1998). What were once conceived of as “natural processes”

⁹⁹ The first goal of the 1979 Healthy People Initiative was “to increase the quality and years of healthy life,” and the goal (health prevention and longevity) was to be implemented by placing primary responsibility in the hands of individuals. As stated by the U.S. Office of the Surgeon General, “One of the major goals of this effort was to educate people on how they could take more personal responsibility for their health through wise lifestyle choices.”

<http://www.surgeongeneral.gov/library/history/biorichmond.htm>

¹⁰⁰ These include the 1988 and 1990 Anti-Drug Abuse Amendments, the 1994 Dietary Supplement Health and Education Act (DSHEA), and the 1997 changes in direct-to-consumer (DTC) advertising.

¹⁰¹ Changes in life expectancy during the 20th century have been used to provide further evidence of the success of scientific, technological, and medical intervention into the body. Between 1900 and 2000, life expectancy in the U.S. at birth increased from 47 to 77 years of age. This 30 year increase in life expectancy at birth is attributed to a number of factors including dramatic changes in childhood mortality. In 1900, nearly a third of all deaths occurred in children less than five years of age, whereas 100 years later, this population comprised less than 2% of all deaths. Significant changes in public health, sanitation, and nutrition have also had an effect on cause of death, with a tipping of the scale away from infectious disease, towards chronic and degenerative ailments (Doll 1995). In 1900, pneumonia and TB were the two leading causes of death, whereas in 1997, the leading causes of death were attributed to heart disease and cancer. Retrieved on April 10, 2008, from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4829a1.htm>

of an aging body, for example, declines in hormones, are now more often reframed as “symptoms” of aging which medical intervention can help to assuage (Balsamo 1996). Further, the consumer model increasingly predominating American medicine is depicted as “empowering” individuals to take their health and related medical issues into their own hands (Pitts 2007:155), inspiring a broad range of bodily interventions implicated in making people feel better, and this may include practices that are implicated in potentially staving off aging, and/or extending life. As bodily aging is increasingly linked to specific genes, not unlike breast cancer or Huntington’s disease, the pathological framing of senescence helps to inspire people to seek relief. As less and less emphasis is placed on being “natural” (Brooks 2008) in order to be authentic (Elliot 2003), some go so far as to suggest achieving heightened authenticity through bodily intervention by circumventing “cognitive dissonance” (Haiken 1997) and the “mask of aging” (Featherstone and Hepworth 1991). In order to gain insights into the ways that people engaged in various body regimens implicated in potentially delaying bodily aging and/or extending the lifespan regard their practice, let’s turn to a consideration of consumption in present day culture, making a link between the individual body and society, through an exploration of metaphors used to represent three specific body regimen careers.

Science, consumption, the body and aging– the present cultural milieu

Consumerism encourages individuals to believe that the body and thereby the self can be reshaped and improved through buying and using the ‘correct’ products (Burnett and Holmes 2001:27).

While I open this chapter by making mention of the long lived link between consumption, medicine and science, the body, and perhaps more specifically, the aging body, I think it is extremely important to note that consumption in the 21st century is in many ways much different than even consumption as it characterized life 100 years ago. Consumption is, in the words of John Vincent (2003:121), “the definitive cultural activity of postmodern society...” As Pasi Falk (1994) asserts, the self of today is a “consuming self.” Consumption, linked to “lifestyle,” is an imperative (Giddens 1991), with a multi-vocal chimera of competing specialists, marketers, experts, healers, and guides, offering an ever expanding range of conflicting advice, products, services, tonics, pills and powders, which literally serve to make us who we are; the very process of consumption functions to produce identities, as all bodies, being structurally situated, mirror individual structural location (Bourdieu 1984). And as articulated by Miller (1997:19), consumption is not just the process of purchasing services and goods, it is “...a fundamental process by which we create identity.” As “expressive individualism,” explored by Bellah and colleagues (1985), serves to inspire each person to regard him or herself as a unique individual, it becomes increasingly possible to create an identity shaped through individual choices (what you eat, what you do, where you go) and a “human life becomes a project that can be tweaked and reworked and adjusted in accordance with a person’s own private wishes” (Elliott 2003:158).

The so called “consumption culture” in which we now find ourselves works, at least in part, to stimulate desire in terms of lack, as Elliott (2003:119) explains, by “...presenting consumers with a vision of a good life. This vision...suggests the ways in

which a consumer's own life does not measure up, and which could be remedied by the consumer product." In terms of the body, and more specifically the aging body, images of "successful aging" (Rowe and Kahn 1999) and "agelessness," (Andrews 1999) serve to inspire the consumption of a wide range of technologies to resist the decline and debility upon which biomedical constructions of aging are premised.

With the aging body juxtaposed to a healthy, disease-free, and youthful normative ideal, the discourse on health and the fight against aging has been increasingly captured by the chimera of the burgeoning 20th century consumer culture. Haiken (1997), for example, explains that during Victorian times, natural standards of beauty were embraced, and by the 1920s, new technologies provided wide ranging possibilities for bodily transformation. In what was sometimes regarded as true democratic regale, this heightened focus on technological enhancement was inclusive, in that it made the beauty associated with youth available to all that could pay. Past cultural prohibitions against older women's efforts to appear youthful were abandoned as older women were now allowed and even expected to "keep up" their looks (Haiken 1997). Equating beauty (and strength, virility, and productivity) with youth, the discipline of bodies through bodily maintenance and consumption of goods and services expanded. As Lily Dache in *Glamour Book* (1956) states (cited in Haiken, 1997:145):

Today, there is no excuse for a woman to grow old, unless she is ill...if you want to keep up with this modern, wonderful world, you must be young in thought, feeling and appearance...and all you have to do is stretch out your hand to receive the magic bounty of glamour that modern science has prepared for you.

Like beauty, health was also increasingly subsumed under the discourse of bodily maintenance, associated with scientific advance and implicating a broad range of

activities in consumer society (Brooks 2008; Bauman 1992:72). Discourses and practices coupled with risk reduction, health prevention, and health promotion abound as the desirable “healthy” body is defined as a body that successfully circumvents risk (Williams 1998), and individuals who do not engage in what are considered health promotion behaviors may be regarded as morally inferior (Lupton 1995, 2005; Fitzpatrick 2001; Crawford 1977, 1994; Petersen and Lupton 1996). The increase in degenerative and chronic disease during the latter half of the 20th century further served to inspire heightened moral discourse linked to consumption, since the dictates of medical authority were increasingly based on particular moral and social discourses (moderation in alcohol consumption, use of seat belts, dictates around child abuse, theories of sexual deviation and delinquency) aimed at social reform through the lens of clinical medicine (Starr 1982).

As Kathleen Woodward (1999:xvi) so eloquently explains:

Given the virtual obsession of western culture with youth and with the appearance of the body, given the very real prospect of frailty in older age, mass culture, which is a consumer culture, seizes on the vast disparities between what it presents at two extremes, producing the older female body as both invisible and hypervisible, envisioning aging as a medical problem to be cured and leaving small explosions of anxiety in its wake. A clever sharp binary between beauty and the so called ravages of time, between health and disability, figured as old age, is encoded daily in the stories and advertisements in the mass media.

On a very general level, all of the body regimen careers that I explore, which are situated within the “healthy life extension community,” involve practices which include the consumption of certain types and amounts of foods, vitamins and supplements, and exercise and fitness routines, which are sometimes thought to potentially slow down the process of bodily aging, and/or to potentially extend life. While many similarities exist

between people in the three sub-groupings of this research, I am interested in exploring the ways that the theories of aging espoused by individuals partaking in each of the three practices (caloric restriction, anti aging, and fitness regimens) may intersect in unique ways with broader cultural values and concerns.

It is perhaps important to emphasize that, as explored at several different points in this dissertation, the 44 people that I interviewed for this study were certainly motivated to engage in body regimen careers for a complex flux of reasons. What I am interested in exploring here is how people engaged in body regimens associated with potentially delaying aging and/or extending life, regard their current body regimens to influence bodily aging, in an effort to explore some of the present day intersections between bodies, theories of aging, consumption, and culture, as I think about the relationship between the individual and social body—regarding the body as semiotic, functioning both as a “receiver” and “transmitter” of information (Lock 1993:136).

Making a connection between the social and the physical body

The body social is many things: the prime symbol of the self, but also of the society; it is something we have yet also what we are; it is both subject and object at the same time; it is individual and personal, as unique as a fingerprint or odor or plume, yet it is also common to all humanity with all its systems, and taught in schools. The body is both an individual creation, physically and phenomenologically, and a cultural product; it is personal and also state property. (Synnott 1993:4)

Early sociological discourse on the relationship between the social and the physical body was dominated by what Bryan Turner (1984, 1996) and others (Fraser and Greco 2005) have called the “organic metaphor” (evidenced in the work of early sociologists like Comte and Spencer) which helped to legitimate social inequality,

hierarchy, and division as both natural and fixed. Other classical sociological theorists, including Marx, Simmel, and Durkheim, provided insights into the ways that the body serves as a location for social structure, while also possessing properties which are the source for the creation of social life (Shilling 2005:10). For example, linking the individual and the social body, capitalism, for Marx, generated alienation among the working class, as people lost control over their lives in a system perpetuated by laws over which they could exercise little power. The increasingly advanced technology in the sphere of production turned workers into machine appendages, alienating people from each other, and probably from their own selves. Highlighting the health gap between the poor and the bourgeoisie, together Marx and Engels revealed the ways that the bodies of the proletariat become disposable assets, and like a machine, overworked, abused, and often suffering injury and early death.

Further, through participation in a community, Durkheim (1995 [1912]) suggests that people engage in shared rituals of the body, which may include things like body painting or tattooing. Using the term *homo duplex* to describe human beings as both physical (individual), and spiritual (social), techniques of the body for Durkheim (1995 [1912]) (and later, Mauss, 1972[1934]), were essential to modern culture, because the cultural structures of society serve to shape people's bodily behavior in ways that may enhance the likelihood of people behaving in a way that serves to reproduce those very societal structures (see also Shilling 2005). Simmel's (1906) writings reveal the way that social forms mark the body through appearance, habit, and action, serving to pattern, guide, and even control social interaction.

Yet as has been argued by others (Turner 1991b; Shilling 2003), it wasn't until the late 20th century that the primacy of the body in sociological theory came to the fore. The work of anthropologist Mary Douglas (1970) serves to powerfully reassert this connection between the social and the physical body. The body, as articulated by Douglas, helps to reveal important cultural values, especially when paired with consumption. In an essay on what she describes as the two bodies (the social and the physical), Douglas (1970:65) explains:

The social body constrains the way the physical body is perceived. The physical experience of the body, always modified by the social categories through which it is known, sustains a particular view of society. There is a continual exchange of meanings between the two kinds of bodily experience so that each reinforces the categories of the other. As a result of this interaction the body itself is a highly restricted medium of expression.

Considering what could be described as the consonance between body and society, Douglas (1970:366) argues that "...the physical body is a microcosm of society", while other researchers (Van Wolputte 2004; Shilling 2005; Synnott 1993; Frank 1990; Scheper-Hughes and Lock 1987; Bourdieu 1984), in recent years, further consider this body/culture relationship since, "...just as we think our society with our bodies, so, too, we think our bodies with society" (O'Neill 1985:51). The body, as stated by Shilling (2005:9) "...is not only a source of and location for society, but is a vital means through which individuals are positioned within and oriented towards society." The body is simultaneously biological and social and it constructs and is constructed by society (Shilling 2003). Similarly, as Frank (1995) explains, the embodied agent is both producer of and created by society. Adding to Douglas' identification of two bodies, Scheper-Hughes & Lock identify three (the individual, the social, and the body politic),

Frank (1990) identifies four (bodies that are talking, disciplined, sexualized, and medicalized), while O’Neill (1985) explores five –the physical, communicative, consumer, medical, and political bodies.

Bourdieu’s (2005:89) work was particularly influential in revealing the ways that our bodies are “...highly charged with social meanings and values...” as he explains that “the body is in the social world but the social world is in the body” (Bourdieu 2000:152). Similarly, philosopher and cultural critic of medicine, Ivan Illich details the ways that different historical periods create and reinforce different individual bodies. In Illich’s (1986) own words:

As body history takes shape, we are able to understand how each historical moment is incarnated in an epoch-specific body. We now begin to decipher the body of subjective experience as a unique enfleshment of an age’s ethos. (Illich, as cited by Watson 2000:46)

The work of social historian Norbert Elias (1978, 1982) keenly examined the ways that, over the course of centuries, the so-called “civilization process” transformed individual sentiment and conduct. Changing economic markets served to influence bodily expressions, according to Elias, and these bodily expressions became increasingly internalized, serving as a function of class identity and social relations.

Positioning the body “...at the center of the nexus between daily practices and the large scale organization of power” (Dreyfus and Rabinow 1982), Foucault’s work helped to detail changes in the way that the body was regarded and treated in society over time. Suggesting that it was during the classical age that the body was defined as both an object and as “target of power,” by the 18th century a decided shift had occurred in which the body was no longer regarded as a unity “en masse” but was instead considered

individually, at the level of “mechanism” and “efficiency” (Foucault 1979), through the “biology of difference” (Laqueur 1987), which characterized the late 19th and early 20th century medicine. “As the exercise of power in society became increasingly focused on organizing, controlling, and administering the human body,” Cole (1992:196) notes, “medicine supplied a scientific standard of optimal functioning and of deviance.¹⁰²” The mindful body, depicted by present day society, is managed and controlled less by brute force and more by surveillance (Foucault 1978).

In explaining the growing popularity of scholarly consideration for the body, Bryan Turner (1996:6) coined the term “somatic society” which he defined as “...a society within which are major political and moral problems are expressed through the conduit of the human body.” One of the most dramatic changes, according to Turner’s research, revolves around the shift from an industrial to a post-industrial economic structure which, Turner argues, increases both leisure and the primacy of consumption.

Looking to my own research to gain insights into the link between body and culture, I have found it helpful to consider the use of metaphor, since, as noted by Jackson (1983:183), “metaphors are means of doing things and not merely ways of saying things.” Referring to the foundations of language as “bodily schemata” George Lakoff and Mark Johnson (1980) in *Metaphors We Live By*, reveal how bodies shape language and in so doing, construct knowledge. The relationship between language and

¹⁰² As briefly detailed earlier in this chapter, the relationship between the individual body and the social body has also long been woven into discourse associated with nationalism and also with eugenics. As Siebers (2000) has explained, the National Socialists equated a particular bodily physique with health and racial superiority while Democracy movements have concentrated on health and appearance as measurements of successful or unsuccessful government regimes.

the body is affected through the use of metaphor since metaphors impact the way that we act, talk, and think:

The metaphor is pervasive in everyday life, not just in language, but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature...the way we think, what we experience, and what we do every day is very much a matter of metaphor (Lakoff and Johnson 1980:3-4).

As suggested by Holstein and Gubrium (2003:112) inner lives (and I would add, inner bodies), are "...fashioned from the vocabulary and metaphors that are culturally available to us." Linking language, politics, power, and metaphor, Robin Lakoff (1989:7, 12-13) explains:

Language is politics, politics assigns power, power governs how people talk and how they are understood...Language is as abstract as power is concrete; it is impalpable, an artifact of the mind...only metaphorically does language *strike* us or *move* us...as politics brings the brute physical reality of power into the sphere of the human mind and heart, language is the means of that transformation.

The use of metaphor is implicated in the social construction of reality – as the creation of metaphors is "...the imaginative act of comparing dissimilar things on the basis of some underlying principle that unites themes, one of the ways we construct a new reality" (Siegelman 1990:ix).

As mentioned in the historical overview at the beginning of this chapter, Sontag's (1978:61-62) work on metaphors of illness reveals how ideas about early capitalist accumulation (think Franklin's popular adage – A Penny Saved is a Penny Earned) are mirrored in theories of disease, which suggest that each person has a limited amount of energy, (and presumably, capital), which must be conserved and spent appropriately.

Drawing parallels between the economic and biological body in his historical exploration of the late 19th century interest in rejuvenation and prolongevity, Cole

(1992:177) explains that while hygienic reformers looked for longevity in the economy of the body, those interested in applied science looked for immortality in a so-called cellular hygiene through the “micro-economy of the living cell.”

Highlighting this connection between the social and the individual body, and referring to our bodies as the “ultimate metaphor” which refracts the climate of the times, research by Crawford (1984:79) suggests that individual bodily ideals change depending upon the state of the economy. For example, during periods of economic crisis, a stronger societal emphasis is placed on bodily control, discipline, denial, and hard work.

In another engaging study first discussed at the beginning of this chapter, which explored metaphors of the body as having both physical and social connotation, anthropologist Emily Martin (1994), looked at historical changes in the use of the metaphors used to describe the body and health, and she found that during the 19th century through the mid 1950s, the body was depicted as a castle surrounded by a mote. During this period, hygiene and cleanliness surrounding the outer body were regarded with utmost importance.

By the late 20th century, as Martin’s (1994) research reveals, attention to internal bodily defenses (sometimes referred to as the “immune system”) has increased exponentially, and the battle for health has become more of a struggle or war within. The emphasis on exterior surfaces declines as elaborate metaphors of warfare detailing internal battles abound. Bodies are regarded as complex systems which, in contrast to simple systems, defined by a predictable cause and effect relationship (Arney 1991 as

cited in Martin 1994), are marked by a higher degree of discontinuity, nonlinearity, and unpredictability.

Flexibility becomes the required *modus operandi* necessary to maintain the health of this complex multi-system body/machine. Linking the concept of bodily flexibility with the flexibility required to survive in the present day corporate/business milieu, Martin (1994) makes a powerful connection between the social and physical body.

Responding to Shilling's (2005) call for more case studies that follow particular bodily phenomena over time, in an effort to document the ways that embodied subjects interact with societal structures to produce particular outcomes, and inspired by these efforts to connect the social and the physical body in order to explore the exchange of meaning, "...each reinforcing the categories of the other..." (Douglas 1970:65), in the final section of this chapter, let's turn to my own research in order to consider the ways that my interviewees talk about bodily aging, as it intersects with consumption (in terms of body regimens), and the physical and social body. Through this analysis, it becomes evident that theories of aging, just like definitions of physical perfection (Monaghan, 2001b), are sub-culturally informed, providing opportunities for multiple readings of the aging body.

Science, the body, aging, and consumption – The meaning of metaphors

Conservation, Balance & Expenditure

When considering the relationship between aging, consumption and the body, as it relates to my data, several important themes emerge. While these themes are not meant to characterize all of the interviews, it is clear that generally speaking, each of the three

subgroups that I have studied, which are part of the “healthy life extension community,” can be broadly represented by a particular view of consumption as it intersects to scientific theories of bodily aging. I describe these with the use of three primary concepts: conservation, equilibrium, and expenditure. It is also apparent that my data reveals that different body regimen practices uphold different body ideals. A particular type of body ideal was connected to each of the three subgroups, with conservation associated with the *efficient body*, equilibrium associated with the *balanced body*, and expenditure affiliated with the *working body*.

It is important to note that interviewees in all three groups regard aging to be inevitable. No one espoused the belief that it was currently possible to entirely avoid and/or circumvent bodily aging. However, all of my interviewees hoped and felt that their specific body regimens were having favorable effects on their bodily aging – potentially in terms of internally slowing the process down. So how do people engaged in different body regimens perceive their practices to work?

For many of the individuals practicing CRON, the very act of consuming, consumption, in and of itself, causes bodily aging. Aging can be slowed through a process of conservation. The careful use of computer tracking devices to detail nutritional intake, for example, paired with a reduction in calories, aims to make this conservation process possible.

Under the basic premises of anti-aging medicine, aging is largely regarded as a “deficiency syndrome,” marked by a gradual and somewhat predictable decline in essential hormones and nutrients. By engaging in blood tests which reveal important

deficiencies, individuals strive to obtain equilibrium amidst continually fluctuating hormones, and other essential minerals and nutrients, in an effort to potentially delay aging by consuming a wide range of supplements.

Finally, and again, generally speaking, for many of the individuals who practiced fitness and health regimens, aging is caused by a lack of expenditure. This “use it or lose it” mindset promulgates the idea that regular, on-going physical effort and energy expenditure – through “working out” – is required in order to potentially delay bodily aging and/or to maximize the lifespan.

Conservation, Efficiency and Reduction, and the ideal of the “Efficient Body”

One of the fundamental premises of Caloric Restriction Optimal Nutrition (CRON) includes the idea that it is necessary to restrict calories in order to potentially delay bodily aging and/or to extend the lifespan. As stated by Longevity Meme, a non-profit organization dedicated to research on delaying aging and life extension:

A calorie restriction diet aims to reduce your intake of calories to a level 20-40% lower than is typical, while still obtaining all the necessary nutrients and vitamins.¹⁰³

Food consumption in and of itself is thought to accelerate bodily aging; as succinctly articulated by one respondent in my research, “CR is not about weight, it is about consumption” [female, CR, 4/5]. Conservation, efficiency, and reduction of energy usage, become of great importance to individuals engaged in the CRON body regimen. Consider, for example, the way a few of my interviewees imagine the process of CR to influence the internal body, bodily aging, and ultimately, longevity.

¹⁰³ Retrieved on May 6, 2008, from http://www.longevitymeme.org/topics/calorie_restriction.cfm

Aging, in my opinion, is where gradually your cells start to have more and more trouble replicating themselves and they start to get more and more damaged... they can no longer hold up their integrity just because they have been reproducing, reproducing, reproducing so much, so to me, that causes aging... CR works, in my opinion, because if you are not putting as much energy into your body, your body is not having to work as hard, and obviously it is not going to injure itself as quickly, it is not going to have as much trouble in keeping up with the reproduction of your cells. [Female, CR, 2/3]

CR is about the expenditure of energy. You just do not use as much energy and it just slows down the process of aging... that is sort of how I see it, how calorie restriction works, it involves an expenditure of energy. [Female, CR, 4/5]

Calorie restriction, especially with the optimal nutrition focus... was almost exactly what I was looking for, a way to watch what I was eating, focus on the nutrients, and everything that I was taking in, for my body to be able to use what it needs, but no more than that. [Female, CR, 4/5]

You use a lot of energy, with your body, for the reproductive cycle, so with the practice of CR, you are conserving that energy and when your body goes into fasting or when you are in a starvation mode, there are some clear differences that kick on, on a cellular level, and they become more efficient and when you have less sugar feeding them then things go into a conservation sort of mode, and being more efficient. I think that it helps and it extends, I mean, if you are doing it correctly. [Female, CR, 2/3]

I imagine that everything is running naturally and smoothly, you know, like there is not, there is not this other stuff in me, like my body is going, "what is happening?" like it knows, there is not this other stuff, you know, like its real, or its killed or grown, and therefore my body can process it with the utmost efficiency, so I guess I feel like I am running smoother. [Female, CR, 2/3]

By analyzing my interviewee responses to questions that included, "How do you think aging happens inside the body?" and "What impact, if any, do you think your body regimen has on your own aging?" I will turn to the ways that two of my interviewees used metaphors to depict this conservation perspective of the body, aging and consumption: the body as logs in a fire and the body as nuclear reactor.

Logs in a Fire

I liken it [caloric restriction] to burning logs in the fire, cause I have had fire places over the years, and especially ones with the glass in front, so you can watch, when you open the flue the whole way, the log burns up really fast, but if you close the flue down, to where there is just a little bit of air coming in, that log will burn for hours and hours, and that is

the way I think of it in my body, I am putting in, I am allowing less fuel, so the log doesn't burn up as fast...if our cells only divide fifty times, and if I can slow, if it slows it down enough so that, it takes longer each time it divides, how could it not extend it? [Female, CR, 4/5]

Fuel conservation is of primary importance in this interview as a way to slow down cell division. By suggesting that each body has a set number of logs, instead of focusing on rejuvenating cinders that having already burned, or putting new logs on the fire, the process of bodily aging is thought to be delayed through energy conservation.

Nuclear Reactor

Your body is like a little nuclear reactor, the food you eat is physically being turned into energy...and in a nuclear explosion its in atoms and pieces of atoms and there is a great huge release in heat, and then you have this destruction of the radiation of the atoms coming out of there. The same thing is taking place in your body, while that food, which is matter, is being converted to energy, you've got two byproducts, one is heat, which is what warms your body, and the other one is free radicals, which are oxygen molecules, and if you don't know anything about oxygen, it is a very reactive chemical. You pour some gasoline on some liquid oxygen and it is going to explode spontaneously. So all this process is taking place inside the nucleus of your cells in your mitochondria, that's where this little engine is, and your DNA is right there, so your DNA is exposed to the highest concentrations of the radiation, and at some point in time there is enough damage to the DNA that the cell senses that it is dysfunctional and it creates a self suicide signal that is called apoptosis where it is just supposed to go ahead and kill itself. But with a poor diet, you have so much shit inside your cells, that it is like hiss on a radio signal. It's distortion. The signal doesn't come through clearly and sometimes that signal gets lost altogether and so you have a dysfunctional cell that is replicating and that is the basis of cancers. And if it's not cancer, than there is some other degradation into the function of the cell, and extrapolate this over the organ, and it might eventually come about in heart disease or kidney damage or liver failure or any number of things that take out people. And that's the thing with aging. Aging comes from eating. You know, we have to eat to live, but in the process, we kill ourselves. [Male, CR, 4/5]

Nuclear reactors are extremely powerful sources of energy, strong enough to power ships and generate electrical power; they are also extremely dangerous, as we well know from Love Canal, Three Mile Island, and Chernobyl. While this respondent warns that our consumption (eating) kills us, he also tells us that we can function better, we

have less risk of (nuclear reactor) disaster, if we eat certain foods, since a “poor diet” is said to leave “shit in cells” which create what is likened to a “hiss on a radio signal.” Since eating, in and of itself, is implicated in bodily aging, energy conservation through decreased consumption is emphasized as an integral process in CRON’s potential ability to delay bodily aging.

Linking the physical with the social – seeking conservation through the efficient body

Some of the interviewees engaged in CRON connected this discourse around conservation, and energy conservation more specifically, to the way they lived their lives more generally, supporting the ideal of the *efficient body*, as it pairs with broader societal issues. Two interviewees talk about energy conservation in terms of not owning a car, and several of the interviewees discussed what could be described as an anti-materialistic regard for “stuff.” For example, in the above excerpt which utilizes the metaphor of logs in a fire to explain the process of caloric restriction, having made the connection between conservation and bodily aging, this same respondent, in another point in the interview, makes the connection between conservation in the way she lives her daily life. She explains:

I live my whole life very simply. I have Amish neighbors and I respect their way of life so much its, I really try to emulate them...I want to live so simply, and just provide for myself, so by eating less, by eating well, I feel like I am doing that too. I am not being wasteful. [Female, CR, 4/5]

Linking his interest in caloric restriction to his interest in debt reduction, another respondent reveals the way that the philosophy and practice of CRON (based on

conservation, efficiency, and reduction) is lived out in other aspects of his life. For example:

I am trying to get rid of consumer debt...and live simply...I have a tendency, just like a tendency to be overweight, I also have a tendency to have consumer debt. And that is my next focus, so I am reading [name of debt reduction book] and applying it. I have also joined other on line groups for you know, debt, and getting rid of debt... CR really does influence other aspects of your life. It is really good in that way, learning to not carry debt, and, you know, my apartment, now, is super tiny, so I do collect less stuff, you know, I am definitely un-American, in terms of no SUV, and no huge house...and I don't know when I will have a car. I rely on public transportation. [Male, CR, 4/5]

Exploring her interest in caloric restriction and intermittent fasting, another respondent links her regimen to the process of recycling (something that is widely associated with conservation in popular discourse). She explains:

One of the articles that I read that got me motivated for intermittent fasting, it was about recycling, that, when you do the intermittent fasting, and you are burning your body, that you are like recycling your cells and building new ones. I thought it was very exciting and motivating, because I thought, well I am like recycling my body parts, cause that seems good to me! [Female, CR, 4/5]

Other respondents make the connections between the practice of CR and the consumption of other things. For example, as one respondent elaborates: “The practice of CR has made me less materialistic, for sure...” and another respondent describes a similar experience in greater detail, talking about her own desire to become more resourceful and efficient with her time, she explains:

CR has really made me so mindful about everything that I eat. Every time there is a decision about food or drink of any sort, it is always a conscious decision with me now. Yes, I am going to have that now, or no I don't think I will have that now. It is really interesting that CR has made me extremely mindful of food -- its eating consciously, and I wish that I could be more conscious in other parts of my life, get other parts sort of cleared up, like my messy desk...We are mindful in what we consume in that we, you know, we don't just work in order to have things to show off how well off we are...but I want to make some changes. I think that I waste too much time and I know now that time is much more precious... and I know that I only have this many more years left, so I think I have got to look at my life and decide what is extraneous, how am I wasting time, how can I be more mindful in my daily life and what I choose to do and how I

live. I need to get rid of clutter. I tend to be a messy person and I tend to have too much junk in my office and I tend to read too many magazines and let them sit around forever, so I want to kind of clear things up. [Female, CR, 4/5]

Finally, one respondent went so far as to suggest that part of the reason she was not primarily motivated by life extension through her practice of CRON was because of the wastefulness and over-consumption which she sees as characterizing present day society.

[So does the possibility of life extension interest you at all with your CR practice?] You know, it interests me, but interestingly enough, I don't do CR for longevity. I'm not so sure I want to live on this planet much longer than I would, normally, because I don't like the way things are going. I don't like how we treat each other. I think we are consuming way too much energy. I think we are becoming overcrowded, you know, if you have ever been to [name of city], the traffic here is ridiculous, and so, I'm not so sure I want to prolong my life...[Female, CR, 4/5]

Balance, Replenishment, and Supplementation – The Ideal of the Balanced Body

For some respondents, most commonly those individuals utilizing anti-aging or age-management medicine, the aging process was regarded as a biologically programmed or scheduled event that occurred in a somewhat predictable manner. This is often supported through popular discourse associated with anti-aging or age management medicine, which is frequently premised on the use of supplementation to potentially delay “the effects of aging.” At what are often depicted as set time intervals, for example, the age of 30 is often referred to as a distinct turning point in bodily hormone production, the body becomes deficient in various hormones, minerals, vitamins, and related nutrients, and replacement is necessary. Aging becomes characterized as a “deficiency disease,” and consumption premised on maintaining equilibrium in terms of balancing and replacing, becomes necessary to slow the process down. As quoted

directly from the website of a medical clinic offering “anti-aging” medicine, “aging is the progressive failure of metabolic processes in our body. Our hormones do not decline because we age, but we age because our hormones decline.”¹⁰⁴ Maintaining the “optimum balance” of bio-identical hormones and other important minerals and nutrients is of primary importance to those engaged in the use of anti-aging medicine. As detailed by the words of a few of my respondents who utilize anti-aging medicine and make the connection between balance, replenishment, and supplementation:

You have to have all of those [hormones] to be *balanced* because if you are not *balanced*, one of them is not going to work. You have to get all of your levels within range, and then they test your blood samples, when you first start going [to the anti-aging doctor], every three to six months, *to keep you in balance*, because your hormones change constantly, and then after you’ve been on them a while, they go to once a year, unless you are having problems, to see where your levels are...[Female, AA, 4/5]

When you have a loss of hormones it’s a signal for your body to die, I mean, that’s how it always was, and you know, when life expectancy was shorter, you pretty much stopped producing hormones and then you would die, so I think it is just a signal for your body, women and men, when we have these hormone losses, we start getting high cholesterol, getting high blood pressure, can’t sleep, and if you can’t sleep then you can’t function and that decreases life expectancy too, so everything kind of hooks in there together...[Female, AA, 4/5]

I don’t think it is possible to reverse aging...but I think you can slow it down and I have seen guys...who were taking [name of supplements] and it was remarkable, the level of, the way their bodies changed. I mean, the loss of fat and the build up of upper body muscles and they said they felt wonderful...when I don’t take my supplements, it is like I am aging five years in a week. And it’s a, and then when I start taking it again, its like, I’m, god, oh, the good me is coming back, the healthy me is coming back, I can really feel it, so I know, I know it is a real thing. It is not something that I am just imagining. I know it is actually doing something. [Male, AA, 4/5]

Free radicals cause aging...they are negating something that is good and I think they say that every time you eat you’ve got free radicals so that is why you want to eat the scavengers, for example, you want Vitamin A, and C and D. [Female, AA, 4/5]

DNA damage is responsible for the chronic and degenerative diseases and it is responsible for aging and wrinkling and the graying of hair. With the [name of

¹⁰⁴ Retrieved on May 11, 2008, from <http://www.stayhealthyandyoung.com/antiaging.html>

vitamins & supplements], I mean, it is proven that if you eat lots, you can repair that DNA damage. [Female, AA, 2/3]

By analyzing my interviewee responses to questions that included, “How do you think aging happens inside the body?” and “What impact, if any, do you think your body regimen has on your own aging?” I will turn to the ways that two of my interviewees used metaphors to depict this need to achieve equilibrium: the body as age clock and the body as plant.

Age Clock

We are programmed to live approximately 120 years if we have ideal health and good nutrition and exercise, and there are a number of things that determine that age clock. One is the thymus gland. The thymus gland has shrunken a lot by age twenty, by age seventy it is almost none existent. This is without intervention...with doing nothing palliative. Another one, is the pineal gland, but you'd have to check me on that. Melatonin, apparently is part of the clock, we generate less of it as time goes on and the rate can be predictable and it appears that at a certain point, you know, they have correlated aging with melatonin decrease. And some people say DHEA. I am not so sure of that. I know it decreases but I am not sure that it is part of the aging clock. Another part is growth hormone. [Female, AA, 4/5]

This interviewee listed many different glands related to the body's “age clock” and she advocated nutrient and hormone replacement through time (which was largely marked by chronological age). The careful balance of hormones and nutrients is central to the practice of her regimen. For example, when I ask her to explain why she uses a particular supplement, she states:

The reason is, that it balances your sodium potassium level at the cellular level. Your sodium potassium gets balanced at the cellular levels and that is your major electrolyte balance. [Female, AA, 4/5]

Further, talking later in the interview about a very trying period of sickness she endured, she explains it by stating “my balance was going off!”

Plant

I think the primary cause of aging is DNA, failure to construct good youthful DNA. It degenerates with time and age and I think that having that complex of amino acids help fight that, the degeneration is the fact that we are not producing some of those... So I think what we are doing [with our regimen] is basically, we are, like feeding a plant, if you give it every single micronutrient that it needs, it is going to be in the healthiest, and the most perfect form. Unlike a plant, which only needs, let's say 35 nutrients, we probably need three or four hundred, so I'm talking about more complex amino acids, and fatty acids, and all the little building block structures in between, I think we start to fail at the production of some of these more complex amino acids and I think that the cell development suffers. [Male, AA, 4/5]

Describing the body as a plant that eventually starts to fail at the production of some critical nutrients, this respondent emphasizes the importance of replacing and balancing out complex amino acids through supplementation to attain equilibrium. At another point in the interview, when asked whether he takes vitamin supplements, the concept of balance arises again as he explains that due to an “imbalanced diet,” vitamin supplementation is essential. Striving for replenishment and balance (in diet and in complex amino acids) becomes the challenging goal.

Linking the physical with the social – seeking balance in body and culture

This discourse around delaying aging through equilibrium, replenishment, and supplementation upheld what I refer to as the ideal of the *balanced body* and it was connected to broader cultural issues through conversations with a number of interviewees engaged in anti-aging regimens. For example, talking about the challenges she faces trying to engage in her body regimen career, this interviewee uses the concept of balance (and her struggle to obtain it) to define her life.

Its just hard with childcare, you know...and I'm a night owl, and I need to get 8 hours of sleep a night, so that is the hardest thing for me, to maintain that exercise schedule...that is a very important thing to me, one cannot eat healthy without

exercising, and you can't exercise without eating right, you know, you have to do them both. *You have to find a balance in everything.* [Female, AA, 2/3]

Other respondents emphasize the ways anti-aging medicine responds to hormonal imbalances, while also discussing the ways that life stress (often depicted by time consuming and competing demands of work and family) lead to detrimental imbalances affecting the individual and social body.

The reason that you age is that you just don't continue to maintain hormone levels as you did when you were younger...People need vitamins and supplements because the stress theory basically says that stress in our society and in the individual and it causes biochemical changes and basically this causes aging. It's the theory of aging. Cellular interactions in the body produce toxins and the oxidative products tend to build up over the years and cause damage...and if you don't have the proper nutrients for reconstruction and repair, you know, you are going to decline even faster and so old age is thought to be a product of stress reactions and its effect on your body's chemistry to be able to deal with it...you are literally what you eat so if you have eaten crap for a couple of years, then it has an effect on the quality of cells that you have produced...and if you live a better life and a more intelligent life in terms of exercise, nutrition and supplementation, you can probably prevent a lot of that... [Male, AA, 60+]

Having established that vitamins and supplements are necessary to deal with biochemical imbalances that occur within the individual body, this same respondent goes on to describe the problems of imbalance that he sees within the social body – situated within what he refers to as “corporate America.”

I retired because of the stress of working for corporate America. I think the business model has changed. When I first started working, corporations were looking out after people. Now the greed concept, which became more and more prevalent in the 80s with the Reaganites, business has gotten that way as well. They don't care about the employees. They don't care about the environment. They don't care about anything, just making money. We see now, how well they really care about the employees. They are downsizing. They are sending jobs out to other countries, just because a few people at the top, and the banking systems, want to make more money, so they are making the few employees that are left shoulder more of their medical costs, the benefits have dropped, when I started, you could count on companies cradle to grave, that is no longer like that...Everything is bottom line and that bottom line mentally has ruined companies. Companies were started by people who had visions, to build a better product, a better mouse trap, better quality or whatever, those people have all been

overtaken by these corporate morphs, who are only looking at one aspect, money and cutting costs... just lower, lower the cost, get more to the bottom line, period and now I think the problems you have got now are so overwhelming that, global warming and all the, most of those are the results of business being out of control...we need some kind of balance. [Male, AA, 60+]

Describing the ways that her life is off kilter due to all of the roles she strives to “balance” – this interviewee describes her use of anti-aging medicine as symbolic of her effort to achieve some sort of life balance by taking care of herself.

I take care of my grandchildren and my mother...and I manage nine stores... I just need more time.... all my life is, is stress all the time. My husband is not an easy man to live with... And um, you know, there is so much going on with my daughter, with the girl they adopted...and you know, its always something going on with my son, he lives one of these high risk lives, and its just, its like [makes a face and makes a gagging noise], between all of them, I feel pretty stressed all the time. I handle it pretty well but I do feel stressed. I lead a pretty stressful life...and when I started really investigating the natural hormones and the anti-aging doctor, I thought, you know, I’ve never taken care of myself my whole life, all my life I’ve taken care of everybody, for once in my life, I’m going to take care of myself. [Female, AA, 4/5]

After emphasizing the importance of using anti-aging medicine to balance out all of her hormones, this same respondent proceeds to connect hormone imbalance with stress from a life out of balance.

I know if I’m under a lot of stress, that my hormone levels change. Stress can affect aging...but I live such a stressful life, you know... I had to laugh, you know, I told my aunt the other day, I said, “You know, if stress really will affect your health and lifespan, I should have been dead by now.” Because that’s all my life is, stress all the time... and I think stress levels, I mean, it changes the chemistry within your body which then causes problems...its a proven fact that stress causes your hormones to change...it’s a chain link effect, a chain reaction. [Female, AA, 4/5]

It is worth noting that in order to deal with the intense stress that this respondent describes in great detail, she opts to try to balance her hormones, rather than to push for some type of social change that might alleviate the disproportionate amount of responsibility she finds herself personally burdened by in her own life.

In a final example, consider the ways that this interviewee makes the connection between hormone imbalances, aging, and an imbalance between work and family life.

You can prepare to slow the biological age of your body internally. The reason why some people look 70 years old and they are only fifty and why some people who are ninety years old and you look at them and you think they are 65, obviously something is being slowed down, you know, something is being benefited... Obviously you look at a whole lot of different things, hormone imbalances take place in a person and metabolic rate goes down, lack of physical activity, you know, I think one of the most overlooked aspects of aging is lifestyle, you look my parents, when I was growing up, my dad said he would be home at five o'clock and he got home at what time? Five o'clock, I mean, there was optional overtime back then, today it is more like mandatory overtime. If you are a salaried person, you don't get overtime. If you are getting home at 7, that is an extra two hours a day that you don't see home, can't even come down, make a meal, or even see your child, or govern what they are doing when you are not around. Times have changed. Stress levels have gone up, less vacation time, I mean, Germans get 23 weeks of vacation time a year, I have a buddy of mine in France that gets 17 weeks of vacation time. This tells us, what do they value more, they value their home life, they value their family, they don't value the dollar sign more, here we value the dollar sign, the dollar sign is numero uno when it comes to anything here... The other day, I got up at 5 a.m. I got up the day before at 4 or 5 a.m., I didn't get home probably until 7:30 or 8 p.m. I got home at 7 p.m. and was half way through a consult, to get some food for the next day, there is not enough time in the day and yet people expect us to be at supreme levels...we face an uphill battle...and there is no time to do it. [Male, AA, 2/3]

While he begins his response talking about the link between hormone imbalances and bodily aging, this respondent proceeds to connect bodily aging to an imbalance in work and family life, which he discusses throughout the interview, as a source of enormous personal stress and frustration.

Energy expenditure, effort, work – the ideal of the “working body”

For other respondents, namely those engaged in fitness-based body regimen careers, on-going effort or work, in the form of “working out,” (regular exercise) or “body work” (massage, meditation), was a key component of delaying bodily aging. Espousing a “use it or lose it” mindset, for these respondents, the body was likened to a machine that needed to be monitored, cleaned, maintained, fueled, and most importantly,

used regularly. This perspective intersects with many public health campaigns, like for example, the Alzheimer Association's "Maintain your Brain" initiative which emphasizes the importance of an "active brain," and provides individuals with a ten step protocol for "brain maintenance." Through this perspective, many of those engaged in fitness and health regimens regard bodily aging to be expedited due to lack of use. Hard work, dedication, and effort are of primary importance. The importance of "work" in terms of "working out," expending energy, and putting out effort, was a dominant theme throughout all the interviews with people engaged in fitness regimens. When asked whether their body regimen have an effect on their aging, consider the responses of a few of the interviewees engaged in health and fitness body regimen careers.

Working out helps cleanse, by your sweating, burning off the excess calories, helps cleanse the body, which has got to be beneficial, not while you are working out, but post work out, and I think it has a direct relationship with aging. [Male, FR, 2/3]

I think inactivity, I think is a real big cause of aging, I really believe in physical activity...I think that people being active, physically and mentally, will keep them young. I see it in my work when you know, you can see somebody that comes in that is 85 years old and you'd never know it and you see somebody come in that is fifty years old and you think that they are seventy....I think there are a lot of mental and physical aspects that can keep you young, definitely. I think inactivity is a real big problem. I really believe in physical activity and I think that people, smoking and drinking too much, people's lifestyles, I think, cause them to age. [Female, FR, 4/5]

In physiology you hear about the fast twitch muscles atrophying more than the slow twitch muscles and if you don't use it, you lose it, so I need to use mine...I don't feel as good, I don't feel as healthy when I stop running[Male, FR, 4/5]

Free radical theory helps to explain the process of aging...Aging, also, if you don't use your muscles, they are not going to work properly. If you don't nourish your cells, they are not going to work properly, and my routine, it helps, I think it helps. [Female, FR, 60+]

Age is causing that...muscle deterioration, with fast twitch muscles, and reaction speeds, and part of it is pure deterioration. The brain reacts a hair slower, the fast twitch muscles react just a hair slower, and it all works together as a big orchestration to make your body not move as quickly as it used to and it is just not doing that as well as it

used to and I realize that...I do believe that joints, you know, can get kinked up, or you know, if you don't use them or bend the right way on a regular basis, you don't exercise on a regular basis and work the joints out, they become stale or immobile over time, and that is the aging process right there. I am not saying that you can reverse the aging process, but I do believe that you can slow it down. [Male, FR, 2/3]

If you look at what happens when you reach your thirties, you start to lose muscle tone, you move less quickly, and all of that, you can do some things to prevent that from happening... I think that you can maintain, sort of a more youthful, I think you can maintain a more, you know, I think we were meant to work, if your muscles aren't working, they just go away. I have found a lot of joy in working out and I think our bodies need to work to maintain some sort of, oh I don't know, what ever it is, ability...[Female, FR, 4/5]

By analyzing my interviewee responses to questions that included, "How do you think aging happens inside the body?" and "What impact, if any, do you think your body regimen has on your own aging?" I will turn to the ways that two of my interviewees used metaphors to depict the importance of expenditure, effort, and work: the body as a car and the body as a pin ball machine.

Car

I think a lot about the quality of my life. I do think I am blessed with good health and I don't miss a lot of time from work because of illness and I think that is all connected to my routine and what I do eat and how I plan the time for exercise... It's like, when you take your car to the gas station and fill it up with gasoline. When you exercise you are giving something to your body that if you don't take that time, you know, your body is going to begin missing it very soon. Just like a car would miss gasoline and eventually wouldn't work. That is how I view it. [Female, FR, 4/5]

Cars have long been used as a popular metaphor for the human body,¹⁰⁵ and people in all three of my different interview groups used the body as car metaphor at different times in our conversations. In the above passage, though, the respondent

¹⁰⁵ The fitness trainer that I worked with as part of my participatory immersion into this topic introduced me to the concept of cross training by emphasizing the importance of doing a variety of exercises. As he described: "when you do the same thing day after day, your body becomes very efficient, like a Honda Civic. We want to push your body and challenge it...make it work harder, more like a Ford Explorer." [Field Notes, November, 2007]

specifically makes the connection between the importance of fueling the car/exercising the body as a way to avoid illness and to potentially delay aging and extend life.

Consumption of exercise actually becomes an essential part of the fuel that keeps the car running.

