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## AN ETHICAL JUSTIFICATION OF WEIGHT LOSS SURGERY

A Dissertation

Submitted to McAnulty College and Graduate School of Liberal Arts

Duquesne University

In partial fulfillment of the requirements for

the degree of Doctor of Philosophy

By

Amy M. VanDyke

May 2013

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## ABSTRACT

#### AN ETHICAL JUSTIFICATION OF WEIGHT LOSS SURGERY

By Amy M. VanDyke

May 2013

Dissertation Supervised by Gerard Magill, PhD

This dissertation provides an ethical justification of surgical weight loss interventions for the treatment of obesity. Situating obesity as not merely a public health concern but also fundamentally a problem of clinical medicine confronting individual patients and physicians, the dissertation argues that the time frame of public health interventions is too long for individuals presently facing obesity and its deleterious physical and social co-morbidities. It argues that failure to address weight loss on an individual level, and specifically to consider the clinical appropriateness of weight loss surgery (WLS), raises serious questions about failure to respect autonomy and promote patient welfare. Moreover, social skepticism or rejection of WLS as a treatment option raises concerns about fairness, as this failure indicates that obesity is not regarded in relevantly similar ways to other life-threatening and health-impairing conditions. The dissertation examines various reasons that obesity and its myriad interventions, including WLS, are inadequately addressed in the clinical setting. It argues that considerations with cultural and ethical valence play a critical role in obesity's different and unfair treatment within clinical medicine. Gendered and theologically informed attributions of blame, self-blame, shame, and self-stigma influence the attitudes and actions of both patients and clinicians with regard to addressing obesity. Inappropriate and conceptually confused ascriptions of responsibility impede social acceptance of, and access to, WLS. The dissertation's criticism and subsequent reconceptualization of these ascriptions of responsibility from a perspective informed by feminist epistemology and ethics provide the foundation upon which to consider reform of current clinical practices surrounding treatment of obesity. This dissertation concludes that WLS is both ethically and clinically justified.

### DEDICATION

To GE and CR whose medical knowledge and expertise make them good physicians and whose compassion has helped uncounted numbers realize a superior alternate narrative for their lives.

To TW, IV, and EA who have always been proud of me before, during, and after. To two of the three strong women whose love and support has seen me through. To my one true mentor.

To my family, immediate and extended, related and chosen, who have taught me compassion by being compassionate. I love and adore you all. And to my dog.

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#### **Chapter One: Statistics, Trends, and Factors Contributing to Obesity**

Although it may seem that the problem of obesity is obvious—after all, people wear the problem not just on their sleeves but on their entire bodies—the obesity problem nevertheless is both complex and sometimes obscure. This chapter demonstrates that obesity is not only scientifically and medically complex, but also conceptually and socially complicated in ways that are sometimes obscured by its status as an alleged medico-scientific fact. Indeed, the scientific "facts" and social norms surrounding the definition, measurement, and etiology of obesity constitute a contested terrain within which interventions to address obesity are developed, debated, accepted, or rejected.

This chapter provides relevant background information on the problem of obesity. Specifically, Section A focuses on the scope of the current problem by examining the increase in obesity's prevalence and severity, both in the United States and in other parts of the world. Section A also addresses the controversial definition and measurement of obesity. Section B discusses the myriad effects of obesity on physical health and quality of life. The far-reaching deleterious physical co-morbidities and reduction in quality of life indicators associated with obesity are explicated.. These first two sections establish that there is substantial, though not perfect, consensus that obesity is a growing and complex health problem. Subsequent sections take up the contentious issues of how the problem should be framed and addressed. Specifically, section C of this chapter discusses various highly contested terrains surrounding the diagnosis of obesity, the acceptance of obesity as a disease, the understanding of obesity as modern-day epidemic, and the approval or rejection of various interventions applied to this problem. This section examines numerous problems of communication about obesity which exist in society in

general and in the healthcare system specifically. Section three argues that communication problems, combined with varying degrees of understanding or acceptance of the myriad causes of obesity, impede the application of typical ethical standards applied in health care such as those found in informed medical decision making, as well as considerations of justice, and argues that ultimately patient welfare is sacrificed. Analysis of ethical standards and considerations initiated in this chapter will be examined in depth throughout the dissertation. Finally, this chapter claims that inappropriate ascriptions of blame, often based in communication errors, have implications for the social acceptance of various treatments including weight loss surgery (WLS). The first section of the chapter reflects the interplay of measurable facts and social context as it reveals the points of consensus and controversy involved in defining obesity by examining the scope of the obesity problem and its trends.

#### A. Scope of the Problem

The first section of this chapter illuminates what is generally perceived to be the increasing problem of obesity both in the United States and across the globe. A review of the trends and disparate impact of obesity is necessary to understand both the present scope of the problem of obesity and its potential for the