Pinball Machine

I have done a lot of cleansing which changes your whole life...we are a machine. I mean we are a machine. We've got plumbing, and there are a lot of vital organs that are in that plumbing and they get congested with toxins and mucus and, we are loaded with parasites, and I can tell you first hand, because I have done cleansing for years and years....[do you think your regimen is having an affect on your aging process?] I do, absolutely, I mean, I know I don't look younger than my age, but I probably feel younger than my age, I feel like I have more health, definitely, than most people that are pushing sixty ... I have done a lot of work on ...getting my blood clean and my organs clean and everything is just like ding, ding, ding, ding, ding, cause that's what, you have these glands, you have your pituitary and pineal, your thyroid and your thymus, your ovaries, all these things have to be, you know, the signals come from your nervous system in your brain...it's really like pinball, they have to be lined up and receiving the signals. [Female, AA, 4/5]

The idea of internal cleansing is very important throughout this interview and, for this interviewee, cleansing happens through hard work, which for her, has included the combination of a variety of practices including yoga, meditation, supplementation, and daily cardiovascular exercise. This respondent emphasizes the *work* that she has done over the years to get her organs “clean.” Expending energy and effort, through exercise, and working on one's body, are of primary importance in these interviews, as a means to enhance health and to even potentially slow down bodily aging and to extend life.

Linking the physical with the social – the importance of work

Making the connection between the importance of work on the body, and work in the broader cultural milieu, interviewees engaged in fitness regimens upheld the ideal of

the *working body* as they repeatedly spoke about the importance of work in their own lives ...working out and work (as in employment) were essential aspects of their lives. A number of interviewees likened their body regimen careers to their work careers – emphasizing the important interconnection between working out the body and working (at careers). One respondent makes the connection between involvement in body regimen careers and work careers, talking about her community of friends involved in similar body regimen careers, stating: “most of them are incredibly successful people. They are doctors. They are business people. They are highly competitive people!” Another interviewee talked about how he got involved in his body regimen career after being inspired by others who were engaged in such practices. He recalled feeling inspired by two people who were extremely successful in their professional careers and part of this was because they required much less sleep and were sick much less often due to body regimen practices. Deciding to engage in a similar body regimen career out of admiration for the successes of these mentors, this interviewee explains the results:

I needed less sleep... which is good because I like to get a lot of work done, and I also haven't gotten sick [after starting body regimen career] which was unusual for me because before I had always been the kind of person that would get the flu in the winter and the flu would often turn to bronchitis, and you know, I had pneumonia when I was younger, so I was naturally not someone with a real strong immunity. [Male, FR, 2/3]

Talking about the intersection between her body regimen career and her work career, which she has combined into a complimentary pursuit as a business owner of a fitness studio, another respondent explains:

This has been my life [emphasis]. I mean there was no way you could ever have a relationship, I mean, I was there, I was teaching fourteen classes a week and I was there 24/7, you couldn't have a dog, you couldn't have a life, you couldn't have anything, you had to have this deep passion for this deal, and so I did...I just want to keep

growing my business and I want to keep making this as popular as possible. [Female, FR, 4/5]

Likening his work career to his passion for sports, another respondent proceeds to explain the angst he feels at work if something goes wrong, a similar angst he feels on his athletic team when a point is scored against his team. In the interviewee's own words:

It weighs on me heavily to let somebody down and to me letting somebody down is to have a failure get past me, because I am a tester at work, and by trade, so I am supposed to be the last line of defense, to make sure that things don't, you know, don't go beyond me in a broken state, so I feel a certain anxiety if they do...I want to be great at what I do at work... whatever it takes to get the job done. I feel a sense of accomplishment when I am doing it as good as or better than the next guy. [Male, FR, 2/3]

Many other respondents engaged in fitness regimens describe how they have no intention or desire to retire from their work. As one respondent talked about her work, "I love what I am doing... I couldn't be any happier...I am literally living the life that I created and love." Other respondents express similar sentiments:

I'll always work...I'll always do something! [Male, FR, 2/3]

I don't think I'll retire...but I could see at some point, changing careers and doing something that was more rewarding. [Male, FR, 4/5]

We [respondent & spouse] don't really see ourselves as ever retiring. We can't really ever imagine that. [Female, FR, 4/5]

While some talked about the possibility of going back to school or starting second careers, these respondents repeatedly emphasized the importance of some type of ongoing work/career outlet in their lives.

One interviewee went so far as to describe a time when she moved into a community where most people were retired, and because she was still working and has no intention of retiring, she ended up moving away from this community because she felt like she did not fit in.

It was a very artificial environment there. People are very superficial. A lot of money but they are not happy people. People either golf, play tennis or shop, that was the lifestyle there, you know, other than the sort of people that I worked with, you know, people who are working because they had to do pay their bills, you know, but most people that lived in our neighborhood were all retirees and that is all they did, those things, and it was like, we don't belong here because that isn't us. You know. So it was not a right fit for us there. I mean, it is a great place to go on vacation, but living there was just not what we wanted. It wasn't our type of lifestyle. [Female, FR, 4/5]

And another interviewee suggested that being a “contributor,” and staying active, were essential ingredients to slowing down the aging process and living a very long life.

[What do you think causes the aging process in the body?]

It just goes back to the way our society has kind of developed, and if you look at a lot of the Asian, you know, the Japanese, they have people in their 80s or 90s and above that are still helping in society, you know, they are contributors, even if it is just cooking the meals, whatever, they are still doing something, you know, they are not laying in beds and waiting on somebody to come turn them, unlike this country where we are, you know, its attitudes, I think, but I think that all has an effect on the aging process. [Male, FR, 2/3]

Conclusion

By making a connection between aging, consumption, and the individual and the social body, this paper encourages readers to think creatively about the ways that scientific knowledge is both created and interpreted, through a consideration of the ways that the division between the individual body and culture may be little more than perception. Biomedical theories of bodily aging, and related beliefs about the ways practices of consumption intersect with aging bodies, are culturally and historically grounded, and serve to influence our views of the body (Oudshoorn 1994). In considering these “techniques of the body” (Mauss 1972[1934]) that are implicated in the 21st century discourse on potentially delaying aging and/or extending the lifespan, it is apparent that a complex interplay between understandings of the individual (aging) body, and concerns of the larger society are at hand. The words and metaphors people use to

understand and explain bodily aging (and the perceived effects of their regimens on bodily aging) are entwined in interesting ways to the broader socio-cultural milieu, whether it be through the call for energy conservation, a cry for work/family balance, or an emphasis on the importance of being able to work – of being a “contributor” – throughout the lifespan. And Oudshoorn (1994:5) explains: “metaphors entail specific meanings and values that may contribute to a positive or negative attitude toward the body.” While the body of the late 19th and early 20th century was warned about the potential failure to succeed due to the fatigue that comes from being worn out (Green, 1986:305), potential failure for the 21st century body may, for example, be focused on that which interferes with the body becoming efficient, balanced, and/or productive.

Conservation – particularly environmental conservation – is a hot topic in 2008, as rising gas prices get people thinking about alternative forms of energy and energy savings. The introduction of hybrid cars onto the market is gaining momentum and people that purchase hybrid vehicles are rewarded with deductions on their tax returns. MSNBC beckons viewers to follow their daily “Going Green” report, and a Newsweek headline on April 8, 2008, talks about growth in “green-collar” jobs, while new terminology for this “green movement” beckons the use new terms like eco-friend, eco-chic, eco-travel, and eco-hotels. Intersecting with this conservation movement, theories of bodily aging associated with the practice of CRON, emphasize the link between energy conservation and bodily longevity.

Cutting back, saving, recycling and reusing were reoccurring themes in my interviews with practitioners of CR. This sometimes involved the parallel between CR

and finances.¹⁰⁶ For example, many talked about the importance of distinguishing between needs and wants when starting CR. This ethos is similar to “Managing Money 101” where people are trained to differentiate between what they need to survive and what things they may desire, but are not essential for survival. A number of interviewees engaged in CR talked about the importance of having some reserves (in terms of fat) in case of illness – not unlike a discussion of savings (in terms of money in the bank) for expenses that arise without warning. Another interviewee talked about how she goes “in the red” when she goes over her allotted number of calories for a given day, and another talks about how her practice of CR, similar to her life in general, is a series of “trade offs” in terms of divvying resources – in CR this centers around caloric expenditure and nutritional value – whereas in life, more generally, it involves the divvying of limited resources like time and money.

Certainly a topic of wide public interest and concern in the past two decades, the work family balance issue has drawn heightened attention. Research in the 1990s concluded, for example, that female graduates of Harvard Business School reporting that they had left the paid labor force, or had chosen part time work, articulated that the challenge of juggling a career with family responsibilities was “...simply not worth the personal toll on the family, on the marriage, and on themselves” (Swiss and Walker 1993:167). Founded in 1990, the Boston College Center for Work & Family (CWF)

¹⁰⁶ An Associated Press newspaper headline on June 27, 2008, details a “frugality movement” with more than 9,000 members that try to avoid consumer culture, opting to barter, make their own things, or buy used. Talking about the changes necessary to reject consumerism, one of the group members explains, “The real surprise is that its so much easier than you would think...If you hang on, it’s like dieting – the hunger goes away.” Retrieved on August 20, 2008, from <http://www.courier-journal.com/apps/pbcs.dll/article?AID=/20080727/BUSINESS/807270399/1003>

strives to assist organizations to create workplaces that are conducive to the employee work/life balance. The theme of work/family balance has broad popular appeal as the Washington Post dedicates an entire blog to the subject of work/family balance on its website in 2008, and corporations like Procter and Gamble tout work/family balance as a reason why they are a “great place to work,”¹⁰⁷ while Hillary Clinton put the work family balance as a key topic on her agenda as she campaigned for a presidential nomination.¹⁰⁸ Intersecting with this emphasis on balance, theories of bodily aging associated with anti-aging medicine, emphasize the link between (hormone, nutrition, and supplement) balance and age retardation.

Finally, connecting the concept of work – of productivity – to the broader cultural milieu, it is evident that the connection between retirement, and the chronological age of 65, is being drastically transformed as people push for alternatives to an “all or nothing” work career. Articles abound on the ways that baby boomers are engaging in second careers, post-career consulting positions, and part-time jobs that enable them to mesh aspects of increased leisure with continued work. Further, in an effort to encourage older workers to remain in the work force, in March, 2000, Congress decided to end the Social Security earnings limit for workers over 65 years of age; this enables people over 65 to receive full Social Security benefits, regardless of how much they continue to earn in the workforce. Hand in hand with this emphasis on continued work and productivity, theories of bodily aging associated with fitness regimens, emphasize the link between work, effort, and expenditure, and bodily longevity.

¹⁰⁷ Retrieved on April 8, 2008, from www.pg.com/jobs/jobs_us/usinfo/work_family.jhtml

¹⁰⁸ Retrieved on April 8, 2008, from www.hillaryclinton.com/news/release/view/?id=3743

Body ideals linked to delaying aging and extending life for individuals engaged in different body regimen careers vary, as this research reveals the ways that CRON is linked to the ideal of a more efficient and sustainable body, anti-aging medicine to the ideal of a more balanced body (based on replenishment), and fitness regimens to the ideal of the working body – a body capable of endurance and perseverance through persistent effort. Turning to the realm of the inner body, the next chapter will consider the ways people talk about this increasingly visible world, looking at the language of the machine, and the use of technology, to understand, explain, monitor, and examine the world within.

Chapter 7: The Body Inside Out

Introduction

Through the fifteenth century, it has been argued that the senses, including hearing, touch and smell, were the dominant means through which people understood their bodies, sight being less important and less reliable (Maldonado 2003). Yet a marked shift in the primacy of sight is paired with the Renaissance-inspired interest in anatomy and dissection, as the history of modernity from its 17th century inception is progressively referred to as a “culture of seeing” (Leppert 2000; Jay 1993; Lowe 1982). With seventy percent of the body’s sense receptors said to be situated in the eyes (Ackerman 1990:230) linear perspective vision, the “visual age” (Synnott 1993) in which we now live, as described by Romanyshyn (1989:31), “has transformed the self into a spectator, the world into a spectacle and the body into a specimen.” The present day knowledge system (Foucault’s episteme) is “... governed by the gaze to such an extent that seeing commonly defines believing” (Leppert 2000:77).

What could be described as the present day fascination with the inner body can, at least in part, be traced back to the work of Belgian doctor, Andreas Vesalius. Famed for his creation of seven volumes (*De humani corporis fabrica*, *On the Workings of the Human Body*) which illustrated the body’s internal structure, Vesalius became widely recognized for his public dissection of the human body, a violation of both Greek and Roman law (Aufderheide 2003), and largely prohibited through the Middle Ages.

Emphasizing the importance of direct observation, Vesalius rejected mainstream beliefs about the internal body, most of which were premised on Galenic medicine.

While Vesalius' ideas were hotly contested, as new instruments (including the telescope and the microscope) enabled closer examination of previously less visible worlds, Vesalius' anatomical view of the body became more widely accepted, with the wealthy sometimes offering their own private rooms for dissections (Boyle and Morriss 1987). Inspiring entirely new perspectives on life, death, and the body, through the development of modern anatomy, as suggested by Romanyshyn (1989:16-17), the "dead body became a corpse and corpses are designed to be opened for inspection...the body is a technical matter, a problem to be solved." Obliging humans to use imagination, science shifted from the observable to the unobservable, as new instruments enabled the identification of previously unknown worlds (Rossi 2000). The potential to manipulate the internal body (for example, in terms of resuscitation, enhancement, or life extension) also appeared increasingly possible as publications like Gray's Anatomy (1858) served to depict the body as a visible anatomical map upon which all disease could be identified (Katz 1996). People no longer died of "mortality" or "old age" but underwent detailed post-mortem examinations in order to determine a specific cause of death (Bauman 1992:138).

Despite Vesalius' prescience signaling far greater explorations into the bodily interior in the years following his death, rolling the clock forward to the early 21st century, it is likely that Vesalius would possibly be shocked, horrified, humored, or even envious if he were alive today to realize what efforts like his public human body dissection are claiming in the modern day marketplace. A far reaching number of human anatomy exhibits currently circulate across the U.S. and Europe ("BodyWorlds," "Body Exploration," "The Universe Within," "Bodies Revealed" and "Bodies...The Exhibition")

piquing enormous public interest while fattening the coffers of companies like Atlanta-based Premier Exhibitions which rang in record profits in 2007 (with sales reaching \$30.1 million, many of which were generated from their popular “Bodies...The Exhibition”¹⁰⁹), a time when many companies flailed in what has been called an economic recession.

Sociology and the Body

A heightened focus on the body has been firmly established in sociology over the last four decades (Turner 1992, 1996; Frank 1991, 1995; Shilling 2005), aptly captured by Turner’s identification of four dimensions of the lived body,¹¹⁰ and his coining of the term “somatic society,” and perhaps institutionalized through the inception of a scholarly journal in 1995 dedicated specifically to the topic “Body & Society.” While a single “sociology of the body” may not exist (Watson and Cunningham 2001), overlapping strands of insight from the field include challenges to the dualism between mind and body (Turner 1991b; Frank 1991), feminist theorists of the body and embodiment which provide important dialogue about sexuality, body image, gender and identity (Brooks 2008; Davis 1997, 2007; Calasanti and Slevin 2006; Woodward 1999; Balsamo 1996; Martin 1989, 1994; Grosz 1994), the critique of the medical model and sociological understandings of health and illness (Karp 1996, 2006; Brown 1996; Charmaz 1991,

¹⁰⁹ Featuring around 20 dissected human specimens preserved through a rubberization process aimed at teaching people “...how to take better care of their health and make positive life style choices” the exhibit depicts, for example, a stretched out human intestine, several fetuses in different development stages, the lung of a smoker, and all of the body’s veins and arteries. For more specifics, refer to: www.bodiestheexhibition.com

¹¹⁰ In *The Body and Society* Bryan Turner (1984) presents four dimensions of the lived body which include (1) continuity over time in terms of reproduction, (2) continuity in space -- population control and regulation, (3) controlling desire and (4) the representation of bodies to each other.

1995; Conrad 1987, 1992), and the ways that the body has been situated as a location for changing ideas about consumption (Shilling 2005; Douglas 1970).

While there has always been some scholarly attention directed to the body, in the late 20th century, the body has been described as a primary site for identity construction (Featherstone 1991; Turner 1992; Davis 1997; Longhurst 2001). As suggested by Vale and Juno (1989:4), “amidst an almost universal feeling of powerlessness to ‘change the world’ individuals are changing what they do have power over: their own bodies.” As Frank (1990:133) similarly articulates: The body is the “...only constant in a rapidly changing world, the source of fundamental truths about who we are, what is just and unjust, human and inhumane, progressive and retrogressive.” Affluent Westerners, according to Chris Shilling (2007:5), now regard the body as “...an entity which is in the process of becoming: a project which should be worked out and accomplished as part of an individual’s self identity.”

With the flexible body (Martin 1994) as work site – to be molded, crafted and shaped as desired, it is perhaps not surprising that cosmetic surgery is the fastest growing medical specialty in the United States (Brooks 2008; Davis 2005). While much of the social theorizing about the body in recent years has focused on the body’s exterior or surface, placing far less emphasis on interior spaces (Watson 2000), the plasticity of the body is also recognized as bionic (Synnott 1993), with a wide range of ad-ons and related devices (polymer blood vessels, pacemakers, heart valves, insulin pumps, implantable defibrillators, bone and organ implants, stents, grafts, and prostheses) used to strengthen, enhance, and normalize bodies.

Considering the concept of illness as it relates to the body, Leder (1990) coined the term “absent body” to describe the ways that people are at times unaware of their bodies and all of the thousands of processes that occur underneath the skin, while Giddens (1991:202-03) suggests that pain and illness draw heightened attention and awareness to a body that is out of control in a world that demands control. Pain, as suggested by Aalten (2007:112), “...is one of the ways the body escapes its elusiveness, making itself heard and thereby becoming undeniably material.” During times of sickness, society, culture and nature (Aalten 2007) forcefully present themselves through “the language of the organs” (Scheper-Hughes and Lock 1987:31), a type of communication people understand through the contextualized cultural symbolism that comprises the communities of which they are a part.

Yet as touched upon in chapter 4, as my own research reveals, the body may demand attention at times other than those marked by sickness. For example, empirical research on the way ballet dancers perceive the physical body suggests that for many, the body is regarded as malleable and “is always under construction” (Aalten 2007:122). Similarly, as physician Christiaan Barnard, one of the first heart transplant surgeons (1981:34 as cited in Synnott 1992) asserts:

The body is no longer given (meaning, traditionally, a gift of God); it is plastic, to be molded and selected at need or whim...the body is not only plastic but bionic, with cardiac valves.

A number of social theorists (Rose and Novas 2005) have suggested that fundamental societal changes are shaping new relationships between people and their bodies as “...biological properties are increasingly not only being ‘discovered’ but are

being created, in ways that reveal specific national and economic priorities, moral and civic values, and technoscientific institutional cultures” (Franklin 2005:61). The body and society are inseparable and as technology and culture transform, understandings of the body also change. Introducing the concept of “biological citizens,” Rose and Novas explain (2005:446)

Such citizens use biologically colored languages to describe aspects of themselves or their identities, and to articulate their feelings of unhappiness, ailments or predicaments. For example, they describe themselves as having high levels of blood cholesterol, as being vulnerable to stress...or as having a hereditary predisposition to breast cancer...the language with which citizens are coming to understand and describe themselves is increasingly biological.

In bringing the body back in (Frank 1990), a growing number of scholars are suggesting that the interest in the human body is becoming increasingly interiorized (Armstrong 1998; Martin 1994), and many times the distinction between inner and the outer is blurred.¹¹¹ Documenting this shift from outer to inner body, Martin (1994) explains that the dominant model of disease prevention prior to 1970 involved cleaning bodily surfaces and external surroundings, but the present focus is on internal systems which are thought to determine “whether you will get sick or stay well” (Martin 1994:67). As the interior body becomes implicated in the discourse of disease and wellness, theorists suggest that the inner and the outer body have become increasingly conjoined, (Glassner 1989; Featherstone 1982), while people strive for new ways to assess, reveal, maintain, and monitor that which is not readily visible. The bodies of

¹¹¹ For example, at an A4M conference in July, 2006, as documented in my field notes, speakers emphasized the need for aesthetic medicine in conjunction with anti-aging medicine that would turn back the body’s internal clock, so that patients did not suffer “cognitive dissonance.” This effort to connect the appearance of the outer with the health of the inner body is reflected in a book written in 1930 by Helena Rubinstein (famous for amassing fortunes with her cosmetics business) where she states, “to preserve one’s beauty is to preserve health and prolong life” (as cited by Featherstone 1991:179)

biomedical science, as Braidotti (1991:361) suggests, are seen as “...useful, purposeful bodies that can produce knowledge.”

This heightened focus on the inner body has been captured by the mass media and consumer culture – flipping through newspapers and magazines, ads for vitamins invite, with the promise of natural cell repair, greater immunity, and heightened energy. The drive to potentially alter biological aging over the past century has also become increasingly interiorized, with medical technologies aimed at visualization becoming a central part of medical practice, as Squier (1999:100) notes a move from external to internal solutions, which have gone from glandular grafting, to gland therapy, to hormone injections, and now to genetic manipulation, as is evidenced by things like the heightened interest in the ability of resveratrol which is thought to “...switch genes on and off”¹¹² and the identification of a gene for Werner’s syndrome of premature aging. Driving, justifying, inspiring, and offering truth to this desire to understand and even control the inner body sits technology.

Inner space: The body in the late 20th century

This film will take you where no one has ever been before; no eye witness has actually seen what you are about to see. But in this world of ours where going to the moon will soon be upon us and where the most incredible things are happening all around us, someday, perhaps, tomorrow, the fantastic events you are about to see will take place. [From the introduction to the film, *Fantastic Voyage* 1966]

While the exploration of the inner body has long captivated the scientific imagination, linking the exploration with outer space to an exploration of inner space has

¹¹² Retrieved on April 28, 2008, from:
<http://www.longevinex.com/article.asp?story=How%20trans%20resveratrol%20influences%20gene%20switching>

provided a valuable justification of the journey within over the last four decades.¹¹³

Highlighted in the excerpt above, films like the *Fantastic Voyage* (1966) tantalized imaginations as a medical team is miniaturized in a life-saving mission, traveling inside the brain of a prominent scientist, in an effort to remove a blood clot. Battling tight time constraints and unforeseen challenges within the internal body, the travel crew takes advantage of the latest in technological innovation, journeying by shrunken submarine through the blood stream. Once the makings of science fiction—now turned science fact—the potential promise of 21st century technologies (e.g., nanotechnology, genetic intervention, and cryonics) make this voyage more of an ever present possibility.

Nanotechnology, for example, as defined by Pepperell (1995:viii) “...represents the technique of designing or evolving tiny machines that can be programmed to operate in environments such as the human body. Such machines might fight diseases, increase physical performance or prevent ageing.” The introduction of new scientific techniques including tissue rejuvenation with the use of stem cells, organ replacement with artificial organs, xenotransplantations, and molecular repair serve to inspire hope and fear.¹¹⁴ As Longo (2003:24-25) explains:

Information technology, has begun to implode, invading the body and spreading throughout it with a variety of micrometric and nanometric devices able to modify cells and even molecules...the body is spotlighted by the informational revolution: Electronics, robotics, and spintronics invade and transform the body...

¹¹³ Consider how, for example, Edgar D. Mitchell, the lunar module pilot on Apollo 14 in 1971, returned from his experience in outer space to start the Palo Alto, CA-based Institute for Noetic Sciences, in order to explore the study of human consciousness, or inner space, science and technology focused on aging has expanding focus from the aesthetic ideals of the outer body, to the "optimal functioning" of the inner.

¹¹⁴ For example, as Rosi Braidotti (2006:33) astutely notes: “The predicament of the impending catastrophe that used to be represented by the nuclear threat nowadays has shifted to the imminent threat of ecological disaster, genetic mutation or immunity breakdown.”

In defining the term “hypermodernity” – Varga (2005:209, 228) explains that it represents a period when natural bodily functions are increasingly substituted or enhanced by technological processes and materials, as new technologies inspire increasingly intrusive manipulations of the body.¹¹⁵ Certainly there are an increasing number of technologies that help to facilitate self scrutiny and self modification (Powell 1996), further altering the limits of the body as the intermingling of body and technology is increasingly perceived of as messy, complex, and inevitable (Haraway 1991). Ward (2001:189) concludes:

The limits of the body have been altered by new technology, and it is no longer appropriate to regard the body as an organic entity, or indeed a phenomena that has largely been constructed by scientific and medical discourses. In this instance the technology plays a role in creating a body that is better understood within a culture of techno-science; there is a move away from the organic towards the prosthetic.

As articulated by Synnott (1993:30): “How we perceive the body is a function of our level of technology...it is a function of how we value technology,” and with an expanding selection of technologies enabling us to penetrate the skin, and developments in science increasingly focused on the cellular and molecular body, the future promise of genetic intervention and present practice of bodily manipulation comes to the fore,¹¹⁶ with products like the M2A camera, approved by the FDA in 2001, consumed like a

¹¹⁵ In doing research for this dissertation, I explored the origin of common body-inspired phrases like, for example, “garbage in, garbage out,” and I discovered that this phrase reveals the play between the body and the machine as it is sometimes used as a justification for nutritious eating, yet it originates in the field of computer science, abbreviated GIGO, as a warning that incorrect input data will yield incorrect output data. The coining of the term is sometimes credited to IBM instructor George Fuechsel.

¹¹⁶ “A Longer, Better Life” by Sara Davidson, published in the New York Times, May 6, 2007, “We are looking at genes, because ...everything starts with genetics. Genetics is a key that opens a door that you can walk through, and now you can see: here's what we should be studying. Anti-aging genes like sirtuins carry the blueprint for proteins that might be able to ameliorate the cellular damage that accumulates with aging, like oxidation of molecules in cells. The next step, which is a difficult one, would be to develop drugs that stimulate the sirtuins, bolstering the repair of damage in cells. But I'm optimistic that can be achieved” (Guarente, May 7, 2007).

tablet, and used to take multiple color pictures each second, collecting thousands of pictures in its journey from the mouth to excretion. The miniaturization of microchips enables technologies to be placed into the human body which further inspires human/machine integration (Graham 2002) as we witness what Manovich (2006:215) refers to as “the birth of neurotechnology -- complete computers that will be the size of neurons and that potentially one day can be implanted under the skull or into tiny neural network circuits that merge with real neural networks.”

An ad that I have been following over the last year which regularly appears in the business section of my local paper features an advertisement for a nearby “anti-aging” medical office. Beckoning readers in bold print with the question “How does this 68-year old doctor have the body of a 30-year-old?” several months ago the ad depicted a brawny, balding, smiling man, shirtless and clad in tight jeans, but only recently, the ad design has changed to show the same smiling person, but to depict only a small portion of his naked torso, with the majority of the picture revealing a technologically enhanced skeletal image that presumably depicts the “healthy 30-something” inner body of this “68-year old doctor.”

Falk (1994:xii) notes that “the transformation of medical technology in recent years has made possible the construction of the human body as a personal project” which may entail the use of cosmetic surgery, organ transplants, transsexual surgery, dieting regimes, health farms, sports science and nutritional science. Technology serves to restructure our bodies in many different ways, for example, while hair implants aim to get rid of baldness, teeth bleaching eliminates the wear of time-stained teeth, just as joint

replacement and organ transplant surgeries become increasingly commonplace. We use a wide range of technologies to modify our bodily senses; computers, for example, assist us in our interpretation of an enormous variety of life processes that we previously just used our senses to understand (Ackerman 1990). By cross-sectioning frozen human cadavers into 1 millimeter slices, the Visual Human Project, for example, serves to make “...previously impossible investigations of the human body...now feasible” as an array of “new visualization tools” provide us with images of the internal body in multiple dimensions and structures (Maldonado 2003:17). As Joyce (2005:457) explains through her research on MRI technology:

MRI images circulate in a cultural context that links visibility to transparency: no longer mediated representation, they are instead mirror images of the real, providing access to a previously unknowable interiority of the body.

Yet as symbolic interactionists and other social theorists have worked hard to make clear, regardless of the presumed or apparent transparency of technical knowledge, scientific facts, findings, and theories are socially constructed (Clarke and Gerson 1990), and the reading of MRI images, just like other diagnostic procedures of the inner body, are “...the products of people doing things together” (Becker 1986:1) which makes them inherently contingent, negotiated, contradictory, and sociologically relevant. Despite the ways that science and technology strive to depict an objective natural world, such pursuits are rife with “tacit assumptions about reality...shot through with social interests” (Brodwin 2000:3).

Interviewee Reflections on the Inner Body

Turning to my conversations with 44 people engaged in body regimens associated with potentially altering bodily aging and even extending bodily life, discussion about the internal body was commonplace throughout our conversations. Recognizing the important role that language plays in how people understand and are understood (Lakoff 1989), I engaged in thematic content analysis to explore the ways that my interviewees talk about their inner bodies through a shared “idioculture”¹¹⁷ (Fine 2002), in an effort to document the ways people are conceptualizing, and experiencing their bodies, and more specifically, the interior of their bodies, to gain insights into the ways they make the absent or invisible, present and observable.

For some, engagement in a particular body regimen was an educational process with the inner body as classroom. As one interviewee enthusiastically explained when talking about the personal effects of her body regimen, “I never realized that there are so many things going on inside of me!” [Female, CR, 4/5]. Another interviewee described broccoli as a “wonder food” that was “brushing the innards” of his body [Male, CR, 4/5] while a woman talking about the importance of her engagement in steam bathing as part of her anti-aging regimen, explained “...it cleanses way down into my innards, you know, so, it is a wonderful thing!” [Female, AA, 60+]. Other respondents articulated the ways that thinking about the inner body helps to motivate engagement in body regimen careers, while alleviating pressing societal concerns about outer appearance:

The only thing that keeps me doing what I do, is that I try to visualize the things that are going on inside of me, and I try to look at that rather than, anymore than, focusing on

¹¹⁷ Fine (2002:233) defines idioculture as a “...system of knowledge, beliefs, behaviors, and customs shared by members of an interacting group to which members can refer and which they can employ as the basis of further interaction.”

the way that everything looks. I try to take care of all the things that I can't see.
[Female, AA, 4/5]

I don't have any focus on keeping my outer appearance more youthful, most because I believe that as long as I am getting the nutrients and everything that I need, that that will take care of itself... You know, as long as I am getting everything I need, I won't really need to focus on outer appearance. [Female, CR, 2/3]

An understanding of the inner body may be regarded as the expertise of “alternative” medical care providers. For example, talking about her journey away from mainstream medicine, one interviewee, engaged in anti-aging medicine, felt particular excitement about her doctor's perceived knowledge of the inner body. She recounts:

I remember the first day that I met the doctor, he was so excited, he would meet with you and he would say, “I am going to put everything I say on a tape and give it to you.” Can you imagine physicians doing that? And he'd draw pictures, *this is what is going on in your body*, he was so excited, and he's spend maybe an hour telling you what you needed to do, he'd say, this is what is happening to you, and he'd put you on the course, an extensive diet, meditation...[Female, AA, 4/5]

So how do people engaged in body regimen careers associated with the “healthy life extension community” conceptualize the inner body? What do they imagine when they think about what is “going on” inside their bodies? What types of words and metaphors do they use to describe the body? How do they understand, monitor, and take care of, as another interviewee describes, the “things” they can't see? And to what “things” is this interviewee actually referring? As Davis (2005:54) suggests, even those who have an interest in the material body rarely go “inside” to explore the flesh and blood of organs, glands, and capillaries, since the interest tends to settle on the cultural imprint on bodily surfaces. This portion of the chapter proceeds with an overview of four different areas of interest related to the inner body that arose during my conversations. The first involves what “things” people talk about as comprising their inner body –

namely, blood, organs and cells. The second section explores the words and metaphors people use to describe their bodies, the third section considers the ways people strive to make the inner body more transparent through the use of technology, and the fourth section documents how this transparency is often clouded by contradictions and confusion.

Blood – the more “alive” the better

What’s inside a body? More bodies. Body wholes, body parts, body fluids. We are already inside-out but we don’t yet know it. We still can’t recognize our bodies in ourselves. (Storyboard used in the film “Salt, Saliva, Sperm and Sweat” (Longhurst 2001:11))

From a scientific perspective, blood can be succinctly defined as a mixture of four components -- plasma, red blood cells, white blood cells, and platelets. From an interpretive sociological perspective, describing the meaning of blood could take up many pages. Blood has a detailed history in the study of the body, and the ideology of blood is entwined with language, politics, and the economics of difference based around race, class, and age (Synnott 1993). Blood has served to distinguish between people for thousands of years, as some were “hot blooded” and others “cold blooded” in Ancient Greece. Blood has served to signify class differences with “blue bloods” used to refer to wealthy elite (Synnott 1993), and the ideology of blood purity was sometimes used to justify racist political ideologies like Nazism.

While most of the discussion around blood among my interviewees tended to focus on the use of blood tests, since, as noted by Romanyshyn (1989:184) “We live in a diagnostic age and to diagnose something is literally to know something through seeing

it.” Several respondents talked about gaining a deeper understanding of blood through medical providers. For example, talking about the way her “alternative” doctor looks at her blood, one respondent explains:

It’s [blood] under a high powered microscope and it goes up onto a big screen and he points out the things to you, you know, he will say, “now see, your red blood cells here are really clumping, you know, they are too sluggish, your blood is not alive enough,” you know, and then he’ll say, “these little white things here, this is some yeast going on,” so he shows you right there, what is going on, so see, just through the years when you go to people like that or you are connected to people, you learn a lot about all these things...From the blood samples, my doctor can tell if you have got a yeast situation in your body, like candida, which he said, can make a person tired all the time. He can tell from the dried blood sample, what is going on in your liver, or if you have parasites, or, you know, he can tell from your blood if you have exhausted your adrenals...[Female, AA, 4/5]

Throughout our conversation, this interviewee repeatedly refers to blood as “alive” and “sluggish” –terms she uses to understand and explain how she is feeling on a given day.

Others recount similar stories of awakening when becoming educated about the internal body and blood:

I read [name of book and author] ... and it was so inspiring to me, I mean, he was a little fanatical and I recognized that, but it turned me on to herbal medicine and cleansing, because a lot of what he talked about was...impurities in the blood, congestion in the colon, I mean, it was so cut and dry and simple with him, and I knew it was true...[and] I have done a lot of work... on you know, getting my blood clean and my organs clean...[Female, FR, 4/5]

Some respondents even connected discussions about the effects of their particular body regimens to blood. For example, consider the following interview excerpts:

There are a lot of physiological things that they say that it [body regimen] does. I mean, it helps your digestion, I think it releases hormones, keeps your stress level down, I think, chemically, there are a lot of things that it does. Really, it probably affects your insulin release into your blood stream. [Female, FR, 2/3]

I’ve taken supplements for so long that it is difficult to see how they make me feel different but I think I know they are having an effect because of my blood tests...things that I have changed have had such a dramatic effect on my blood chemistry and so that is how I determine what works. [Female, FR, 60+]

While other respondents make the link between a particular body regimen, blood, and bodily aging. For example, when describing the ways he felt his particular body regimen influenced his own bodily aging, consider the words of the following interviewee:

I think, you know, health wise, like blood work, you know, keeping the arteries clean, to how you look, how you feel, your outlook. I really do think about how it is not just the physical aspect, it is also the mental and emotional aspects... even before I got into healthy eating, even with just the exercise alone, I think that that affects your aging and your outlook. [Male, FR, 4/5]

Other respondents make similar connections between a particular body regimen, blood, and bodily aging. Here are some examples:

When you are upside down and you are reversing gravity, that is a huge contributor to...slowing down the aging process...the king of all asanas, is the head stand, for that reason, it is the king of all asanas, asanas being a posture, a pose, and your feet are up here and your head hangs here and you completely reverse the way that the blood travels in the body, plus the fact that the blood is going, I mean, flooding, rushing, when you are upside down, to your heart and your head, and you are giving it irrigation through blood and oxygen, in this area of the body that, you don't get any other way, so, I mean, there have been reports of people that even just take an ironing board and lean it up against a piece of furniture and lay with their head down here for ten minutes a day and do nothing else besides that and look 20 years less than their actual chronological age. [Female, FR, 4/5]

I've actually been a witness to so many situations over the years...I have kind of noticed that...people that had massages, it was almost like they didn't age. It was like you could take 10 or 15 years off of them. Just through massage therapy, they were more flexible, they had fewer illnesses, because of course it helps with the circulation, which red blood cells have a tendency to be kind of sluggish, and so the effleurage of massage, actually just pushes them away from the walls of the veins, and of course the red blood cells are what carry the nutrition and oxygen to all of your cells, and they just have the tendency to be kind of sluggish so that is one thing that massage does, it just kind of pushes them and keeps them going along their way, so, you know, in turn your body is getting the nutrition and the oxygen that it needs. Its good for cells and massage is good for toning and firming skin. [Female, AA, 4/5]

The above respondent raises another important topic that came up as people described aspects of their inner bodies, and that involves what I refer to as “organ talk.”

Organ talk -- Organs in Need of “Love,” Cleaning, and Protection

Defined in an online medical dictionary as “...a relatively independent part of the body that carries out one or more special functions,¹¹⁸” a couple of people talked in general terms about their “organs.” For example, one interviewee explained that when thinking about the effects of her body regimen career on her body, she thought that it was like giving her organs “love” – “my organs are happy with the exercise. It is a way of rewarding my organs,” [Female, FR, 4/5], while another respondent expressed concern about the potential deleterious effects of her body regimen, on her organs, if she restricts calories too low:

If I do get under 1,000 calories I’ll make sure I’ll eat something extra, because the last thing I’ll do is put myself in starvation mode, and have my body draw from the more important organs that I have... I’ve read up on that, that being one of my bigger fears, some of your organs do start to shut down, because your body goes into starvation mode, and it is trying to do as little as it possibly can, that way the calories that are coming in, it can, you know, use those, and I just simply don’t want that to happen, and usually your bone mass, your muscle mass, are the things that start going first, then your organs, you know, organ failure, it terrifies me to think that something like that might happen to me. You know, I am sitting here trying to focus on getting all the nutrients and energy my body really needs, and I don’t want it shutting down because I have missed something. [Female, CR, 2/3]

Cleaning organs was also a theme, and sometimes people engaged in various organ detoxification practices in order to do this. One respondent recounted how she created her own version of a “personal steamer” in order to “steam out...contamination.” She explains: “It cleanses way down into my innards. You know? So it is a wonderful thing...the toxins start coming out of my pores in such heavy amounts...it is a very thick amount of toxicity” [Female, AA, 60+]. Others talked about drinking detoxification teas

¹¹⁸ Retrieved on April 10, 2008, from <http://www.medterms.com/script/main/art.asp?articlekey=21288>

which target specific organs. Talking about the toxins in the organs, two interviewees explain:

We've got plumbing and there are a lot of vital organs that are in that plumbing and they get congested with toxins and mucus and I mean, we are loaded with parasites, we are, and I can tell you first hand, we are, because I have done cleansing for years and years and years... I was told by a practitioner who does this saliva...she said, "take this product, because you have tape worms," and I thought, "I'll take it but, I've got her this time, she is wrong this time," and I went to check this product out and the clerk said, "oh, you are in for a surprise." I took this product and you should have seen what came out of me! [Female, FR, 4/5]

My diet and nutrition has probably got too much crap in it, so that will pummel your thyroid, right there, just the fat soluble toxins actually go into your fat reserves...and release all this toxic crap...it just poisons your system so that your body slows down the metabolism so that it can minimize the damage that all this poison is doing to you. Certain herbal factors can help detoxify your body...I have done some of those. [Male, AA, 4/5]

I try to do cleanses, which is also stuff that I have read that are very good for you, tablets or tea...it regulates you. There is a lot, you know, with opening all of your intestinal tracks, you get rid of all those toxins, you know, detox your body... You need to clean everything out to make sure your body is getting the nutrients from that and the foods you eat. [Male, FR, 2/3]

The supplements that I am taking at the moment are a combination of stuff that...I have heard maybe have a particular application, like I am taking milk thistle and it is a liver de-toxer. [Female, FR, 2/3]

While people do mention other organs, the heart, kidneys, the liver, gallbladder, appendix, and skin, most respondents that discuss organs in relation to their particular body regimens, focus attention on a specific organ, typically the brain.¹¹⁹ Perhaps this is not surprising given that, as noted by Joyce and Williamson (2003), the diagnosis of death in the U.S. underwent a shift during the 1970s from a focus on the heart, to a focus on the brain. The brain is now the organ that is perceived as the last line of defense

¹¹⁹ Researchers work to identify ways that brains are similar and different and this includes identifying apparent brain-based gender differences. For example, in a 1998 study published in the Archives of Neurology, "brain shrinkage," which is said to happen "with age," is found to be more commonplace in men than in women. Retrieved on June 10, 2008, from <http://www.sciencedaily.com/releases/1998/02/980219061407.htm>.

separating this world from the next. In one of the online groups that I participate in which discusses issues related to life extension, the brain is the site of great interest – believed by many to be that which distinguishes the life span of, for example, humans, from rats, who live just two to three years. In the words of one prominent biogerontologist, “the brain is the last frontier.”¹²⁰

I would also suggest that the Alzheimer Association’s national campaign focused on “brain health,” combined with public health initiatives which talk about “exercising the brain,”¹²¹ and “brain fitness,” also serve to inspire heightened concern and awareness about this bodily organ. A number of people talk about perceived risks to their brains. For example, one interviewee engaged in CR recounts that she does not want to be on pain medication largely because of how it “affects” her brain. At another point in the interview, this same interviewee explained her desire to stop drinking alcohol due to her perceptions of the way alcohol influences her brain. Consider some of the ways that interviewees talk about their brain in relation to their body regimens.

I have been on and off the raw juice program...and it makes a huge difference. You feel better, you are healthier, your skin is better, you have more energy, your brain is sharper...[Male, AA, 60+]

I actually think it [body regimen] makes my brain buzzing, you know, much more excited about everything...By the afternoon, I’ll do the one hour walk and my brain is zooming. [Female, CR, 4/5]

I take a supplement ...that is supposed to prevent the destruction of a certain part of the brain...I think this part of your brain dies 13 percent after age 45. It doesn’t start real early, it starts at age 45, and if you can slow that down, apparently, it really extends your lifespan. All the research that they have done...shows that when this area of the brain has dropped below a certain percent, you die no matter how good the rest of your health is. [Female, AA, 4/5]

¹²⁰ Online newsgroup communication on April 11, 2008, from GRG list.

¹²¹ Retrieved on April 9, 2008, from <http://www.cdh.org/News.aspx?id=120734>.

I use my brain a lot so it keeps it sharp, just through use, and all the extra nutrients that I am taking help keep the deterioration minimized in your brain cells and I take substances that actually, like some herbal substances that are supposed to actually help. [Male, AA, 4/5]

I know a lot of people do cross word puzzles and stuff like that, but I don't because I feel like my job is challenging, everyday, its like we are getting new computer systems and learning new things in that way, but, I feel like my brain remains active and I don't feel like I have to sit and do cross word puzzles, you know, I mean, I like to read. Every day I like to read, so I feel like I keep up. My brain is active enough. [Female, FR, 4/5]

Cells – Keep them Clean and Protected
I like nonsense. It wakes up the brain cells. -Dr. Seuss

Sometimes referred to as the “building block of life” (Maton et al. 1997), and described in scientific discourse as the functional and structural unit of living organisms, the cell is considered the smallest unit of a living organism. Derived from the Latin word, *cellula*, translated to mean a small room, the word “cell” was first used by Renaissance scientist Robert Hooke, when he likened the cork cells which he viewed through a microscope to the small and barren rooms in which monks lived.¹²²

Cellular theories of aging have become of heightened interest in recent decades and a number of interviewees talked about their bodily cells when discussing the effects of their particular body regimen. Explaining what she perceives to be one of the favorable effects of her regimen, one interviewee explains “...it balances your sodium potassium level at the *cellular level*...” While another elaborates, “...when you do the intermittent fasting...you are *recycling your cells* and building new ones...” One interviewee describes the “junk that accumulates in the cells,” and he regards his practice

¹²² Retrieved on March 11, 2008, from <http://kmoddl.library.cornell.edu/biographies/Hooke/>

of CRON as “cleaning up” his cells, while another interviewee utilizing anti-aging medicine explains the importance of “high quality protein” in his body regimen since it is “key to all cell repair.” One respondent describes CRON as a regimen which allows “...your cells to rest...,” while another engaged in a fitness regimen explains that she takes various supplements and vitamins “...for generating new cells.” Finally, as one interviewee warns: “If you don’t nourish your cells, they are not going to work properly” [Female, CR, 60+].

Describing the powerful experience of seeing scientific images of bodily cells, another interviewee explains how he felt more inspired to engage in his body regimen career. He elaborates:

I saw the most beautiful graphics that showed at molecular levels what were healthy cells and what was the role of the Sirt T to protect, if you were healthy, how the cells were supposed to be interacting, and it looked so beautiful that, somehow, because I am graphically oriented... it just clicked. [Male, CR, 4/5]

Seeing this graphic depiction led this interviewee start to think more seriously and consistently about how the things he consumed altered his inner body. He explains, “If I wasn’t doing CR, I wouldn’t be that attentive to my body, knowing internally what is going on in the body.” Recalling another image of the internal body that he found motivating, this same respondent states how much he enjoyed seeing what he describes as “...a beautiful animation about how our cells interact.” Recounting his perceptions of this animation, this interviewee explains:

Basically it just shows how food gets into the system and how the cells interact, its absolutely beautiful, it just looks like, well I don’t know, it looks like, hmmm, what’s that, what proceeds the butterfly, the worm, and all that, moving around and connecting and all that, but...that visually helped me understand free radicals and the protection of our cells through proper nutrition, and the slowing down of aging. [Male, CR, 4/5]

Similar to the above quote, other interviewees talked about “free radicals,” a term that has become increasingly popular in the mass media. Free radicals are atoms with an unpaired number of electrons, oftentimes recognized for the damage they can do when they interact with essential components of cells. Marketers tout the benefits of antioxidants, which are thought to counteract the effects of free-radicals. One interviewee, for example, describes free radicals as “...damaged cells damaging other things in your body. You know, just wreaking havoc, really...” [Female, CR, 2/3] and, using similar language of internal battle, another describes them as “...oxygen cells that attack different cells...” [Female, FR, 60+].

Some interviewees discussed cells when talking about the process of bodily aging. One respondent explains that the aging process “...is making your cells less sufficient at doing their job” [Male, AA, 4/5] while another respondent elaborates:

Genes are constantly helping your body renew itself, but these messages, and everything, cell messages start to get garbled and they start to screw up as you start to get older. [Female, CR, 4/5]

Concluding with what may sound like an esoteric, but certainly spiritually inspired poetic explanation of the importance of bodily cells, in the words of one respondent:

I think that, we are really dull when we are not alive, you know, so the more alive you are, from what you, you know, its all cells, as far as our human body, its all cells, and so, the cells are basically light, every single cell is like an entire universe. And so you know, we just want to be the most radiant little vehicle that we can be for this expression of this consciousness, this awareness. It's all about being this mind of awareness. I mean, spiritually, we are like cells in a big, large body, I mean, we are the microcosm, and we are doing our little personal tasks but we are part of the whole. [Female, FR, 4/5]

While insights from this sample certainly cannot be generalized, I do think that my data reveals some interesting ways that people are thinking about all that comprises the body within. Another interesting angle from which to explore the ways people think about their bodies, and particularly the inner body, includes a consideration of the language people used when talking about the body.

Talking about the Body

When thinking about the ways that people talk about their bodies, during the enlightenment, the human as machine metaphor captivated the 17th century imagination as philosophers like Descartes and Hobbes both regarded the body as a machine that gets run down, breaks, and eventually dies (Boyle and Morriss 1987:89). Yet as Descartes asserted, opening his *Treatise of Man*, “I assume their body to be but a statue, an earthen machine...” (Watson 2000:45), since bodily processes are governed by the laws of mechanics, once the disease of the body is realized, just like broken clocks, broken bodies could be fixed (Boyle and Morris 1987:95). Applying mechanical physiology to all life (Rossi 2000), the enlightenment body was likened to a machine as a compilation of “pistons, levers and cogs,” and by the late nineteenth century, the body-as-machine was re-conceptualized as a motor (Armstrong 1998:78). By 1910, as Armstrong (1998) explains, the body could be explored by a range of technologies, including the stethoscope, ophthalmoscope, laryngoscope, x-ray and speculum. The dominant image of the body as a machine, constructed during the machine age of industrialization, was at the foundation of medical practice from the early 20th century (Martin 1989).

In his book *Consilience*, sociobiologist E. O. Wilson (1998:30,91) repeatedly refers to the person/machine: “People, after all, are just extremely complicated machines....an organism is a machine,” and as poet and philosopher Wendell Berry (2000:6) further articulates:

Our language, where it is used, is now almost invariably conditioned by the assumption that fleshly bodies are machines full of mechanisms, fully compatible with the mechanisms of medicine, industry, and commerce; and that minds are computers fully compatible with electronic technology.

Making this connection between language and the body-as-machine, Featherstone (1991:182) suggests that terms like bodily “maintenance” reveal the link between the body and the machine metaphor.

Like cars and other consumer goods, bodies require servicing, regular care and attention to preserve maximum efficiency. As the consumption of goods increases, the time required for care and maintenance increases, and the same instrumental rational orientation adopted towards goods is turned inwards onto the body.”

Scientists interested in the biology of aging also use “maintenance” metaphors which depict the body as a machine, with, for example, a discussion of a “biological warranty period,” (Olshansky, Carnes and Butler 2001:1), when referring to human longevity, not unlike the warranty periods that cover cars through a set duration of time and/or miles.

Detailing this body-as-machine through time, Armstrong (1998:81) notes that that human body has often served as a model for technological developments with particular emphasis on the ways technology (e.g. telephone, typewriter, washing machine, blender, lawn mower, car) improves the “deficient body.” The human body as machine may perhaps be best exemplified by the “robot,” a term first coined by Karel Capek in 1917, from a Czech word which means servitude or obligatory work (Reichardt 1978).

In her research on childbirth, Martin (1989) reveals the ways that mechanistic bodily metaphors have been used by medicine to dehumanize bodily processes, specifically those experienced by women, while Loe's (2004:91) research on Viagra shows the way that the male body has been depicted as a "technologically enhanced machine" which may be simultaneously "hurtful and helpful." Regarding technologies as "extensions of the body," McLuhan (1994) optimistically documents the ways that he regards such extensions to supplement what he defines as bodily limitations.

In the 21st century, the language of computer system takes precedence (Holstein and Gubrium 2003) as we turn to the terminology of the computer (e.g. hard drives, high speed processors, system crashes) to create and express who we are (Sternberg 1990). As Glassner (1990:223-224), in his extensive research on participation in fitness and health movements, suggests:

When germ theory held sway, people pictured their bodies as occupied by miniature invaders, but our current entrancement with computers has us envisioning our bodies occupied by tiny information units. From biotechnology, we've received the idea that the body houses trillions of bits of genetic information, available in principle for resplicing, and precoded to produce future cancers, heart disease, or mental illness...Not merely a well oiled machine (as modernists understood it), the fit body-cum-self is an information processing machine, a machine that can correct and guide itself by means of an internal expert system. When information from the medical and psychological sciences is received...the self-qua-information processes is able to use that information to change its own behavior for the better. It may change its exercise protocol, for instance, or reduce its exposure to stress, or consume more fish oil.

The computer is simultaneously revolutionizing both our immaterial lives through electronic interconnection just as "...it is irretrievably altering our material lives..." (Dery 1998:7). While it could certainly be argued that computer technology aids the deficient body, offering, for example, greater efficiency, control and speed, such technology has also served the dream of bodily escape. For example, in J.D. Bernal's

The World, the Flesh and the Devil (1920), the possibility of abandoning the aging body is imagined, and the brain becomes an organ capable of self-repairing (Armstrong 1998).

In the words of Woodward (2002:113):

One of the main utopian discourses arising out of the development of computer communication is the potential it offers for people to escape the body, especially the constraints of a body which is marked by race, age, gender and corporeal needs, such as eating and sleeping.

In her widely recognized *Cyborg Manifesto*, Donna Haraway (1991) suggests that humans have become cyborgs which she regards as a blending between natural organism and machine. Haraway (1991:10) explains that “late twentieth century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self developing and externally designed, and many other distinctions that used to apply to organisms and machines.”

This tendency to depict increasingly blurred bounds between the human/machine divide, and to talk about the body using the language of machines, typically computers, sometimes cars, was commonplace throughout my conversations. For some, it was in terms of the “programmed body”:

I have given up junk food. *I have reprogrammed* my body to crave other things and I do not even miss junk food. The idea of going out now and buying a McDonald’s hamburger doesn’t even appeal to me. [Male, CR, 60+]

Do we really want to start *programming* that part of our brain? [Female, CR, 2/3]

I think that *we are programmed* at the end of life to want to live longer, you know, it’s like some kind of hypnotic spell we are under, naturally, and we do everything that we can to live as long as we can, and that is natural. [Male, AA, 60+]

I think *we are programmed* to live a maximum lifespan... Based on what I have read, we are programmed to live approximately 120 years if we have ideal health and good nutrition and exercise, and there are a number of things that determine that age

clock...I think we are *biologically programmed* to die at a certain time and it comes in stages [Female, AA, 4/5]

System-Talk

Similar to Martin's (1994) research on perceptions of immunity and health, respondents in my study talked at length about the body as a "system," typically using just the general term "system," although sometimes identifying multiple systems, with the most common being the immune system. Three themes arose within the "system talk" about the body – the broken system, the system in need of cleaning, and the effects of one's body regimen on one's system.

The Broken System

The broken system, or system that is down, was seen by interviewees as a sign of concern, since it was thought to hinder the body's overall wellbeing and functioning.

Examples of this perspective include the following quotes:

I am a woman of fertile age and yet this thing is not working properly, so it is kind of like *a system that is down*, so there is just that overarching concern that things are not functioning the way that they are meant to...I thought well maybe this is an indicator that something else is broken. [Female, FR, 2/3]

I had a bad episode with alcohol, and the next day I was very ill...and then I quickly proceeded to catch the cold that my two sisters had been passing back and forth for the last month and a half, which I believe is because I got myself sick with alcohol, and then that brought my *immune system down*, which caught me the cold, which I am now building back up. [Female, CR, 2/3]

I think that if your *endocrine system* is working then you shouldn't have all the [menopausal] symptoms, that is what I think. [Female, FR, 4/5]

Stress knocked *my system* off kilter [Male, AA, 2/3]

The holistic doctor said that I have leaky gut, where the toxins just leak out into your *system* and they are absorbed and then your *autoimmune system* then goes into an attack mode and that is what causes all of the fatigue and the pain and the stiffness and, and

then with metabolism being only at 80 percent, I am pushing harder, which of course, makes it even harder, still, for me to function. I have functioned reasonably well... I don't know why but finally *I guess my system caved in*...[Female, AA, 60+]

The Toxic System – The Toxic Machine

Respondents typically referred to the “toxic system” as something to be guarded against. As noted earlier in the section about organs, a number of people recounted doing detoxification regimens and cleansers in an effort to get out what they perceived to be internal bodily toxins, “viruses,” and “bugs.” Consider some of the following responses:

One of the ways is bacteria and stuff that live in *your system* is to attach themselves to your artery walls and if you are not getting the proper nutrition so that your *immune system* can handle that bacterial load and get rid of it, it will...will start damaging the interior of your arteries and your body's response to that is to create inflammation to try to deal with it but the inflammation, at the same time, is damaging, if it is unchecked. It can stuff to develop underneath the blood vessel walls which can create lumps that block the arteries and when that happens, you can start getting clots. It causes strokes and heart attacks that a lot of people gotta watch out for. [Male, AA, 60+]

If you try to go off the CR diet, you just know too much. [laughter] You know, you just know too much. It's a, you think, damned, I have to fast tomorrow to get all of this shit *out of my system*. [Male, CR, 4/5]

Effects of “Techniques of the Body” on the System

Some people talked about deleterious effects of various practices on their bodies, while many talked about the positive effects of their particular body regimens. Here are some examples of the ways people perceived their body regimens to impact their internal bodily “system.”

I am completely depleting my system, day after day after day after day, for 20 years, you can't drink enough water to put back that water in your body [Female, FR, 4/5]

I'm kind of the type of person that is kind of always *tweaking my system*, you know, always experimenting, always trying to learn more...[Male, FR, 2/3]

I think a lot of times if I am coming down with something and I take that time for exercise, I am able to get whatever is in my *system* out, and I ended up avoiding illness, so in my opinion, there are many, many benefits. [Female, FR, 4/5]

I drink tea, too...a liver detox type of thing [because of] that feeling that I should try to *keep my system clean*...I am kind of fascinated by the short term kind of detox things...You have to be very gradual going back into your eating habits, like you can't just kind of bounce right back, because it would be kind of a *shock on your system*. [Female, FR, 2/3]

I have done a lot of home work on getting my blood clean and my organs clean and everything is just like, ding, ding, ding, ding, ding...you have these glands, your pituitary and pineal, thyroid and thymus, your ovaries, all these things have to be, you know... the signals come from your nervous *system* in your brain...[Female, FR, 4/5]

When you are overweight, it puts so much stress on many different systems, like the *systems* trying to clean your toxins, or putting stress on your heart...[Female, CR, 2/3]

Other examples of the body-machine as computer include reference to the brain as “the monitor,” efforts to “burn” information into one’s memory, and ways of reacting as “screens” and “wiring” issues. In the words of some of my interviewees:

The first thing that comes in the brain, you know, *the monitor*. If I saw myself getting to 125 pounds or lower, then I mean, there, the family voices in my head come up and I know they would be screaming at me when they would see me....[Male, CR, 4/5]

Those are on the *radar screen* [Male, CR, talking about health risks of concern]

I always say that *my first screen* is emotional, like, that *my screen* to yoga is emotion, “oh, I can’t do this,” “oh, this is too hot,” ...and that is the way I understand the world, first, through the emotional, good or bad, that is the way *that I think I am wired*...” [Female, AA, 4/5]

One of my children has dimorphism where she mixes it on the way out and that is a *wiring issue*. [Female, CR, 2/3]

[Talking about how he researches his body regimen] I’ll order the books and then I can highlight my books and go over and over them again, so that the information is really *burned into my memory*...that is just how I operate. [Male, AA, 4/5]

Body as Car

While most respondents used the language of computer technology when talking about their bodies, as also discussed in chapter 6, some respondents relied on the car

metaphor for the body. For example, one interviewee with an interest in cryonics as a means towards life extension explained that she would prefer not to be among the first people experimentally rejuvenated. Using the analogy of a car, this respondent explains, “I mean, I bought a jeep grand Cherokee the first year it came out, and oh, it was a lemon. I went to the shop 13 times in 12 months. I am just not sure if I want to be the first [to have ‘a biological robot body’].” A number of respondents referred to their bodily need for “fuel,” and body-as-car examples included mention of “running on automatic.” Examples of the connections drawn between the body and the car include the following:

I am real careful about *refueling*...I am real conscious of making sure that I am eating enough, because, you can't do that [fitness regimen] with no food, you know? [Female, FR, 4/5]

I can look at something and be like, “well that's great and all but that is not really optimally nutritious, you know, I really need *to fuel* my body.” [Female, CR, 2/3]

When I am with people who practice healthier lifestyles, they will never bring it up, if I am with people who have difficulties with their lifestyles and with health, they are more likely to bring it up...and if I see a problem that they need to take care of, they are like, “well, I don't think it is a big problem. I think that the problem will get better by itself next year when I am not under stress,” and I'm like, “*do you have a gas car that will drive on its own?*” [Male, AA, 2/3]

You need oxygen to live, but oxygen burns inside our body and sugar burns, you know, it is what we burn *for fuel*, and then oxygen is like a catalyst. [Female, AA, 4/5]

[Talking about what it is like to start on his body regimen career] It's just changing a pattern you've had for your whole life and you've got to consciously, instead of just *running on automatic*, getting in there and doing what you have done for your whole life, you have got to start thinking about, I need to take this now, and not take that...its like tinkering with a car, you make certain adjustments. Is the car running better? Yeah, alright, you are successful! [Male, AA, 4/5]

Body as Machinethat Sometimes Falls Apart

People engaged in body regimens implicated in potentially altering the effects of bodily aging pay a considerable amount of attention to their bodies, and perhaps

particularly to their inner bodies, where it is thought that the processes propelling bodily aging are at play. And, as noted elsewhere in this dissertation, this “attention” typically entails what might even be described as a heightened awareness of, and sensitivity to, the body’s frailties. Consider, for example, the following interviewee excerpts:

I think, again, a lot of it [bodily aging] is self inflicted, you know, we are not very good at taking care of ourselves, and the more stress we have, I think the more taxing it is on the body. *A machine can only last for so long until it starts to fall apart.* [Female, CR, 4/5]

I have a wonderful friend, bless his heart..., and he is about, maybe ten years older than me, and ...he is in reasonably good health, but he has this saying, “*the older the machinery, the higher the maintenance costs,*” and he keeps reminding me, that “your no spring chicken anymore, you are going to feel some aches and pains,” but I know what is normal and what is not normal. [Female, AA, 60+]

I promote intentional wellness. I don’t get sick. I really don’t. I don’t even get colds. Except for that period when I was diagnosed, all of a sudden my *body just started falling apart*, that one period things went wrong...[Female, CR, 4/5]

I have an Achilles issue, but I bike, and I’ve been trying to play tennis again, I mean, I am doing something, and it is not an extended period of time. I mean, I think the longest I have actually been injured might be six to eight weeks and *you are not going to fall apart* in that amount of time. [Female, FR, 4/5]

I am sitting here trying to focus on getting all the nutrients and energy my body really needs, and I don’t want it *shutting down* because I have missed something. [Female, CR, 2/3]

Body as the Ultimate Machine

Combining awe with a heightened awareness of the body’s potential frailty to describe the body as “the ultimate,” one respondent contrasts the body-machine to a computer, concluding that in the end, the body is much more “miraculous.”

None of it would surprise me, because life itself seems so weird to me. I mean, it just seems so strange to me that we have this body that really is so much like the ultimate, it is like a miraculous machine in many ways, but it’s a miracle. We don’t, look at living tissue, it is such a miracle compared to a computer, for example, [laughs] but it functions according to laws, and rules, and if you break the rules, you break the

machine, but the whole, why should life exist at all, when you start asking these questions its just, its mind-boggling, I mean, I get to a point with myself where anything is possible because life itself is, it just happens, and it seems impossible that there should be life, really. [Female, AA, 4/5]

Efforts to Make the Inner Body More Transparent

At the turn of the 20th century, as noted in the introduction to this chapter, seeing has become the dominant sense, used as the primary means to acquire knowledge (Ewen 1988; Berger 1977). New technologies that change, transform, magnify, or modify our perceptions serve to help construct new understandings of what is and is not real (Virilio 1989). As Latour (1992) suggests, in the late 20th century, bodily functions are delegated to technologies – and this includes technology as machine and tool, as well as “...techniques of quantification, systemization, and routinization” (Lock and Kaufert 1998).¹²³ Computerization, for example, as Clarke and colleagues reveal, (2003:174) “...allows more aspects of life to be scrutinized, quantified, and analyzed for their relationships to health and disease.” Advanced technology has served to heighten perceptions of risk (Joffe 1999), as people are increasingly provided with technologically inspired information and images that bring perceptions of danger to greater consciousness.

Routine dental check-ups incorporate x-ray technology in order to potentially reveal a more comprehensive understanding of one’s mouth, while millimeter wave scanners (or whole body imaging devices), which make clothing and other organic bodily materials translucent, are increasingly used for airport security screenings. A wide range

¹²³ As Lock and Kaufert (1998:21) proceed to elucidate, technology is “...in short, the gamut of human effort to manipulate and control what is available to it in order to produce an effect or an end product perceived to be beneficial in some way to individuals and also society.”

of physicians may use magnetic resonance imaging (MRI) or CT scanning to make parts of the invisible body more visible, and in Virilio's (1989) words:

The human body, in particular the inner body, represents perhaps the final site of technological colonization. It comes to be regarded as a kind of motor, harnessed to the technological, the final completion of the human-machine interface, begun in the information regulation, where the subject increasingly interacted with media technologies (as cited in Cooper, 2002:126)

My interviewees recounted numerous ways that they used technologies both as tools in the manipulation of the body¹²⁴ and as measurement devices¹²⁵ to assess the efficacy of their body regimens. Sometimes striving for biological optimization,¹²⁶ people turn to what could be described as technologies for bodily optimization, (which include supplements, vitamins, medicines, scales to weigh bodies and foods, exercise equipment, hand held music devices, pedometers, exceleators, devices to measure body fat, blood pressure, and blood sugar), to gain insights into the workings of the inner body and the resulting effects of their given body regimen careers. For the purposes of this analysis, I will consider three technologies that some of my interviewees reported using in order to guide their personal decisions about consumption, and these will include the dietary tracking software used by many practitioners of CRON, blood tests often used by

¹²⁴ Technology used to heal, replenish, enhance, strengthen, protect, and improve: supplements including nutraceuticals, hormones, nootropics, exercise equipment including weights, treadmills, elliptical machines, rowers, bicycles, and goggles.

¹²⁵ Technology used to measure and assess progress, efficacy, identify areas of strength and areas in need of improvement include devices to measure cholesterol, blood pressure, weight, temperature, foot steps and walking distance, blood sugar, dietary intake, and heart beat.

¹²⁶ It is interesting and perhaps important to consider the ways that the term "optimal" is part of the history of cybernetics, an interdisciplinary field of study combining research in engineering, neuroscience and evolutionary biology, to better understand the development and structure of complex systems, and the processes of control, communication and feedback. While detailing the history of cybernetics, Orr (2006) credits psychiatrist Nathan Kline and computer engineer Manfred Clynes (1960) with a paper titled "Drugs, Space, and Cybernetics: Evolution to Cyborgs," in which they describe a new type of modified human body, a "biologically optimized cyborg," complete with a small capsule which operates like a pump to inject bio-chemicals into the body at a speed similar to the normal biological rate (Orr 2006:169, 305).

those engaged in anti-aging medicine, and the heart monitors used by some interviewees involved in fitness regimens.

Dietary Tracking Software helps Guide Consumption

Dietary tracking software is particularly popular among individuals engaged in CRON. Many use what is referred to as the CRON-O-Meter,¹²⁷ a free dietary tracking software program available for download online, and used by a number of interviewees as part of daily ritual.¹²⁸ By entering one's daily food intake into a computer program, (and typically striving for at least 100% of the USRDA), people turn to dietary software to guide their daily nutritional intake (in terms of things like calories, vitamins, minerals, protein, carbohydrates, and fats). Through the use of these tracking devices, people determine nutritional and caloric "deficiencies" and "excesses." Many use this information to guide them down the grocery store aisles and through the refrigerator. For example, as one interviewee uses software to track all of his nutrition, he explains what he learns from using this technology, stating: "yesterday... even though I only made about 1,500 calories...I almost got all the RDAs... what it tells me is that just from my nutrition alone, I am mostly meeting my dietary goals, at least from the USRDA." Other interviewees expound further about the ways that they use dietary software to determine what, and how much, they should eat.

¹²⁷ Refer to <http://spaz.ca/cronometer/> for more information.

¹²⁸ "We create new rituals with every generation," says artist D. A. Therrien in his "Man in the Machine," (1993:169, as cited in Dery 1996), "There's really no difference between [believing in] multiple gods and believing in multiple sciences or technologies." He elaborates, "We've looked at technology, at least since the industrial revolution and maybe even since Newton, as almost a second religion. Religion is supposed to unify you with a greater whole and technology offers that same utopian vision."

I use dietary software daily... I actually kind of like getting home from work and punching in what I had for lunch and seeing what I still need for dinner, and that sort of thing... mostly, so that I can keep a focus on the nutrients that I am getting, because that is one of my biggest concerns, that I get all of the nutrients that I need, since I am still in my late twenties, I have, you know, a lot of kind of building to go, and I use the chronometer to kind of guide me and if towards the end of the day I am not getting the nutrients that I need, then I start taking my supplements. [Female, CR, 2/3]

Using the software... god, I was just blown away because I thought I had been eating healthy before I went on this program, and then when I used the software, I saw how deficient I was in many nutrients, I was just flabbergasted, I thought, my God, why don't they teach you about this stuff in school! From my using the software so religiously when I first started, it's a self education program, you know, after three months, I tell people, "use it for 100 days," after three months of using that thing religiously, you know how much to eat, and what to eat, and so, if you try to go off the CR diet, you just know too much. [laughter] [Male, CR, 4/5]

I actually use this thing called Fit Day. I just like it better because I can access it from anywhere because I think the Cron-O-Meter, you have to really download onto your computer, and I'm like, I don't, you know, I'm always, I'm on the go, and it is just so awesome to be able to have a computer thing like that now, so I can just enter in what I eat and see if I have all my vitamins. [Female, CR, 4/5]

I thought that I had been eating good, or, you know, better than I had been previously, and its not that I wasn't eating good, but I wasn't eating great. And I think that that is something that a lot of people don't realize, just because you are eating a lot of fruits and vegetables and greens, you know, whatever, doesn't necessarily mean that you are getting everything that you should be, and there are a lot of days where I'll put all my, you know, all the things that I have eaten into Chronometer, but I still don't come out, close enough to where I should be, at all, like right now, for instance, today I am at like 60 percent of my minerals and vitamins, and I only have five hundred calories left, so, I'm going to have to research and you know, see what I have in the cupboard and try to work out that equation, that is something. [Female, CR, 2/3]

When I am back on moderate [CR], doing my nutrition software...I monitor so that I don't drop [weight] too fast... You learn more what foods have what in them [from dietary tracking software], and, you know, by the end of the day, what you might need a little bit more of, its really amazing, because unless you have studied nutrition, you really don't know what is in the foods that you are eating. [Female, CR, 4/5]

Blood Testing tells me what and how many Supplements and Vitamins to Consume

While blood tests were a common diagnostic tool used by many individuals with whom I spoke, to determine, for example, blood cholesterol levels, or excesses and/or

deficiencies of vitamins, minerals, and hormones, such tests were often particularly important to individuals engaged in a body regimen career associated with anti-aging medicine. Individuals that have visited a provider of anti-aging medicine make note of blood tests because they are typically used to detect hormone, and other related deficiencies. Anti-aging doctors, certified through the A4M, are specifically encouraged and trained to look to the blood for answers, (as opposed to, for example, “symptoms”). In the words of one doctor speaking to an audience at an American Academy of Anti-Aging Medicine (A4M) conference:

I’m a doctor, a scientist. Scientist’s measure. They don’t diagnose simply based on symptoms...People are looking at how we are giving these hormones. To protect yourself, measure....We defend ourselves by going by lab work and not symptoms.¹²⁹

My interviewees engaged in anti-aging medicine thought about and talked about blood tests in a number of different ways. For one individual, the results of a particular blood test served as a disruptive “wake-up call” – inspiring him to take action, to make changes in his life.

I was very stressed out. I had my blood work, and my blood sugar was through the roof, fasting. I had high cholesterol, liver enzymes through the roof, testosterone levels were like a 75 year old male, my body was knocked off kilter... [Male, AA, 2/3]

Blood was regarded as a way to detect particular excesses and deficiencies, as a number of respondents explain:

Every one is so different...you might require a high dose [of hormones]. I might require a teeny, tiny dose, so a lot of it is based on your symptoms that you experience plus your blood work. [Female, AA, 4/5]

We did a blood test, and according to the way he [anti-aging doctor] read it, I was on the low side for HGH and on the low side, I wasn’t out of the normal parameters, but on the low side of testosterone, too. [Male, AA, 60+]

¹²⁹ Field Notes, A4M meeting, Chicago, July 15 – 16, 2006

I played with it myself in terms of testosterone, and it makes a tremendous difference when I am on it, but, I actually had my blood tested, and I was real low anyway, so, I could get a doctor to give me a prescription. [Male, AA, 60+]

If you really want to know what you are getting and not getting [in terms of micronutrients], why not get the blood work done, you know, for someone that is diabetic, you find out what your blood sugar is, you find out what medication you need, and you make a better choice of foods, if you have hypertension, high blood pressure, take medication, find out how low it brings you, if it doesn't work, find something that does bring it down, and so, same thing with micronutrients, a one size fits all multi vitamin is not what you need. You can be getting too little. Too much. Completely missing the boat ...If you take a multivitamin you might be getting 24 different things that you don't need, you know? [Male, AA, 2/3]

Without a blood test, they [anti-aging doctor] don't know what your hormone levels are. They don't know what to put into you, or how much. [Female, AA, 2/3]

I had the blood test and he could see what the different levels of hormones were in my body, so, we kind of fooled around with them a little bit, and you know, I was having some frequent hot flashes, so he put me on a supplement called Pregnalone, which is a natural progesterone, and that worked, and when I went in one time I told him that my energy level had been kind of low and we did blood work again and he could tell that my DHEA levels were not high enough for me, so, he put me on a supplement of DHEA. [Female, AA, 4/5]

You have to get all of your [hormone] levels within range, and then they test your blood samples about, when you first start going, every three to six months, to keep you in balance, because your hormones change constantly, and then after you've been on them a while, they go to once a year, unless you are having problems, to see where your levels are....And they tell you that it'll take a couple of weeks for it all to kick in and get in your bloodstream, it was about two and a half weeks. [Female, AA, 4/5]

For other respondents, blood – often in the form of results from blood related testing – may serve as evidence that their body regimen is having the desired effects.

I have excellent blood pressure, excellent heart beat, everything... my blood pressure is brilliant, wonderful, so the small problems I have are easily fixed...[Female, AA, 60+]

All my blood work was good. I am physically healthy, and able to do just about everything! [Male, AA, 4/5]

Finally, blood was also used as a way to guide dietary consumption.

I teeter with the Blood type diet. I'm an O and that is a lot of protein and that is no wheat. I try to avoid the wheat. I think that has been a good thing. I am not there on the dairy, though, they say no dairy, and... we use a lot of butter. [Female, AA, 2/3]

Heart Monitors help me Determine Exertion Level and how much Exercise to Consume

One of the most common technological devices used by those engaged in fitness regimen careers was the heart rate monitor. These devices were used as a way to guide consumption of exercise, and this includes length of exercise and level of physical exertion. Heart rate monitors are devices designed to measure and record heart rate during strenuous exercise. Users are provided with “instant feedback” about the “work level” of the heart and are instructed to stay within certain “zones.” Some people described heart monitors as providing them with guidance and information they otherwise would be unable to obtain. As three respondents explain:

Heart rate monitors are...very good tools...you have got your different zones, your heart rate percentages, and you can pick a zone to maintain. If you are trying to burn fat, you should stay in a lower zone. If you are looking to increase, you want to stay in between this and this, you don't want to go out and sprint, you want to stay at different percentages, and that is all based on your heart rate...so that is why I've used a heart rate monitor in the last four to five years. [Male, FR, 2/3]

I was using a heart rate monitor when I was marathon training. I was mostly using it to keep myself from going above a certain level in a lot of my training runs. It's actually a particular training method, it raises your speed, if you train consistently at a very specific heart rate, and you just keep doing that, over time, at that same heart rate, your pace will increase, and I have used that successfully. [Female, FR, 2/3]

I just got my first heart rate monitor a year ago. I really wanted to use it to see if I was running too fast on my slow days, and I have sort of worked up to believing that it should dominate my training...I am going to start wearing it more often, because I find that I am running too fast, on days that I think I have determined what I've done. I have to start reading it...most of the world trains with them, you should go hard and easy, hard and easy, you know? [Male, FR, 4/5]

Thinking about the Body through the Technologies that Guide Consumption

Dietary tracking software, blood tests, and heart rate monitors were used by various interviewees in an effort to guide their consumption (of food, supplements, and exercise) while engaging in their body regimen careers. Each of these different technologies involves an understanding of certain numbers which provide a baseline or an ideal towards which to strive. People using dietary tracking software, for example, aimed to get at least 100% of the recommended daily allowance (RDA) for vitamins and minerals, while staying under a certain number of calories. Individuals undergoing blood tests were interested in “balancing” and even “optimizing” certain hormones and vitamins, at levels defined by doctors and scientists as “ideal” or “optimal.” Those using heart rate monitors worked to stay within certain heart rate zones, established by exercise physiologists, over set amounts of time while exercising.

Iatromathematics, or the pairing of nature to numbers in relation to the body, has increasingly made the body appear to be quantifiable (Davies 1998:147) as people commonly use numbers in terms of diagnostic measures, (which includes things like blood pressure, pulse rate, body weight, caloric intake, and vitamin and hormone levels), as a sort of shorthand language to talk about, represent, and examine bodies. The standardization of weights and measures, as Willis (1992:9) explains, is portrayed in mass culture as a symbol of quality, signifying a rationalization of scales likened to the increase in productivity and efficiency associated with, for example, Taylorization, with its focus on simplifying production into “rationalized units” (Willis 1992:1).

As scientific discourse is positioned around the ongoing improvement of humans, Powell (2006:29) notes that “human qualities are seen as measurable and calculable and

thereby can be changed and improved.” As the human body becomes increasingly defined by quantifiable measurements (Shilling 2005:123), the body is regarded as a “producer of quantifiable performance.”

Using technologies to guide consumption, individuals repeatedly turned to the language of numbers to decide what, when, how much, and whether to consume. As interviewees using the dietary tracking software daily explain:

I do have certain meals kind of in my head as to what their nutritional content is, for example, there is a salmon teriyaki one for 100 calories, and an entire bag of lettuce is 20 calories, so I know, if I am ever stuck for a meal, I have at least 120 calories with thirty grams of protein, 12 grams of carbs and 3 grams of fat, so that is one of those things that I know if I am going to eat that for lunch, that is what I am eating. [Female, CR, 2/3]

I was...amazed at how something like just a half a cup of cooked kale could make all the numbers [on the dietary tracking software] just fly, something as simple as that... I've always enjoyed growing my own vegetables and stuff but I just didn't know, I mean, yeah, you hear that leafy greens are good for you, but until you actually see the numbers, you are just taking someone else's word for it... I like to see it for myself. [Female, CR, 4/5]

I try to stay within 1300. I noticed that most females do about that, and that seems about right, so I, and because I haven't been doing this for too long, I don't want to like lose weight really fast or anything like that, so I will stay at 1300 now, and then I might go to 1200... I really don't think I could get all my vitamins under like 1100. [Female, CR]

It seems that most of the males that are reporting on the list are eating around 1800 calories which is right at what I eat, so, its kind of odd how that works out to kind of a universal number. [Male, CR, 4/5]

My goal is around 1200 because I find that it is really, really hard to get all of those nutrients on much less than that, and I just need that much to be able to get through...[Female, CR, 2/3]

I still maintain what they call the zone balance of 30% protein, 40% carbohydrates and 30% fat... According to the software for my height and my activity level, I need about 1600 calories a day, so I know I don't have to worry too much about maintaining. I generally hit about 1200 a day. [Female, CR, 2/3]

Finally, talking about the ways that she could be “too restrictive” with herself, another respondent says that the numbers based on the dietary tracking software actually help her to engage in caloric restriction more healthfully. She explains:

Now I know I am doing it healthy, because I can see the numbers. I track it [dietary intake] with nutrition software, so that I know that I am o.k. [Female, CR, 4/5]

Blood tests, which were common place among individuals engaged in all three body regimens, but particularly among those using anti-aging medicine, also inspired “number talk,” although generally speaking, when referring to hormones, my interviewees typically talked in terms of being “higher” or “lower,” rather than in terms of specific numbers. For example, as one respondent explains:

My anti-aging doctor said the testosterone is what everybody is different in. She gave me two implants instead of one because I was so low. I had zilch. And she said, “don’t be alarmed if it doesn’t kick in at all, the first cycle, three to six months, because sometimes people have to have it the second time to really get the levels up to kick in”...mine were so much lower and were depleted for so much longer, it was just going to take more. And she [anti-aging doctor] said, “Once it is in your body, it doesn’t just last for a week or a month, it will last for that whole pellet session.” [Female, AA, 4/5]

One interviewee did engage in “number talk” while talking about his belief in andropause, and his need for testosterone supplementation.

Andropause is definitely an issue but it is not looked at in the big picture, because when you look at the averages [of testosterone], which go from 200 up to 1100 or 1300, if you fall anywhere in that range, you are considered to be fine, well why can’t you be, if you are 300, why can’t you be 600, as long as you are not causing any side effects? It’s common sense, you know, just like you would treat the person with low thyroid or with diabetes, bring them down to an acceptable range, you know, as long as side effects don’t become an issue, you know? [Male, AA, 2/3]

The discussion about heart rate monitors was also based on an understanding of certain ideal numbers. For example, consider the way one respondent talked about his approach:

You should go hard and easy, hard and easy ...I have learned to do more of this...if I could train at 138 on my recovery, I shouldn't get above 160 on my tempo run day, and I need to be over 160 for 25 minutes at least one day...you can let your heart rate determine your effort...you don't have to run too hard to get the same benefits, running 85% rather than 95% and you can do it more often. [Male, FR, 4/5]

Striving for ideals (in terms of numbers), people held up their own flesh and blood bodies in comparison and certain numbers could spark cause for concern, comfort, confusion, or celebration. As another respondent explained: "I could probably be a better athlete at five pounds lighter, or, you know, some unknown number" [Female, FR, 2/3]. Aalten's (2007) research with professional dancers suggests that many dancers confront two bodies, one considered to be fleshy, tangible, and lived, and the other, an aesthetic ideal. The lived body works hard to meet demands while the ideal body is experienced through perceptions of other dancers, and it appears to perform tirelessly and effortlessly. These two bodies, as Aalten (2007:113) suggests, are in constant interaction, as dancers forever strive towards the elusive ideal. In terms of my own interviewees, the ideal body is not necessarily situated in the perception of another, but it is often depicted through the language of numbers, and constructed, maintained, and revealed, through the use of technology. Using technology through which to strive towards certain ideal numbers, individuals engage in a daily practice aimed at self-management and self-improvement.

Other functions of technology when applied to body regimen careers include convenience. For example, indoor exercise equipment offers individuals the ability to engage in body regimens, regardless of limitations potentially posed by things like inclement weather or time of day, while food scales enable people to prepare carefully weighed, measured, and tracked meals in advance so that they can be readily consumed,

as desired. Technology (for example, the use of treadmills and various types of exercise equipment), also functioned to heighten individual awareness about a wide range of measurements, which sometimes included, for example, length of time of usage, caloric expenditure, pulse rate, and mileage, in terms of distance and footsteps.

While technologies associated with plastic surgery, for example, were sometimes touted as means to avoid “cognitive dissonance” so that people could match their external appearance with the vibrancy they exuded from within their internal bodies, in my own study, there were examples of a certain bodily dissonance related to times when people described those who appeared healthy and vibrant externally, but after undergoing evaluative tests on the internal body, were found to be extremely sickly and unhealthy. In this case, contrary to research which suggests that people assume “health” based on a certain external look, health was not a taken for granted appearance-based reality, but was rather something that many situated beneath the skin, to often be talked about in terms of numbers, and to be revealed by a wide variety of tests and measurements. In the words of one respondent:

I knew a guy once who had just had a kidney transplant, looking like a cover model of fitness magazine, he looked just like that, you would think nothing was wrong, did the bloodwork and it was like, “oh by the way, I am waiting for a kidney transplant, I can’t count a day on my five fingers where I feel good, I don’t feel good,” Yet you look at him, and your like, “wow, they can look like that, and they don’t feel good,” He can’t put up a finger with five fingers, for a day he feels good. We look at the bloodwork and its like “wow!” so really, with the external features, they don’t always match the internal features. [Male, AA, 2/3]

Truth on this particular occasion, was situated within the technology, with the site of dysfunction, and the authentic source of “health and illness,” merely shifting from the external, to the internal. This same focus on the authenticity of the inner body was

emphasized during several conversations with female respondents about cosmetic surgery. In these cases, respondents resisted aesthetic bodily augmentation on the grounds that it was in some way insincere or phony. These interviewees proceeded to suggest that a person's "inside" is more important than external appearance. In the words of one interviewee:

Why are people so stuck on plastic surgery? There is so much more in life. Look at the inside of you. What is it in the inside of you that is missing that you have to go feel like you have to have your eyebrows and your eyelids lifted or whatever, you know?
[Female, FR, 4/5]

Technology, sometimes in terms of exercise equipment which enabled cardiovascular conditioning without the impact on knees and other joints, and largely in terms of a wide range of vitamin and supplement routines, was also used to help people alleviate pain. While the desire to potentially delay aging, and/or to ultimately live longer was certainly present, pain, as discussed in some detail in chapter 5, served as a huge motivator to action. As neurologist Russell Martin explains:

Pain is greedy, boorish, meanly debilitating. It is cruel and calamitous and often constant, and, as its Latin root *poena* implies, it is the corporeal punishment each of us ultimately suffers for being alive (cited by Yancey and Brand 1997:13).

A number of people talked about using technological interventions, in terms of supplements, which included hormones, and a wide range of other products thought to potentially alleviate discomfort.

Finally, for many, while the present allure of technology existed, the future promise also held appeal, inspiring interest in present day practices associated with the "healthy life extension community," in the hopes that it might lead to the opportunity to benefit from what was sometimes regarded as the constantly improving future

interventions. For example, consider the ways that some of my interviewees articulate their optimism about the future of technological breakthroughs:

I think it is possible to potentially delay aging mostly because I don't think anything is impossible. I mean, if you just think of the strides that mankind has made in the last 100 years, you know, medically, and technology-wise, I think it would be almost ignorant of us to say that it is impossible to slow or stop aging [pause] I mean, I'm sure if you went back 100 years from now, a 100 years from now you went back and told them we would be able to perform surgery on a microscopic level from hundreds of miles away, they would have laughed and called you insane, they would have told you that's just not possible, you can't do that, and here we are! [Female, CR, 2/3]

I believe that with the work that they are doing now with telomeres and all that stuff, I think that eventually they will actually break the code of biological life itself and I don't know if that will happen in my lifetime. Although I just read a book called *Singularity* and it talks about how it is going to be a reality within 10 to 20 years. I don't know, but, its very encouraging, anyway, but the whole thesis of the book is that if you address the problems with your health, and aging and disease right now, you can live long enough to take advantage of the technological, all the new technologies coming out twenty or thirty years from now to radically extend your lifespan. [Male, AA, 4/5]

I guess I am a transhumanist because its all about using our technologies, I mean, there are different philosophies, but it's about becoming better, just bettering life... artificial intelligence is going to be smarter than humans and it will be able to bring about a better change and answer some of these problems that we can't answer, about ending aging, or about getting into space, or about being able to put our consciousness in bodies that are better constructed than human bodies, which if you want to call it robotic or a bionic body. [Female, CR, 2/3]

I think that they will eventually be able to halt aging altogether... Aging is a disease as far as I am concerned, and its solvable eventually, we just haven't got the technology yet or the knowledge. [Male, CR, 4/5]

We all want to stay looking younger...I try to do mine in using new technology and skin care products... I think you have to give your body the tools to look better and feel better...you have to seek out new and advanced technologies and it's hard to stay on top of all the new technology and supplements and skin care, but I think those all are important. I think they do retard aging. I see it. I worked with it so many years that I see the proof of it. [Female, AA, 4/5]

Technology as "Double Edged" (Giddens 1994)

The technical means that have industrialized agriculture, making it...more efficient and productive and easy, have also made it more toxic, more violent, and more vulnerable –

have made it, in fact, far less dependable if not less predictable than it used to be. (Berry 2000:11)

The ancient story of what could be described as the complex entanglement of the human-technology embrace continues to unfold as new instruments are developed in which to examine, probe, track, guide, and reveal bodies. Science and technology have long been regarded as tools to enhance human dominion over, and liberation from nature¹³⁰ (Merchant 1990). Though the increasingly blurred boundary between human and machine (Cooper 2002; Haraway 1991) serves to inspire and terrify, the intersection between science, technology, and the body, has a rich history of ambivalence, possessing the potential for liberation or repression, depending upon who is in control (Dery 1996). Describing the “technophilia/technophobia divide” (Brodwin 2000:5), or the “Faustian bargain with technology” (Dery 1996:90), the ambivalence characterizing the melding of human and machine dates back to the 1960s, as computers have been simultaneously “...engines of liberation and tools of social control” (Dery 1996:75). Haraway (1991:152) elaborates:

Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves our frighteningly inert.

Some of this ambivalence stems from concerns associated with the creation of human machines, the automata which is sometimes explored in literature like, for example, Mary Shelley’s *Frankenstein*, Hans Christian Andersen’s fairy-tale *The Nightingale*, Orwell’s

¹³⁰ It is important to highlight the ways that the notion of nature is socially constructed, and how its meaning has changed over time. As discussed by Lock and Kaufert (1998:19), prior to the Enlightenment, nature was more often depicted as a “moral arbitrator,” whereas at present, nature is more likely to be positioned as comprised of a set of knowable universal laws.

1984, and Huxley's *Brave New World*, which share in their depiction of the dangers of the dream to use science to manipulate and transform. Along similar lines, Nathaniel Hawthorne's *The Birth Mark*, first published in 1843, details the story of a scientist who, in a quest to achieve physical perfection, removes a birth mark on his wife's face, which causes her to die. Works such as Hawthorne's piece, used as a foreboding warning, more than a century later, in 2002 by the President's Council on Bioethics,¹³¹ chaired by Dr. Leon Kass, a bioethicist who has been recognized by many in the life extension community as a vocal opponent, reflect broader cultural concerns, while leveling a powerful critique of present and future technological and scientific interventions aimed at the human body (Gilman 1999).

Exploring the effects of technology during the first few decades of the 20th century, cultural critic Walter Benjamin is sometimes recognized for his sensitivity towards technology's destructive aspects, which center around the ways that mechanical production may depreciate art (Willis 1992:11) as new technologies create new aesthetic standards (Graham 2002) which may inspire heightened alienation through self-objectification. As Cooper (2002:59) elaborates, also citing Buck-Morss (1992:33):

Benjamin is ambivalent about the role of technology. He recognizes its double function: on the one hand, technology extends the human senses, increases the range and depth of perception and "forces the universe to open itself up to penetration by the human sensory apparatus"; on the other, the technological extension of the senses leaves them open and vulnerable, in the sense that technology "doubles back in the form of illusion, taking over the role of the ego in order to provide defensive insulation"

Adding to the critique of 18th and 19th century enlightenment discourse centered around the notion of inevitable, linear, progress narrative, social critics including Marxist-

¹³¹ Retrieved on April 8, 2007, from <http://www.bioethics.gov/background/birthmark.html>

inspired scholars have revealed the ways that technology may serve as an exploitative tool, expanding mass disregard for the value of individual labor.

Considering the ways that the paradigms of science and technology become contests for power over culture and nature, Merchant's (2000:683) work explores how science and technology are negotiations for meaning and theory, paired with negotiations for political power over what truths are to be depicted and what metaphors are used for representation. The disciplining of biological life was of enormous importance to Foucault (1980), who saw this occurring through the trajectories of biopolitics and anatomo-politics. While biopolitics was based at the population level (rates of longevity, fertility, morbidity, life expectancy and death), anatomopolitics (1980:139) was "...centered on the body as a machine: its disciplining, the optimization of its capabilities, the extortion of its forces, the parallel increase of its usefulness and its docility, its integration into systems of efficient and economic controls...ensured by the procedures of power that characterized the disciplines." Serving to connect space, power, and knowledge, Foucault's (1980) research reveals how, when space becomes mapped, catalogued and coded, it becomes the subject of ongoing surveillance. While this theorizing is certainly evidenced in terms of the way geographical space is regarded, it is equally plausible to apply it to the mapping, cataloguing, and coding of the inner body as a site of surveillance through technological inspection.

More recently, describing technology as "double-edged," Giddens (1994) suggests that technology introduces new risks and dangers including "disastrous secondary effects, many of which are probably unpredictable" (Dubos 1974:147), while

also powering the creation of "...beneficent possibilities for humankind" (Giddens 1994:27). The technological reformation of the body, as Armstrong (1998:101) articulates, implies that the body could potentially be optimized or perfected; technology offers "utopian possibilities and a wounding fragmentation of the self which is an incorporation of those possibilities in the form of the commodity."

Regardless of outcome, it is clear that the "technological transcendence of the body" (Cooper 2002:11) has expanded, as technology continues to dramatically change the ways that we understand ourselves and the world (Heidegger 1977). Technology has been a crucial part of the human effort to establish some sort of domination over nature (including the body) yet technology also threatens to destroy nature, as Turner explains (2007:21): "by arrogantly modifying, improving or replacing it."

Critical of the human relationship to modern technology, Heidegger (1977:15) suggests that due to technology, the individual is treated "...as a resource that aims at efficiency -- toward driving on to the maximum yield at the minimum expense." As further articulated by Dery, (1996:231, 311)

Technology calls into question time honored ideas about the body. We live in an age of engineered monsters, when the human form seems increasingly indeterminate, reducible to replaceable parts...infinitely manipulable... When we objectify ourselves – our own bodies – we enter the numb, neon nightmare of Crash, where people are "mannequins dressed in meaningless clothing" and only a violent collision can jolt them back to their senses.

Paul Virilio (1995), a widely recognized critic of technology who warns that humans may eventually be subordinated to the technological, suggests that while technology is regarded as a tool, it often creates an effect which opposes its original intent. For example, while it may be said that technology creates greater speed,

technology may also generate a state of “inertia” where people feel immobilized. In *Exhausting Modernity*, Teresa Brennan (2000) asserts that people slow down time by constructing inertia, which Brennan describes as an artificial time consisting of fixed commodities and fantasies.¹³²

Thinking about this “double edge,” “double function,” or perhaps the contradictory experience of technology more as it applies to the world of my interviewees, it becomes clear that most of my interviewees talk favorably about their use of technology in order to make the body more transparent, in an effort to “...put under human control those processes that once symbolized the very limits of such control” (Brodwin 2000:7). There are exceptions to this optimistic regard for technology and the resultant coupling of technology and transparency – examples of times when technology actually serves to cloud and confuse more than clarify – and by looking at these instances, we may gain new perspective. This is confirmed by other researchers who suggest that despite an expanding array of tools, interventions, and strategies, efforts to make the internal body more transparent through the use of technologies (Joyce 2005; 2008) may ultimately result in an increasingly complex and sometimes confusing depiction of the body.

Technology may Misguide

In chapter 6, three different body ideals which are upheld by the three different body regimen career trajectories are identified. The practice of CRON is often associated

¹³² These fantasies, as Brennan (2004:40) further elaborates, “...either divert living attention inward, or, like hallucinations, require the expenditure of energy in their repression, they slow us down.”

with what I refer to as the “efficient body,” and associated technologies may be focused on improving bodily efficiency. Using dietary tracking software is supposed to presumably do this by guiding people to consume 100% or more of the USRDA for vitamins and minerals. While many accounts, as relayed in the above paragraphs, revealed the ways this software was experienced as beneficial, and even essential, to the practice of CRON, one interviewee relayed a personal experience that served to reveal some of the complexities involved in relying on dietary tracking software for dietary guidance and reassurance. In the words of this respondent:

Our family doctor... just, by happenstance, got a bone density exam done, and I had osteopenia. One of the reasons I wanted that looked at is that when I started doing CR for the very first time I realized [due to dietary tracking software] that I was getting almost no calcium in my diet, very, very little calcium. So I was pleased that I was starting to get lots of calcium and I was pretty convinced that I wouldn't have to take calcium supplements, that if I could track my food, I'd be fine, so, that's how I got started, and where it ended up, and where I think this conversation will go, is that three years later, I had another bone density exam and I've now gone from osteopenia to osteoporosis with a significant decrease in bone density... and I think personally, although there is no proof at all, that in fact, I was not getting enough calcium, even though I appeared to be, due to the foods I was eating. [Male, CR, 60+]

While this particular interviewee continues to tout the benefits of the CR practice, and still sees value in dietary tracking software, what he is explaining in the above paragraph helps to provide some insight into some of the complexities of the use of this technology. While arguably beneficial to many of those engaged in CR, for this particular individual, the dietary tracking program provided a false sense of security. In getting what he believed to be 100% of the USRDA¹³³ for vitamins and minerals based on the dietary tracking software, he assumed that he was fine, and that his bone density would actually be improved, but as he now concludes:

¹³³ See footnote 17 for greater detail on the meaning of the term RDA.

...In theory, I was getting plenty of calcium, however, you only get about thirty, some estimates are that you only get about thirty percent of the calcium that is actually in the spinach, so I am sitting there thinking I'm getting 100 percent and I'm getting thirty percent. Since I wasn't getting 150 or 200 percent, I wasn't taking supplements or the rest of it, I could have been going three years with much less calcium than I thought, and I suspect that what has happened is that I was going with way too little calcium for a long time and then I really didn't solve that calcium intake problem when I went on CR, even though I thought that I did, and then it caught up with me.

In another example of a time when technology served to misguide and mislead, a different respondent recounts using an iPod as a motivational device for training. Soon the inspirational music and messages piped in via the iPod were encouraging this particular respondent to push his body in ways that were not sustainable. Injuries were inevitable, and now, this same interviewee is no longer able to enjoy running. In the words of this respondent:

I actually started running last year for a while and I got really into it. For a while I was just running and saying, "oh this is cool" and I'd go out and just lope along and not push myself, and use it as a meditation, and then I got an iPod and I had the iPod nano system and I put the thing in my shoe and I had Lance Armstrong telling me about my personal best... and all of a sudden every day was a new kind of chance to hit the personal best and go farther, faster, and then I ended up getting plantar fasciitis really severely, in one leg...and I was in severe pain, and then I could not walk for two weeks... its not that big of a deal. The real bad thing was trying to go to work and just function, or go on vacation and have fun, I mean, I couldn't really walk...and that was really annoying. And it hurt, a lot. And then I got over that, and so I started running again, and I did the whole thing again on the other side, and I said, "I'm not running anymore." [chuckle], so I am tempted to run every once in a while, but I just sort of say, "ehhh, its not worth the possible price, and in order to have enough energy to exercise, you have to take in maybe more calories than would be optimal for CR [Male, CR, 4/5]

Technology may Normalize and Restrict

Often upholding the ideal of the "balanced body," as discussed in greater detail in chapter 5, individuals engaged in the use of anti-aging medicine may turn to blood tests as a way to gain insights into how to best achieve greater bodily equilibrium. While many respondents recount the ways that blood tests serve as essential tools for "bodily

calibration,” one respondent recounts how, even though her blood tests came back “normal,” she did not feel well. Over a period of time, through multiple visits in and out of different doctor’s offices, this respondent ended up coming to the realization that blood tests were not identifying her particular problem, and may in fact be resulting in a misinterpretation of her problem. She elaborates:

My blood tests kept saying, “normal,” but you see, a test is only normal to the person who, how should I put it, they do a test and they give you a window of normalcy, you know, and, you know this is how they read your, your profile, “you should be from here to here,” well if you fall somewhere in there, you’re ok, and I did, but I am not o.k., you have to think outside the box. I don’t fit into that box. [Female, AA, 60+]

In this example, rather than giving a person a false sense of security, the technology proved overly narrow and restrictive as it suggests that her blood tests results were “normal” and that she was therefore, perfectly healthy, when in fact she was very sick. In suggesting that this interviewee’s blood test results fit into the “window of normalcy” when in fact she felt very ill generated enormous angst for this respondent as she embarked on a lengthy and frustrating course to try to get answers for her malaise.

Technology may Distract and Disconnect

Individuals engaged in fitness regimens often uphold the importance of the “working body,” ideal through which an emphasis is placed on the importance of performance and endurance. While heart monitors provide some with a means to improve this “working body,” this favorable experience with the heart monitor technology was not always the case. For example, as described in one interviewee’s recount of her experience with a heart monitor:

I have a heart monitor... It is one of those things similar to certain vitamins. I look at it as a contraption that takes my mind away from what I most enjoy but I have heard that there are great benefits to learning more about your heart rate and coordinating your exercise so that your heart isn't going, you know, at a higher pulse rate than what you are supposed to for that day. I've read a little bit about it but I just haven't gone that route yet....Now I am doing it more, based on how I feel and not really looking at anything that is like a watch or a heart monitor to tell me... when to back off and when to push on. [Female, FR, 4/5]

For this particular interviewee, the use of a heart monitor to guide her fitness regimen and to determine her pace is experienced more as an undesirable distraction and burden than as a useful helping device. This particular interviewee explains that she prefers to determine her regimen, based more on embodied clues centered around how she feels, rather than on what the particular device is telling her to do.

The use of additional technologies while engaging in fitness regimens was also, on occasion, described as undesirable, due to the distractions such technologies place upon an individual's embodied experience of their body regimen. Instead of finding such technologies helpful, these individuals experience usage as an undesirable disruption or even a cloud to embodied wisdom and judgment. In their own words:

Everybody wears their headphones or they talk on the phone or they watch TV while they are on the treadmill, which I can understand, because treadmills are terrible, but I am exactly the opposite, I don't like anything distracting me, and everybody laughs when I say that... When I run, I like to feel how I am running, I mean, whether I am feeling good or if I feel bad. When you have all of this artificial stuff going on, you know, a good song, you speed up, I don't want that, everyone likes to dissociate. I like to associate with my running... [Male, FR, 4/5]

I am very anti iPod...I can't stand it. I can't have anything messing with my hearing when I am running. It actually freaks me out. It turns on my fight or flight...I just like to just think, and so I can do that, and I also really like to both see what I can get out of my body in terms of performance, as well as that aspect of just trying different things on myself, like kind of a self experimentation...[Female, FR, 2/3]

Just as technology can isolate people from the experience of their own embodiment, it can also serve to disconnect and isolate people from one another – creating less connection, and perhaps at times, deflating inspiration. For example, as another respondent explains:

Right now, you know, I come up, I can see my wife in the gym and I walk up on her and of course she is just sort of heads down, and grunting through it, while she is on the elliptical or the treadmill or something like that, or watching the TV or something like that, but she is not interacting with me or with anybody else. She has her earphones, her iPod in her ears or something like that, you know? When she is working out with someone else and kind of feeding off of that person and going through the pain with them, and kind of coming out the other side, a better person, she took pleasure in that... I think that she does see that if we are working at it together, you know, we are going to be better, and she is going to take more enjoyment from that, and she is going to do that right, you know? [Male, FR, 2/3]

Technology as the 800 Pound Gorilla

Finally, in an unusual situation where a respondent's spouse actually got on the telephone during our interview to offer further elaborations to the stories that this interviewee was telling, it became readily apparent that the use of technological devices, like dietary management software and food scales, sometimes transforms the ways people engage in shared meals, as conversations may become, perhaps, less about the events of the day, and more about grams, ingredients, and "little sheets of paper." As one individual who lives with a practitioner of CR explains:

I'll fix a beautiful meal, and I do try very hard to do basically vegetarian low fat cooking, low fat and no fat cooking, and um, but she will pick up the most incredible amount of food and weigh everything first, so I'll hand her some grapes and she'll say, "oh that's so sweet," and she'll put them into her container and she'll weigh them first. I'll hand her a slice of watermelon, and she'll say, "oh, thank you so much" and I'll just know that it is going to get weighed first. Its like, you know, um, its like an 800 pound gorilla, this little scale, it is always there, so...and [name of person's] very good at telling me instantly, "oh, here, would you like a banana, its thirty grams of potassium, she already knows how much everything weighs, so this is an interesting phenomena. She looks at food in terms of grams, weight, you know weight by grams, and then

[laughs] she's forever, not driving me nuts, because she actually uses her excel spread sheet to reconstruct my recipes, but the minute we'll have a nice dinner, she'll go, "ok, what were all these ingredients that we had," and I'll think, "oh gosh," and you know, I never cook things the same way twice so I am having to rack my brain and go oh gosh, you know, what did I throw in it this time, and having to go, you know, those are just so minor but they do reoccur over and over and you just have to get used to them. But if she's feeling better, and hopefully living a long healthy life just cancels out all of these annoyances. [laughter]

Stories such as the ones told above help to illuminate the multiple complexities involved in the use of technologies to maintain, monitor, measure, and guide the workings of the inner body. As evidenced in the story which highlights the spousal experience with the practice of CRON, engagement in the utilization of these technologies has ripple effects which transcend the individual experience, serving to influence the lives of those significant others with whom the individual lives and interacts. The technologies may transform the ways individuals think about and engage in meals, cooking, and eating, as a focus on numbers, weights, measurements, and specific ingredients may take precedence over other interests and concerns.

While a variety of technologies provide body regimen careers with important insights and pleasures, the "double edge" of this engagement is readily apparent as the very same technologies which serve to reward may simultaneously provide people with a false sense of security, with constrictive normative ideals, disconnection from embodied ways of knowing, and alienation from other people. Recognizing these complexities and contradictions is an important aspect of understanding and assessing the value and meanings of technological intervention as

part of the body regimen career specifically, and more generally, as it becomes an increasingly commonplace part of our understandings of our bodies.

Conclusion

While the sociology of the body has gained in popularity in recent years, perhaps initially focusing more on the ways that the surface of the body is marked by culture, a heightened attention is now turning to consider the inner body, as a range of technologies ranging from heart monitors, blood tests and dietary software, to genetic testing and MRIs, strive to make this once hidden and mysterious sphere more visible and knowable.

Through this chapter, I have worked to reveal some of the ways that individuals engaged in body regimen careers associated with the “healthy life extension community” are conceptualizing their bodies, and this involves discussions around various aspects of the inner body, including conceptualizations of blood and cells, paired with the dialogue that I refer to as “organ talk.” The interplay between body and culture is readily apparent as individual bodies are understood and depicted as complex machines, sometimes cars, and more often, computers.

Interviews with individuals engaged in body regimen careers associated with the “healthy life extension community” provide an opportunity for us to consider the ways that the relationship between humans and technologies is influencing our understanding of bodies. Based on cultural changes which include the development and use of an ever expanding selection of technological interventions, new bodily kinesthetics may be developing. As Sheperd (2003:178-79) suggests:

It may be that we are now looking at the emergence of a new kinesthetic. That kinesthetic can be found in gym culture, in dieting, in building the body – but also in personalizing and inhabiting the accessory, the manner of using the mobile phone, the car that is driven and decorated as enhancement of the person. This new kinesthetic has to do with the experience not so much of alienated mechanization of the body but instead of the body as something that can be extended beyond natural limits – where that nature is sterile, humanist, not sexy enough.

Considering the ways that this new bodily kinesthetic may position the technologically enhanced, managed, and maintained body as the most fertile with potential and possibility, it is likely that insights gleaned from the experiences of those engaged in body regimen careers may provide a window to larger cultural shifts. Looking at the body as a site which reveals tensions between culture and nature, the heightened rationalization of bodies in recent decades has unveiled a purposive tricking of nature, as people use technologies to defy bodily set points, to supplement and replenish naturally declining vitamin and hormone levels, and to enhance, optimize, and maximize health and performance. For some engaged in body regimen careers, nature is literally transformed as people detail significant changes in things like physicality, endurance, speed, and taste buds. Articulating this shift in his own research on the “religion of technology,” Noble (1997) explains that in the past, humans were most regarded as a part of nature, whereas now we are more prominently positioned as exploiters or masters of nature. Technology, for those engaged in body regimen careers, often serves to place boundaries around consumption – whether it is in terms of the quantity and quality of food, vitamins and supplements, or exercise. Using the technologies often requires a variety of resources, including issues around access, affordability, and the time needed to potentially learn how to operate devices and interpret results.

Thinking about the use of technology in body regimen practices, it is important to consider the ways that this engagement can be regarded as Janus-faced, being simultaneously helpful and hindering. While individuals certainly glean a considerable amount of information from their technological engagement, I detail a number of examples that reveal the more complex and contradictory nature of some of these insights as "...investigating the interaction between material bodies and new technologies illuminates the work of ideology-in-progress" (Dery 1996:10). Applying numbers to bodies is not without problems given the enormous diversity that the human body represents. In fact, during several conversations interviewees described what could be categorized as "too much of a good thing" – times when desirable numbers based on technological calculations often got "too good" – which typically translated into "too low" instead of "too high." For example, one individual's blood pressure, instead of being too high, got too low, causing him to experience unsettling levels of dizziness. Some CR practitioners, and others who were highly conditioned athletes engaged in fitness regimens, at times questioned their unusually low pulse rates, expressing concern about bradycardia, a pathological condition characterized by a defect in the cardiovascular system. Further, while most were working to get cholesterol levels as low as possible, one interviewee described how his cholesterol got so low, after a year on CRON, that he became very concerned. As he recounts:

My cholesterol is super low, and actually that freaked me out, actually, it went down from 160 which was low, after a year, a one year period in CR, to 100, and then that freaked me out...if your cholesterol goes really low, it can be indicative of a disease, and I forget which one, cancer or something like that. People who have cancer, their cholesterol goes down very quickly and that's not good. [Male, CR, 4/5]

The interface between body and technology also requires a certain amount of time and planning – thereby limiting the potential for spontaneity – as people may, for example, need to plan, weigh, measure out, and record, food, vitamins and nutrient consumption, in terms of quantity and quality. What experiences do we forgo, for example, when we are forever under the influence of what Brennan has described as an ego that is always in need of a plan? Further, technologies thought to measure particular phenomena in relation to the body may not necessarily be as precise or accurate as may be depicted. Technologies may serve to separate and isolate bodies in ways that are potentially unsatisfying and even alienating.¹³⁴ Finally, the use of technology, at least for some, may take the place of embodied forms of knowing, and this may sometimes be experienced as undesirable, uncomfortable, and inauthentic, serving to detract from some of the very real pleasures people enjoy when engaging in the practices of their body regimen careers. This may also serve to shift expert knowledge of the body into hands of external experts and machines, as people turn to scientists, doctors, and devices, for the latest understandings of optimal numbers, in an effort to determine what exactly is going

¹³⁴ As I mentioned in the intro to this dissertation, as the child of a self-proclaimed health nut, I spent a considerable amount of my childhood inside the walls of a fitness club. I have fond memories of the place. The community was friendly – everyone knew everyone by name and the milieu was extremely social. One of the biggest differences between the club of my childhood, and the one where I now exercise, involves sound. When I was a kid, a steady stream of music flowed in through speakers strategically positioned throughout the gym – there was no escape to the universal sound of the building – all members were entreated to the same spin of music du jour. The social scene was vibrant, with one small television situated more for employees than customers, and with a myriad of places to mingle; conversation was the rule and not the exception. Now, nearly three decades later, sight and sound based technologies have become increasingly personalized, with iPods and other hand held devices providing each gym member with a personalized cadre of tunes. The shared group experience of the 21st century gym, with big screen TVs at every turn, and miniature, personalized versions on each exercise machine, complete with the choice of more than 50 channels, is in great contrast to the 1970s gym-as-social-gathering-place. While certainly the people that comprise a given club continue to create their own versions of community, my experience makes me reflect on the ways that the technologies may in part serve to transform, and I would argue, potentially undermine, disconnect, and threaten these types of more communal gym engagements.

on inside their bodies. Exploring the embodied nature of body regimen careers in greater detail, and premised around the concepts of control and release, the lived experiences of those engaged in body regimen careers will be detailed in next chapter.

Chapter 8: Embodiment and Body Regimen Careers – Exploring Control and Release

During the summer of 1984, Jim Fixx, author of the best-selling *Complete Book of Running* was enjoying his daily 10 mile ritual – a jog along Route 15 in Hardwick, Vermont. At the age of 52, this widely recognized fitness guru unexpectedly suffered a massive heart attack and died suddenly, without warning. Engaged in an all encompassing health-oriented lifestyle, this is a person who, from the perspective of the fitness regimen career, appeared to be doing everything “right.” Along similar lines, advocate, researcher, and role model for those engaged in the practice of Caloric Restriction Optimal Nutrition (CRON), UCLA gerontologist Dr. Roy Walford died on April 27, 2004, at the age of 79, due to complications from Amyotrophic lateral sclerosis (ALS), or “Lou Gehrig's Disease.” Author of numerous popular books on the practice of caloric restriction and longevity, including *Beyond the 120 Year Diet: How to Double Your Vital Years*, Walford's death poses an obvious challenge to those engaged in the practice for life extending benefits. Finally, in June 2007, Dr. Alan Mintz, founder of the Cenegenics Medical Institute, one of the most widely recognized anti-aging medical facilities in the world, and famous for his enthusiasm in support of the use of hormones for “age management,” died at the age of 69, from a brain hemorrhage. The death of this popular and outspoken anti-aging advocate, famous for his body builder physique and his infectious enthusiasm for “optimal health and wellness,” came as a shock to many.

Perhaps in stark contrast, the French-born Jeanne Calment, who holds the longest officially confirmed lifespan at 122 years and 164 days (February 21, 1875 – August 4,

1997), smoked a couple of cigarettes a day until around the age of 115 when she allegedly quit because she was no longer able to light her own. With examples such as these, how do people engaged in body regimen careers justify and maintain faith in their pursuits? If some of the most highly esteemed leaders in the “healthy life extension community” are not reaping the benefits of healthy life extension, why do people persist in their own body regimen careers?

While it is certainly possible to argue that many of us suffer from the yeah-but-its-not-going-to-happen-to-me syndrome, I would suggest that even more importantly, the reason why people continue to partake in their own body regimen careers, despite evidence that may contradict and confuse their current practices, is because they experience their day-to-day engagement as extremely pleasurable. In fact, I would go so far as to state that it is highly likely that even if Jim Fixx, Alan Mintz, and Roy Walford had a crystal ball through which they could have known their fates in advance, they likely would have continued their body regimen careers, regardless, due to the daily pleasures and rewards they most certainly obtained from this involvement.

While the rewards associated with body regimen careers have been recognized in the academic literature, an enormous amount of the focus is on what could be described as the symbolic value of images of health, fitness, and athleticism, which tend to equate a particular physique with moral goodness and aesthetic beauty (Bordo 1993; Featherstone 1991; Glassner 1990). Intersecting with the discourse associated with health promotion and prevention, engagement in body regimens associated with a striving towards “health” and “wellness” are sometimes regarded as symbolic of what has been characterized as the

increasing rationalization of society (Ritzer 2002, 2004; Turner 1982; Foucault 1973; Weber 1954[1922]), established around cultural norms that include predictability, efficiency, and calculability. Efficiency, for example, as Ritzer (2002:29) describes, "...leaves no room for the enchanted. Anything that is magical, mysterious, fantastic, dreamy, and so on is apt to be inefficient." Dietary management, dating back to the nineteenth century, as detailed by Turner (1982:265), is said to potentially serve to produce "...a sober and athletic population whose healthy bodies would not disrupt production as the result of illness following 'irrational' eating and drinking habits." Shifting his gaze 100 years later, to the 1980s, Turner (1982:267) concludes that "contemporary anxieties" about matters related to the body, which may include, for example, dieting, slimming, anorexia, fitness and exercise, efforts to increase strength, speed, and mental aptitude, "... are part of the extension of rational calculation over the body and the employment of science in the apparatus of social control."

While recognizing the legitimacy in this powerful critique leveled at morally imbued promotion of, and engagement in, body regimens through the last two centuries, something about this criticism, even when I became aware of it as a sociology undergraduate student, felt incomplete to me. Perhaps in large measure having grown up in a family environment that was strongly involved in practices related to fitness body regimens, I was sensitive to what I had considered the embodied pleasures generated by such engagements. Not only was a large part of our familial social life based around such involvement, but I was witness to (and later, participant in) the "vibrant physicality" (Monaghan 2001a) of the embodied experience, in and of itself. Calling for an

“anthropology of the body,” Blacking (1977) proposed the value of experiencing the bodies of others, through our own bodies, in order to gain greater insight into somatic states, and while admittedly limited given the uniqueness of each individual body, I recognize how my own embodied experience with body regimen careers has influenced my research conceptualization and thinking.

Having said that, at the start of this research project, I was motivated to use the tools of interpretive and interactionist sociology to provide a more complex understanding of the embodied “lived experience” of engagements in body regimen careers associated with the “healthy life extension community” and this includes the perceived pleasures of involvement in tandem with constraints, since, as detailed by Fishwick (1991:152), there is a chasm in the literature over varying interpretations of whether physical activities relating to the body are empowering or constraining. I began this project with a particular interest in the ways that people described how their body regimens make them feel – their “being in the world” (Csordas 1994:10) – through the embodied effects of the lived experience of such engagement. As defined by Howson (1998:237) embodiment describes:

A dialectical process between embodied experience and the language available to articulate such experience... a process of transformation and mediation in which embodied experience is authentic and articulated through cultural categories.

Depicting the body as source of pleasure and pain (Giddens 1991:61), and partaking in research on people engaged in gym-based fitness regimens to “...redress the balance of over-determined theoretical expositions which paint a homogenized version of the drudgery of the gym,” Fishwick (2001:164) for example, concluded that participants

regarded their bodies as balancing acts and sites of struggle, with daily practice serving as resistance to perceived excesses. Further, highlighting the embodied pleasures of body work, Sassatelli's (1999:236) research on body culture within fitness gyms revealed that many regarded the "body work-out" as offering liberation from external pressure, while Ryan (1991:182), in her research on women involved in weight training, explains:

Even for 'ordinary' women an alternative physicality of living the body from the inside out could be constructed around the jouissance of body performance, of doing bodywork and of experiencing body strength as pleasurable in themselves and empowering. It could emphasize both the enjoyment of skill in performance, of goals that relate not only to the final outcomes but also to the activity itself.

Answering Monaghan's (2001a) request for empirical research that attempts "...to bring 'healthy' bodies 'back in' to medical sociology" and the critique that actual living "flesh and blood" bodies are too often absent from sociological research on the body (Wacquant 1995), I am interested in turning an analytic lens to the embodied effects that people experience from their engagement in body regimen careers. With inspiration from Merleau-Ponty's (1962) suggestion that an understanding of the world can only be mediated through the body, I strive to consider the ways that knowledge, in and of itself, is always embodied (Pillsbury 2001; Csordas 1994; Shotter 1993; Johnson 1987). Recognizing the importance of the body as it intersects with an understanding of individual narratives, for example, Weiss (2003:32) explains that the "...intelligibility of narratives...always includes more than the intentions, motives, passions and purposes associated with them [since] ...our bodies themselves contribute to the construction of narrative intelligibility."

In an effort to try to learn more about the ways that the body informs experience, and to potentially break free of a Cartesian based phenomenology first espoused by Husserl that separates mind from body (Strathern 1996), Merleau-Ponty resists objectifying the body, and instead regards it as a vehicle through which we are able to know the world. This phenomenological approach (Merleau-Ponty 1962) emphasizes five core ideas: (1) people experience the world through living in a body; (2) the world is also experienced through the senses; (3) cultural and social interaction serve to create ambiguities in the way people experience the world; (4) bodily experiences serve to help condition thoughts, and (5) people experience the body as both subject and object, and any concept of “self” intersects with the experiential body and is embodied.

This growing interest in studying the body in order to destabilize binary oppositions (Grosz 1994) is in part a reaction against disembodiment, focusing instead on the “sensuous quality of lived experience” (Strathern 1996:198), as it represents an effort to locate the body as the site of intentionality – a position that many others have given to consciousness or the mind (Young 2005). It is also important here to note, however, that this research recognizes that some type of “pure” experience of embodiment does not exist, since “the body as lived is always layered with social and historical meaning and is not some primitive matter prior to or underlying economic and political relations or cultural meanings” (Young 2005:7).

As mentioned at different junctures throughout this dissertation, as someone who has personally engaged in my own body regimen career over the last two decades, which has included participation in a wide number of athletic/fitness activities paired with a

keen interest in, and experimentation with nutrition, vitamins, and supplements, I have strongly felt my own embodied effects from these efforts. Quite simply, if I did not experience such practices as both extremely pleasurable and rewarding in many different ways, it is impossible that I would continue to engage in what are often resource draining (incalculable), time consuming (inefficient), and inconvenient (unpredictable) practices.

As a qualitative researcher interested in honoring, showing respect for, and connecting with my interviewees, the experience of embodiment through engagement in body regimen careers became a central location bridging between us a common understanding, despite the enormous diversity in the range of body regimen practices I learned about and discussed. Time and again respondents talked about the joy and the pleasure they received from engaging in their body regimen careers, recounting, for example, that body regimens make them feel “happier,” “calmer,” “healthier,” “more awake,” “joyful,” “more stable,” “more excited,” “more aware” and “less anxious.” As articulated by one respondent:

Since I’ve gotten healthier and healthier, I’m much more stable, less moody, not as worried, not as obsessed, happy, a lot more content, less anxious, less bouts of depression...much more stable, much more grounded, and much more able to tolerate uncomfortable emotions. I don’t have to run from them or medicate them, which has been really nice. [Female, CR, 4/5]

As a matter of fact, every single respondent recounted certain favorable embodied effects of their body regimen careers which served as a wellspring of motivation, happiness, and pleasure. This was particularly evident when I asked respondents whether or not they would consider taking a pill that mimicked the effects of their body regimen careers, but did not require them to engage in the actual practices. I first became

interested in this issue during my participation in an online group dedicated to the practice of CRON. The topic of scientific research into a pill which could mimic the effects of the CR practice was met with resistance from some of those engaged in the practice. Asking people in this online community to elaborate on the reasons behind their lack of enthusiasm for a CR mimetic, one respondent summarized what was a much larger group sentiment, when she stated, “taking a pill just isn’t the same.” People explained that the practice of CR is cheaper than buying pills, that it is more “natural,” and that it helps people feel “connected to the earth.” One person warned that pills do not offer any protective measures against the contaminants in “regular” foods, and another explained, “I just feel so much better than I did pre-CR, and I notice that fairly small strays off the healthy path make me feel awful. Why would I not want to feel the best I can?”

Following the chapter about risk, and the “to do” imperative, it may seem obvious that people would consider taking a pill that mimicked their body regimen as a way to avoid the ongoing and multifaceted burden of all that their routines demand. Yet as described above, throughout my conversations with people, it became evident that my respondents get a tremendous amount of meaning, satisfaction, and pleasure from their day-to-day engagement in body regimen practices. A couple of respondents went so far as to suggest that their ideal death would be to die doing that which they loved. When unable to engage in body regimen careers, people repeatedly recounted feelings of sadness, depression, grief, frustration, anger, and anxiety. As one respondent explained, “My wife will tell you, if I go for a while without it [my body regimen], I am a bear to be

around! ... Oh I feel horrible!” In fact, it is possible to argue that for many, the here and now of involvement provides far greater satisfaction than any sort of long term goals or pharmaceutical mimetic ever could. Yet as one CR enthusiast asks both playfully and seriously: “Who wouldn't want to look and feel forty at sixty? That's the idea here, and I hope it works.”

The topic of a mimetic is particularly relevant for individuals practicing caloric restriction because scientists, like Harvard's David Sinclair, are currently working to develop a pill that could potentially mirror the physical effects of the practice.¹³⁵ As part of the conversation through many of my interviews, I asked people whether they would consider taking a pill that mimicked the effects of their body regimen, so that they were absolved from engaging in the demands of the daily practices. None of the respondents reported that they would take the pill instead of engaging in their body regimens.

Consider the following responses to the question: *Would you take some type of pill that mimicked the effects of your body regimen?*

I don't think so. I don't think so. I really don't think I would... I like my routine, my exercise, no, I think, I am quite content with the way things are now. [Female, FR, 4/5]

I would still stick with CR! You know, it's a great, it's a great way to eat and it's a great way to feel healthier and thinner. I wouldn't [take a mimetic] [Male, CR, 4/5]

¹³⁵ The economic payoff of such a creation would be enormous (Vincent 2003). As suggested by Rose and Novas (2005:457): “The visualization of the body at the molecular level not only creates new possibilities for the generation of wealth, but also generates new ethical values that spill over into market interactions. The co-production of health and wealth is a profoundly ethical endeavor.” In a similar vein, sociologist Stephen Katz (2000) suggests that the ideals of positive aging and anti aging converge to promote a widespread “anti-aging” culture, with appeal that serves many private interests as is proven by commercial capital. These insights ring true as headlines on April 23, 2008, report that Sirtris Pharmaceuticals, the Massachusetts-based company run by Sinclair, and focused on developing a drug based on resveratrol, was purchased by GlaxoSmithKline for \$720 million.

I don't think I would, because I don't think I would want to replace the natural benefits, or highs, if you will, of the actual exercise, I mean, I exercise... not just for the benefits, but for the joy of doing the activity as well. [Male, FR, 4/5]

Other people question the potential health risks associated with taking a mimetic as they worry about what such technology is actually doing to the inner body, and some express cynicism about the idea of a so-called “magic bullet.”

Oh, no, no, no! Not anything pharmaceutical, I'm anti, to me that's, like, I would say, cheating, but I don't know how you could get the same benefits, again, that would be like, what the pharmaceuticals do, they treat the symptoms rather than the route problem...I do not see how that would be healthy for the body. That doesn't sound natural. [Female, CR, 4/5]

No! [to a mimetic]. I like our diet. I am very suspicious of pharmaceuticals that alter the natural processes of the body. I am very suspicious of all of the anti depressants. I am very suspicious of much of the modern medicines that I think that we are producing today—they interfere with the function of the body. They don't enhance it. I think it is terrible. I think we don't even know what the side effects are going to be, the long term side effects. We hear about the short term ones and we talk those up, but I think we have released a lot of them into the market in the last 20 years that we have no idea what's going to really happen. [Male, AA, 4/5]

A CR mimetic would probably not be something that I would use, and the reason is, that I am very, very [emphasis] skeptical about scientific results and how much humanity understands physiology. I think that every time I read a scientific article about some awesome new thing being discovered, I have two reactions, one is, isn't this amazing [emphasis] that we know this, and the second reaction is, we've been around here 30 thousand years and we just learned this? So I think we are incredibly ignorant. [Male, CR, 60+]

I don't think that [a mimetic] is very healthy because you are sending your body into an overload and its not going to know which way to go, you know, personally I think you either have to be one way or the other, you know, you try to eat healthy and being human, you are not going to be able to all the time, you do the best you can, but I don't think there is any one, one magic super pill or drug or anything that's, I truly believe that the whole thing is a lifestyle and you have to be willing to, you know, kind of commit to it...[Male, FR, 2/3]

Some would potentially consider a mimetic, but it would only be after many years of scrutiny and more reassurances that it was safe.

I would probably scrutinize that one, [taking a mimetic] and I would wait until it ran its course, you know, four or five years, to find out if it was healthy, because, you usually

don't know what the long term effects are until four or five years down the road. So even though the FDA thinks it is ok or just because somebody is selling it on the market, doesn't necessarily mean it is ok because they may not have found the long term effects because no one has used it in the long term yet, so until somebody has some long term study, with a high number of samplings, to derive results, they are just not going to know, you know, there is no other proving ground like the actual world, the real world. [Male, FR, 2/3]

I wouldn't take it until I saw other people take it and I saw the effects and it didn't harm them. So, I'm not saying I probably wouldn't try it, but it would just be a ways down the road. I'd have to know that it is not actually going to harm me more....I am just not going to put myself at risk...[Female, AA, 4/5]

I would have to see a lot of research. I am not an early adopter kind of person, so I'd have to run it through a long time before I'd just start popping pills. [Male, FR, 4/5]

I tend to be on the fence with this, on the cautious side, I just wonder, you know, any time you intervene in a process there is sometimes a reaction or a side effect, and I'd want to know what the side effects to it are. Sometimes they are not known until many, many years later. And a, I don't know. I am a cautious sort of person. [Female, CR, 4/5]

Finally, others would consider taking the mimetic as “added insurance” but they would still continue to engage in their current regimen.

I'd probably say “yes” [to the mimetic] but I still like the way that I eat, so I would probably take the pill and you know, basically eat the same, probably drink a little bit more [big laugh] [Female, CR, 2/3]

I would take it. I would probably not eat a whole lot differently...so I probably wouldn't change a whole lot of what I am doing now, but it would make me feel more confident in being a very heavy athlete in that I wasn't really wrecking myself. [Female, FR, 2/3]

This overwhelming desire to continue engagement with body regimens, even if the physical effects of the body regimens could be realized through some sort of pharmaceutical mimetic, helped me understand the importance that the practices associated with body regimen careers have in people's every day lives. In order to gain a greater understanding of why people are deeply committed to their engagement in body regimen careers, as part of my research approach, I engaged in my own journal entry

process to better capture some of my own experiences with a body regimen career.

Through a review of my weekly memos, it became readily apparent to me that over the course of a year, I repeatedly described my body regimen in terms of two core concepts: “control” and “release.” While it takes a considerable amount of control and discipline to rise most mornings two hours before my family in order to squeeze in a morning fitness routine, the experience of exercise itself, in an embodied way, feels like an enormous physical, emotional, and mental release of stress and tension. During and following my routine, I feel more focused, calm, joyful and energetic. Control and release also serve as powerful concepts structuring my dialogue about nutrition, diet, and supplements. Certain special occasions, certain holidays, birthday parties, and other “events,” are marked by a “release” from my typical regimen, while the concept of “control” (over what, when, how much, and whether) to consume further marks this journaling. Finally, extra control may serve to justify future release, as the two fluxes co-exist in endless dialogue.

In Greek mythology, Zeus' two sons Apollo and Dionysus are often used as points of contrast. Dionysus, god of wine, is associated with the primal, the natural, immersion, chaos, the irrational, and excess, while Apollo, god of the Sun, is used to represent individualism, structure, discipline, the rational, and self-control. Many writers have creatively used these two poles as points of reference. Perhaps most widely known, in *The Birth of Tragedy*, Nietzsche (2004 [1872]) suggested that tragedy is an outgrowth of the inherent tensions between the forces that both Apollo and Dionysus represent. Yet it is also possible to see what could be described as a complementary relationship between

the forces. For example, as noted by Synnott (1993), Dionysian immersion was sometimes achieved by transcending the senses through controlling disciplinary bodily practices like fasting.

While it is open to debate whether these poles are marked more by complementary opposition, or by confrontational and even tragic tension, it is possible to argue that the study of such opposition and tension is fundamental to sociological inquiry, through the discipline's effort to understand the relationship between social order and social disorder, structure and agency, and stability and change.

The tension between what I am exploring as "control" and "release" is found in the works of many of the sociological classics including the writings of Marx, Weber, Durkheim, and others. Human history, for Marx, was characterized by heightened efforts to control nature, which was simultaneously marked by increased alienation, as humans become controlled by their own creations which they experienced as alien, generating feelings powerlessness. Capitalism helped to generate alienation as people lost control over their lives in a system perpetuated by laws over which they could exercise minimal power. Social change and revolution were inevitable for Marx, when people recognized the ways that the capitalist system took away their freedoms. The tension between control and release was embedded within class struggle. The progressive march towards a more egalitarian social reform – as depicted in a particular version of socialism – would come through this struggle for release which served to question the social control of all dominant societal institutions, including, famously, Marx's drug-like depiction of

religion, since the church, (conceivably like all other societal institutions), was perceived of as justifying the capitalist division of labor.

Recognition of the tension between control and release is also a concern for Durkheim. For example, in his famous study of suicide, Durkheim highlighted four different types: anomic, altruistic, fatalistic, and egoistic. Fatalistic suicide, Durkheim argued, was a product of too much social control, where an entire segment of the population was exempt from exercising control over their own lives “...a suicide deriving from excessive regulation, that of persons with futures pitilessly blocked and passions violently choked by oppressive discipline” (Durkheim, 1951[1897]: 276, 258), while its opposite, anomic suicide, was a result of too much release – not enough “regulation” or clearly delineated expectations about behavior – the experience of normlessness or perhaps too many possible norms. Durkheim further articulated this tension between control and release in *The Elementary Forms of Religious Life* (1995[1912]). For example, in describing asceticism and prohibitions (through vigils, retreat, silence and fasting) as an essential element of religious life, Durkheim suggests that such engagement helps to center people more deeply amidst the sacred, providing a separation from the profane. This separation, sacrifice, and abstinence is also a source of pain and suffering, which sometimes serves as a test of worthiness, a sign of worldly emancipation, and I would add a feeling of control since, as explained by Durkheim (1995[1912]:320): “By the very act of renouncing things, he has risen above things. Because he has silenced nature, he is stronger than nature.” The experience of release, also articulated in Durkheim’s research on religion, is perhaps best revealed through the term

“effervescence” – as described by Durkheim (1995[1912]:217 – 218):

“Once...individuals are gathered together a sort of electricity is generated from their closeness and quickly launches them to an extraordinary height of exaltation...the effervescence often becomes so intense that it leads to outlandish behavior; the passions unleashed are so torrential that nothing can hold them.” Control and release, as Durkheim (1995[1912]:1) clearly explains, are central components of the religious experience, and the study of “the religious nature” of humans is “...to reveal a fundamental and permanent aspect of humanity.”

Weber’s exploration of the relationship between control and release may best be depicted through his research on religion, as expressed in the *Protestant Ethic and the Spirit of Capitalism* (1902). In early Calvinist doctrine, hard work, discipline, and self-control, paired with a subordination of “instinctual gratification” (Turner 1982:255), were considered necessary for the rewards to be obtained in the spiritual, eternal life. As Weber cleverly revealed, this same ethic worked to inform the development of capitalism, as people were encouraged to engage in hard work, discipline, and self control to reap rewards – not in an afterlife, but in life on earth. While the sphere of production demanded self-control, hard work, and discipline, consumption was often marked by the experience of release. Jacksonian America during the 1840s was no longer characterized as the milieu of Puritan patriarchs, but rather, by “independence, individual enterprise, and a passion for material wealth” (Cole 1992:77). This pursuit required a heightened sense of control and discipline, marked by a heavy emphasis on personal responsibility and restraint. The quest for material wealth was embodied through the rationalization

and control of the body (Cole 1992:93), and this discipline and control were most threatened, for Weber (1993[1922]), by sexuality, as he explains:

Rational ascetic alertness, self control and methodical planning of life are seriously threatened by the peculiar irrationality of the sexual act, which is ultimately and uniquely unsusceptible to rational organization. (Weber 1993[1922]:238)

In his historical examination of practices associated with self care, Foucault (1988:29) notes an "...ambiguity about the body in this cultivation of self," since cultivation practices were typically focused on the soul. The rise of clinical medicine (Foucault 1973), hand in hand with other disciplines, including demography and geography, helped to make unruly or undesirable bodies the subject of social control and regulation (Turner 1991b; Thompson 1998). Foucault's genealogy reveals the ways that knowledge and power relations mutually coexist as the channel through which rules of conduct are constructed. The body becomes positioned in the middle of the tensions created from this power/knowledge relationship (Foucault 1979) since it is the site where rules of conduct are implemented. As Katz (1996: 14) articulates, "Weber's concept of Protestant asceticism and Foucault's concept of discipline both specify how administrative regimes pacify individuals through techniques primarily aimed at the self as a locus of regulation." Yet Foucault does document bodily practices involving *both* control and release – for example, aesthetic practices involving denial and discipline of the body served as sources of control, while Epicurean practices were associated with release and indulgence, and symbolic actions implemented on the body served to signal identity.

Picking up on this interplay between production, consumption, control and release, in his seminal research on perceptions of health during the early 1980s, Crawford (1984) concluded that the concept of “health” mirrors what he suggests is an inherent tension in capitalist societies. Explaining that all cultures organize releases from typical renunciations, Crawford (1984) argues that while capitalist production demands self-control, discipline, denial and willpower, consumption within capitalist society often serves as a release – marked by freedom and pleasure. With the body as a site for resistance, people experientially embody the mandates of control and release, as “power imposes its agenda and achieves its objectives through our bodies”....since... “our bodies are both the metaphor and the substance of our struggle against domination” (Crawford 1984:97).

Crawford suggests that food, for example, is an important location for what he describes as an inherent and contradictory dilemma – the dilemma that exists at the nexus between control and release. Crawford (1984:93) explains, “Like shopping, the desire to eat is a favorite form of coping. And for those who don’t throw up or fast, exercise has become our most popular attempt to resolve individually the contradiction.” The contradictions of consumption centering around food have also been explored by other scholars including Lupton (2000:217) who argues that, for example:

Foods may be conceptualized as ‘risky’...even when there is no apparent biological link to ill health or disease...danger is founded far more on social norms and cultural conventions associated with the need for individuals to maintain some sense of certainty and order, preserve integrity, present themselves as ‘civilized’ and defend their bodily and symbolic boundaries against transgression.”

Lupton's exploration of the ways that cultural conventions help people maintain a sense of certainty and control intersects with Elias' work on the "civilizing process," which, occurring from the Medieval period through to modern capitalism, involves the increasing internalization of moral norms as a means for self control, rather than brute force (see also Cole 1992)

It is argued that the dynamic between control and release is something that is part of many different cultures (Rieff 1966), and religions (McGuire 2003), yet as suggested by Crawford (2000:222), in advanced capitalist societies, individuals strive to respond to the competing demands in a way that create problematic "contradictory internalizations" revolving around the tension between letting go and self discipline, control and release, denial and pleasure. The concept of health, through this lens, regarded as underscoring the cultural ambivalence towards discipline and pleasure – suggests metaphors more characteristic of plate tectonics – the jerking and unpredictable movements of the earth's lithosphere, and less like the measured equilibrium of a balanced scale. The maintenance of balance will only theoretically be achieved more in the uneven swing of a pendulum than through the creation of harmonious synchronicity, as anxiety, ambivalence, and confusion often prevail.

Like Rieff (1966) and Crawford (1984, 2000), a number of other scholars have used the concepts of "control" and "release" as a lens from which to understand culture. For example, Binkley (2007:18) suggests that the radicalism and counter culture inspired by 1960s social movements could be described as the "Dionysian explosion" and that they were shadowed by an "Apollonian counterpart" which was characterized by "self

control and self regulation in which liberation was sketched out as a calculated lifestyle project.” As Binkley (2007:18) explains “...for millions of middle-class Americans who had...internalized and routinized the reverie of the 1960s and applied it to a radical renovation of their everyday ways of life, the new sensibility operated within a dynamic of release and constraint.”

Looking at the concept of “health” as a type of self-control, and as a type of release marked by a struggle between indulgence and denial, O’Sullivan and Staklum, (2004), argue that release, through this perspective, is depicted most significantly by pleasure, and it is considered the opposite of self monitoring, discipline, restriction, and denial. It is argued that health promotion, replete with what is often regarded as an overarching moralizing discourse emphasizing self-control, “*shoulds*” and “*should nots*,” may actually have an opposing effect, triggering releases rather than restraints (O’Sullivan and Staklum 2004:36). Similarly, Williams (1998) argues:

Health... becomes our new salvation: a sacred symbol and ritualized practice in which these corporeal dilemmas and cultural contradictions (...of transgression and taboo, pleasure and pain, control and release, are played out...) are played out if not ritually ‘resolved.’

Looping back to my own research, and in some ways parallel to my own personal memo-writing experience, examples of the concepts of control and release exist throughout many of my conversations as people describe their embodied engagement in a wide range of body regimens associated with the “healthy life extension community.” As explained by Williams (1998:438) control or discipline is “...a core, if not ontological, feature of human embodiment, from homeostatic balance and neuro-hormonal regulation to the culturally instilled dispositions of the habitus...discipline and control...are

principally social and cultural,” and much of the sociological research on the engagement in practices related to health promotion, fitness, and wellness tends to look at such involvement more predominantly through the lens of control (Turner 1982; Crawford 1984, 1998; Lupton 2000). Yet, as Williams (1998) further articulates, “Bodies...from their leaky fluids to their overflowing desires and voracious appetites are first and foremost transgressive, demonstrating their continual resilience to rational control.” And as Bataille (Stoekl et al. 1985) also explains, humans experience enormous pleasure from expenditure, waste, excess, and festivities. In this sense, “It is the body...which is the original Other” (Scott 2001:15).

Rene Girard (2000:181) suggests that during stressful or challenging times, many turn to different types of releases in the form of “excess” which can sometimes lead to addiction. Sometimes my interviewees used the language of addiction – referring to themselves as a “health junkie,” and as “addicted” or “hooked” to body regimen careers or to specific foods, while likening the embodied effects of body regimens to “psychedelic drugs” or to “...the best drug I ever took in my life.” Food, being a drug of lesser danger, is something many use for a release, and when stress is alleviated, a turn to control, through food restriction and dieting, is commonplace. The feeling of control, according to Girard (2000), provides people with a mental “lift” or feelings of accomplishment and exhilaration.

Scholars recognizing the body as site of the tension between “control” and “release,” often regard the pursuit of health, or the practices associated with body regimen careers, as cultural mandates centered on control and restraint. While some also

recognize release, it is often in terms of contrast, for example, using a theme like: “a healthy lifestyle might be the death of you” (Lupton and Chapman 1994; Williams 1998). The “healthy lifestyle,” through this lens, becomes unhealthy because “letting go” as a healthy imperative, is seen as antithetical to the values of regulation, discipline, control, and denial. As articulated by Williams ala Crawford (1984):

The rational mandate for “control” (i.e.: denial) therefore jostles if not clashes with the corporeal desire for release (i.e. pleasure), our bodies providing what is perhaps the “ultimate metaphor” reflecting and refracting the general mood and cultural contradictions of late capitalist society.

Release as contrasted with control, and intersected with the human body, is also situated within confines of consumer culture, for example, as Featherstone (1991:170) asserts:

Consumer culture latches onto the prevalent self-preservationist conception of the body, which encourages the individual to adopt instrumental strategies to combat deterioration and decay...and combines it with the notion that the body is a vehicle of pleasure and self-expression. Images of the body beautiful, openly sexual and associated with hedonism, leisure and display, emphasizes the importance of appearance and the look.

In this context, release is premised around the type of bodies people strive to shape, mold, discipline, and construct, within the “freedom” of the marketplace. Through this lens it is possible to regard release as a form of social control that may even be more powerful than the imperative of self-discipline and restraint. For example, William O’Neill (1971) astutely notes the possibility that the pursuit of pleasure, hedonism, and release could be used as a means of social control, surmising that “...sensual gratification could enslave men more effectively than Hitler ever could...” (cited in Dery 1996:39). While a “flexible” or “plastic” body (Martin 1994) may be touted in the market, this plasticity may be in many ways an illusion, since “there is little choice of what body to value; the normalized body is reinforced by the transformative possibilities of medical technology”

(Young 2005:91),

This emphasis on control and regulation is understandable given the way such discourse has paralleled public health promotion efforts dating back at least to the 1970s which emphasize a critical link between disease and individual behavior. The first goal of the 1979 Healthy People Initiative was “to increase the quality and years of healthy life,” and the goal, (health prevention and longevity), was to be implemented by placing primary responsibility in the hands of individuals. As stated by the U.S. Office of the Surgeon General, “One of the major goals of this effort was to educate people on how they could take more personal responsibility for their health through wise lifestyle choices.”¹³⁶ Thirty years later, this emphasis on personal responsibility and control over health continues, as defined by Healthy People 2010 literature, health promotion is “the science and art of helping people change their lifestyle to move toward a state of optimal health.”¹³⁷

Theorists have also argued that in a “risk society” (Beck 1992), pervasive feelings of insecurity and uncertainty abound, which generate unpleasant perceptions of being “out of control.” A variety of practices provide people a sense of control and these may include, as Powell (2006:122 -123) suggests, “...dieting...fitness regimes...minimizing potential risk to self by taking out life insurance, installing a burglar alarm...rational thinking, systems of prevention, and ways of identifying threats before they take effect are means of managing danger and threats in a risk society.” Castel (1991:289) asserts that this overarching desire to manage risks is based on a “...grandiose technocratic

¹³⁶ Retrieved on April 11, 2007, from <http://www.surgeongeneral.gov/library/history/biorichmond.htm>

¹³⁷ Retrieved on April 14, 2008, from http://www.hhs.gov/od/about/fact_sheets/healthypeople2010.html

rationalizing dream of absolute control...” as Glassner (1990) suggests that as modernity’s promise of control has not been realized, fitness programs fulfill this desire. “Fitness programs promise direct control over the effects of nature, as well as freedom from medical professionals, and the achievement of personal morality. And they offer outcomes one can feel almost every day of one’s life” (Glassner 1990:219). Yet as a number of scholars have noted (Powell 2006; Gilleard & Higgs 2001), risks can be difficult to control and people do not have equal opportunity to avoid risk due to differential resources. For example, as Schrag (1980:252) elaborates further: “Almost every agency of education, social welfare and mental health talks a seductive language of prevention, diagnosis and treatment; and almost every client is a hostage to an exchange which trades momentary comfort and institutional peace for an indefinite future of maintenance and control.”

Pushing the concept of “health” further to also make room to explore the libratory potential of such efforts, Williams (1998:448) highlights what he describes as a “return of the sacred and the resurgence of more sensual, carnal forms of knowledge and experience...” explaining that the “underpinnings” of postmodern times serve to include “*both* order and chaos, liberty and discipline, transgression and taboo” and, I would add, control and release. From this perspective, Williams (1998:449-50) concludes:

The pursuit of health...becomes a moral performance; something which, atone and the same time, represents both an embodied expression and ritual ‘resolution’ of the dual imperatives of bodily “control” and corporeal “release”: symbolically reordering what is, in effect, an inherently ‘untidy experience.’...health...is not simply something one has, or is, rather it constitutes a reiterative set of ritualized practices by which one, literally and metaphorically, becomes ‘viable’ at all.

In order to understand what people actually get out of their engagement in body regimens associated with the “healthy life extension community,” we have to consider the corporeal or affective dimension (Sweetman 2001), regarding bodies simultaneously as objects, and as sites of struggle (Pitts 2007). As Varda (2005:210) eloquently recognizes:

The body is at the intersection of nature and culture, of the individual and society, of space and time, of corporality and spirituality (mind) and as such, it is subject to social control but is also seat of the individuality, the material substrate of our physical existence, thought and social relations.

By accepting the invitation to regard human corporeality as a paradoxical blend of *both* control and release (Falk 1994; Williams 1998), I will turn to insights from my interviewees to provide numerous examples of the way these concepts prove useful to explore the embodied experience of partaking in body regimen careers.

Regimen as Control & Release

Many people describe the embodied experience of their engagement in a particular body regimen as being very empowering and this is often articulated through the language of control and release. Expressing the language of control and release, often woven through discourse about fitness regimens, for example, Longhurst (2001:113) asserts:

Working out in a gym, jogging, cycling, swimming and playing racquet sport and so on are an integral part of daily life for many managers. Often these activities are heralded as good relievers of stress but they also function to craft a corporeal self that marks the individual and corporate body as ‘in control’ and ‘successful’.

Empirical research by Mullen (1992) on health (and illness) found that individuals struggled to “balance” control and release, which he regarded through the lens of

moderation and excess. Turning to the stories from the conversations I had during this research project, for example, one interviewee recalled the first time she remembers experiencing the love of being physical, (which she attributes as an influencing factor in her later engagement in a fitness body regimen career), recounting her memory of riding a bicycle as a small child. Later in this same interview, this story parallels and serves to connect to the way this same respondent describes her current experience with the physicality and embodiment of her body regimen career. Through the lens of control and release, consider the following recount:

I was less than five, [and] my brother had a bicycle and I wanted to learn how to ride it and I remember learning how to ride it but it was a real small bike and my brother was 3 ½ years older than me and I wanted to be able to ride a big bike like him so I can remember telling my parents that the bicycle was broken and some how or other they believed it and they went out and bought me this incredible bicycle that was like a big bike and I can remember how gorgeous it was, it was like this beautiful bike and it had these streamers off the handlebars and they really encouraged me with that, too, and I had an absolute, a love for that, the first moment that I learned how to ride. *I loved the feeling of the wind blowing in my hair and just being able to get around like that by myself, with my own power.* [Female, FR, 4/5]

Later in the interview, this respondent describes the feelings she experiences now, at almost 60 years old, when she engages in her fitness body regimen, which includes running on the track.

Wednesday nights I go up to [name of city] and go up to a place where we meet and have a track workout and our last track work out we did mile repeats on the track and it was a, I am definitely the oldest woman on the team, in fact, I am probably the oldest person on the team, and in the last work out we were doing these mile repeats with a very short time interval in between and one of the men that was on the team, that is probably 7 years younger than I am, after the workout ended, we went back to where we meet, we run back there as like a cool down, and he looked at me and he said, “You looked so fast on that track,” and, I thanked him for saying it, but what he was telling me is what I was feeling while I was on the track. *I just felt very powerful. I could feel the wind blowing in my hair and I just felt like I was really in control of my speed and my body. Nothing hurt.* I started out with one group of women who said that they wanted to run an 8 minute mile and half way around the track I just decided that I was going to try to catch up with some of the younger women and *I just felt like a huge*

surge and I just pushed on and I started to pick up the pace and the whole way I just kept moving faster and faster. It is just a wonderful feeling.

Describing embodiment in terms of control and release, the above recount reveals the powerful ways people are connected to the embodied physicality of their engagement. Another interviewee practicing CRON also recounted this combination of control and release when articulating her experience engaging in her body regimen career. Describing the ebbs and flows in her engagement with her body regimen, this respondent explained that in the winter she practices “strict CR,” a more controlled version of her regimen, while in the summer she practices a more “moderate CR,” which allows for more release. Undulating back and forth between these seasonal rhythms, this respondent explains:

I go in phases, I never really studied why though, but you know, as the weather gets cooler, I am more inspired to do more [of the body regimen]. Over the summer, it's too hot to want to get out and I feel more lethargic, I have a tendency to go off of it then. I am still eating nutritionally but I am just eating more than what my body really needs. It's not to the point where I am gaining much weight but more than what would be the restriction part of it. [Female, CR, 4/5]

[So how would you describe the way that CR, when you are doing the strict CR, how it makes you feel, physically?]

Oh, in control and loving life! It's amazing. It's amazing how just taking control over that one aspect of your life, it can go into the other areas as well. I get more done...once I get started, its amazing how just that one aspect, taking control of it, makes everything else fall into place... taking control of being in charge of what I put and don't put into my body, its very zen. [big laugh]

[What about in the summer when you are doing the more moderate CR?]

I don't feel unhealthy. I just don't feel as motivated, because I am eating out of my garden. I grow organically and it's all fresh produce. I just eat as much as I want to...[big laugh]

Describing the embodied pleasures of control and release, the respondent above reveals how, for her, these tensions are seasonally mediated. Others describe similar ebb

and flow periods, blocks of time where they engage in stricter control with their body regimen, followed by times of release when they may “relax” or “loosen up a little bit.”

For example:

At the end of 12 weeks I am going to take about a three week break, and by that I mean, it is hard to stay on a perfect diet, and by perfect diet, I mean, eating oatmeal all of the time, and eating pure chicken, you know, sometimes I can season it with soy sauce or mustard, or something else. It is a strict diet, you know, it gets old, it really does get old after a while because there are a limited number of things that I can eat...I am looking forward to just kind of relaxing because it, I intend to do this... I mean, follow the program to the letter as best possible, and then from there, I figure, after 12 weeks, I'll take a 2 or 3 week break and then start again, just do it again. [Male, FR, 2/3]

I really did have all these control issues but when it came to food I didn't really, I mean I had control over, I would take out whole categories of food, no white bread, there has not been white bread forever, there is no mayonnaise, there is no butter, a little bit of olive oil or grapeseed oil, but I don't even get carried away about that, but I have many, many food rules, but when it came to, you know, I could eat a couple pounds of carrots, there still was excessive food that I didn't have control over. I had control over what I ate but I did not over quantities of what I ate, so, but now I think that this intermittent fasting is something that is perfect for me. I have the ability to say no food until 5 o'clock, yes...20 hours fasting, four hours eating, and that works perfectly for me. [Female, CR, 4/5]

I keep it pretty simple, you know, its about nine or ten weeks where I eat vegetables, potatoes, egg whites, blueberries... and then...you can go out and eat at [name of restaurant] or have some baked chicken wings or stuff like that, you know, having brown rice for breakfast or some oatmeal, whatever, you can rotate the stuff you are having and maybe *loosen up a little bit*, maybe go out to dinner and have a dessert, well why not share it, four people, four forks, why not have dessert for everybody, you know, so, something simple like that...[Male, AA, 2/3]

Again, the three respondents above describe times of control followed by release, which serve to frame their body regimen careers. For some it is in terms of weeks or months, while for others, as in the case of the experience with intermittent fasting, this pendulum is built into the daily practice itself, with long stretches of control through abstaining from eating, followed by release. Another way that this experience is described and embodied is depicted through conversations about dietary consumption.

While people may follow strict and highly controlled rules about what they can consume, a number of interviewees described experiencing the consumption of large quantities of specific foods as a certain release from control. Many types of vegetables, for example, tended to represent a category of food that did not require restriction and control, and a number of interviewees recounted eating very large volumes.

I don't have any trouble following this [body regimen] and the volume of food you eat is huge, because its all, I mean, for lunch, I made myself a big vegetable salad with cottage cheese or yogurt, and it would take me an hour to eat it, it was so huge!
[Female, CR, 4/5]

I make crazy salads. The "crazy" factor is actually kind of the size, more so than the content, but for my very superbowl lunch which I have been doing for about two years now, is the largest mixing bowl that I have, which, size wise, I am not sure, it is probably, I don't know, two gallons or something and like a whole head of lettuce, usually romaine, because that has all the most nutrients in it, the typical make up of the salad is kind of mundane but it covers a lot of bases nutritionally for me...and that whole thing, which is enormous, and takes me like 20 minutes to eat, is like under 300 calories. [Female, FR, 2/3]

I've been health conscious for years...and I eat massive amounts, huge quantities of vegetables [Female, CR, 4/5]

I eat a huge breakfast. I eat over 2 pounds of celery, and I may have several pounds of tomatoes and I'll definitely have several pounds of red peppers. [Male, CR, 60+]

Finally, a number of interviewees talked about changed palates and heightened taste buds that they perceived to be a result of their engagement in body regimen careers. For example, as people place much greater control over the foods that they consume, they describe the experience of eating as much more mindful and pleasurable. Their taste buds come alive as they begin to enjoy the "natural" flavors of foods that they never before noticed or appreciated.

Every time I do eat, it is so wonderful, it tastes great ... food is great, food is wonderful, and I love all of this, and I have developed a real taste for kale and swiss chard and all of these things... [Female, CR, 4/5]

I think that your tastes buds actually thrive on the fruits and vegetables that you take in, and foods taste better, so, eating this tastes better, fresh fruits and vegetables tastes better...I eat a lot of oatmeal which is kind of bland, so...as a result, when I eat the fresh fruits and vegetables, it really makes them pop, it makes the flavor that much more attractive! [Male, FR, 2/3]

When you are doing CR and you are reducing sugar and you are reducing salt, you start to taste all of the natural, you know, in the vegetables and then, red peppers become extremely sweet [laughs], they may have been a little bit sweet before but they become sweeter, or broccoli tastes different over time, I mean, it might even have a little bit of a saltier or meaty flavor to it. [Female, CR, 2/3]

I think I value the taste of food now that I practice CR. I think food has never tasted so good. When I was heavier and eating more, I don't think I respected food. I think I ate unconsciously, you know, there is that new slow movement, slow food, I love that, I love it because I try, I think sometimes we eat so quickly, and I do this sometimes, I gulp food down, and I think to myself, I didn't even enjoy that. I don't even know what the hell it tasted like. If you are going to put it in your mouth, you might as well savor it and enjoy it and let your body just kind of absorb it... I think CR has made me value how food tastes in its pure form, vegetables, and my god, there is nothing better than a good piece of fresh sushi or a good piece of dark chocolate, and savoring it, that kind of thing, and so I kind of love some of those advantages of it. [Female, CR, 4/5]

Perhaps it is important to note here that while one side of the embodied experience of control and release may sometimes be characterized as more desirable than the other, throughout my interviews, people articulated the embodied experience of pleasure in the simultaneous practice of both. The experience of release would not exist without the experience of control, and vice versa.

Regimen as Release

In a culture marked by heightened rationalization, some suggest that culturally prescribed avenues of release are necessary in order to, for example, get rid of emotional tension. For example, the “runner’s high” – the feeling of wellbeing oftentimes paired with physical exertion (Shaik 2003) – is likened to the spiritual euphoria associated with Eastern mysticism (Blake 1996 as cited in Shilling 2005). Similarly, surfers sometimes

describe feelings of release and transcendence, not unlike Maslow's (1970) description of the "peak" experience, or Csikszentmihalyi's (1975) conception of "flow," which are characterized by the embodied experience of oneness, immersion, connection, awe and ecstasy. Sometimes, as Freud suggested, simple "animal" acts like eating and intimacy may promote social merging, while risk taking, or "edgework" (Lyng 1990), may also provide people with an embodied sense of release through pushing to the outer extreme of thrill seeking and potential danger.

Turning to my own interviews, a broad number of people talk about their regimens in terms of a certain embodied release of built up stress, tension, and anxiety which is often generated from work – whether in the paid labor force or in the home. In this sense, work serves as a site requiring control and discipline, while body regimen careers respond as outlets of release. For example:

It's [body regimen] a good way for me to relieve stress and anxiety... my line of work...is very high stress and this is the best way for me to work out that stress and get out some energy in a positive way... [Male, FR, 4/5]

I like it [body regimen] because it's a great stress reliever, it kind of allows me to go out and meditate for a few hours and just let my mind kind of wander. [Female, FR, 2/3]

I can get a little martyrish if I have spent all day doing everything for everyone else. I want to do one thing, just one...my husband is always like "go run, go run," because he knows that I'll be glad. [Female, FR, 4/5]

CR has freed me up, given me much more time, in a healthy way, to recover from an unhealthy obsession with food, an obsession that was stressing me out and was not good for my health. I spend so much less time worrying about food and that sort of thing... now I have more energy and time for intellectual pursuits and friendships and that kind of a thing. [Female, CR, 4/5]

I started out doing it [fitness regimen] like 3 times a week and then 4 and then 5 and then 6 and then 7 because it was like the best drug I ever took in my life. I was like floating above the earth. I mean, I was just, the way it made me feel was just beyond any drug that I have ever taken...I definitely have taken weeks off from [fitness regimen] whenever I travel...and I'm fine with a week...I'm fine with ten days, but

then I am just ready to crawl up the wall and I mean, you just gotta get me in here... and then let's just say, after a week and *I am ready to just explode*. I do my [body regimen] and I'm like, [long sigh] ahhhhhhh, I got my fix!! And as far as a week off of [body regimen], to be honest with you, that is serious torture for me! [Female, FR, 4/5]

For me, it [body regimen] is more of a head clearer... I love it! It gets me as excited now, probably more so than it did back when I first started. [Male, FR, 4/5]

A lot of people do a lot of different things for releases, you know? I can go for a run or a ride, and be out with a whole bunch of people and not say a word to anybody, you know? I really relieve stress through it. Of course, when school started, I can't do it but for years I ran every morning before work and the day was just *so much better*. [Male, FR, 2/3]

My interest in fitness affects my work because every day I have to go down to the gym, well not have to, I mean, I want to. I want to go down to the gym everyday. It is my time away from the computer. I need that time away just for a little bit of a break during the day, *for a mental break and a physical release*. I can take out my aggression in the gym and when I come back upstairs I can be a happy person again. You know, the stress I pick up during the day, I can let it go there, and, and I need that, I think everybody needs that, I don't think it is healthy to hold onto aggression or feelings of frustration. Get em' out, talk about it, go to the gym and work out if you need to *release* that anxiety, to *release* the aggressions that you pick up during the day and come back a renewed individual...it goes back to that tribal mentality, almost, that caveman mentality, where, during the day I have to be a good little worker and we all answer to somebody at work, however, when it comes to satisfying that inner caveman need to hunt and grunt if you will, this serves that purpose, this serves that need to battle, or whatever you want to call it, you know, I would say it is a primal urge. [Male, FR, 2/3]

Others talk about release in terms of easing up on some of the prior control they practice in terms of their regimen. For example, one interviewee recounts how she eats more foods that are not completely organic now than she did in the past.

I kind of loosened up a little bit, because the more I read about the organic label, the more I was disenchanted with the organic label...I am already not getting 100% organic food, I never will, and so I kind of let that go...[Female, AA, 2/3]

In perhaps one of the most interesting recounts of release, one respondent, who was very satisfied from the effects of her anti-aging medicine regimen, described the ways that the supplements that she took provided her with a sense of release from what used to be her normal everyday concerns, worries, and insecurities. After taking her

combination of hormones and supplements, she felt dramatically more accepting of herself. Released from her previous endless cycle of feeling like she was never good enough – this respondent describes feeling a sense of confidence and satisfaction that she had never before experienced. In her own words:

Before the hormones got fixed, I felt horrible, and I looked horrible, in my mind, but what happened is, after the hormones, I realized that while nothing had physically changed, I didn't care. It was a difference of, even though I looked the same, had the same weight, had the same body, I actually felt sexy, even though things hadn't changed and I was fully aware of that, it was almost like I just didn't care. It was almost a mental thing of, but it had to be a hormone thing as well, you know, it couldn't have just been a mental thing because whatever I had done before, without the hormones, I couldn't mentally just get to that point, but it was very, very strange, because I thought, I know [emphasis] I am not any different than I was just three weeks ago, I haven't got a buff body all of a sudden, but it was literally a difference of where I am thinking, "oh, I look good in that!" It was very strange because I knew better [laughs] but it was almost like I didn't care... it was an amazing difference. So to me that is what happened. I don't think I've ever been to a point where exercise wise or healthy food wise felt good inside and made me feel as though I look good. It's been different for me, it was more of a I don't care what I look like. I feel good about it. It was totally different. I don't care. I don't care. I look just as good as that girl over there!
[Female, AA, 2/3]

Regimen as Control

Hand in hand with release, control is a very important aspect of people's experience with body regimens. Individuals engaged in body regimen careers, for example, often express detailed knowledge about physiology and nutrition, which reveals the "rationalization of conduct" (Monaghan 2001a:52), through the application of scientific norms and beliefs on daily practice (Turner 1991a). Grounded in a Foucauldian analysis of bodily practices, the moral imperative linking body regimens to practices of surveillance and control (Bunton 1992), have led some to liken engagement in body

regimens as a transfer of religious asceticism to a more secular sphere (Turner 1991b).

For example, as Girard (2000:186) articulates:

Our sins are inscribed in our flesh and we must expiate them down to the last calorie through a deprivation more severe than any religion has ever imposed upon its adepts. There is a great irony in the fact that the modern process of stamping out religion produces countless caricatures of it.

According to Harpham (1987:xi), “where there is culture, there is asceticism [which is defined as] any act of self-denial undertaken as a strategy of empowerment or gratification.” In her research on medieval devotion, for example, Walker Bynum (1992:162) concludes, “control, discipline, even torture of the flesh is...not so much the rejection of physicality as the elevation of it... into a means of access to the divine.” Just as Monaghan (2001a) noted in his study of bodybuilders, many individuals engaged in body regimen careers, based on their whole hearted commitment, could readily be compared to the dedication reflected in religious conversion and the physicality of religious enlightenment.

Body regimens often provide people with a sense of ontological security through control, guidelines, rules, and structure. Using the word “regime” to describe “personal habits...modes of self discipline...learned practices that entail tight control over organic needs,” Giddens (1991:62) argues that regimes are very important to identity because of the way they link personal habits with bodily appearance. Recognizing the body as an essential communication tool, sociologists like Goffman and Garfinkel quite remarkably revealed the importance of sustaining bodily control during social interaction as bodily discipline and control helps people construct, re-construct, and sometimes maintain a sense of identity. Because the body helps people maintain social relations and mediate

multiple identities (Goffman 1963, 1969) controlling bodily expressions, movement, and communication is an essential part of successfully navigating day-to-day life. Bodily control – perhaps more centered on the inner body than on appearance – was also important to my interviewees. As clearly articulated by several respondents:

It's [body regimen] kind of this security to know you are doing what you can do for yourself, you know, and people, people think "oh life is to be enjoyed, I'm not going to worry about what I eat," but it can be very enjoyable if you eat healthy, because I mean, though there are things that you can never eat, most things you just can't overeat. [Female, FR, 60+]

When I can't do my regimen, I get anxious to be constructive and to be productive again...I don't like not being at the top of my game, I don't like not being productive, it gives me a sense of anxiety and an anxiousness where I need to recover and get back in the gym where I can be productive again. [Male, FR, 2/3]

I've always maintained a pretty good diet regime, very little red meat, now none at all, pretty low fat, a lot of fresh fruits and vegetables... We eat a pretty strict diet, I mean, we like it, but it's pretty strict. [Male, AA, 4/5]

I think part of the CR practice is control, its discipline, and it is a good discipline, and at the same time, it is educational...and I would hate to miss out on that part of it, and I would hate for anybody else to miss out on that part of it, because I think that it is so important to just be in touch with what you are eating... finding out what vitamins are there, and the nutrients...and just all those things interacting together, I think, just brings you that much more in touch with yourself. [Female, CR, 2/3]

I really think in a way its [body regimen] all a control issue, because really, in my opinion, we delude ourselves that we can control life, and it is really, fool hardy...it [body regimen] is a source of, maybe anxiety reduction, you know, the illusion that I am making some effort to control, it is in your own mind, it is part of your control... trying to control life. [Male, AA, 60+]

As noted by the respondent in the quote above, a number of interviewees recognize their efforts at control as in some ways futile, yet they continue to engage in these efforts, and they describe a calming sense of satisfaction in the day to day, from their efforts – even if they also recognize the limitations in their efforts.

Sometimes respondents reflected on the ways that the control aspect of their body regimens influenced significant others. For example, one respondent detailed how she feels like the control she exerts to engage in her body regimen may make her “less fun” to be around for those not partaking in similar practices. She explains:

It [body regimen] makes me less fun to be around in like restaurants, you know, cause I won't, I am pretty unlikely to just all of a sudden decide that I am going to have a big plate of nachos and eat the whole thing, you know, I'm much more likely to order the chicken salad, as I did tonight actually, while my companion had like fish and chips, you know, like fried stuff is kind of off my menu now...I'm less apt to share in the kind of usual American excess of you know, getting big piles of food and socially that can be a little bit of a damper... [Female, FR, 2/3]

The concept of control intersected with people's ability to get the time to engage in body regimens, to get access to the right foods and supplements, and to resist what were regarded as external temptations. Respondents repeatedly recounted buying and cooking their own meals as a way to maintain control in terms of food consumption. This sometimes involved taking on the role of the family cook – while other times it led to separate trips to the grocery store, individual meals at dinner time, and even separate refrigerators in which to store food.

I love grocery shopping. My wife hates it and I love it so we get along fine [Male, CR, 4/5]

Initially, you know, when I started doing it [body regimen], we would buy our groceries together and I would kind of buy my stuff, and then kind of eat his stuff too and then eventually we just decided to buy our own stuff, just individually, so we shop individually and cook most of our meals individually, and I think that that really helps CR and our relationship, honestly... it was like [using voice of significant other] “oh you spend so much time preparing stuff for you. What the heck?” ... and that would put strain on everybody. [Female, CR, 2/3]

We eat pretty much separately. I fix what I want, she [spouse] fixes what she wants. She eats things that I don't eat. [Male, AA, 60+]

I do all the cooking and the grocery shopping. I have gotten much more picky. [Male, FR, 4/5]

We usually just go to the grocery store everyday, and I'll just go with him [spouse], and we'll each buy our own thing. [Female, CR, 2/3]

At home, I eat out of a separate fridge, completely from the family... The separate fridge was my own idea because I can't, I find it difficult to look in the regular refrigerator at... whatever my family is eating today, and deny myself that day in and day out. [Male, FR, 2/3]

I make my own pates, and my own mega muffins and all of that... [Male, CR, 4/5]

I have always been a cook. I like to cook, so most of our meals are from scratch, and I have never sort of fallen into the habit of buying a whole pile of convenience foods because I have always sort of felt that cooking real foods was good for you and better for you, and I have lived that way all my life. [Female, CR, 4/5]

Dining out, a time which likely required a release of control over content, quality, and quantity of food, was often perceived of as inconvenient, challenging, less desirable and sometimes stressful.

On my diet, I would prefer to stay home [to eat] and I would prefer to eat lean... [Male, FR, 2/3]

You know, really, the only time I ever really have trouble is, when I go out to eat, and my husband loves to go out to eat, so I have gotta make sure to like ask the waiter, what is on this, how is this cooked. I have to ask a lot of questions and sometimes make a lot of substitutions. [Female, CR, 2/3]

Not surprisingly, since human social life is inherently ritualistic (Seale 2001; Becker 1973), interviewees repeatedly recount turning to ritual, as a means of control, (and release), through their engagement in body regimen careers. Having been a part of human culture for thousands of years, rituals serve basic social functions, helping to establish and reinforce shared cultural values while providing daily life with routine, structure, meaning, predictability, and order. Rituals of the body have a transformative power, as Crossley (2006:108) explains, "body techniques have the power to transform

imaginative and affective structures of intentionality (in the phenomenological sense), thereby situating those who practice them differently.”

Helping to sustain collective memory and identity (Woodward 2002; Durkheim 1995 [1912]), devotion to a group is supported through ritual (Bauman and May 2001). Anthropologists have long regarded rituals as a means for individuals and communities to reveal, for example, the connections and contradictions between culture and nature. Mary Douglas’ work *Purity and Danger* (1966:2-3) detailed how rituals around purity and impurity grew out of religious, philosophical, and practical concerns, helping to create a certain unified experience, while publicly displaying and revealing symbolic patterns. Douglas (1966) shows that rituals serve to create unity (order), display symbolism (of contradictions which exist on the social level), and engage fundamental religious/philosophical themes (good/evil). Suggesting that rituals are necessary to help contain existential fears of that which is beyond human control, Douglas explains that purity rituals focused on pollution and taboo, for example, help to construct boundaries between the self and that which we do not completely comprehend. As defined by Pfohl (1994:28):

Rituals are highly patterned actions which, when performed correctly, connect people to a mythic or transcendental sense of what things are and should be, of what is real and how they should act in accord with that reality.

The predictability of repetition in terms of ritual and routine made it less likely that someone would veer off of the goals of their daily body regimen career as engagement in rituals often served to secure ontological security while denying change (Strathern 1996:30), providing people with tools to tame and transform the natural order

in an effort to make it appear safer and more secure (Becker 1973:238. According to Giddens (1991:39):

Routine activities are never just carried out in an automatic way. In respect of control of the body and discourse, the actor must maintain constant vigilance in order to be able to 'go on' in social life. The maintaining of habits and routines is a crucial bulwark against threatening anxieties.

This experience of stasis, stability, and control is part of Harpham's (1987:xiv/xv) description of ascetic discipline and control which he describes as:

A bodily act that points beyond itself, expressing an intention that forms, and yet transcends and negates, the body; discipline makes the body intelligible by indicating the presence of a principle of stability and immobility within the constantly changing physical being.

Linking "body techniques" and religious ritual, Crossley (2007:90) details how the performance of rituals can inspire religious awakening just as body techniques can "...modify perceptual, affective and cognitive structures [as]...the world takes on a spiritual hue because the conscious experience of the agent is transformed by action." Referring to religious holidays like "Carnival" and "Lent" as "complementary aspects of the ritual year" Meredith McGuire's (2003:31) research reveals the ways rituals can serve both control and release, as Lent may be marked by the "ritual expression of abstinence, sorry, bodily mortification and thoughts of death" and Carnival by "ritual practices of consumption, joy, bodily pleasure, and affirmation of life."

Eating is often an important part of religious rituals, as Shilling (2003) notes, Calvinist reformers connected sin to the pleasures of drinking and eating, while a wide range of medical writings linked diet and Protestantism. George Cheyne's program of "diaetic management," (promulgated by Anglican minister John Welsley), for example, emphasized a highly ritualized pattern of chewing foods, and focused on helping people

control disease and melancholy while promoting longevity, through a return to a lifestyle characterized by greater simplicity, moderation and sobriety (Turner 1991b).

Rituals help to reposition “matter out of place” as a way to provide protection for “...the vulnerable margins and threatened borders of the body politic” (Williams 1998:439). Rituals enable people to set limits which provided them with a feeling of comfort and security, working “...upon the body politic through the symbolic medium of the physical body” (Douglas 1970:129), and helping to reinvigorate the present from the past, while generating what Bourdieu (1977) refers to as habitus¹³⁸. Anthropologists have shown the ways that rituals have served to mark important life transitions or stages (Turner 1969; Van Gennep 1960) and pairing body modification with ritual helps to establish authenticity (Siebers 2000) as bodily flesh, for example, through piercing and tattooing, is permanently transformed. Referring to such acts as ritual systems without theology (Gans 2000:165-166), body modification may be empowering, generating pride and signifying a certain discipline or control over one’s body and mastery over pain. Turning to my own conversations to think about the importance of ritual as a source of control, in the words of one respondent:

I think the ritual [related to health regimen] puts the breaks on things...knowing what you can and can’t do. I mean, I never have sherry before 9 at night, I just know that, so there’s no chance that I drink too much or anything, and so, yeah, that kind of thing does influence [Female, FR, 60+]

The predictable repetition associated with ritual provides structure and comfort – guiding people as to “...how they should act in accord with that reality” (Pfohl 1994:28)

¹³⁸ Bourdieu (1984:190) explains that “the way people treat their bodies reveals the deepest dispositions of the habitus,” defining habitus as attitudes, dispositions, and taste that individuals share as members of a field.

associated with their body regimen career and imbuing them with a sense of purpose. Many respondents, for example, talked about eating the same things over and over again. Hand in hand with repetition and predictability, meal planning was another common theme. People planned far in advance as to when, what, and how much they intended to eat.

I basically eat a lot of the same things [Female, CR, 2/3]

My breakfast is always the same. I've tweaked it over the years to where my breakfast is always the same so you don't have to think about it, you just do it. And my lunch, then, is pretty much the same... [Female, CR, 4/5]

I do kind of have a regimen. I have a pretty similar breakfast, a mid morning snack and then lunch and then an afternoon snack and then dinner. I make sure that I get enough protein and vegetables. We think about what we are going to eat every day. I kind of think about the week and say, "ok, what will I have for the week?" [Male, FR, 4/5]

I just get in this... routine. I've always been this way. I pick something I like to eat and I eat it until I am sick of it. I can't really say that I have this great varied diet. [Female, FR, 60+]

I tend to eat the same way, every day, basically. So I don't mind repetition. It is easier for me. [Male, CR, 4/5]

Most of the meals, we tend to eat the same things over and over again, so a lot of the meals, I've already worked out on the computer a long, long time ago so I know that this is a good combination. And my breakfast is consistently the same thing... that eliminates all the crazy ass cravings I used to get during the day. [Male, CR, 4/5]

Mind Games as a Source of Control

While people experience the tension between control and release from the "outside world," when engaging in their body regimens, they also experience this tension within themselves. This may sometimes serve to exemplify the classic Cartesian mind/body split where the mind struggles for control over the body, which resists, and through the process, "body-mind fluctuations are...normalized" (Tulle 2007:338). For

example, as one CR enthusiast explained in an online communication based around emphasizing the need to monitor and track calories: “If your body is low on energy, which is kind of the modus operandi for CR, it will attempt to get more calories in sneaky ways. Your body knows what it wants - neutral energy balance, NOT negative.” In this particular example, the body becomes positioned as that which is clever, sneaky, and persistent – as a site requiring steadfast vigilance and determination. Playing what could be categorized as “mind games,” a number of my interviewees recount stories of the ways that they keep themselves engaged in what are sometimes very demanding body regimen careers.

It is funny, in my mind, often times, I equate it [body regimen] with brushing teeth. When people talk to me about it, I’ll say, “do you brush your teeth?” and they’ll say, “yes” and I’ll say, “It’s the same thing. It’s the same idea. *Don’t let your mind speak negative thoughts to you about it.* Just think of it as something you need to do as part of your life. When you begin doing it, you will work yourself into being joyful with it because it gives you so much back...Occasionally because of the climate I live in, the weather can be a factor, but *I’ve also really worked on my mind with that so that that does not get in my way either.* I, even if it is raining, I’ll say to myself, “water is healing, water feels good on my face, water feels good on my skin.” I’ll go out in the rain. If I have to run slower, so be it. It is that kind of a day. So I don’t let a lot of things influence my decision about what I need to do about my health. [Female, FR, 4/5]

With the yoga, I feel like I have climbed a mountain, I’ve conquered myself, because of all the mind chatter... that’s why the science of mind is so good for me, because I get chatter, chatter that is self deprecating, it is not even hyper critical, I mean, that is so far behind me now, but there is one move in yoga, I have to laugh, because when I am doing it I have to say, “look in the mirror, look in the mirror” because I used to, and I am going to preface this in the past, but when I would look in the mirror, I would completely fall out of it, I couldn’t stay in that position because I would be saying, “you can’t do this,” my eyes would meet my eyes in the mirror and I’d say, “you can’t do this!” and I’d fall out of it. The other day I actually looked at myself and I maintained for the most part, but its mind over matter. [Female, AA, 4/5]

When I work out in the gym I have this negative thought that runs through my head: I am going to pass out. What is going to happen? Will they know who I am? And I carry it to the farthest degree of craziness....I think most of it is psychological, it is a manifestation of anxiety, I have always been kind of pre-dispositioned to anxiety, and the anxiety is kind of high now, it kind of comes out in dizziness or a physical way.... I

have to kind of assure myself... I go through all of these self thoughts for reassurance..." [Male, AA, 60+]

Another respondent describes how sometimes her food cravings feel like they will literally "swallow" her. In order to get through what she regards as these particularly challenging moments, this interviewee describes her process of "self talk."

I try to be logical. I am a logical creature. I have all the nutrition I need for the day. I can pull it up and see, ok, my body does not need anything... *I try to tell myself* that I am not needing more food, and then a lot of times, it wouldn't be good for me to, at that point, exercise, if my blood sugar is already low, so I will...listen to a little meditative tape or something to help get me, to calm my body down, because its kind of panicking. [Female, CR, 4/5]

When talking about why he does not delve into more restriction and control with his body regimen career, another interviewee explains:

I find that I always run into some bounce back, either I get too cold or I feel hungry and irritable all of the time, or I don't have enough energy or something. There is some kind of consequence to it that I dislike. Or I'm too into food, [laughs], and I can't get myself to go there. I'm like, "oh, I'm hungry, should I eat?" Yes! So, I think it is just *a mindset thing*... it's like, I could do it, but I don't really feel compelled to... [Male, CR, 4/5]

Describing the mind games she has to play in order to coach herself through gaining a few pounds, another interviewee articulates:

I have actually gained a pound every...two to three weeks, so that is progress, and I am increasing my food slowly...but every day progressing, and watching my self talk, somewhere in my head, its so interesting, there's still a piece of me that thinks, "oh my god, I'm going to wake up one day and be over weight," and that fear is so irrational, and I know that, so I am constantly having to *really* be logical about this and not go on my emotions. And you know what, I can see it in the mirror, I look at it in the mirror and I just think, *my god girl, gain some weight!*... I call it mirror therapy [laughter] [Female, CR, 4/5]

Finally, another respondent explains how his experience with his body regimen helps him cope with his high risk job as a fire fighter – providing him with valuable mental skills that enable him to grapple with what are sometimes life threatening situations. He articulates:

When all your fire gear is wet, and you have got that tank on your back, you just added about another 80 to 85 pounds on your body that you will wear anywhere from an hour to four hours, so I mean, your fitness level definitely can help you or hurt you... some of the situations we get can be testy, and it helps being able to control the brain for doing that, training for the iron man, telling yourself, “this is only going to be for a little longer,” so they kind of help each other out. You know? Suck it up! [Male, FR, 2/3]

The body, through engagement in body regimen careers, becomes a site through which fundamental contradictory tensions are realized, wrestled with, and experienced, as described through the relationship between “control” and “release.” These tensions, premised in the relationship between control and release, production and consumption, are demanding, ongoing and complex. Suggesting, for example, that all asceticism is for the sake of desire, Gans (2000:177) further elaborates:

As the market generates ever higher levels of consumerism, the desire for social recognition, particularly among the young, becomes increasingly focused on the body because it is there that the adolescent has the opportunity to add value most readily. And the principle source of the value added turns out to be what social value has always been created from, not hedonistic self indulgence but ascetic deferral of desire.

Yet as Williams (1998:440) articulates, “despite a long history of rational discipline and corporeal control, ...bodies are sensual as well as ascetic, fluid as well as static, volatile as well as fixed...” As people try to articulate their experience with what may be regarded at times as contradictory tensions, my interviewees across all three sub-groupings tended to use the term “balance” as a way to articulate their efforts to navigate that which represents “control” and “release.”

“Balance” as a Strategy to Navigate Control and Release

While the ideal of the “balanced body,” as discussed in greater detail in chapter 6, was predominantly upheld by those engaged in age management body regimen careers, the notion of “balance” as it is applied to the experience of “control” and “release,” was

important to interviewees in each of my study's three subgroups. While the "balanced body" was used as an ideal to counteract perceived hormone and nutrient deficiencies which are thought by some to increase with age, "balance" when applied to the experience of "control" and "release," was more about managing powerful and sometimes competing energies. Looking to my interviewees as they describe efforts to balance the pull and push of "control" and release":

A few years ago when the whole Atkins diet was really big, all of the older members in my family went on the no carb, all protein, you know, to that extreme, so they are no strangers to taking something to somewhat of an extreme, even though my current calorie restriction, I don't consider it extreme at all, because I don't focus on the calorie part, I focus more on the optimal nutrition, and instead of playing the "Oh well, fat is evil or carbs are evil." Instead of playing that game, I've come to find a balance between them all. [Female, CR, 2/3]

I think people can become obsessive about anything. I think it is important to work towards balance. I keep trying to explain to my coworkers who are interested in my routine that they don't really need to diet. They just need to put the balance into their life with what they eat along with exercise, that it will happen, but unfortunately, in our culture, a lot of things are not in balance. A lot of people believe that there is some kind of magic secret....I'm not always out there thinking about my regimen making me healthier, but I am thinking a lot about how it brings balance into my life, and how, it brings many good things into my life. [Female, FR, 4/5]

I balance it...if I eat a lot of something that I think has more sugar in it or more fat, I will exercise more or I will make sure that I am getting in more miles, and its not like the miles I get in, I told you, I walk and I read, I am doing 2 ½ to 3 miles an hour so that I can walk and I can read, but if you are there for an hour, then you have gone three miles, and if you are reading for a couple hours, you know, then all of a sudden, you are up to 7 or 8, so I'm, yeah, I think I just balance things ...[Female, CR, 2/3]

I am forever seeking balance, and I am fanatical too, but I am seeking balance when I am fanatical. So over the years, I have cut back [on exercise regimen], from seven days to six days, and from six days to five days...I have to have balance now... I have to have more of a balance. [Female, FR, 4/5]

I've started eating a lot of things I wouldn't used to have eaten...but there is a balance...[Female, AA, 2/3]

We don't like to think that we are that insignificant. But we are. You know, so it is kind of balancing, the significance of your own life, who's significant in it for you, and

then at the same time you realize, that there is this huge universe, its kind of really weird, the things you think about can be kind of unsettling. [Female, FR, 60+]

When people work to articulate the embodied experience of control and release, a central theme repeatedly arises out of what this relationship seems to center around -- the concept of energy.

Energy

A critical issue related to embodiment which also intersected with the above discussion about control and release, involves the concept of energy—which has its own rich history that intersects with historical discourses premised on efforts to potentially delay aging and/or extend the lifespan. The relevance of the notion of “energy” has been around for thousands of years, as is evidenced by concepts like Prana, the Sanskrit word to mean vital or life sustaining energy, regarded as that which separates life from death, and the Chinese word chi (or qi), translated literally to mean “air” or “breath,” but most often used to describe the flow of energy as symbolized through the balance of the yin and the yang. The Chinese book *Huang Ti Nei Ching Su-wen* (The Yellow Emperor’s Classic of Internal Medicine), written about 4,000 years ago, includes numerous references to the aging process and it repeatedly suggests that bodily aging is controllable. Beginning with a passage where the Yellow Emperor “Huang Ti” asks his minister Ch’I Po why most people live for about half of their potential life span, Ch’I Po responds that most people do not work to generate chi; aging, it is suggested, is not inevitable (Hall 2000). Aging is regarded as a “disease state” that is caused from a lack of chi which results in disharmony between yin and yang.

Grounded in the 19th century focus on science, hygienist theory promoted through the work of writers like Luigi Cornaro, and George Cheyne, was premised on the idea that senescence (and eventually death) resulted from a decline in so-called “vital energy”; people were urged to conserve what were perceived of as limited stores of bodily energy in order to live longer and healthier lives (Haber 1983). Conservation of “vital energy” was of utmost importance, providing moral grounds to depict things like non-procreative sexuality and masturbation as bad since both were thought to deplete vital energies, the same vital energies thought to be depleted by bodily aging (Shilling 2003). Ailments associated with a decline in energy were identified in the late nineteenth century. It was during this time that Dr. George Miller Beard coined the term “neurasthenia” to describe a condition which William James later called “Americanitis,” used to describe symptoms of fatigue, anxiety, impotence, and depression. Neurasthenia was thought to be caused by a decline in the energy reserves of the central nervous system and Beard grounded the cause in “civilization” and all the changes associated with rapid industrialization and urbanization (Mellencamp 1992).

As detailed in chapter 6, turn of the century efforts aimed at rejuvenation, like for example, the Steinach operation¹³⁹ (now referred to as a “vasectomy”), was premised on the idea that such procedures would make the aged more industrious and energetic (Sengoopta 2003), as scientific discourse served to offer ways to combat fatigue, and stimulate productivity. The Steinach operation has been considered a reaction to modern

¹³⁹ Research scientist Eugen Steinach, one-time director of the Biological Institute in Vienna, and six time Nobel Prize nominee, thought that the "Steinach procedure" (or vasectomy) enabled tissue responsible for sperm production to provide the bloodstream with more hormones resulting in greater energy.

fears in the U.S. and across Europe of a decline in masculinity, as reproductive potency is waved in exchange for greater amounts of bodily energy (Armstrong 1998:149). After having had the Steinach procedure in 1934, for example, William Butler Yeats proclaimed that he had a significant increase in energy (Armstrong 1998).

Images of the human body as machine emerged through the movement towards scientific management and Fordist mass production, and Taylorism was premised on the dream of getting rid of inefficiencies and wasted energies in the production process to create pure productivity (Shilling 2005:82). Productivity and efficiency were regarded as dominant political and economic goals, and such ambitions were also embodied within individual bodies (Shilling 2005), with the individual body likened to a battery replete with the charge of energy flows (Armstrong 1998:7).

A belief in what might be described as a “universal energy current,” flowing between people and other living and non living matter, was also explored through a number of movements and methods including hypnotism, Mesmerism, magnetism and other practices sometimes affiliated with spiritual healing. As energy field healer Barbara Brennan (1988) aptly details in her *Hands of Light* workbook, Count Wilhelm Von Reichenbach engaged in a range of 19th century experiments which focused on so-called “odic” or electromagnetic fields and forces. A number of twentieth century physicians, scientists, and alternative healers have similarly focused on identifying and measuring this so-called “universal energy” like, for example, Dr. William Kilner, recognized for his research which described and identified “human energy fields” or “auras” as a way to diagnose a variety of illnesses, and Dr. Wilhelm Reich, a

contemporary of Freud who introduced the concept of “orgone” energy, and worked to develop energy releasing techniques to heal negative emotional conditions.

The pharmacological revolution during the 1960s also tapped into this widespread interest in “energy,” serving in part to further push bodily energy limits with a host of pills aimed to manage, balance, maintain, decrease, and increase energy. Considering the concept of “energy” as it is discussed in the late 20th century, Morse (1988) suggests that to be tired is to be a target for a type of “cultural extinction” before biological death. For Romanyshyn (1989:189), haunting a cultural discussion about the need to harness energy sits the nuclear bomb and the corpse – which he defines as “...a dead thing to be energized.” Likening the human body to a “transducer,” or an energy converting device, Ackerman (1990:307) explains:

Our bodies take mechanical energy and convert it to electrical energy...When Walt Whitman said: ‘I sing the body electric,’ he didn’t know how prescient he was. The body does indeed sing with electricity, which the mind deftly analyzes and considers. So, to some extent, reality is an agreed-upon fiction.

The present day complementary and alternative medicine (CAM) field includes healing practices focused specifically on energy including “bioenergy,” rolfing, “energy medicine,” and magnetic therapy, comprising what Brennan (1988) refers to as the “Human Energy Field” to describe a range of measurable energy sources like electrostatic, magnetic, sonic, thermal, and visual.

Considering the ways that energy was discussed throughout my own interviews, it was framed within the language of excess and conservation. For some, engagement in a particular body regimen enabled them to release energy that might become experienced as pent up and potentially destructive. For example, talking about his own body regimen

career – one interviewee explains it as “fun” “exhausting” and “tiring” and another describes it as “tiring in a good way.” Other interviewees discuss feelings characterized by a similar release of energy when they detail the embodied benefits of their body regimen careers. This was particularly common among individuals engaged in fitness regimens where body regimen careers were thought to provide relieve what was sometimes characterized as an overabundance of energy.

This morning... when I went out the door, I mean, most people when they start running, they have to work into it, in my mind I thought to myself, you are going to need to work into this run, but when I started to run, I felt so much power, it just felt like I could have taken off at a fairly fast pace and not even had that build up time, *it was like a big flow of energy*...It really is about a certain amount of *energy that is inside of me* that, if it doesn't come out, its just dying to come out, its like a cat being in a box, and wanting to get out of that box, that is how it feels... [Female, FR, 4/5]

For me, you know, I just feel great after I have done it [fitness routine], and then I just, the rest of the day, I feel terrific and I know that at the end of the day, I am tired, after exercising, I am tired, and that feels good. [Female, FR, 4/5]

One respondent talked about her life long struggle with Attention Deficit Disorder (ADD). She did not realize that she suffered from this while in college but the way she experienced it was through what she described as an overabundance of energy that impeded her ability to organize, study, focus, and complete projects. She found an outlet through which to channel this excess energy by what was to become an involvement in a rigorous body regimen career. Reflecting back on the beginning of her body regimen career, she describes the way she learned to manage this excess energy during college. She would run stairs, jump rope, or sprint around the block, in the middle of a study session, in an effort to release some of the pent up energy that she felt was physiologically impeding her ability to concentrate.

I just kind of have a lot of energy, and I would just take breaks... from studying during college... and go and run up and down the steps or something, just to blow off this energy, and then I started to, you know, like run around the block, and it felt good, so I just kind of started running more and it felt better...so much of it came from the thirst in me to, I just had this energy that I needed to get rid of... [Female, FR, 4/5]

For others, engagement in their regimen enabled them to increase their energy so they felt “more alive,” “more vital,” and “vibrant.” When pondering whether she feels any effects from her supplements, one interviewee responds, “I have good health, I feel good, and I have good energy,” while another explains, “I have more energy and stamina,” and in the words of a third respondent: “I definitely feel like I have more energy [since starting body regimen], and I feel like I am preparing myself for a healthier life.” After engaging in the regimen she developed with the help of an anti-aging doctor, another interviewee explains the embodied effects of this anti-aging body regimen:

I have lots of energy...I’m just able to go all day long and not feel like I’ve got to lie down. I mean, it was completely different. I can do this, do this, we can go do this, and its like it kind of never stops on it...[Female, AA, 2/3]

Other respondents talk about energy as it relates to their body regimens:

I have more energy [since starting body regimen career]. I think my stress is easier to deal with...I just think when you are in a healthier state, you feel better, you are not as stressed, you can do your job better, just your overall health. When you feeling bad, you are not going to work as well, and I don’t think that it is any big secret. I think that people living a healthy lifestyle understand that it’s a part of you...[Male, FR, 4/5]

I know that I am stronger and a little bit more calm. I am definitely more confident, and I feel very healthy. I feel very healthy. [Female, AA, 4/5]

They [supplements] are unbelievable, I mean, you can tell a difference, they go right in your blood stream and you drink them on an empty stomach and they affect you. I have been taking those supplements for four months now, and I have never taken anything that I can seriously feel the difference, like if I don’t one day. *They just give you the best energy!* [Female, FR, 4/5]

I did my own experimentation with Vitamin E ... I tried huge dosages and it was staggering. I mean, *talk about energy!* [Male, AA, 60+]

CR causes...a brightness, it makes you more awake, more alive, you do a better job, everything about it is positive, in my opinion, and I also combine it with exercise.....[Male, CR, 60+]

My regimen is helpful...*it gives me more energy*, and then, you know, I think, my health has been pretty good. You know, I haven't had too many health problems. It [anti-aging body regimen] makes me a little bit more chipper. [Male, AA, 4/5]

I feel good, and I have good energy, and so whether it is really and truly physiological or just a psychological effect, I don't know. I don't know. But I'm not going to stop....[Female, CR, 4/5]

I feel like a probably a 19 or 20 year old. I act that way. *I have a lot of energy*. I don't feel fatigued unless it is a long day, and anyone would feel fatigue then, you know, but otherwise, I stay up without any trouble. I haven't stopped jogging. Some people who are 19 or 20 stop jogging, and I'm thirty five, and it feels great. I run as fast, not you know, obviously, I can still do those things, I can do them at optimal levels...I think I am much healthier and better shape than I was at 21 and 20, you know. [Male, AA, 2/3]

I have been on and off [my body regimen]...and it makes a huge difference. You feel better, you are healthier, your skin is better, you have more energy, your brain is sharper...[Male, AA, 4/5]

I think your skin is being preserved [from body regimen] and you walk more energetically and you feel energetic and you demonstrate that energy...[Male, CR, 4/5]

I feel better, I feel lighter, which is cool. I like being sprightly. [laughs] and I guess, like, I don't feel as run down. You know, I might be tired every once in a while, but sometimes, you know, after a week of eating the regular American diet, you just don't, you feel kind of icky and I don't really feel like that, like really ever. [Female, CR, 2/3]

It about blows my head off, it is so effective. It makes you feel like you could conquer the world so I can understand these people that inject it, the feelings they get with that ...it was like I was, "oh man, yeah, I'm back, oh power, here!" You know that heady testosterone feeling where you feel like you can conquer the world... I know that it is helping me keep my mind sharp. I can feel that and I can see it happen, and...after I take this stuff, it makes me feel better... I have done experiments where I have not taken it [supplement regimen] for a week or so at a time, and I feel like I am falling apart. When I don't take it, it is like I am aging five years in a week. And then when I start taking it again, its like, I'm, god, oh, the good me is coming back, the healthy me is coming back, I can really feel it, so I know it is a real thing. It is not something that I am just imagining. I know it is actually doing something. [Male, AA, 4/5]

It [body regimen] makes me more aware....it makes me more awake. [Female, FR, 4/5]

I have lost all this weight. I feel wonderful, my brain, I am 10 times more excited than its ever been before, I don't know if it is the burning of the fat, or what, but everything is just amazingly exciting to me, I get out and I walk and my body feels good and I look

good and I am pretty cute for my age, so, you know, I don't see any bad sides to it. [Female, CR, 4/5]

I felt like I really needed to eat steak everyday because I needed the protein for the hours that I was on my feet, and then I quit, boom, just like that, and was just amazed to find that I *had more energy* and I can't imagine eating meat, it just, it just takes too much blood and brain and energy from your body, you know, it is very difficult to digest, and, besides, it is just not right. [Female, AA, 60+]

The energy that is dormant at the base of the spine that you are waking up when you start a yoga practice, it travels up the spine towards the crown of the head, that energy is so hard to get toward that highest chakra...[Female, FR, 4/5]

While another respondent talks about energy in terms of their spirituality-- linking energy, power, and flesh, into an esoteric yet poetic exploration of the interconnections she experiences through her engagement in various body regimen practices.

I believe in god, I mean, not like a religion kind of god but as an *experiential energy* that powers each of us, this life, this life, this you know, this electricity, that either makes us alive or the lack of it makes us what we call dead, is this god, this name of god, I mean, its more scientific to me than it is religious, god, but its something because if you don't breathe in this power, then you don't move. And so, you know, this power [pause], all the power that has ever been here or ever will be here is here now, right? And we are a center of expression for this power and it guides us, and that's what our life is, it is embodied in our flesh. [Female, FR, 4/5]

For some interviewees, a change in energy was the initial trigger which signaled that something was wrong...kicking off a journey into the unknown which I have described in chapter 2 of this paper as the body regimen career. As one respondent, talking about the symptoms she experienced, which she links to menopause, says, "...and that is certainly not me, because I usually have boundless energy..." Several respondents recount "low energy" as part of the initial sign that something was wrong, which motivated them to try something different – which sometimes translates into a turn towards anti-aging medicine or caloric restriction.

I just know I wanted to feel normal again. I didn't have to feel 20 again. Because honestly, mentally, I do still feel 20. Your body doesn't but your mind does. I just

wanted to feel good again. I mean, *I've always been somebody with a lot of energy*, I've always slept well. I wasn't moody, and now all of a sudden I was all of these things and it wasn't getting better, it was getting worse. And I just thought, there has gotta be, I mean, these hormones they are giving me are killing me, and they are not doing anything, I'm gaining all this weight, I'm not sleeping, something is not right, and that is when I said, ok, I am going to look into the alternative. [Female, AA, 4/5]

When I was 85 pounds overweight... my knee was in constant pain and my eyesight, I couldn't pass the driver's exam, and I just had, you know, was a lot more fatigued and had a lot more aches and pains, and when I lost 85 pounds, my knee pain went away. I was able to pass the driver's test without putting glasses on my driver's license, my vision was better, you know, *I just had a lot more energy*, just to see what that 85 pounds did, it, you know... that's how I got into caloric restriction [Female, CR, 2/3]

I was working for a millionaire and his wife...and that woman spent every minute she could having cosmetic surgery or you name it, she had the time and the money to do it and that is what she did, and at that time she, you know, *I was feeling lack of energy*, and she used to say to me, "oh, you need HGH" and I thought, "what is she talking about?" and she used to have these vials in her fridge ready to take her shots, and she would say, "oh, it's the only way to go!" and I'm like, well yeah, right, so from then on, I started reading about it, and reading about it, and you know, I really was reading, reading, reading, and ...I just thought it would be a miracle...[because] I am always breathless. I can't get up and down the stairs... How can I describe it? It is like extreeeeemeeee fatigue. [Female, AA, 60+]

Others use energy as a barometer of how they are doing with their body regimen career. For example, as some respondents explain:

I try to keep my BMI in the 21 area, ah, if I drop, If I try to drop below that, I just run out *of energy*. [Male, CR, 4/5]

They suggest a BMI, you know, of 18.5, and that is too low for me, I don't think that that would be good for me, because I don't feel good at that...it takes *too much energy* to sort of keep moving...[Female, CR, 4/5]

A desire for energy may also serve as a motivation to engage in a particular body regimen career. For example:

I want to live, I don't necessarily want to live until I am 150, but I want to be, I want my body to match my brain...*I want the energy!* [Female, CR, 2/3]

Honestly, I don't know how all that works. I just base it on how I feel and if the things that have been happening to me go away on a gradual level and do I feel on a normal keel and do I feel like its not caused any side effects, and that's what I go by, and I have to say, what the [anti aging doctor] did worked for me. It [anti-aging body regimen]

worked for me...it just put me back to normal. It didn't make me feel better. *I did have more energy*, but it wasn't any more than normal because I tend to have a lot of energy, anyway, so it just felt more back to normal...it just made me feel more normal. At least I wasn't always on edge, I could sleep and stuff...[Female, AA, 4/5]

I need to put on a few pounds ...[but I am not] about to start eating junk food, you know, to just resort to trash food just to gain weight, because...*there is a certain lack of energy*, that becomes associated with that, a certain lethargy that seems to follow along...[Male, FR, 2/3]

When not able to partake in a particular aspect of the body regimen career due to injury, travel, or other circumstances, many note an undesirable change in energy. For example, in the words of two respondents:

I was just like really down, depressed, *low energy*, found myself eating more, you know, which is sort of a vicious cycle because then you are not exercising, and then I was just not feeling good about myself, because I was you know, psychologically it just makes me feel better as well, it just was really difficult. I was down and depressed...there are times when I go away for a while and I forget to take [my supplements] with me, and I can definitely feel a difference, if I haven't taken them. I really do. I think I feel more run down, I don't feel as well...[Female, FR, 4/5]

When I haven't replaced supplements, I can definitely feel a difference, *energy level*, just health in general, you know...that's my experience with it, whether it be psychological or whatever [laugh] but that is the way I seem to notice things, you know? [Female, AA, 4/5]

While the topic of "energy" may lend itself to trivialization since certainly we all feel tired from time to time, and this fatigue may seem much less pressing than other more demanding health-related challenges, yet some respondents recount past stories about times when not having enough energy posed a significant problem to them in their personal lives. For example, in the case of one respondent, it meant the end of a romantic relationship that she really valued. She recounts:

Somebody left me once, that I liked, quite a lot, and the reason was, he said, I just couldn't keep up. He said, "it is just so hard for you to get up in the morning, and I jump up, and you know" and I said, "thank you for telling me," because I wanted him to tell me... and my husband I married him, because, partly he *was low energy*...I was just so exhausted. [Female, AA, 4/5]

While social critics sometimes talk about enhancement drugs and the demands of a culture driven by the “better than well” (Elliot, 2003) ethos, as mentioned elsewhere in this dissertation, my interviewees did not articulate a desire to feel “better than well,” striving instead for what they perceived to be a “normal” healthy amount of energy. One respondent described a time that a supplement that he took actually made him feel “too good.” This was cause for suspicion, leading him to decide to stop taking the supplement.

I could really tell a difference on [name of supplement]... you take it a couple of hours before bed, and a few hours after you had last eaten, and this stimulates the production of human growth hormone when you sleep, because all this takes place while you sleep, and I want to tell you what, there was one hell of a remarkable difference in the way I felt. I mean, I felt like “my god, I am 20 years younger,” and my wife felt the same way, I mean, you just wake up totally exhilarated and alert and boom, just ready to go, and everything, but then, the more I read...I kept thinking, well you know, [name of supplement], is revving up my metabolism and that is not really what I want to do, I don't want to be producing more antioxidants...I thought, you know what, this is all playing with unproven science, and I am just not going to experiment with myself on this until other studies come out on this... I figure, when I feel like I am on my way out, around my 105th birthday, maybe I'll start taking it again just to feel like it feels to be young again. [Male, CR, 4/5]

Finally, some respondents discuss energy in terms of their desire to facilitate a deeper and more intense interconnection with other human beings. This occurred across interview groupings with examples from all three subgroups. It was particularly interesting to me in the ways that it may provide empirical insights into what Barbara Brennan (1988:21, 25) describes as the “holographic view of the universe” made up of a “dynamic web of inseparable energy patterns,” and Teresa Brennan (1993:81) refers to as the “interactive economy of energy” which explores “...how the environment literally gets inside...subjects who in turn act in similar ways in reproducing it.” By emphasizing

the importance of considering the energetic interaction between people, Brennan (1993), for example, explores the ways that the notion of the separate, individuated self is in many ways an illusion. Referring to this interconnection between people and this exchange of energy as the “transmission of affect” (since affects are literally “carriers of energy”), Brennan (2004:16, 34) gives an example which reveals the history of such ideas:

Ideas of the transmission of affect were scattered across premodern European history and were still current in sixteenth-century France: thus Montaigne’s well-known observation that an old rich man would find his energy enhanced while the younger man (Montaigne himself) in his company would find his energy depleted.

Consider the ways some of my interviewees explore and articulate the transmission of affect which often revolved around descriptions of the energetic connections between people.

I found a picture of a hand at a yard sale, and I think it had land going up here, and it had little spaces and it had Carl Jung at the top of it and it said, “we are all connected,” and I remember, I kept that for years and I thought, that is a really cool idea, it had never occurred to me, that we are all connected, and of course, I believe that wholly, now...I believe that there is but one divine energy and that its in all of us, and that all we have to do is just recognize it and stay positive with it, and feed the subconscious mind. [Female, AA, 4/5]

I’m not part of organized religion, but I do believe in a spirituality, and the connectedness among people, the interconnection that we have, that we are all part of an energy pool, or a piece of it, and when I die, my body goes back into energy, I don’t know if my sense of self continues, you know...[Female, CR, 4/5]

There is no one around and I feel my best right now, but I can stay balanced and be o.k. with just one person...and I can give them my full attention and my full energy and I can still stay balanced, but if they come with someone else...I am thrown off...I can’t focus as well, I feel more scattered, rather than grounded...I have trouble in malls, I have always had trouble in malls and stuff, around a lot of people, cause I pick up people’s feelings and their emotions and, people have issues, and I, for the longest time I thought I had all the issues, but no, its just them. I was picking up their issues, so I was going a little insane. I do best to be by myself. But one person at a time, when they come in, if I feel their issues, I know that they are their issues, and I am able to, you know, keep that wall, that boundary between us...I don’t take it in...but at a mall, I don’t

seem to be, I never really found a way to guard against that, like, its too much, and I usually feel like I want to go cry. I feel emotionally bankrupt. Now If I am with another person... I could stay with them and concentrate on being with them, their energy was familiar to me and I felt kind of protected, with, you know, being around their energy. It is a hard thing to describe, because it is not something that I have come across much. At least, no one else has ever talked about it. [Female, CR, 4/5]

Someone getting radiation therapy, they better have somebody that can repair those lines of light because you put radiation on an energy body and it is like holding a nylon stocking to a flame, it just burns it, it singes it...mostly what I did for [name] was just held the energy field for him and just, I mean, I didn't even have to put him on a massage table and do a healing on him, I mean, just living next to him by harmonic induction I could raise the vibration of his energy field.[Female, FR, 4/5]

Body Regimen Career Enhances Quality of Daily Life

As is the case with any research, and perhaps, particularly qualitative research, this project changed faces a number of times from inception to where it now stands. In the earlier phases of my research, because of my focus on individuals utilizing practices under the umbrella of the “healthy life extension community,” I expected to primarily be learning about people’s efforts to potentially delay aging and/or to possibly extend life. With the same forward looking spirit embedded within Mykytyn’s (2007) research on doctors engaged in the practice of anti-aging medicine, I anticipated stories situated within a discourse premised on future possibilities, forward-looking optimism, anticipation, and expectation. What I found, however, was that while many individuals certainly did think about the future significance of their present day practices, as detailed to an extent in chapter 7, most were far more interested in, and motivated by, the day to day embodied effects of these engagements, emphasizing what could be described as “quality” of life over “quantity.”

Body regimen careers may provide people with tools to help distinguish what is good for their bodies, in what Brennan (2004:157) describes as an “environmental context,” as people learn “...to have pleasure in foods that increase...health and joy in activities that do the same.” Brennan (2004:159) goes on to articulate: “The health-conscious middle class knows that when the body is fed certain things and given exercise, even though the exercise and the healthy food may go against one’s inclination, the whole being does better in body and mood.” As articulated by one respondent when she was trying to explain her experience of “embodied consumption,” which includes a desire to steer clear of most high sugar desserts because of how they make her feel:

I stay away from desserts...The momentary pleasure for me often ended up in heartburn or...indigestion. There were many things that my body was reacting against well before I started CR. It was just like, when I eat that, I feel shitty. Heavy, fat desserts like a chocolate mousse cake or something always made me feel ill...I’d get indigestion....I would just feel ill. So I stopped doing that, just because it made me feel so shitty [emphasis], so it hasn’t been hard to give those things up because for me, they made me feel very ill. [Female, CR, 4/5]

Certainly my empirical data aptly fits Brennan’s description of the interplay between consumption and embodiment, as my interviewees tend to focus more on the embodied pleasures of their practices, than abstract long term hopes and dreams.

Consider the following examples from interviews that exemplify this focus:

Maybe calorie restriction is...going to give you 11 percent, at most, life extension if things go well, when you are starting it at an ethically reasonable age, you know, past your teens or when you have started actually aging, or right before...but why I am strongly a proponent of calorie restriction is that you gain many healthy years in your middle age years, I mean that’s what it is about to me. [Female, CR, 2/3]

I am not really doing it [caloric restriction] to extend my life, I am doing it to live as healthy as I can, until the day I die, cause I feel that I am going to have a very long life...I see myself living a really long time, and pretty healthy, too, but if there is anything that I can do to get that little bit of edge that maybe gives me my last five years in really good health, yeah, I want to do that... [Female, CR, 4/5]

I don't do CR for longevity. I'm not so sure I want to live on this planet much longer than I would, normally, because I don't like the way things are going. I don't like how we treat each other... I think we are consuming way too much energy. I think we are becoming overcrowded...the traffic here is ridiculous, and so, I'm not so sure I want to prolong my life, but I do it more for while I am here. I want to be in the best health that I can be in, and just feel good. [Female, CR, 4/5]

Those of us who started in our forties with CR are going to enjoy health span, you know, more than lifespan, we are going to have longer time of having good health, you know ...its not about, for some of us, its not that we want to live longer and get to 110, you know, if it happens, then it will nice to do so with having health along with it, so, that's not my focus...I am more practical, that you have to accept that at some point, you know...you have to come down to reality, so I am not into CR so much focused on the longevity part...[Male, CR, 4/5]

I'm never against trying something that would make you live longer and feel well, because my thing has always been, I don't mind living to be 100, I just don't want to feel 100, or I don't want to live to be 100 and I can't take care of myself, but I've said, If I live to be 100 and I'm in terrible shape and I can't live my life, than I don't want to live, so I think it's the quality of what comes with it. [Female, AA, 4/5]

I don't think it [anti aging medicine] is going to prolong my life, in a sense, but I think it would make me have a more fulfilled life, by just making me feel more happy about who god made me to be, and doing what I am supposed to do while I am here and not being so off that I can't do it, or being so wrapped up in this vision of what I need to be, physically, very different. [Female, AA, 2/3]

Most people, when they are talking about health foods or living longer, extending their life, I think the majority of people aren't really interested in living to 120 or 150 or whatever the theoretical max... I think most people, if you really pinned them down, they'd be quite happy to live to be 80 or whatever the hell it is, as long as they were healthy and they had good energy levels and their brains were effective so that they could really enjoy old age...I want to improve the quality of my life, not just live longer. [Male, AA, 60+]

As long as I can help my physical health, I am going to try to... not necessarily a longer life, what is the word I am looking for, a prosperous life, so... it's great if people live until they are 100 but if you are incapable of walking or you know wiping your own behind, what's the point, you know? Not that you have gotta go out and dig ditches and run farm equipment, but you know, if you can be able to, what's the word I am looking for, be a contributor to, you know, if you can still contribute, yeah, but if I am going to be, and its because I have seen it, you know, sitting in a nursing home drooling all over myself, hell no, I don't want to live that long, you know, if I'm healthy for the most part, yeah, I can see it being good. [Male, FR, 2/3]

I don't think I want to live until 122, for me, I just want to live whatever life I have left, healthy, and whatever age it is. I don't feel like I have to, that I am striving to get to

100, you know, I just want to be healthy and to live a good life as long as I have it. I don't have any specific goal in mind, you know, because in the day to day you never know what is going to happen to your life. You have to live each day, you know?
[Female, FR, 4/5]

Conclusion

This chapter serves to add to past and current sociological understandings of engagements in “techniques of the body” (Mauss 1972[1934]). While not trying to refute attempts to reveal the ways that practices linked to body regimen careers may in some ways be perceived of as oppressive, constrictive, and deterministic, I am interested in exploring some of the ways that people experience their embodied engagement in these practices as extremely pleasurable. As noted at the beginning of this chapter, contradictory evidence abounds as to the actual short and long term benefits of a wide range of practices. After all, Nathan Pritikin, founder and practitioner of the famed low fat/low calorie “Pritikin diet,” Adele Davis, one of the first scientists to study nutrition, supplements, wellness, and aging, and author of *Let's Get Well*, and Linus Pauling, scientist and advocate for high dosages of Vitamin C for health prevention, all died of cancer, while founder of *Prevention* magazine, and organic farming advocate, Jerome Rodale, died of a heart attack, and Daniel Rudman, the scientist who inspired a broader interest in the use of HGH to retard some of the so-called “effects of aging,” died of pulmonary embolus at the age of 67.

Yet despite what could be perceived of as challenges to body regimen careers positioned under the practices of “healthy life extension,” individuals continue to engage in and experience great pleasure from their involvement. Talking about the joy of their

engagement, people refer to their senses, which included discussions about the smell of the grass, the feel of the air, the sound of one's footsteps, and the pleasures of the outdoors, while engaged, for example, in a wide variety of fitness/exercise activities. The heightened taste and flavor of food, and the rhythmic sound of one's breathe during yoga, meditation or running, were also described in sensual detail as many recounted the activities of their body regimen careers among their greatest life rewards.

Describing the physical impact of their body regimen careers, people most commonly turned to the concept of "energy" to articulate the ways that their practices are (or are not) working. Further, for some, the pleasurable experience of embodied "vibrant physicality" (Monaghan 2001a), gained through engagement in body regimen careers, was most articulated through descriptions of the life enhancing interconnections experienced between people – sometimes as part of the body regimen career community in which many were a part, and sometimes as a more general spiritual outlook on life, living and the communal connections among all people, more generally.

My research suggests that the daily practice of the body regimen career, in and of itself, is an important, if not essential, part of this enjoyment, as interviewees repeatedly described their disinterest in a pharmaceutical mimetic that would copy the effects of their body regimens, without requiring them to engage in the actual routines. As people talk about their embodied experience engaging in a body regimen career, the concepts of "control" and "release" are essential, most often described in a complimentary entanglement that serves to guide, structure, and motor involvement.

Though my interviewees consistently felt that their body regimen careers were having impacts on bodily aging, many also made it clear that their sites were not tethered to a disembodied dream of an ever lengthening life. My interviewees were very in tune with their flesh and blood bodies, experiencing what I would describe as a pleasure from a heightened sense of awareness and physicality. In this sense, the flesh was not regarded as an undesirable burden, but was rather, something to be enjoyed, celebrated, and respected. Turning to my final chapter, I will explore some of the key findings highlighted throughout this research endeavor, while making suggestions for future areas of inquiry.

Chapter 9: Body Regimen Careers Respond to the Problematic of Living

Cancer. A handful of words can universally silence a room and I suggest that the “C” word is among them. Cancer cells represent something quite terrifying to most of us, however, when we think about these hearty cells, we may also see something quite intriguing. As poet and novelist Margaret Atwood explores in her thought provoking poem “Cell,”¹⁴⁰ unlike many other types of cells that have a fixed lifespan, cancer cells multiply endlessly and “abundantly” – living heartily while hungrily consuming the body host until little more than a devoured shell remains. Detailing the desire for endless life found within the cancer cell, Atwood (1995) beckons her readers to situate a parallel desire by looking in the mirror, reminding us of that which we may share with the reproductive pink petals that comprise cancer cells – an insatiable hunger for a youthful abundant forever life.¹⁴¹

Starting the conclusion to this dissertation by pondering Margaret Atwood’s poem “Cell” seems appropriate in a number of ways. Not only are cancer cells the famed HeLa cells, first identified during the 1950s, and serving to offer a material glimpse at what cellular biologists describe as some of the first evidence of cellular “immortality,” but in many ways this dissertation weaves through and around the subject of death without ever really addressing it, even though the prospect of death, the so-called “elephant in the

¹⁴⁰ Written by Margaret Atwood (1995:47-48)

¹⁴¹ Nearly two hundred years ago physiologist Le Gallois noted the potential tissue culture offered “...in maintaining alive indefinitely any part of the body whatsoever” (Squier 2000:46). A century later, scientific labs focused specifically on cultivating tissue culture, recognized that the unorganized nature of tissue growth provides certain tissues (namely embryonic and cancerous tissue) with potential immortality (Squier 2000:46).

room,” provides an important backdrop for a project focused on body regimens associated with the “healthy life extension community.”

When talking about her effort to discuss “the body” social theorist Elspeth Probyn (2003:215) explains that in so doing, she is always led “somewhere else,” as a focus on the body quickly morphs into a focus on a myriad of other intersecting topics. Perhaps similar to discussions about the body, a discussion of death is equally slippery, since, as Aries (1991) explains, death is predominantly a taboo topic in postindustrial culture. No longer regarded as an inevitable possibility present across the lifespan, “spectacular advances in longevity” (Aries 1991:582) position death as an unnatural failure, as “business lost” (Aries 1991:586). As Landecker (2000:69) similarly articulates, it is amazing how readily the “narrative of immortality – beneficent, malignant, or monetary – masks the death at its origin.” Yet, perhaps, even in spite of efforts to ignore, forget, mask, or defy, death remains with what some would describe as a mysterious and gripping clutch, as social critic Walter Benjamin (1969:100-101) explains: “The meaning of a character’s life is revealed only in his death...What draws the reader to the novel is the hope of warming his shivering life with a death he reads about.”

In talking about life, we are ultimately also talking about death, and aging, by association, is intimately and directly implicated (Twigg 2004) in a linear construction of the life course. As Tseelon (1995:93) explains, “the aged represent death by their very being” since it is a commonplace understanding that we are dying from the moment we come into the world, and aging as a process of becoming represents our ever closer journey towards death (Vincent 2003:27).

Perhaps, if we turn again to Atwood's poem, likening ourselves in some way to those insatiable cancer cells motivated by endless abundance, we are forced to consider some of the irony embedded within this desire. Cancer cells represent to many a death sentence, and yet in the same vein, they may represent the secrets of immortality that present day scientists work hard to unravel. These contradictions are perhaps endemic to the circumstances which cradle human life since, as Giddens (1991:49) explains the "existential contradiction" – we are all worms and food for worms (Becker 1973) – as captured by Heidegger's use of the term *dasein*, which describes a being who not only lives and dies but is cognizant of his or her own finitude. Perhaps to confuse matters even more, as Shilling (2005) aptly notes, the more we understand about the human body and the more we are able to intervene and transform bodily processes, including life and death, the less assured we are about what the body actually is.

For all that it represents to those that analyze culture, one of the most fascinating, and often times perverse, functionalities of present day consumerist culture is its ability to hold together vastly contradictory pursuits in some semblance of coherence. Girard (2000:181), for example, reveals the ways that the capitalist system embraces the desire for thinness with a multitude of products aimed at this goal, while in turn, systematically favoring consumption more than abstinence. "Our entire culture," Girard (2000:181) asserts, "looks more and more like a permanent conspiracy to prevent us from reaching the goals it perversely assigns to us." Simply turning to today's mail, for example, I flip through a multi-paged insert from a regional big box grocer featuring products for "healthier living" which beckon me to "take charge" of my health while simultaneously

recommending that I “go with the flow” – while “taking charge” and “going with the flow” appear to me to be very different recommendations, such disparate instructions sit together in this print ad as compatible bullet points serving to guide and instruct. In another example, I take note of the paper bags used by Whole Foods, instructing consumers to “eat local foods,” while noting that the store’s entire frozen food section now consists of vegetables imported from China. My interviewees repeatedly recognize and identify these types of contradictions, too, for example, in the words of one respondent: “The same hospital that is saying it wants people to take care of themselves will have an eight foot sign saying in front of their cafeteria ‘now featuring Hagen Daaz ice cream’ O. K.? [laughter]” [Male, AA, 2/3]. The increasingly globalized capitalist economy in which we find ourselves firmly entrenched, as noted by Braidotti (2007:31), inspires “an internally contradictory process” where nothing is outside of the ever expanding tentacles of capitalist growth – even individual embodiment.

In many ways the individuals to whom I am deeply indebted, those that offered me their time and wisdoms by agreeing to partake in this research project, represent a similarly contradictory position because while engaging in body regimen careers associated with “healthy life extension,” an involvement that could easily be implicated in some type of ultimate fear, avoidance, or denial of death, many described what could almost be characterized as a heightened awareness and even an acceptance of death.¹⁴²

To a degree it would be foolhardy of me to argue that there was any form of consensus

¹⁴² In his comprehensive social history of death, *The Hour of Our Death*, Phillipe Aries (1991:592) notes that the reality of death inspires two attitudes in Western culture -- "One of taboo, banish death from daily life. The other is accepting death as a technical fact but reducing it to the state of an ordinary thing, as insignificant as it is necessary." My interviewees tend to represent more of the latter attitude where many accept death as a technical fact but do not imbue the event with great mystery or symbolic value.

around the issue of death – and with respect for cultural anthropologist Ernest Becker’s (1973) Pulitzer prize-winning work on the near-universal denial of death, the limitations of a realist epistemology applied to this subject are many.

However, the topic of death did arise in a variety of different ways throughout my interviews. Sometimes sparked by my probing questions, other times situated within an interviewee’s own story, attention to death was positioned along a continuum with some respondents firmly asserting a degree of acceptance towards death, while others offered more elaborate stories of dread. Some interviewees talked about a fear of death as a motivating factor in their body regimen careers, while the vast majority of interviewees explained that while they did not regard death with eager anticipation, they did not fear death. Some found comfort in religious beliefs which included faith in an afterlife. Others talked about death matter-of-factly – as an inevitable end that, to quote Shakespeare’s Julius Caesar, “will come when it will come.” Many talked about death as a great mystery or “unknown,” while some used humor to address the subject matter. As one respondent asserted, “I am doing CR so that I can be guaranteed to live a long life [laughter]. Maybe I should just live destructively so that I can go early!” Yet regardless of perspective, of primary concern were body regimens not as a way to offset death, but rather, as a means to continually offer up new strategies, plans, and practices through which to improve life in the here and now.¹⁴³ As one interviewee surmised: “I think it’s

¹⁴³ According to Tijmes (1995), and as inspired by his reading of Arendt and Marx, the challenge of our current time revolves around the detachment people feel from the world since the world exists, not as a stable place of dwelling, but rather, in a permanent state of transformation. The lack of security this inspires makes it difficult for people to create meaning through shared experiences. Tijmes (1995:239) concludes, “What is permanent in modern life is the hunting for the new that relieves the guard of the old.” Scientific discovery intersecting with consumer culture serves to fuel this permanent state of hunting for the

easy to become obsessed with longevity and physical health...but we are all going to die, you know, regardless of what we do.” [Male, FR, 2/3]

In his widely read reflections on his 19th century journey to America, Alexis De Tocqueville (1990[1831]) expounds upon the “feverish ardor” with which Americans approach life, likening what he describes as a pervasive sense of rush hinged to an American awareness of death. Characterizing the so-called “American way,” De Tocqueville (1990:137) elaborates:

The recollection of the brevity of life is a constant spur to him. Besides the good things which he possesses, he every instant fancies a thousand others which death will prevent him from trying if he does not try them soon. This thought fills him with anxiety, fear, and regret, and keeps his mind in ceaseless trepidation, which leads him perpetually to change his plans and his abode...Death is often less dreaded...than the perseverance in continuous efforts to one end.

While De Tocqueville certainly highlights a degree of what may be characterized as “death anxiety” in the American populous, he suggests that worse than the dread of death, is the prospect of a life of restriction, directed only towards one monotonous goal. According to De Tocqueville, Americans characteristically engage in an endless process of change and exploration which involves experimenting with new pursuits and continually making and revising life plans and strategies. To not have the freedom and ability to engage in this dynamic process of exploration, acquisition, and experimentation would be far more dreaded, stifling, and deadly, than the actual event of bodily death.

The dynamic nature of body regimen careers associated with the “healthy life extension community,” replete with scientific and medical research and recommendations that change almost daily, provides participants with the opportunity or the challenge to

new which may serve to at least temporarily quench the human thirst for hope, meaning, purpose and belonging.

engage in what is a constantly shifting pursuit based on the latest technologies and research findings. Body regimen careers associated with the “healthy life extension community” become ways that people can “do something” to grapple with life as much as, or I would argue, perhaps even more than, with death. While Becker’s (1973) *The Denial of Death* is most widely recognized for his description of death as a universal human fear which generates an inevitable amount of anxiety, my research suggests that life, and the resulting “challenges of living” inspire a similar (and perhaps even more urgent) type of insecurity in need of a salve. While the event of death is most certainly anxiety producing –as psychoanalyst and philosopher Erich Fromm (1955:34) astutely questions why humans do not “...go insane in the face of an existential contradiction between a symbolic self that seems to give man infinite worth in a timeless scheme of things and a body that is worth about 98 cents?” – my research suggests that it is in the process of daily living where engagement in body regimen careers provide the greatest dose of inspiration and meaning, as practices associated with body regimen careers often provide people with a shelter from life’s storms. My interviewees were more inclined to engage in body regimen careers to add life to their days than days to their lives. As clearly stated by two respondents:

I would choose to sacrifice two or three years at the other end...of my lifespan...and take anti-aging medicines...because I have known what it is to exist and to force myself to keep living, and I know what it is to feel like I want to be alive, and there is just no comparison...I would rather live a shorter amount of time and live better [Female, AA, 4/5].

I am not motivated by CR because I fear death... I have a wonderful life here. I am just so pleased with it and every day that I can get out of it, I am thankful, but I am not afraid to slip this coat off and go try on another one. [Female, CR, 4/5]

The lived experiences of individuals engaged in body regimen careers associated with the “healthy life extension community” is in many ways different than the depictions of aging, prolongevity, and life extension among the biogerontological community, transhumanist or futurist circles, government agencies, and the mass media. While all may agree that bodily aging is indeed a tremendously complex Gordian knot,¹⁴⁴ the lived experience of daily practice for those engaged in body regimens associated with potentially delaying aging and/or extending life is premised on far more than some otherworldly death-defying fantasy. Talking with real flesh and blood people engaged in “healthy life extension” practices, contextualized this subject matter, and helped to reveal more of the contradictions and complexities than depicted by much scientific reporting, media stories, government agency warnings, and academic theorizing. The here and now pleasures of such engagements are much more present oriented than may be evidenced by such a forward looking dream as people talk abundantly about the ways their engagement in such practices provides them with a sense of hope, community, purpose, comfort, and pleasure. In the following segment of this chapter, I will provide an overview of what I believe to be some of the most important points gleaned from my research.

Aging and Life Extension in the 21st century – Fitting Body Regimen Careers into the Controversial Debate over Goals and Boundaries

While most of my research focus has concentrated on the experience of individuals engaged in body regimen careers, it is important to situate these practices within a broader cultural milieu which includes the work that biogerontologists and other

¹⁴⁴ The Gordian Knot is a legend frequently associated with Alexander the Great and used to serve as a metaphor for a tenacious problem, remedied by a courageous blow.

scientists are currently doing to understand the processes of bodily aging, and to potentially delay aging and/or to extend life. This controversial scientific focus is rife with multiple overlapping debates, as those engaged in the pursuit of delaying aging and/or potentially extending life disagree about what goals are actually scientifically and technologically feasible and desirable.

As briefly mentioned in chapter 1, political scientist Robert Binstock (2004) has helped to clarify this debate by identifying three paradigms through which to understand current biogerontological research: “compression of morbidity,” “decelerated aging,” and “arrested aging”; these paradigms range from the most conservative prolongevity efforts aimed at shortening the period of infirmity before death, to the most ambitious, which strive to entirely reverse the process of aging in adults.

Scientists advocating “compression of morbidity” tend to focus on the desirability of what is described as a long and healthy life, terminated by a fast decline, and swift death (Weil 2005; Hayflick 1994). In stark contrast, advocates of the paradigm of “arrested aging” push for biotechnical intervention that would enable the aging process to be reversed in adults. This paradigm is often associated with the work of Aubrey de Grey, a British biomedical gerontologist widely recognized for his development of Strategies for Negligible Senescence (SENS),¹⁴⁵ described as “a detailed plan for curing human aging.”

Researchers focused within Binstock’s (2004) “decelerated aging” paradigm which could be characterized as existing somewhere in between the “compression of

¹⁴⁵ For more information, see <http://www.mfoundation.org/sens>

morbidity” and “arrested aging” paradigms detailed above, tend to concentrate on processes that could slow aging and potentially extend average life expectancy and/or maximum life span. This includes, for example, Dr. Cynthia Kenyon’s research on gene suppression in worms, Dr. David Sinclair research on resveratrol and its relationship to increased life spans in yeast, worms, fruit flies, mice and fish, L. Stephen Coles, interest in stem cells and life extension, Richard Miller’s work on the genetics and cell biology of aging in mice, along with a range of research on the effects of hormone supplementation.

Turning to my interviewees to understand where they fit into Binstock’s (2004) three paradigms, it is evident that variation exists among my respondents, depending in part upon their particular body regimen practice. For example, none of my interviewees in the fitness regimen segment subscribed to the paradigm of “arrested aging.” A slight majority of these respondents are best described as proponents of the “compression of morbidity” paradigm, while the remainder of the fitness regimen enthusiasts advocated for “decelerated aging.” Consider an example of the “compression of morbidity” paradigm from one of my conversations with a person engaged in a fitness regimen career:

I don’t think I want to live until 122 but I just, for me, I just want to live whatever life I have left, healthy, and whatever age it is, it is. I don’t feel like I have to, that I am striving to get to 100, you know, I just want to be healthy and to live a good life as long as I have it. I don’t have any specific goal in mind, you know, because in the day to day you never know what is going to happen to your life. You have to live each day, you know?... I mean....the thing that I find very depressing is being sick in a nursing home, you know, with Alzheimer’s disease or something like that, that is something that I am fearful of. [Female, FR, 4/5]

In contrast, the majority of the interviewees in the anti-aging medicine grouping were proponents of Binstock’s (2004) “decelerated aging” paradigm. While many were

most interested in the effects of hormone supplementation on age deceleration, a number of interviewees using anti-aging medicine, were also well informed, and keenly interested in other scientific interventions aimed at potentially delaying bodily aging. An example of the “decelerated aging” paradigm from the anti-aging interviews includes the following excerpt:

We all want to...stay looking younger...to retard aging...I try to do mine more in using new technology and skin care products... I think you have to give your body the tools to look better and feel better...you have to seek out new and advanced technologies and its hard to stay on top of all the new technology and supplements and skin care, you know, but I think those all are important. I think they do retard aging. I see it. You know, I worked with it so many years that I see the proof of it. [Female, AA, 4/5]

Similar to the fitness regimen grouping described above, the paradigm of “arrested aging” was not a dominant interest among these interviewees.

Finally, turning to those individuals engaged in a CRON body regimen career, it is evident that while the majority of these interviewees were proponents of the “decelerated aging” paradigm, a number of interviewees were also interested in, and sometimes even financial supporters of, the “arrested aging” paradigm. For example, a couple of interviewees mentioned closely following de Grey’s work, and some were financial supporters of the SENS mission. For these interviewees, while the “compression of morbidity” and “decelerated aging” paradigms were understandable, and even as a bare minimum, acceptable, they did not go far enough. The near future possibilities of science were tantalizing, and the past and present advances of science, (as supported by theories of scientific and technological development like “Moore’s Law¹⁴⁶),

¹⁴⁶ First introduced by Intel co-founder Gordon E. Moore in 1965, and premised on the idea that the number of transistors that can be placed on an integrated circuit increases exponentially, doubling nearly every two years, Moore's law works to explain a trend in the development of computer hardware. Many aspects of

were used as proof to defend, justify, and bolster future scientific possibilities. Consider the following interview excerpt from a respondent that wholeheartedly supported the “arrested aging” paradigm:

I think it is possible to potentially delay aging mostly because I don't think anything is impossible. I mean, if you just think of the strides that mankind has made in the last 100 years, you know, medically, and technology-wise, I think it would be almost ignorant of us to say that it is impossible to slow or stop aging, I mean, I'm sure if you went back 100 years from now, a 100 years from now you went back and told them we would be able to perform surgery on a microscopic level from hundreds of miles away, they would have laughed and called you insane, they would have told you that's just not possible, you can't do that, and here we are! [Female, CR, 2/3]

For those interviewees who supported the “arrested aging” paradigm, current involvement in body regimen careers could be likened to effectively treading water while ultimately waiting for assistance from an anticipated future lifeboat. In these cases, body regimen practices are thought to ultimately keep participants healthy enough to reap the imminent benefits of more aggressive and effective future scientific interventions into bodily aging and longevity.

In the introduction to this dissertation, I discussed the importance of thinking both about the “means of practices as much as what the practices mean” (Pitts 2007:233). When focusing on interviewee attitudes towards the “means of practices” – in this case, the “nuts and bolts” of body regimen careers associated with the “healthy life extension community,” three general perspectives towards prolongevity were identified to help characterize similarities and differences between respondents: skeptical prolongevity, pragmatic prolongevity, and radical prolongevity.

digital electronic devices are now understood through Moore's law, including memory capacity, processing speed, and the resolution of digital cameras.

Skeptical Prolongevity

Some interviewees yielded what could be characterized as a cautious skepticism towards prolongevity, believing that science, despite being admittedly the “best we’ve got” [Male, CR, 60+], is still “woefully incomplete.” These respondents tended to be particularly concerned with the present and future potential risks of practices associated with body regimen careers, and they were more likely to entirely avoid a practice if they had any doubts or concerns, rather than to take a chance. People espousing a view of skeptical prolongevity were less likely to take supplements, vitamins, and other additional dietary additives, and were more likely to try to get all of these things from foods and other sources perceived of as both “safer” and more “natural.” While aware of many important scientific breakthroughs, the skeptical prolongevists were equally aware of the damages caused by scientific interventions, and they were wary and cautious about putting their own bodies at risk by using “unproven” science. They sometimes talked about the “promotional” aspects of science, suggesting, for example, that scientists have multiple motivations (beyond just the pursuit of knowledge) when promoting their own research interests. Further, these same respondents tended to think more about what they regarded as the potential positive and negative effects of delaying aging and/or extending life, and this included greater expressions of concern about differential access to biomedical interventions, and potential population challenges, paired with issues around the distribution of limited, scarce resources.

Pragmatic Prolongevity

Other interviewees tended to embrace an attitude towards body regimen practices

associated with the “healthy life extension community,” that could be summarized as, “if it feels good, do it,” making them less moralistic and less judgmental about the lifestyle of others. As one interviewee articulates: “My view on all of this is very, pick and choose. I feel as long as you are not hurting anybody, than you should pretty much be able to do, you know, what you feel you need to do” [Female, CR, 2/3]. Interviewees embracing this attitude of pragmatic prolongevity tended to be most driven by the practical, here-and-now pleasurable effects of body regimen practices, and less fixated on more ideological theories of life extension as an ideal number of years; in fact, pragmatic prolongevists sometimes went so far as to admit that they would be willing to trade life extension benefits, in terms of years, for a more pleasurable (and what was sometimes characterized as more “youthful”) embodied experience in terms of the day-to-day. They tended to focus on the desire for “customized” and “personalized” practices, often emphasizing the need for each person to establish his or her own unique body regimen career since different practices influence different bodies in unique ways. Respondents espousing this perspective tended to be particularly vocal about managing, and ultimately, avoiding pain, and they were especially critical of attitudes that associated aging with inevitable pain and suffering. These same respondents were particularly critical of governmental restrictions that made it difficult to obtain various supplements, pointing out what they regarded to be a double standard between more limited and difficult access to, for example, “anti-aging” supplements, while many pharmacological “band-aids” are “doled out like candy.” By making use of whatever practices bring enjoyment in the here and now, pragmatic prolongevity enthusiasts were less future

oriented than their counterparts.

Radical Prolongevity

Those interviewees most fixated on aiming for the goal of delaying or stopping aging and/or extending the lifespan “at any cost” could be described as espousers of “radical” prolongevity. This “do-whatever-it-takes” mindset often involved stories which openly acknowledge the potential risks inherent in current body regimen practices. Individuals embracing this attitude were more likely to take higher dosages of a large amount of vitamins, supplements, and other “anti-aging” and/or “life-extending” products, not necessarily because it made them feel good, but because it might favorably alter bodily aging and/or lifespan. Radical prolongevists regarded risk-taking as necessary to the pursuit of prolongevity, and they even accepted certain unpleasant side effects from various supplements and practices as inevitable or a necessary sacrifice. Far more optimistic about the possibility of near future interventions into bodily aging, proponents of this perspective tended to think less about potential negative societal repercussions of prolongevity, figuring that humans are incredibly resourceful and resilient creatures who are capable of satisfactorily solving problems related to prolongevity as they arise.

Just as some respondents held perspectives that overlapped with multiple views of prolongevity, other interviewees changed their perspective on prolongevity over the course of engagement in a body regimen career. For example, one interviewee detailed how his initial interest in radical prolongevity, gradually, over nearly two decades of a body regimen career, shifted to become more characteristic of what I describe as

“pragmatic prolongevity.” As this interviewee explains:

I believe that with the work that they are doing now with telomeres and all that stuff, I think that eventually they will actually break the code of biological life itself and I don't know if that will happen in my lifetime. Although I just read a book called Singularity by, ahhh, I can't think of his name but it all talks about how it is going to be a reality within 10 to 20 years. I don't know, but, its very encouraging, anyway, but the whole thesis of the book is that if you address the problems with your health, and aging and disease right now, you can live long enough to take advantage of the technological, all the new technologies coming out twenty or thirty years from now to radically extend your lifespan. And that's, in the very beginning, when I started this in 1990, the idea of radical lifespan extension was really a, exciting then, right now I am not so much focused on that, its just increasing the quality of my life in the present moment, but if that comes along with it, you know, so be it. [Male, AA, 4/5]

Following this detail of the different ways my interviewees regarded the pursuit of prolongevity, and more generally, their body regimen careers, I will continue through this chapter to highlight what I consider to be some of the key findings of this research, which begins with a discussion about the meaning people experience from their engagement.

Body Regimen Careers offer Meaning

Man can live for about forty days without food, and about three days without water, about eight minutes without air ... but only for one second without hope. *Hal Lindsey*

CRON can give more than extra energy, a thinner waist line, a more youthful appearance, and a reversal of disease symptoms. It can give you hope for a better future. Hope is important. *Online newsgroup participant, August 20, 2008.*

In the beginning of this dissertation, I discussed the process through which people engage in what I refer to as the “body regimen career.” Questioning tradition and disillusionment are often at the heart of this process, and this may involve disillusionment with a broad range of dominant cultural belief systems which include two of the most influential in the first decade of the 21st century, allopathic medicine and mainstream religion. Critical of what many regard as the contradictory beliefs offered by these

dominant socio-cultural institutions, people often recounted stories of the ways their body regimen careers offered alternative sources of structure, meaning, and understanding, which may be experienced as intensely motivational and deeply empowering. As an example of the empowerment one respondent articulated as she learned to question allopathic medicine through her engagement with anti-aging medicine, consider the following interview excerpt:

A lot of people my parent's age, they accept what their doctor tells them, its "ok, well he said it so I've got to go with this," well what we kind of say is, "well that's great, but let's look at another option." And I think that people our age, we are seeing that there are options and that we have to take our own health care in our hands to get things taken care of. We can't wait for that doctor to call us back. We have to do the phone call ourselves, and do our own research. [Female, AA, 4/5]

Here it is perhaps important to note, as stated previously, in greater detail in chapter 5, that the above interviewee was not rejecting biomedicine, per se, but was rejecting the ways that biomedicine was practiced. Instead of looking to the physician as the omnipotent expert or the all knowing initiator, this interviewee sought greater involvement in her own health care, wanting more the role of participant or partner, than that of patient. This theme came up repeatedly in each of my three interviewee groups, and particularly among those using anti-aging medicine, and it reveals the ways that a turn towards this medical specialty may in part be more about the practice of traditional biomedicine than a critique of biomedicine in and of itself.

While interviewees in the anti-aging grouping of my research often turned to what was regarded as an "alternative" medical provider for treatment, and interviewees engaged in the practice of CRON often strategically used biomedicine to obtain information from various medical tests, respondents from the fitness regimen grouping

regularly recounted the ways they avoided medical care providers altogether, as a number of these respondents described what could be explained as a conscious avoidance of doctors.

Interestingly, the angst, disillusionment, and criticisms that a number of my interviewees leveled at biomedicine, both in terms of the delivery of care, and sometimes in terms of the medical outcome, (which primarily focused on negative experiences with pharmaceutical drugs), were also apparent during conversations about another prominent societal institution with ideological functions sometimes likened to medicine – the realm of religion. It was not that my interviewees rejected religion entirely – positioned, for example, solely from an identification with atheism or post-theologism – rather, it was that many rejected what they perceived to be the traditional practice of religion, often in terms of the delivery of religious teachings, which included criticisms of the ways many religious leaders treated their congregations. Examples of these sorts of critiques include the following:

I was born and raised Catholic, and I was never, I had bad experiences in church, as a child, because it was in Latin and I didn't understand anything so I always hated church. I was very happy to stop going to church when I could. I couldn't understand. [Female, FR, 4/5].

When we got married, because my wife and I were raised Catholic, and we went to the Pastor that we had known, my wife was ill for a while and he had seen her in the hospital, and he said, "well, you know, you have to pledge your first born son to the Catholic faith." And I was like, "dude, this is like allegory, and it is supposed to be like a story that you take as a moral lesson. You are not supposed to take it literally. You are crazy!" And I just walked out and said, "Well, it was very nice talking to you, but I don't think so." And so we did not get married in the Catholic Church. [Male, CR, 4/5]

I am Christian and my kids go to Christian schools, just like I did. We go to mass on Sunday and there are many times when the preacher says things that I completely disagree with. The preacher is more narrow minded than I'd like. I listen to the sermon, and leave the church shaking my head and thinking, "Whoa!" [Male, FR, 4/5]

I was raised Catholic. I was going to be a monk...My parents are really devout Catholics, and they teach people to pray, and so forth, but I don't find any comfort in the Catholic Church so I don't follow that stuff. [Male, CR, 4/5]

As detailed by the respondents above, some of my interviewees had problems with the delivery of organized religious teachings. While these individuals were not necessarily atheists, agnostics, or anti-religious, they did express a desire for a different type of religious leadership, and this may have included a different type of relationship with their religious leaders, one based more on mutual respect and understanding, backed by a similar type of experience within the church setting. Similar to my respondents who wanted more respect, partnership, and understanding-as-verstehen (Weber 1947), from traditional allopathic doctors, these interviewees were providing similar critiques of the ways certain religious leaders practiced, and potentially even tainted or distorted, religion.

And again, in parallel with critiques leveled at biomedicine, sometimes the content of religion came under attack, and in these cases, religious teachings were repeatedly criticized for doing more harm than good. Like pharmaceuticals that were perceived to poison the body under the guise of making it healthier, religious teachings were sometimes thought to promote hate, intolerance, exclusionism, and violence, more than the overarching, and perhaps, idealized goals of universal love, compassion, and grace. As an example of a respondent who directed their questioning of religion to the perceived negative effects from the content of religious teachings, consider an excerpt from the following interview:

I was raised in a very strict, fundamentalist, right wing family, and I decided that at age 12, I was sitting in a fundamentalist church with my family at age 12 and I had a realization strike me totally out of the blue and it was like this amazing revelation and I said to myself, “You know what? I don’t have to believe this shit!” And that was it. From then on, it was all downhill and home... I just saw all the hate and anger. I saw all the hatred, its all hatred and anger driven, you know, it’s all, let’s make it smaller, trying to keep it small, and its negative and its intolerant...now I go to church on Sundays and disrupt it in some way... a few weeks ago I got up in my Sunday school class and said, “every body has the right to salvation, this concept of salvation being limited to just Christians is ridiculous.” And it was really something, the guy I felt was really conservative, said, “you know, I have to say, I think that too.” ...So we do a lot of research on the topics and we try to find ways to gently or not so gently nudge traditional definitions of Christianity. [Male, AA, 4/5]

Just as respondents sometimes critiqued both the practice and the content of traditional biomedicine, one interviewee combined both a critique of the practice and the content of religion, by describing a particularly memorable experience that turned her away from religion in its entirety. In the words of this respondent:

I would volunteer for homeless things and outreach things, you know, giving sandwiches and stuff. I lived in [name of city]...and we would actually go into [name of city], pick up homeless people and take them out for the day, like Sunday, they would come out to the sermon and we would cook dinner, and ...this was something I enjoyed to do, and one day, we picked up a large homeless gay population, I mean, flaming, you know, there is no secret they are gay, I mean, and take a guess, I mean, I understand that you do all this effort, you know, to do your sermon on what you think the topic of the day is, but the minute that you see that you have like thirty five gay people in your audience, I’m thinking, talking mean about gay people should have not been the sermon for the day. And of course, they thought it was funny. I was embarrassed. I thought, "My god, we brought all these people out here and you know, we basically just told them that they were sinful creatures," and you know...I was so embarrassed...I’m like, that is just rude! I mean, you are allowed to have your beliefs, but I mean, that would be like inviting somebody into my home and then being rude to them, so...it just seems like people of a religious persuasion don’t like a large majority of everybody else...you should treat everybody with respect, and I don’t think religious people do that. I kind of think that people at the top, it really isn’t about religion, it is about controlling other people, and so I don’t really, I can’t explain it, its just, I just don’t see it [religion] as a very nice thing. [Female, CR, 4/5]

In the above examples, and in many more not included here, respondents discussed the ways that they questioned the practice of dominant societal institutions – whether religion, or also in the spotlight of this study, biomedicine. Rather than reject the

practices of biomedicine or religion entirely, though, my interviewees often described their journey to create an alternative path for themselves, one that they found more rewarding and engaging than what might be regarded as the more traditional or mainstream route. While this included body regimens inspired by the “healthy life extension community” for all, in terms of religion, it also frequently involved some type of eclectic personal blend that may be better characterized by the term “spirituality,” and included reference to beliefs and practices associated with things like the new age, paganism, Buddhism, Wicca, spiritual channeling, energy fields, eco-feminism, and the deep ecology movement.

In a prologue written more than three decades after his initial work which documented three different types of prolongevity legends that have existed throughout the ages, philosopher Gerald Gruman (2003[1966]) provides an epilogue to his story, in an effort to momentarily reflect on the present day pursuit of prolongevity. Instead of using thousands of years of history to offer evidence of the feckless nature of such a dream, Gruman (2003[1966]:160) rebuffs the apologist call for an acceptance of death as natural and inevitable, encouraging, instead, the furthering of this meliorist tradition of bodily intervention, as he argues for “...a program of action that would be supported to augment, in tangible ways, the value of each person: through prolongevity, rejuvenation, resuscitation techniques, and perhaps, even some variety of resurrection.” While recognizing the existence of what he refers to as a “counter-revolution of falling expectations” paired with “a pervasive fear” that life is both meaningless and absurd, Gruman argues that in order to counter the conflict and anxieties inspired by such a

perspective, the worth of the individual must be resuscitated. For Gruman the dream of potentially extending the lifespan is fundamental to human hope.¹⁴⁷ It gives people future promise, faith, and perhaps most fundamentally, a *raison d'etre*.

In his powerful story of Holocaust survival, Viktor Frankl (1959:121) explains that over and beyond any horrific circumstance, the human quest for meaning in one's life is the primary motivational force. According to Frankl, disillusionment, defined as the discovery that human suffering has no end, is most damaging to the human spirit, which is characterized by hope. I argue that a renewed sense of hope, promise, and meaning are at the heart of engagement in the body regimen career. Instead of being paralyzed by the emotions surrounding the questioning of tradition or disillusionment with dominant ways of knowing, people carve out alternative courses that they experience as deeply satisfying, empowering, rejuvenating, and inspiring. As one CR enthusiast articulates, "For me, the practice of CR becomes a catalyst in many other areas of my life" [Female, CR, 4/5]. As a substance that speeds up a chemical reaction but is not altered or destroyed in the process, catalysts are important change agents, relevant in many scientific discussions, and in this case, relevant in conversations about life. My research suggests that for many, body regimen careers may serve as catalysts that significantly alter (and many would add, improve) many spheres of life presumably having little to do, at least on the surface, with food, diet, exercise, supplementation, and the body.

¹⁴⁷ When talking about institutions that disenfranchise youth, in his book *Stealing Innocence*, Henry Giroux (2000:11) aptly details the aftermath of lost hope, as he explains that in such circumstances, "the discourse of hope is replaced with the rhetoric of cynicism and disdain."

Engagement in body regimen careers associated with the “healthy life extension community” is complex and multifaceted, but based on my conversations with 44 people partaking in such pursuits, an overarching theme that appears to offer important understanding into the motivation behind this engagement includes the everyday meaning that people receive from their involvement as body regimens are given priority in many facets of a person’s life. Further, in providing people with an outlet through which they are able to carve out an alternative to the traditional treatment modality which characterizes allopathic medicine, people experience a sense of empowerment and inspiration. Sometimes by turning to what could be described as an “alternative” biomedicine – seeking out a provider that may treat them more as partner in health, and less as patient in illness, while giving them more time, attention, and sometimes, even, solutions, people may actually experience a renewal in their commitment to biomedicine. Perhaps in a similar way that so-called new age religions have been thought to potentially renew religious faith and this may include more traditional, mainstream religious beliefs. Being sensitive to the meaning making inherent in the experience of body regimen careers will be an important part of discussions which consider the ethics of biomedical intervention into the human aging process.

Body Regimen Careers as Source of Community

As detailed in the third chapter of this dissertation, engagement in body regimen careers works to construct, shape, and transform personal identity, as people who partake in these efforts, often feeling, in certain ways, at odds with dominant culture, experience a sense of community, belonging and “we-ness” based on their engagement with like-

minded others who are involved in similar body regimen pursuits. This sense of community was created and maintained by my interviewees when they shared agreement about certain moral codes (for example, in terms of which foods to consume and/or avoid), engaged in acts that involved, for example, trading stories, information and research related to body regimen practices (this included a wide variety of possibilities, from recipe swapping to the exchange of blood test results for comparison and analysis), joined together to purchase large quantities of supplements for reduced rates, trained together (often in terms of fitness regimens), and meeting together (in terms of local organizations and even national professional meetings, like, for example, the Caloric Restriction Society Meetings that take place about once every 18 months).

The issue of community is a central sociological concern, past and present, with deep historical roots, as sociologists like Ferdinand Tonnies used the concepts of *Gemeinschaft* and *Gesellschaft* to explore the concept of community, while Emile Durkheim touched upon the concept through his study of suicide, and in his articulation of mechanical and organic solidarity.

The sense of “belonging” experienced by those engaged in body regimen careers was an important part of long term engagement and commitment. By connecting, listening to one another, and “feeling heard” by sympathetic others, many people felt a sense of understanding and community that they experienced as nourishing. Examples of this abound in the online communities of which I have been a part. For example, in trying to encourage an ill member to persevere, one online CR enthusiast sympathetically writes that she hopes that her own post, “and all the support you are getting from the

[online] list helps you back to good health.” After describing the enormous sense of community he experiences from the friendships he has forged through his gym workouts, one interviewee explains this need for community, connection, and understanding, as fundamental to the human condition, as he explains, “People are not selfish. They just want to be heard and listened to. We as a culture don’t do enough of that. We don’t truly listen and seek to understand the people around us” [Male, AA, 2/3].

Consider, for example, some of the ways that other interviewees articulate the feeling of community that they get from their engagement in body regimen careers:

CR society meetings are...really a fun thing and we get to see each other.... they are very special. [Male, CR, 60+]

People who seem to be involved with massage therapy, they are also interested in other avenues of health and wellness too, you know, they do yoga, or they are into alternative therapy... and I think just being exposed to other people in that community, you know, you hear about people doing yoga, or Tai Chi, you know, all those things all kind of run in the same circles, and people are always talking or sharing information with you...[Female, AA, 4/5]

I think it would be really beneficial to live near others that are doing CRON because then you could all make a weird salad and nobody would complain! [Female, CR, 2/3]

I belong to the CR list, and you know, reading all the different, I don’t participate a lot, in you know, the email list, but I do read them everyday and I find it hugely motivating. There is a CR support group and two other lists, one is more scientific, and the other is more community, and so I find those hugely motivating. I read them everyday and you know, it keeps you on track, as your doing this. [Female, CR, 4/5]

I joined the CR society in order to connect with other people in my area because I felt kind of alone out here. [Female, CR, 4/5]

We gather at the gym at a certain time, and not only does it help with the safety factor in having a spotter, and the encouragement factor, but it is also a camaraderie thing, you know, there is that sense of belonging as well, and being that I recently moved to [name of city], that also helps bolster the initiative to be a part of a group that I am familiar with and that I enjoy being around. [Male, FR, 2/3]

As touched upon in chapter 2, and as others have suggested, the late 20th century has witnessed significant changes in the organization of work,¹⁴⁸ as postmodern culture has ushered in a shift away from a focus on “work” as the primary motif (Bury 2000:94). Once an important if not critical site of community building, this apparent decline in the “work” career as “primary motif” may lead people to seek out other avenues of connection. The “body regimen career,” as I have argued elsewhere in this dissertation, may serve an important role in this shift, perhaps providing some of the satisfactions that were earlier met more in the realm of work careers. In *Civilization and Its Discontents*, Sigmund Freud (1961 [1930]:27) articulates the important role the realm of work holds for humans, as he states “No other technique for the conduct of life attaches the individual so firmly to reality as laying emphasis on work; for his work at least gives him a secure place in a portion of reality, in the human community.” I would argue that in seeing body regimen careers in terms of “work,” with the body as work-site, it is evident that engagement in these pursuits most certainly does serve to provide people with a sense of security, and a position within the broader human community, which helps to make the task of living, with all its “pains, disappointments and impossible measures” (Freud 1961[1930]:22), more bearable.

¹⁴⁸ According to data from the U.S. Department of Labor (DOL), people between the ages of 18 and 38 change jobs approximately 10 times. This is far different than what may be imagined when the term “career trajectory” is employed which often implies a lengthy commitment to one particular occupation and employer. Body regimen careers, I argue, more closely model the current career trajectory that involves a relatively high rate of job switching. While the centrality of work remains constant, people explore various approaches to the body as career site, inspired by any number of things including bodily events, the influence of friends, family, work, and others, exposure to new scientific theories and ideas, and resources in terms of time and money.

Consider, for example, the emphasis on “goals,” as they relate both to body regimen careers and to work careers. While goals, in work careers, are often shaped around ongoing “individual performance evaluations” (IPEs), goals in terms of body regimen careers, may be based around the USRDA’s dietary requirements (in the case of CR), blood/hormone levels (for those using anti-aging medicine), or things like exercise times, exertion levels, and performance records (PRs) (among individuals engaged in fitness regimens). Consider, for example, the words of one respondent engaged in CR:

I have become more focused on nutrition and on being able to achieve my vitamin goals and minerals and what not, what you need with the RDA, with CR. I have a goal and you know, that’s neat. [Female, CR, 2/3]

Engagement in Body Regimen Careers as Absolution from Individual Blame

The “risk” society (Beck 2000) which characterizes 21st century U.S. culture, based on the values of hyper-individualism (Berger 1995), personal responsibility, and self-reliance, inspires heightened feelings of insecurity paired with what can be described as a moral imperative “to do” something. In this specific case “doing something” translates into engaging in some type of body regimen career implicated in potentially delaying aging and/or extending life. In many ways the final outcome of such efforts is far less important than the act of doing, in and of itself. In doing, people feel a sense of moral absolution from blame – a feeling that they are doing, to the best of their knowledge and abilities, what is good and right in the face of a wide range of challenges, obstacles, and conflicting information – ultimately offering up the final outcome to fate or to the roll of the dice or spin of the wheel which so often serves to explain many of life’s contradictory outcomes. In the words of a few of my respondents:

I always know that something bad could happen because you know, my dad was the perfect example, I mean, you go in to the doctor, you think things are wonderful and you think the surgery will go well, but bad things can happen ... but once I realized, you don't really have control over everything, I'd like to have control over everything, but you don't, and I just have to accept it. You know, nothing will happen that I can't handle, once I figure it out, work it out in my head. [Female, CR, 4/5]

I think, to some degree you are tempted to want to preach and sort of act superior about it [body regimen career], and I think that that's (a.) probably stupid, (b.) dangerous, and (c.) probably wrong overall, because like I said, you are probably trying to kill yourself in an expensive way or something...I think there is a problem with the whole "choice" issue...when your kidneys are failing and people are saying, "well its all your fault" because one of my ideas about life is that yes, you can effect what you can effect, but you don't necessarily choose what you can effect. [Male, CR, 4/5]

We never know what tomorrow holds. You don't want to feel like you've missed out on enjoying all of your life just so you can tack years on at the end...it is important to have something more meaningful to live for than just physical health and security because those are things which will inevitable pass, it is just a matter of time...[Male, FR, 2/3]

You live for today and you enjoy today because you don't know what tomorrow will bring. What you are going to get hit with...[Female, FR, 4/5]

As the responsibility for one's wellbeing is more than ever regarded as the sole responsibility of the individual (Rose 2001; Fitzpatrick 2001; Breslow 1990), engaging in body regimen careers (which may include taking a wide range of supplements, vitamins and related products combined with rigorous exercise, and specific nutritional practices), symbolizes a personal and moral commitment to one's well being (Nichter 2003). As Marshall and Katz (2002:59) note: "Whether through preventative bodily discipline or remedial therapy, the onus is on the reasonably ageing individual to remain 'forever functional.'" Changed consciousness and awareness may also carry the burden of knowledge and responsibility as multiple interviewees repeatedly explain that they "know too much" not to engage in body regimen careers; as one interviewee concludes in talking about her body regimen career: "once you start, you just can't stop!" and another explains, "I am always reading health and wellness magazines and keeping up on, you

know, what I should be taking, and anti-aging type of things, too!” The well known 20th century catchphrase “Keeping up with the Joneses” – meant to capture efforts to “keep up” in terms of accumulating and maintaining socio-economic and cultural capital – now takes on new meaning as my interviewees repeatedly describe efforts to “keep up with all the latest health information, technologies, and trends” and the 21st century “Jones” is a new “healthy” (and pricey) soda brand made without high fructose corn syrup (HFCS) or genetically modified organisms (GMO)'s. “Keeping up with the Joneses” is not easy....In the words of two respondents:

I know the benefits of supplementation...of eating sensibly...of working out, its just difficult to do though, its just difficult to keep up, I mean, if you could do that, but, for the average person, just, you know, working for a living and everything, its difficult to do that. [Male, AA, 60+]

You have to seek out new and advanced technologies and its hard to stay on top of all the new technology and supplements and skin care, you know, but I think those all are important. I think they do retard aging. I see it. You know, I worked with it so many years that I see the proof of it. [Female, AA, 4/5]

When people feel personal responsibility for their health, their wellness, their illness, and, now I would add, increasingly, bodily changes characterized as “aging,” it is perhaps not surprising that a degree of anxiety could be provoked. While the “sick role” Parson’s (1951) identified more than five decades ago may serve to threaten individual responsibility and productivity, my research reveals the ways that what could be described as the 21st century “at risk role,” bolstered by the “to do imperative,” may threaten an individual sense of security and well-being. And anxiety about decline is inspired at ever younger ages as Gullette (1997:17) astutely remarks, “As the century has progressed, everyone has been getting older younger.” By engaging in body regimen careers associated with the “healthy life extension community,” it is possible that for

some, this anxiety is lessened, minimized or managed. As argued by Williams (1998:437), “the pursuit of health, in short, is an embodied practice and moral performance, in which bodies, literally and metaphorically, become ‘viable.’”

While these engagements can easily be seen to slide into what has been called the “moralizing approach to consumption” (Willis 1992:134) which clearly delineates “good” and “bad” directives, while disregarding deleterious social and economic factors in favor of individual prescriptions and causation, the complexity of the lived body disrupts such discourse as confusion and contradiction prevail. Humans are not automatons and the flesh and blood lived body oftentimes defies control and reason. Interviewees repeatedly highlight contradictory examples offered by acquaintances, friends, and family members who do not engage in “healthy life extension practices” and live lengthy and healthy lives. For example:

There are people who smoke cigarettes and drink whisky up into their 90s and they are some of the strongest constitutions out there. [Female, FR, 4/5]

My grandfather smoked like a chimney for forty years, ate crap, was naturally thin, but lived happily until 98, you know? [Female, CR, 4/5].

Further, a vast number of theories abound which project conflicting recommendations for delaying bodily aging and extending bodily life. Exercise causes free radicals. One in four supplements is tainted. Plastic in water bottles and yoga mats is implicated in cancer. Caloric restriction is sometimes linked to osteoporosis. HGH may accelerate tumor growth. Some of my interviewees described how they started consuming alcohol, namely red wine, after years of abstaining from alcohol, because of the alleged health benefits. Further, as Girard (2000:184) astutely notes, the healthiest and unhealthiest

actions may spring from the same motivation as “The true reason why many young people join the ranks of smokers is the fear of gaining weight, a fear which the government fosters.”

At one point during this dissertation process, I found myself sitting at a health fair by a booth which was promoting anti-aging medicine to passersby. As people stopped to ask questions and peruse the written material documenting what anti-aging technologies could offer aging bodies, the vast majority of men and women were interested in weight loss more than hormone treatments and vitamin regimens. “What do people expect?” one person quipped, “I’m sixty years old and this is what a sixty year old face looks like!” Another senior couple stopped to chat, both joking that they would be miserable if their spouses started acting and looking twenty years younger. “I couldn’t keep up” laughed one of the guys, “We’d have to get divorced” quipped a woman who quickly identified herself as “72, and proud of it!”

Why am I writing this? I am writing this because I think that there is a disparity between longevity and anti-aging oriented marketing materials, discourse in biogerontological circles, and the experience of real people living real lives, and this includes those engaged in body regimens associated with the “healthy life extension community.” Time and again my interviewees recounted statements such as the following: “I do a lot of reading and research, you know, and I read the abstracts, not just the hype” [Male, AA, 4/5]. My interviewees were keenly aware of, and cynical about “hype,” “magic bullets” “the latest fads” “quick fixes” and “miracle cures” – in the words of two interviewees:

I am wary of any kind of supplementation at this point because you see these things come and go, you see Vitamin E sort of gain status as a wonder thing and then all of a sudden it's a terror, and then beta carotene and so on and so forth, so I try to have a little bit of a "take it with a grain of salt" attitude with everything. [Male, CR 4/5]

There are so many advertisements on the television for X, Y, Z pill, slim quick whatever, lose 27 pounds in five minutes, it just, it seems like it can be fixed so why not eat that double cheeseburger, and unfortunately it is not there, we all know its not there, that stuff never works for anyone! [Female, CR, 2/3]

Media depictions of particular body regimen careers were also subject to critique. For example, a number of people engaged in CR often talked about how the media only covers extreme examples of the practice which viewers might regard with derision or fear. Respondents using anti-aging medicine often noted how media depictions emphasized abuses around human growth hormone. Interviewees repeatedly associated what could be categorized as over usage and high dosages with a small minority – often professional athletes, movie stars and entertainers, and others in the media limelight. Similarly, individuals engaged in fitness regimens rebuffed elusions to fix-all supplements while detailing the multifaceted challenges and rewards involved in engaging in fitness regimen careers over the course of decades. While navigating body regimen careers, my interviewees were often savvy about, and in multiple ways, resistant towards the near constant allure and pressure from consumer culture. Describing, for example, an encounter with a physician who was working to inspire age-based body insecurities, one respondent explains:

I remember I was going to some dermatologist because I have had some skin cancers, and so, one day he came into the room and he sat down in my chair and he said to me, "I'm doing some new facial treatments, and a lot of people are having that done who are your age," and I felt like I was listening to a used car salesman and I never went back to him after that. It just turned me off. I felt like he was trying to sell me on this five thousand dollar procedure, so that was the end of him! I mean, he, I assumed he did good work, but then when he got into that, he wanted to get into some kind of laser, and

said “we can remove those spots that you have,” and I thought, “no!” [Male, AA, 60+]

Just as my interviewees were consistently wary of the media, and their own role as consumers, many also expressed a similar sense of skepticism and even doubt about the practice of science, as detailed in the beginning of this chapter with a discussion of so-called “skeptical prolongevity.” While medicine, science and technology have sometimes been relegated to the position of religion in postmodern culture, one marked difference that I noted throughout my research interviews involved the stories about the admitted limitations of science sometimes held by even the most devout scientific followers. Unlike fundamentalist religion which tends to promote an ideology which suggests that the answers are already figured out and available to the most faith-filled and devout scientific enthusiasts, many of those who participated in my research remained far less dogmatic and far more expressive about what were sometimes called life’s “mysteries” and “unknowns.” As one CR enthusiast (who is a self described “geek” and a transhumanist) explains when talking about the current state of longevity science, “We don’t know a lot. We don’t know that much, and we have a lot we can learn” and another interviewee similarly elaborates, “I think we really don’t know a lot of things.” Describing scientists as hunters on a trail who have picked up a scent but still haven’t located the prey, another interviewee articulates his combined enthusiasm and skepticism towards science, explaining that there is still an enormous amount to learn about the body and bodily aging. For those who may be tempted to liken the dedication involved in body regimen careers to that of religious devotion, it is important to note that the so-called “religiosity” of those involved in body regimen careers would have to be a doubt-

based faith grounded in ongoing questioning and skepticism. Yet similar to religious devotion, individuals engaged in body regimen careers did describe what could be characterized as degrees of commitment ranging from, for example, what was described by one enthusiast of CR as “slacker CR to CR extreme.”

Woody Allen, in his film *Hannah and her Sisters*, plays the role of a hypochondriac who is certain that he has a brain tumor and is terrified by the possibility of dying. After undergoing medical tests that reveal that he does not have a brain tumor, Allen experiences a brief stint of joy, followed by the realization that although he may be healthy today, at some point, he will become sick and die. This leads him on a quest to figure out the meaning of life. Through this journey he comes to realize that he should lighten up -- experience more of life’s humor and imperfections – while taking himself less seriously.

Similar to Woody Allen in his film described above, my interviewees repeatedly cautioned against being arrogant about their pursuits. One respondent, for example, explained her efforts to resist “the prison of health as an obsession” [Female, AA, 2/3] and her desire to avoid being “consumed” by her body regimen career. Several people joked about their engagement in body regimen careers, suggesting in fact that efforts might in the end have some type of opposite effect. Recounting the way his friends tease him about his health and fitness regimen, for example, one respondent explains:

I’ve got a friend who jokes with me...He’ll say, “you think those health foods are going to make you live longer,” and I say, “I like the taste of them.” And he says, “you are kidding yourself with that soy milk that you drink.” [laughter] He kids me, and then he says, he is the same age that I am, and he talks about, what about the old guy who is sitting in the chair all like this [makes a posture like he is immobile] and is saying ‘oh my god, I’ve gotta live another ten years! [laughter] [Male, AA, 60+]

Individual Body Regimen Careers Reveal Broader Cultural Concerns

The permeable bounds between the individual body and culture have been explored in great detail in a considerable amount of the literature. In contrast to a programmed machine, the human body is a dynamic, communicative vessel that reveals vast amounts of information about a person's life (Scheper-Hughes and Lock 1987; Douglas 1970; Goffman 1963; Mauss 1972[1934]). The body in contemporary culture is not a taken for granted given. People live their bodies within the world and culture is experienced through the body; scientific imagery of the body, it is argued, may inspire people to “internalize” and embody new forms of society (Martin 1994:122). For example, in her feminist research on the societal dictates of the female body, Bordo (1993) argues that anorexia nervosa is the outcome of three cultural axes which describe the socially and culturally mediated relationship we have with our bodies in the late 20th century. Identifying the duality of mind and body, the perception of the body as machine to be individually controlled, and the axis of gender/power, whereby women are subjected to stringent beauty ideals, Bordo (1993) reveals both the ways that the body is communicative, and the ways that culture infiltrates individual bodily experience.

The bodies of individuals engaged in the three different body regimen careers explored in my research also represent broader cultural issues of concern, and in some ways these individual bodies may actually physically embody such concerns. The “efficient body” becomes the ideal for those engaged in CRON, while those engaged in anti-aging medicine strive towards obtaining a “balanced body,” and individuals

partaking in fitness regimens celebrate the “working body.” These different bodily ideals, promulgated by divergent scientific theories of aging, serve to connect the practices of body regimen careers to broader societal issues and concerns, linking, for example, the efficient body to matters of ecological sustainability, which includes the values of efficiency, conservation, and the protection of limited resources. In contrast, the balanced body is positioned as the site of an ongoing tension between depletion and replenishment, in order to highlight the negotiations between personal and familial obligations with the impinging demands of work life. Finally, a desire for lifelong societal engagement in meaningful activity, as it is represented by the “use it or lose it” ethos of the working body, serves to promote ongoing effort, activity, endurance, and productivity, while challenging chronologically-based work retirement expectations.

Recognizing the ways that different body regimen careers, influenced by different theories of aging, pinpoint different areas of focus, concern, and interest for individual practitioners, I find myself thinking about what is in the shadows of the efficient, balanced, and working body ideals. For example, around 38 million people in the U.S. are said to be "food insecure," struggling to gather enough money to keep food on the table for their families.¹⁴⁹ The meaning of the “efficient body” takes on a very different position when thinking about those who conserve, not by choice, but out of necessity. While the “balanced body” may include some type of negotiation between work and family as is often exemplified by "flexible" work, this same type of "flexibility" is not always voluntary, as it is used as a corporate strategy to circumvent the expense of

¹⁴⁹ Retrieved on July 30, 2008, from: <http://www.npr.org/templates/story/story.php?storyId=5023829>

benefits, and to have an “as needed” on-demand workforce that is similarly compensated on an ad hoc and less stable basis. Finally, while the “working body” may indeed be celebrated for those that have the privilege to find some pleasure in their work, this concept takes a very different course for those in jobs that are damaging to the body, monotonous to the mind, or demeaning to the spirit.

Considering the ways that the concept of consumption in terms of body regimen careers is shadowed by the market, it is impossible to separate the practices of consumption coupled to body regimen careers from our current state of hyper-consumerist (Allison 2003) capitalism. Looking at the latest 2008 advertisements in magazines geared towards what could broadly be described as the “health and wellness industry,”¹⁵⁰ I am struck by the ways the market co-opts many of the empowering embodied effects my interviewees discuss when talking about their body regimen careers. For example, for those seeking greater balance – a recurring theme throughout my interview groupings but of particular importance to those engaged in anti-aging body regimens – Aveda offers paying customers the Chakra Balancing Body Mists, while those interested in the green movement and environmentalism, especially important to those engaged in CRON, are enticed with Patagonia's new line of recycled polyester clothing. For those concerned about “staying active” -- like, for example, those interviewees engaged in fitness regimens, Wobenzym N is offered as a supplement touted for keeping its consumers “active & mobile.” Those seeking changes in affect largely in

¹⁵⁰ As part of my creative process in writing this dissertation, I spent time creating collages that captured the various themes that I was reading about and thinking about, including ideas that were developing based on my in-depth interviews. I credit Stephen Pfohl's Images and Power class with my introduction to using collage as part of the creative research process as it has certainly become an important part of mine.

terms of happiness and joy are offered soyjoy bars that are “fortified with optimism” and may allegedly elevate the mood of those who eat them. A concern about the inner body, as was evidenced in chapter 7 in terms of, for example, my discussion of “cell talk,” is met with other market solutions like Flora brand dietary supplements which are advertised to offer “15% more phytonutrients” in order to “renew energy” and “cleanse at the cellular level.” There is even a watch made by Philip Stein said to alleviate stress; a full page ad in the August 2008 edition of Yoga Journal magazine, for example, reads, “Ever since I've been wearing this watch my stress is mostly gone ...Integrated frequency technology enhances the wearer's well-being.” Issues of life balance, energy, environmental activism, and mental outlook, to name only a few, are co-opted by the market and are presumably offered only to those who can or are willing to pay the price.

Body Regimens Focused on the Inner Body Reveal Bodily Diversity

When thinking about the body, and perhaps more specifically the aging body, contradictions abound, as the body is simultaneously a location for resistance and regulation (Katz 1996). As I argue, and others (Biggs and Powell 2001) also articulate, narratives of agelessness (Andrews 1999), “successful aging,” and aging-as-physical decline, pair together to target different groups and to promote conflicting narrative directives guiding body regimen careers.

As detailed in chapter 7, the exploration of the inner body has been steadily gaining momentum over the past three centuries and in the early twenty-first century, medical diagnostic technologies based on visualization beneath the skin is increasingly commonplace. Individuals engaged in body regimen careers use a range of technological

devices through which to both gauge and structure their day to day practices, as technologies are thought to provide a greater level of reassurance than outer appearance or even, sometimes, embodied knowledge. For example, technologies like dietary software and heart rate monitors serve to place limits around consumption – helping to structure and guide consumption in terms of what and how much (whether in the form of nutrition or exercise) in order to ideally construct a more healthful, enduring, and/or long lived body. Blood tests associated with all three regimens, but perhaps particularly anti-aging or age management protocols that identify deficiencies and excesses based on predetermined normative ranges, are also used to serve meliorative ends, as information yielded through the technology, or the “expert” translator using the technology, serves to direct individual consumption.

What before may have been dictated by a more spontaneous interplay between a person’s immediate surroundings and their own embodied wisdom, is now approached with what I would describe as an added degree of distance, with technology in the position of interceder. CR enthusiasts may be the most vocal about this relationship, with a number of them talking about the ways that they use technologies to “trick” their bodies, as detailed, for example, in the discussion on “mind games” in chapter 8. One CR enthusiast described wearing heavy weights in clothing so as to trick her body into thinking that it was keeping the same weight so that she does not incur bone loss, while others talked about consuming low calorie, nutritionally dense foods that would trick their bodies into feeling full. Interviewee experiences serve as insightful examples of the ways that technology can be both a help and a hindrance. Such experience suggests that

the lived realities of human lives may to some degree subdue concerns about the interface between humans and machines since absolute control of machine repeatedly proves impossible. The body, as Weiss (2003:33) recognizes, is that which “frustrates our attempts at narrative unity, while simultaneously making the quest for narrative coherence possible.”

Control over the body – and in this case, perhaps particularly the inner body – still proves, at least at this point in time, complicated and confusing, as research supports contradictory protocols, and symptomatic bodies (Romanyshyn 1989) bear unique histories that have varying effects on technological interventions. As highlighted in greater detail in chapter 7, technologies used by those engaged in healthy life extension practices sometimes do not promote healthy life extension, and may even lead to injury or illness. Further, even helpful technological interventions may be experienced as unpleasant, distracting, and undesirable, thereby destabilizing prospective long term commitments to such engagement.

Along similar lines, the bodies promoted through healthy life extension, in contrast to the narrowly constructed “body ideals” circulated in popular culture, may defy cultural understandings of attractiveness, normality, and desirability. While individuals that engage in body regimens focusing primarily on the external body (like, for example, cosmetic surgery), may be striving towards a constrictive (and often times racist, sexist and ageist) culturally denoted body ideal, individuals engaged in body regimens focused on potentially delaying aging and/or extending the lifespan through a reshaping of the internal body often recount how their body regimens may actually make them defy

governing cultural norms and expectations about external appearance. Resulting bodies (of those engaged in body regimens associated with healthy life extension) sometimes conflict with dominant ideals as my interviewees repeatedly suggested that others often critically regard their bodily appearance, referring to them as “too skinny,” “too skeletal,” “muscular in undesirable way,” and “not voluptuous enough.”¹⁵¹

When I did CR extreme, I went to 117 pounds and I was 117 pounds when I met [name] and he was a little bit concerned about me, because he thought I was anorexic at first, you know, when you meet someone like that, and some of his friends had made jokes that I was a heroine user...[Female, CR, 2/3]

It is ironic how much concern or fear a lot of people might express towards me, you know...kind of wondering whether I was anorexic or something like that, you know, and yet, its kind of a much safer side to err on than on the side of obesity, and yet, you know, we are all completely comfortable with people being obese. [Male, FR, 2/3]

I just don't think that there is anything else that I would do to my body to change it from what it is right now. I mean, I'd like to keep what I've got but I don't want to, you know, I don't think I have any undying urge to change it much more than it is. I mean, I realize that I am not going to be Arnold Schwarzenegger, and I really don't want to because I know what the side effects are, and in the end, it is not going to be pretty, so I'm not, I'm not, I've accepted the fact that I am a rather small individual. [Male, FR, 2/3]

You know, a lot of people look at it [body regimen] and see it as something...like rah rah rah [makes roaring sound] as a machismo based thing, someone who is just infatuated with pumping themselves up into something bigger than what they are. [Male, AA, 2/3]

I am striving for a different physique than the normal person... I have always been thin... I make fun of my skinny arms and legs, I will pull up my sleeves, I mean, I can almost put my hand around my arm. I'd rather be thin and fit, than muscular and fit, and that is probably because that is just the way I am, so I sort of gravitate towards it. [Male, FR, 4/5]

I don't think a lot of people think it [her body] is even pretty, I mean, it is attractive to other athletes. I am not sure that your average guy wouldn't like me better 20 pounds

¹⁵¹ Physical side effects attributed to low rates of body fat varied among respondents and included discomfort sitting on hard surfaces, feeling cold a significant amount of time, difficult and/or interrupted sleeping, and irregular or absent menses. Physical side effects from intense amounts of physical exertion include feeling tired and sore a significant amount of the time, and experiencing fitness-related injury.

heavier, I mean, I don't care, but, even my own husband would probably prefer me another fifteen pounds bigger...[Female, FR, 4/5]

My wife thought I got scrawny when I started doing CR so that was a negative [laughter] but she was supportive, she understood the science behind it. Through practicing CR, I sometimes think that I look older. When I see my friends that are heavier, I notice that fat on a person's face makes them look more youthful....While everyone is on their own unique timeline, age catches up with everyone at some point. [Male, CR, 60+]

Initially, [after starting CRON] heck, a lot of my friends thought I had AIDS, or cancer treatment, or things like that, but they have gotten used to me [laughter] [Male, CR, 60+]

That's my negative mantra...that I am too thin, and I don't like that. [Female, AA, 4/5]

A former person I dated...found me too thin, you know, so, I haven't dated in three years...I had a discussion about this with [name of person] about whether we going to be less attractive because we are so thin. I don't know... [Male, CR, 4/5]

The Embodied Practice of Healthy Life Extension Body Regimens is Pleasurable

I would like to insist on the embodied nature of all vision and so reclaim the sensory system that has been used to signify a leap out of the marked body into a conquering gaze from nowhere (Haraway 2003:393).

From a phenomenological standpoint, culture is lived from a certain embodied perspective and we develop perceptions of our body and its relation to the world from that perspective. Embodied agency, as Tulle (2007:343) has argued, can serve as a vehicle for social change by "...unsettling existing structures and rendering them open to new dispositions." As detailed in chapter 8, and perhaps best depicted by the concept of "pragmatic prolongevity" articulated at the beginning of this chapter, engagement in body regimen careers involves far more than an effort to reach a future external ideal. People experience their body regimen careers in very personal, embodied ways that make use of multiple senses. My research confirms some of the psychological dimensions that Crossley (2005) suggests are linked to body techniques; through the performance of

certain body techniques, for example, acting out a particular state of mind, we can cause ourselves to physiologically experience a particular mood or state of being. While it is possible to liken the evangelism which may sometimes characterize the body regimen career to a type of postmodern religiosity, it is important to note that the language of skepticism and pragmatism abounds, based on my conversations with individuals engaged in body regimen careers. While “blind faith” may be at the heart of religious commitment, my interviewees made it ever clear to me that they were not just blindly faithful to body regimen careers. They experienced embodied rewards that were interpreted as evidence of efficacy. For example, CR was attributed to curing a range of health-related problems including one person’s 20 year history of high cholesterol, another respondent’s arthritis and one interviewee’s restless leg syndrome. In the words of a fitness regimen enthusiast reflecting on the effects of her body regimen career, which involves a combination of exercise, nutrition and supplements, “I can definitely feel a difference! I really do!”

While some scholars have recognized the “emancipatory” potential of various types of body work, many tend to dwell on the limitations of this potential due to, for example, “the co-option of fitness by the marketplace” (White et al. 1995:168). Yet my research suggests the need for further consideration to be directed towards body regimen careers as “potentially emancipatory phenomenon” (White et al. 1995:168). The pleasures of engagement in body regimen careers serve to motivate and inspire, offering individual’s what has been described as a sense of “control” and “release.” In his book *Coming Apart: An Informal History of America in the 1960s*, William O’Neill (1971)

suggests that Aldous Huxley was smart because he realized that hedonism was a valuable means of social control and that “sensual gratification could enslave men more effectively than Hitler ever could...” (as cited in Dery 1996:39). Certainly the pleasures and satisfactions people described through their engagement in body regimen careers served as important motivational forces guiding day-to-day participation.

One of the most powerful embodied experiences explored by individuals engaged in body regimen careers is the experience of what I would describe as a transcendent, loving connection – energetic connections between people, nature, and the universe. Feeling good physically – sometimes experiencing what could be characterized as “vibrant physicality” (Monaghan 2001a) – literally seems to physiologically transform – as people try to describe the ways their own vitality or energy fields connect, influence, and are in turn, influenced by others. Through an analysis of my interviews, it appears in fact that the very experience of aging may be much more about particular feelings than a certain look. When talking about the experience of aging, many also use the terms of embodiment to describe their efforts, articulating a desire to “feel good about aging.” Time and again my respondents talked about the experience of “age” in terms of feelings. “Feeling good” was at the heart of the embodied pleasures of body regimen careers, as one respondent concludes: “I think you should be able to feel as good as you possibly can for the rest of our life,” [Female, AA, 4/5] and another explains his navigation of his body regimen career by stating, “I just kind of pay attention to how I feel” [Male, AA, 4/5]. For many, body regimen careers inspire a heightened awareness of embodied physicality as many describe the ways that they have learned to pay “better attention” to

how their bodies feel. For example, in the words of one respondent: “I am not trying to appear 20 years younger than my age. I just want to feel as good as I possibly can for the rest of my life...I just try to pay close attention to how I feel” [Female, AA, 4/5].

In the final chapter of the last book she was to write before her death, Teresa Brennan (2003:157) hints to the ways we can turn to our bodies to gain insights into more healthful ways to live our lives both interpersonally and cross-culturally. She elaborates:

When one has knowledge of what is good and bad for the body, the wholesale denigration of the flesh becomes an obstacle in the way of united mind and physical being. It makes sense only when accompanied by a cultural ignorance of the body's – that is, the embodied mind's – requirements. Learning to distinguish between what is good and bad for the body in its environmental context, learning to have pleasure in foods that increase its health and joy in activities that do the same – these things are also part of the modern way in the West now...the body is there before the slower ego consciousness gets it, in this as in other respects.

In thinking about the ways that many of my interviewees described being dramatically transformed by the embodied pleasures of their body regimen careers, I cannot help but perhaps idealistically wonder whether the body is indeed, as Brennan (2003:157) suggests above, “there before the slower ego consciousness gets it...” Individuals engaged in all three pursuits describe experiencing and being inspired by these types of powerful human-to-human connections as they often condemned that which they regard as divisive to this healing pool.

For many, their embodied engagement in body regimen careers gives them the affective experience of feeling an enormous human connection – transcending dualisms and generating feelings of merger or intertwinement with others in ways that sound more spiritual and ethereal than bodily or physical. Whether caused from a “runner's high,” the “cundalini energy” of a yogi, a hormone induced state from physical activity or

supplements, the reflective and meditative discipline of CRON, or from some other phenomenon, this heightened state of transcendent awareness is of great interest to me. While this may conclude the discussion of a more psychologically oriented study, leaving this experience in the space of the individual body, my sociological perspective invites further dialogue on broader implications of this phenomenon.

Probably the determining factor in my decision to major in sociology, as opposed to many other fields of interest, involved what was then a prominent debate over “nature versus nurture.” This well known debate centers around a discussion about how much a person's innate qualities or “nature” determine individual difference and circumstance as compared to the influence of the external environment and culture. While many other fields of inquiry tended to place considerable focus on “nature,” my sociology classes were firmly focused on the power of “nurture,” sometimes going so far as to suggest that humans are born as *tabula rasa* or blank slates. Straight out of classes in biology, zoology, and psychology, I found this sociological perspective refreshing and inspiring in that it avoided some of the limitations of biological reductionism my feminist awakening was resisting.

And yet, in the years that have passed since my introduction to sociology and to the “nature versus nurture” debate, some dramatic changes have occurred to further transform this discussion into something far more complicated and confusing. The direction of biology, replete with the completion of the Human Genome Project in 2003, has made what was already an arbitrary division far more complex as scientists increasingly suggest that nature is actually transformed and shaped by nurture in

profound ways that make all of what we do open for scrutiny and debate. While my faith in the dramatic influence of “nurture” has inspired the social activist in me in a myriad of different ways, I am left with far greater confusion, ambivalence, and even fear, over what some of the current biological theories propose as the power of “nurture” to dramatically alter “nature.”

While the discussion was once about equal access to things like high quality education, health care, safe, clean and affordable housing, living wage job opportunities, travel, the arts and cultural events, respect, recognition, love and community – more and more focus is now being placed on the ways individual behavior and consumption marks and alters the physical body – quite literally. For example, nutrigenetics, a burgeoning field based around an understanding of the nutrient/gene/disease interaction, emphasizes how the “bioactive” nutrients we consume affect our genes, as nutraceuticals, anti-oxidants, flavanoids, and functional foods, become a new part of everyday understanding and vocabulary. Folic acid, for example, is linked to DNA methylation, with cancer as the disease potential, while Vitamin D is associated with mRNA stability, a dearth of which is thought to trigger kidney problems.

While on the one hand such findings are potentially fascinating and helpful, in the current climate of “molecular politics” (Rose 2001), the complexity inspired by such potentialities can not be underestimated as the ever narrowing focus on the individual body is now understood in terms of nanometers. Further, if nature and nurture are paired together with the new “geneticism” (Rose 2001) grounded in research that increasingly focuses on the ways that consumption literally guides, changes, shapes, and transforms

the very flesh and blood of our beings, we have much to think about in terms of the sociological repercussions of this approach. Radical differentials in terms of access to high quality, fresh, non-processed, affordable foods is repeatedly documented, for example, as large segments of the population are said to live in what are sometimes referred to as “food deserts” or urban districts with minimal access to the foods required to maintain a healthy diet, but, in stark contrast, are often surrounded by ample “convenience stores” and fast food chains. Using the discourse of individual choice and the free market to explain the biopolitics of risk would grossly misrepresent a serious and life threatening public health situation that could be better understood by considering the political economy of this new geneticism.

While the embodied joy, vitality, and love, as experienced through human connection and merger is repeatedly articulated by many of my interviewees as a wellspring of motivation to continue engagement in body regimens associated with healthy life extension, the tendency to parse, contrast, compare, and divide, and to focus less attention on connection, and more on differences, even among those with access to the necessary tools and resources for engagement in body regimen careers, may be overriding and even detrimental. As Brennan (2003:151) astutely noted:

When it [the subject] strives to preserve its own life at the expense of the perpetuation of life around it, it contributes to the anxiety that corrodes living pathways within itself as well as in others. It draws to itself more of the same, and more of the same leads to more drastic moves of self preservation, although these moves cost its life in the long run.

From this perspective, a greater focus on our connections, to other humans, and to all of nature, more broadly, which includes a “...deep, inescapable sense of the fragility

of the lives that we're leading" (Haraway 1991b:16) is the only way out of what may starkly be described as a potentially apocalyptic and apoptotic course of action. So is it possible that involvement in body regimen careers associated with healthy life extension (with "life" in this case referring across scales from cellular to individual to community to planetary) may inspire people to look and feel beyond their own bodies in creative and useful ways that serve to illuminate some of the broader cultural contradictions that may impede efforts towards cellular and planetary longevity? It is here that I would argue a hope-filled yes. While already recognizing the ways that such pursuits can be potentially divisive in terms of drawing identity bounds that serve to include and exclude, praise and disparage, I choose to turn my attention to the ways that this engagement serves to awaken a greater source of awareness that can revitalize, unite, heal, and nurture.

Coward's (1989:197) research on new age "body work" explores the ways that such practice offers people a way to "express dissatisfaction with contemporary society and feel they are doing something personally to resist the encroachments of that society." Similarly, as revealed in greater detail in chapter 5, engagement in body regimen careers associated with the "healthy life extension community" offers many a similar outlet for social critique of traditional Western allopathic medicine in terms of both the medical encounter and/or the medical outcome (Siahpush 1999). Saving people from a fatalistic or anomic experience with disillusionment (whether in terms of medical, religious, or some other type), body regimen careers often renew people with hope, purpose, and meaning.

While some (Coward 1989; Dery 1996) warn that this alternative may be more of

a “journey of personal transformation” than “social rebellion,” throughout my conversations, I heard powerful cultural critiques that were at times backed up by action. These cultural critiques, often aimed at economic disparities, influenced behavior and included things like decisions to support local food suppliers and farmer’s markets instead of big box mass merchandisers, to seek out, support and advocate for medical care providers that serve as partners in prevention, wellness, and healing, and to stay informed about, and get involved in local, regional and national political concerns. Other cultural critiques were aimed at frustrations with the societal treatment of women and included, for some respondents, a decision to abstain from dating, the refusal to partake in what was regarded as the culturally mandated female beauty ideal, or efforts to “play the game” perversely which included, to use the words of one interviewee, “thinking and acting like a man,” to manipulate what was considered an unfair balance of power.

As noted above, a critique of the practice of biomedicine was a dominant theme across all three interview groupings, despite the fact that respondents in each of the three groupings often took a different tact in navigating this frustration. Perhaps even broader than the critique of biomedicine, a number of respondents leveled criticisms at what could be described as the root causes of *dis-ease* – the so-called “manufacturers of illness” (McKinlay 2009:578). For example, several respondents focused attention on the inequities inherent in the capitalist economic structure – sometimes articulated in terms of “the profit motive” – as a site of critique inspired by this embodied awareness. A number of respondents expressed views similar to this CR enthusiast:

About one percent of the world’s population holds something like... 85 percent of all the wealth and resources in the world, extremely big, whereas, something like 85

percent of the world's population has only 1 percent of wealth, I mean, it is just so imbalanced....it keeps people in different classes, even here in America, I mean, its mind boggling at times...[Female, CR, 2/3]

Profit as the driving force behind a wide range of industries, was repeatedly criticized since it was thought that such a priority was in direct conflict with efforts aimed at prevention, healing, and wellness. Body regimen careers were regarded as an expression against what was sometimes described as a contradictory and hypocritical system. As one respondent clearly explains:

The whole [biomedical] industry really isn't something that I want to support...I feel that every choice that I make is supporting a particular industry...I want to support the things that I really believe in and my money does that. [Female, CR, 4/5]

Supporting farmers who grow local foods and locally owned businesses (especially grocers and restaurants) was a common theme across all three interview groupings. As another respondent articulates:

We support people who want to make a living at growing organic food....People part of the local food movement....I want to support them because I like to eat fresh local and organic food where possible and I do support that. [Female, CR, 4/5]

As previously mentioned, the contradictory gap between a system built on profit and the goals of health, prevention, and wellness, was not the only point of contention that my interviewees explored in depth. Some respondents leveled a critique at the societal pressures on women "raised in the era of Twiggy and Kate Moss" to fit within what was typically characterized as an unrealistic, limiting, and even unhealthy bodily ideal. As some feminist scholars have suggested, the present day focus on the body, replete with the documented rise in disordered and distorted eating, exercise, and body image, goes hand in hand with many of the favorable gains inspired by the women's movement (Faludi 1991; Wolf 1991). A handful of my respondents talked about trying

to altogether opt out of this cultural mandate, while others described the ways that they manipulate and contort what they perceive to be gender specific and constricting body ideals. For example, in the words of one respondent:

I am resentful of the fact that in society things are all based on looks. I am resentful for that....I don't like it, but I feel like I have to encourage my daughters to learn how to dress cute and be smart and maybe be smarter than the guys, to use that, in the long term, to their advantage....ahhhhh, it's frustrating! [Female, CR, 2/3]

While it may be impossible to escape the demands of the “cult of the perfect body” (Edgley and Brissett 1990) so prevalent in the 21st century Western culture in which my research is situated, it is important to note that my respondents spoke much more in the language of embodiment – how they “feel” – and much less in terms of appearance and how they “look,” and for many, especially female respondents, this was experienced as comforting and even, liberating. As discussed in chapter 7 of this dissertation, a number of my respondents actually detailed how misleading a particular “look” may be, arguing, for example, that someone very ill may sometimes appear to be the “picture of health.” For a number of my respondents, body regimen careers actually gave them some freedom from what were perceived of as constricting body ideals – offering them an alternative bodily discourse in which to follow, uphold, and explore – and giving them feelings of success, striving, and improvement based, not on a pant size, cup size, or wrinkle erasure, but more on the pleasures of physical embodiment so many detail from their participation in body regimen careers.

Competition as it relates to body regimen careers was much less focused on appearance and much more centered on knowledge, understanding, and access to information. Respondents from all three interview groupings, for example, talked about

their interest in getting “the edge” in terms of health-related information.¹⁵² Knowledge, in this respect, truly does become power, and individuals compete to “be in the know” -- to learn and in turn, to practice, and eventually, to share, all the latest research findings as they relate to body regimen careers.

While so many aspects of the body regimen career could be relegated to the level of individual experience, with primacy placed on a rational and entrepreneurial subject position that situates successes (and in turn failures) as the outcome of individual choice and action, it is my belief that the underlying cultural criticism that is apparent across all three of my interviewee groups is of great interest and importance. People involved in the pursuit of prolongevity are clearly not merely narcissistic and self absorbed people who have nothing better to do with their time than worry about their bodies. They are also not just hypochondriacs or worry warts. These are often people who are fighting back, seeking out some semblance of agency in a culture they perceive as unhealthy at best, and deadly at worst. The pursuit of a body regimen career associated with the “healthy life extension community” may give them a sense of temporary peace, control, freedom, or joy that serves as a salve for what many describe as a tremendous sadness, frustration, and anger with dominant cultural values. Rather than enabling people to hide and escape within what Berman (1989:95) describes as an unaware “dream life,” it is my belief that body regimen practices often push people into a state of heightened awareness and sensitivity. These are people with a cultural critique, a feeling that corporate greed, money, and profit, is killing us, and in the words of one respondent “feeding us shit...”

¹⁵² As credited to the work of Jeremy Rifkin (1983), and cited in Berman (1989:88), “survival of the fittest” is being replaced by “survival of the best informed.”

and in the words of another “a subtle genocide is occurring...” While the cacophony of the market may serve to drown out these cries of dissent, it is my belief that more research needs to be done to explore, and to potentially provide an outlet to broadly cast, these action-inspired criticisms.

Concluding Reflections

In a fascinating book detailing his experiences doing ethnographic research for his dissertation in sociology on inner-city poverty, sociologist Sudhir Venkatesh (2008) recounts a conversation that he had with Ms. Bailey, one of the tenant leaders at Chicago’s Robert Taylor housing projects. Interviewing Ms. Bailey in an effort to understand why the housing project had a high school dropout rate of 60 percent or more, Venkatesh (2008:148-149) outlines a conversation that went something like this:

Ms. Bailey: “If your family is starving and I tell you that I’ll give you a chance to make some money, what are you going to do?”

Dr. Venkatesh: “Make the money. I have to help my family.”

Ms. Bailey: “But what about school?”

Dr. Venkatesh: “I guess it will have to wait.”

Ms. Bailey: “Until what?”

Dr. Venkatesh: “Until my family gets enough to eat.”

Ms. Bailey: “But you should stay in school, right? That will help you leave poverty.”

Drawing the conversation to what might be characterized as the “upstream”¹⁵³ reasons for high school drop out rates, Ms. Bailey proceeds to explain that in order to better understand the lives of the tenants of the Robert Taylor housing project, the research scope must be broadened to include those outside of the housing project that help to determine “...how the tenants lived day to day.” By enlarging the scope of the conversation in a way that transcends the narrowness of psychological reductionism, Ms.

¹⁵³ My use of this term comes from my reading of McKinlay (forthcoming 2009).

Bailey helps to illuminate how high school drop out rates will not be reduced or eliminated, until poverty itself is reduced or eliminated.

Thinking about the above insights offered by Ms. Bailey, as they relate more specifically to my own research, it is my belief that the discussions surrounding the scientific pursuit of prolongevity, which includes the engagement with body regimen careers situated within the “healthy life extension community,” may benefit from widening the scope to include more consideration of “upstream” reasons for such involvement. For example, in a culture that largely, and perhaps, increasingly (Kaufman et al. 2004), defines aging based on a biomedical discourse of aging-as-inevitable-decline, unless we have other equally compelling alternative discourses, it is likely that desires to circumvent, manipulate, alter, and/or meliorate this so-called “decline” will likely only increase. The ways that age gets framed is strategic, as a variety of different interests stand to benefit from the construction of age as decline. Further, in a society that emphasizes intragenerational, communitarian, and re-distributional social policies less and less, opting instead for more individualistic programs based on individual earnings, risk, losses, and gains, it is not surprising that a similar individualistic ethos is being applied to the age resistant and/or long-lived body, as the body becomes the central domain over which a person is expected to exercise responsibility and control. Offering people meaning, a sense of community, absolution from blame, embodied pleasures, and much, much, more, it is evident that engagement in body regimen careers associated with the “healthy life extension community” work to fulfill multifaceted and deep human hungers.

Yet as someone who identifies very strongly with the commitment in critical gerontology (Moody 2006; Hepworth 2005; Katz 1996) and age studies (Gullette 2004) to find new ways to conceptualize age that transcend or circumvent negativity (i.e. “age as decline”) or invisibility (i.e. “agelessness”), or “good” (a.k.a. “successful”) versus presumably “bad” aging (the specter?) which leaves an entire segment of the aging equation with the stigma of culturally-defined failure, I find myself thinking about alternative ways to write about and talk about and experience age that may be more inclusive, holistic, and perhaps, closer, in some way, to the humbling and contradictory reality of lived experience.¹⁵⁴ Yet I am also mindful of Hepworth’s (2005) important observation that many challenges to socially constructed discourses of age often disembodied the self by masking old age while overlooking the broader socio-cultural milieu in which aging occurs.

Hopi Indians have been recognized as having a cumulative conception of time. In Hopi culture, at any particular age, you are all the ages that you have already experienced, in addition to your present age. Making the past an ongoing part of the present and the future, the Hopi perspective on the passage of time could be described as circular, accumulative, and holistic. While chronological age depicted in 21st century Western culture may be characterized as linear, with each person marching towards the unknown age of finitude, and existing only as one particular age, at any given point in time, thinking about the ways my interviewees talk about age encourages a more

¹⁵⁴ In an effort to tease out the differences between biology or nature, and nurture, and the sociological construction of “femininity” and “masculinity,” feminist theorists distinguished between the concepts of “sex” and “gender” (Oudshoorn 1994). It is possible that critical age studies may benefit from such a distinction in order to better discuss the socially constructed aspects of the aging experience, and what it means to be “aged by culture” (Gullette 2004), while also recognizing the lived biology of aging.

cumulative and holistic description, which I argue opens the door to a more complex understanding of the aging experience – making it less a dialogue based on whether you are “for it” or “against it,” and more about the messy human experience of aging that may indeed be a tree full of blossoms, fruits, pits and bugs.

I write this because, while some of my interviewees clearly articulated particular concerns, obstacles, fears, and challenges they associated with the passage of time in terms of “age,” (largely framed around concerns about current and future dependencies depicted as loss), most of my interviewees also recounted what could be described as numerous pleasures of age and this included examples of the ways that the passage of time has led to new life goals, changed motivations, priorities and purposes, embodied wisdoms unknown during adolescence and young adulthood, richer and more rewarding interpersonal relationships, and improved attitudes and perspectives on life. Situating my own interest in age studies and the resulting need for more alternative ways of thinking about age other than as decline (Gullette 2004), and thinking more about a provocative question posed by sociologists John Vincent and Emmanuelle Tulle¹⁵⁵ (“Can ‘anti-ageing’ practices be understood as resisting ageism or do they constitute part of the problem?”), I turn to my own data in order to reflect more on how narratives of aging are represented by those engaged in various practices associated with potentially delaying aging and/or extending the lifespan. Through this analysis, it is increasingly apparent to me that understandings of age are far more complicated than what might be captured by a

¹⁵⁵ This was part of a presentation to the British Sociological Association, April 14, 2007. Retrieved on July 1, 2008, from [http://www.people.ex.ac.uk/JVincent/Conference%20papers/BSA%20April%202007/Anti-ageing%20fitness%20and%20beauty.ppt#263,3,Cultures of resistance](http://www.people.ex.ac.uk/JVincent/Conference%20papers/BSA%20April%202007/Anti-ageing%20fitness%20and%20beauty.ppt#263,3,Cultures%20of%20resistance)

“pro-aging” or “anti-aging” dichotomy. For example, one interviewee explained that with time we increasingly become the “carriers of our culture” and that it is important to “keep the stories alive...to keep the connections, the understanding of our culture.” Like the thread that weaves together pieces of fabric on a quilt, this interviewee concludes that the “older people” in any culture are those that “keep us connected.” Similarly, when talking specifically about body regimen careers, the passage of time became a narrative of accumulated knowledge yielded only through the insights of experience.

I found the wisdoms of accumulated age – or “aging as maturation” (Gullette 2004) to exist across my sample with people in all of my age categories offering their own examples of the fruits of time’s passage. For example, several interviewees who had spent decades in the paid labor force talked about how their motivations had shifted over time, away from fears about economic survival and security, to more communitarian efforts geared towards building a better community. Other interviewees talked about becoming increasingly flexible, patient, less judgmental, and more accepting of others with time. One interviewee talked about what he described as “youthful arrogance” in his work career while another described the “stubborn pig-headedness” of his past that had caused considerable tensions and pain; both explain the ways that the passage of time taught them to be more humble, which led to more harmonious interpersonal relationships, greater humility, and modesty.

Body regimen careers offer a similar purview through which to document and detail the rewards associated with the passage of time. Like occupational careers that

may place rewards on accumulated experience over time¹⁵⁶ (as opposed to those types of professions that give primacy to younger members, retiring people more quickly, or making skills obsolete¹⁵⁷), people gain the wisdom of experience while engaging in body regimen careers based on “healthy life extension,” and this provides them with a special status in terms of mentoring, role modeling, and teaching others within a given body regimen community. The practice of caloric restriction can even be, for example, more about looking forward to the experience of age, than it is about denying or resisting it. For example, a respondent in her 20s explained her interest in a caloric restriction body regimen career as connected to her desire to experience age. As articulated by this interviewee: “I’m the person in my high school graduating class that could not wait to get to 30, to say, ‘Hey 30, I lived to see 30!’ and I am looking forward to each decade as it comes because, you know, I want to live to see it!” [Female, CR, 2/3]

Many interviewees explained their current body regimen career as a progression of insights and experiences that had occurred over a number of years – juxtaposing the “early” and presumably “younger” days in which “it was all fantasy,” “I knew nothing” and “I struggled,” to the present where the fruits of experience are enjoyed – the aging process becomes distinguished not through the language of decline or loss – but through a process that may combine experience, knowledge, heightened sensitivity, consistency,

¹⁵⁶ This often includes jobs where salaries and benefits accumulate and grow over the course of one’s career, for example, teaching, architecture, law, medicine, and many government and social service positions.

¹⁵⁷ For example, careers often based specifically on the performing body which may include work as a professional athlete, or in some other physical activity like dancing or boxing. Careers in information technology are also recognized for having accelerated “career tracks” where technologic skills become outdated at an exaggerated pace and those trained in the latest languages and technologies often yield more power and status, and make higher salaries, in the market.

and thoughtfulness. One respondent describes how, over time, he has learned to discern between what is important to him (in terms of his body regimen career) and what is not – and he is more selective about his body regimen practices, choosing to engage in only that from which he truly benefits and values. And another respondent, talking about her body regimen career as a giant puzzle in which she has gradually fit together the pieces, explains how she initially became extremely interested in nutrition and healthy eating and later discovered “a whole other piece of the puzzle” which included yoga and meditation. In a similar way, another interviewee talks about age in terms of “the passage of time” as she concludes, “and everything gets easier with time, you know, you learn through trial and error, and that is what time is about.” Talking about her current body regimen career, another respondent explains how it takes “years to learn...I am learning this, the practice, that I’ll do the rest of my life, but it takes, you don’t just start with it, you build it...over time” as another interviewee explains, “It’s a process, its definitely a process...everyday I learn something new about it [body regimen career].” In the words of one interviewee who is engaged in an anti-aging medicine body regimen career:

Once you build up a momentum, it is like a psychological and intellectual momentum, you cross a certain threshold of knowledge and it feeds of itself and you get more and more to add to what you have got and then its like, you just never quit. You never stop!

While many of my interviewees talked about aging in terms of their desire to be as independent as possible for as long as possible, they did not pine to role back the clock of time. Many recounted bygone challenges including, for example, immaturity, inexperience, and illnesses that they confronted at other points of life that they had happily overcome or surpassed. A number of interviewees talked about their expanding

love and respect for their bodies and their body regimen careers. Several female interviewees, for example, spoke about the ways that they struggled with disordered eating and distorted body images during their younger years, explaining that through the passage of time, they have learned to accept, love, embrace, and nurture their bodies in much more rewarding and health-filled ways. A number of respondents engaged in rigorous fitness regimens explain how they have learned through time how to give their bodies more opportunity for rest and recovery which is experienced as more nurturing and less injury-provoking and single-minded. Other respondents talked about what was sometimes considered to be a “natural” age-based decline in libido as a relief – as freeing them up to focus their energies on other interests and concerns. Many respondents recount various illnesses and personal struggles that marked their younger days, whether physical, interpersonal, or work-related. My interviewees repeatedly paired these narratives of struggle with a summation of the “growing experiences” of life which may be described as the wisdoms of accumulated time and experience in terms of “a trying time bygone,” “now...I am a bit more thoughtful,” “the different person I’ve become,” or “the way I now see the world as compared to then.” As three interviewees articulate:

I have no desire and never had a desire to go back, “oh those were the best years of my life,” no, I think the best years of my life are just, every day, it just continues to unfold, and things get better and better....I don’t want to go back. I like now too much!”
[Female, AA, 4/5]

As you get older, your priorities change and you think, I can do better...tomorrow I might, and you lose that intensity about not doing well and you relax and understand that nothing is really that important, that you, really, giving it [body regimen career] your best is important, the other stuff, I mean, isn’t that important...it takes a while to get to that place where you can say, “it’s o.k.”...you can always look back and say, “I could have, would have, should have,” but you do the best you can. [Female, FR, 4/5]

It is nice to be my age because things don't matter as much. You know, like, maybe when we were younger, you know, we had all these crazy goals, thinking that, we had to do this and achieve that. Now we are older and mellow and happy and kind of successful, you know? [Male, CR, 4/5]

Though my interviewees were all engaged in body regimens associated with healthy life extension, individual depictions of aging were complex and were frequently entwined with powerful descriptions of individual enjoyment of body regimen careers, situated around the accumulated knowledge which results in the heightened pleasures gained through the passage of time. Describing, for example, how the joy he derives from his engagement in his body regimen career increases with age, one respondent recounts: "I'm not a fanatic like I was then [in college]... It [body regimen] gets me as excited now, probably more so than it did back then" [Male, FR, 4/5], as another explains, "Now, more than ever, I really love it [body regimen career]... it really is something that I just love...you know, there are so many layers to all of it for me, now" [Female, FR, 4/5]. For several respondents in all three groupings, with the passage of time, they have experienced a much greater acceptance and celebration of their bodies, not as they are shaped to fit some sort of cultural ideal, but more so in a fleshy appreciation that signifies a more holistic body love. In the words of another interviewee: "I think maybe for a while I sort of into this [body regimen career], you know, trying to strive for perfection and a beautiful body, now I don't care about that anymore, it's all about health" [Female, CR, 4/5].

As revealed from the field of aging studies, aging is not an event that happens at a particular chronological location, rather, it is something that we experience from the day we are born, and it is something that is simultaneously socially constructed, and

biologically experienced. By promoting stories of age that expand to encompass far more aspects of a person's life than is possible through a sole focus on biomedical definitions of aging-as-decline, the fruits of accumulated experience, through the passage of time, will be magnified and through this broader and more inclusive lens, it is my belief that our understandings of aging will serve more rejuvenating, optimistic, and nurturing ends. Like the Hopi emphasis on the cumulative passage of time described in the beginning of this segment, individual narratives throughout my research reveal the benefits of cumulative knowledge and experience, and in this sense aging was depicted as the whole of human experience which no doubt includes sadness and pain, joy, happiness and pleasure.

As the title to this chapter insinuates, I believe that engagement in body regimen careers is as much (or more) about prescriptions for day-to-day living than about efforts aimed at avoiding dying or even biomedical aging, per se. Involvement in body regimen careers serves as a way for people to grapple with what are often broader cultural critiques aimed at dominant societal institutions which include, for example, medicine and religion. Because such engagement is perceived to counter mainstream culture, participants often experience a sense of community, and self-identity, through a process of comparison and contrast. The "to do" imperative as a prescription for living is centered more on *doing something*, and less on the specifics of rituals, practices, and engagements. Acceptance of this imperative "to do" may serve as one attempt to absolve oneself from what could be described as the increasingly prevalent cultural discourses underscoring individual blame and personal responsibility. For many, body regimen

careers offer an alternative biomedical experience, in relation to the both the way biomedicine is practiced, and the specific outcome of biomedicine (which often involves critiques of pharmaceuticals). While the flesh and blood body may appear to serve individual ends, it is readily apparent that this body in many ways mirrors the concerns, beliefs, and theories proposed in the broader socio-cultural milieu – as prescriptions for bodily living intersect with prescriptions for societal well-being. While technologies applied to this individual body may help to elucidate, it is also apparent that the very same technologies that elucidate may also conflate and confuse, making for disparate conclusions that dismantle opportunities to write one-size-fits-all prescriptions. The pleasures underlying engagement in body regimen careers, as articulated through the experience of “control” and “release” as well as around discussions of “energy” underscore the powerful physiological attraction to these practices.

As I ponder my final remarks for the conclusion of this dissertation research, I find myself thinking about the future of body regimen careers associated with healthy life extension. This area is fertile for further research, raising many important philosophical, sociological, political, and ethical issues and questions, as interventions into the life course, both in terms of delaying or reversing aging, and/or extending the lifespan, yield potentially dramatic ramifications (to the individual, family, community, and society at large). In thinking about the particular focus of my own research, which concentrates specifically on the practices of individuals engaged in “healthy life extension” body regimen careers, as these practices intersect with sociological concerns and a commitment within critical gerontology to focus on social justice (Moody 2006), two

additional issues come immediately to mind which I will briefly consider in closing, one involving the issue of safety and potential risk, and the other involving the issue of social justice in terms of access.

With 78 million baby boomers positioned to be serenaded by the market for products implicated in “healthy life extension,” and as a long list of once used and now banned pharmaceuticals has taught us, bodily interventions of many different types often come with some very real risks. Providing timely, accessible, accurate, and honest information about these risks, as well as providing protection, when possible, against harm, will likely only increase in importance, as more interventions (for example, nanotechnology, genetic interventions, and new pharmaceuticals that might, for example, mimic the biochemical effects of CRON) come to the fore, and we debate, for example, whether taking neurochemicals thought to enhance memory is a practice characterized as “anti-aging,” health-prevention, or medical enhancement. In order for researchers, scientists, medical practitioners, government agencies, and others to secure credibility in terms of regulation of interventions associated with body regimen careers situated within the “healthy life extension community,” a much broader focus leveled at biomedicine, more generally, is necessary, and this includes a critical analysis of both the way biomedicine is practiced, in tandem with the “outcome” of biomedical treatments, including a thoughtful consideration of the expanding role that pharmaceuticals of all persuasions are playing in the treatment of all kinds of human conditions. Given the status of the so-called “war on drugs” that is not uncommonly referred to as a

“failure,”¹⁵⁸ it is questionable as to how far moralistic arguments referring to, for example, users of enhancement drugs as “chasers of false vanity,” will take us in a much needed public dialogue about the possible risks associated with such supplements, and I would argue, with many more legalized and ambitiously marketed pharmaceutical options. As Hogle (2005:705) astutely notes, in her consideration of bodily enhancement technologies, the attraction to such interventions is multifaceted and complex and likely includes issues as personal as competition for partners or jobs, and the desire for competency and productivity, paired with macro-level concerns like “institutional contexts,” “consumer culture,” and the available technologies.

Further, while I have tried to show the ways that the “healthy life extension” body regimen career may serve as a vehicle for cultural critique, I am also extremely sensitive to the fact that many are entirely excluded from engagement due to what may be described as the “requirements” (in terms of a vast number of resources including, for example, time, money, and knowledge) for participation. As one of my interviewees astutely responded, tongue and cheek, when asked whether she was motivated by life extension through her use of anti-aging supplements:

If I wanted to extend my life, I would probably be a millionaire, living on a luxury yacht and wanting to continue living like that. If I extended my life, I would have to work longer to support myself [big laughter] so no, that is not on my priority list.
[Female, AA, 60+]

¹⁵⁸ Retrieved on August 19, 2008, from <http://www.commondreams.org/headlines03/0416-08.htm>

Indeed, life extension, as a goal, in and of itself, likely represents a very privileged socio-cultural location in a country (and a world) where there are extreme gaps between, for example, the richest and the poorest.¹⁵⁹

While the potential of current and future scientific interventions and the related technologies to heal and rejuvenate the body may expand, the vast contradictions in terms of actual treatment experiences within the realm of biomedicine, paired with real-life access to the resources which enable participation, will likely continue to spark heightened tensions and contradictions. In a world where a child dies every thirty seconds from malaria, a preventable and curable disease,¹⁶⁰ and in a country with nearly 47 million uninsured or 16 percent of the population,¹⁶¹ (which represents an increase of 9 million people since 2000),¹⁶² it is incredibly important not to romanticize engagement in body regimen pursuits or to use such involvement as moralizing evidence that everyone *can, should, would, and could*, as is evidenced by the powerful discourse around the commodification of health which is upheld by the ethos of “personal responsibility,” yet is often expressed through the appeal to “personal empowerment” (Hogle 2005) and consumer “choice”¹⁶³ (Cooper 2002; Sassatelli 2000).

¹⁵⁹ Based on the latest complete data from the Bureau of Labor Statistics (BLS) (www.bls.gov) the richest 20 percent of U.S. households received nearly half of all national income in 2006 (49.6%), which represents a 6.0% increase in share compared with 1975 data. Further, those families in the bottom quintile in 2006 represented approximately 3.3% of national income, a 1% drop in share compared to the 1975 data.

¹⁶⁰ Retrieved on August 19, 2008, from <http://www.who.int/mediacentre/factsheets/fs094/en/>

¹⁶¹ Retrieved on April 23, 2008, from <http://www.census.gov/prod/2007pubs/p60-233.pdf>

¹⁶² Retrieved on April 23, 2008, from <http://www.kff.org/uninsured/>

¹⁶³ As Cooper (2002:163) astutely notes: “In the context of a powerfully entrenched consumer society, which tirelessly sells us the possibilities made available by a radical degree of choice, we need to be careful about the very grounds on which any choice is made possible...social meanings and ethical reference points are relatively determined by the social forms which carry them.”

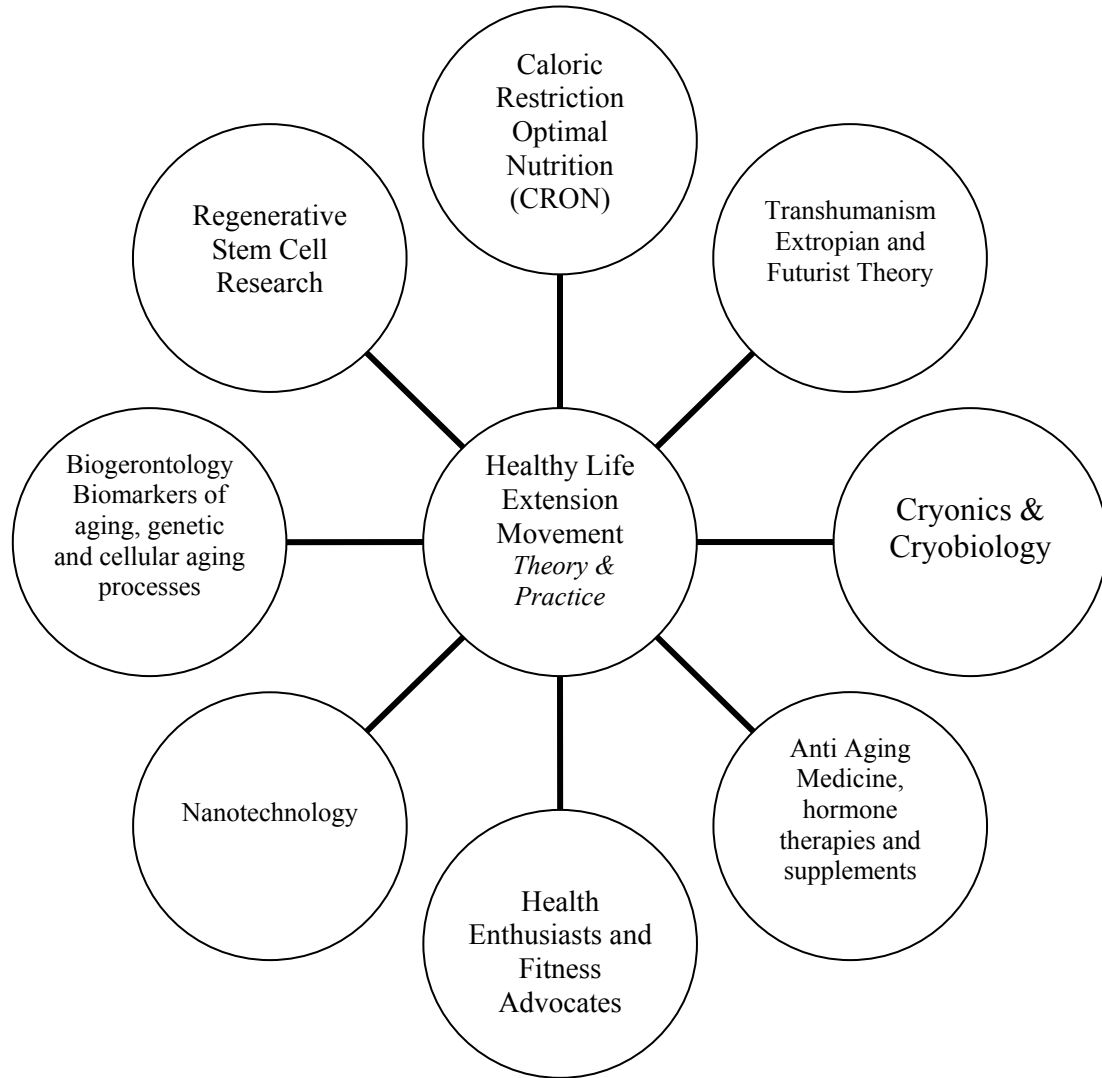
An acquaintance of mine who I'll call Susan recently had the opportunity to attend a 50th high school reunion where she was able to reconnect with one of her classmates, who is now a very famous Hollywood movie star. Reflecting on this experience, Susan explained, "You wouldn't believe how great she looked! I mean, unlike all the rest of us, she looked like she could have been 30 years old. Seriously, her hair, her skin, her figure, her health, everything, I mean, clearly, she hadn't aged the same way as everyone else. I guess that's what money can buy, nowadays, a different way to grow, or not grow [laughter] old!" While Susan's story is based on her perceptions from a one night gathering with a now famous childhood friend, her conclusion stands out in my mind as something that demands greater bioethical consideration as we think more about the present and the future of technological interventions targeting aging and/or the lifespan. What will the future of aging look like if an increasing number of prolongevity-inspired interventions are only available to a select segment of the population?

In my local newspaper only weeks ago, a story about doctors in Louisville, Kentucky, performing a successful hand transplant was on the front page, while a couple of pages in, a letter to the editor detailed the challenges that an uninsured farmer was facing in trying to pay thousands of dollars in medical bills after having tragically lost his hand to gangrene following a dismembering farm accident. The ironic interplay between these two coexistent and yet starkly contrasting stories is pronounced as one person represents a potential victory for medicine and science, and another, a tragedy. What does the future of medical care, more generally, and interventions into aging and the life span, more specifically, mean, in a society, and a world, where such extreme gaps exist in

terms of distribution and access to resources? Many questions remain, with important bioethical, sociological, and political issues to explore, as we think about past, present, and future efforts to potentially delay bodily aging and/or to extend the lifespan.

Through this research it is apparent to me that bodies have important stories to tell. As much as body regimen careers associated with the “healthy life extension community” inspire us to see our interdependence with one another, and to experience the affective connections between people – understanding, for example, the suffering of others as their own – these pursuits may serve to instigate and support social change that is healing, rejuvenating, and freeing. In contrast, such practices may be experienced as divisive, anxiety-provoking, and damaging when they further serve to sediment and concretize divides and divisions within and between individual bodies, people, communities, and cultures. By finding ways to promote the cathartic healing and revitalizing potential of body regimen careers, while maximizing access and safety, it is my belief that such engagements could become a positive instrument of therapeutic social change that could have dramatic potential both for the individual body, and society, at large.

Appendix A: Overview of the Healthy Life Extension Community¹⁶⁴



¹⁶⁴ This concept is based on the concept of the “healthy life extension community” outlined on the Longevity Meme website. For additional information, refer to:
http://www.longevitymeme.org/topics/healthy_life_extension_community.cfm

Appendix B: Interview Guide

Demographics – About You

Tell me a little about yourself: where you are from, your childhood family, your living situation now, career, spouse, children, hobbies, etc.

Age, marital status, occupation, educational background, religious orientation.

Initial Involvement

Could you describe how you first become interested in [current regimen]?

Explore interest in longevity, anti-aging, health, wellness, fitness over the life course.

Routine

Could you walk me through a typical day for you with your regimen? What types of things do you currently do as part of your daily routine (for example, supplements like vitamins, amino acids, minerals, probiotics; exercise, stress management, etc.) probe: How did you come up with this particular routine? How has this changed over time?

Explore use of various technologies related to current regimen.

What are your personal goals with your [current regimen]?

Information Sources

Where do you turn to for information related to your [current regimen]?

Can you think of a time when you have come across contradictory or confusing information?

Motivation

What do you think motivates you to stick with your current regimen? What makes it most worthwhile?

Could you give me an example of a time, over the course of your engagement with your [current regimen], when your interest was stronger than it is now? How about a time when it was weaker?

Embodiment

How does your [current regimen] make you feel?

How do you think it impacts the way you feel about your health? ...your body?

Can you think of a time when you experienced any undesirable “side effects” from your [current regimen]?

Do you think it is possible to be too healthy?

Impact on Daily Life, Identity, Meaning

Can you think of any ways that your interest in your [current regimen] has influenced your life? Probe: Does it influence your sense of who you are?

Explore the issue of lifestyle.

What are the biggest challenges you experience in practicing your health regimen?

What is it like when you are unable to engage in your typical regimen?

How do you experience the expectations of others? Probe: Burdensome? Rewarding?

Could you describe how your engagement in this regimen influences other aspects of your life? ...your family, work, free time, social life, other personal relationships?
Explore reactions of others over time, from initial engagement to present.

Can you think of any examples of times when your engagement has caused tension or created challenges? Time, resources, demands, impositions on others.

Looking back over the course of your engagement in this [regimen], can you describe any specific examples of ways your practice has changed you?

Community

Explore the issue of involvement with others interested in similar regimen--online and face-to-face.

Risk Awareness

What types of health related issues concern you most...and why?

Efficacy and Effectiveness

How do you determine whether your current regimen is working in the ways that you hope that it is? Probe: Supplements and vitamins – how do you know they are having the desired effect?

What sorts of things do you (and/or you and your doctor) do to monitor your health and the effectiveness of your routine? Probe: Any tests? (blood, blood pressure, glucose monitoring, body temperature, cholesterol, body weight, BMI)

Do you have any safety concerns about the practices you are engaged in with your current regimen? [use of bioidentical hormones, supplements, exercise, etc.]

Conceptualization of Aging, Biology and Health

How do you think your health regimen affects your body? Internally? Externally?

What do you think causes the aging process in the body?
How do you think aging happens inside the body?

What impact, if any, do you think your body regimen has on your own aging?"

Do you think it is possible to slow down the aging process? How?

Additional Questions

If a pharmaceutical product is developed which mimics the effects of your current regimen, would you take it? Why?

If you read a study tomorrow that indicated that your current regimen would not delay your bodily aging and/or extend your lifespan, would you still continue to do it? Why?

Explore experiences with and attitudes towards cosmetic “anti-aging” interventions.

What do you see as the future of interventions into the process of aging over the next 20 years? What types of things do you see as possible? Desirable?

Questions only for those going to an anti-aging doctor

How did you find the doctor that you went to? What was it like to make the first appointment? Waiting time? What was required? Tests?

Walk me through your first visit.

How did your first visit compare to your expectations? How did it compare to past medical encounters?

Please describe the doctor recommendations and the anti-aging regimens that you have tried and are currently using.

Please describe your perceptions of the differences between your experience with your anti-aging doctor and your experience with other medical care providers.

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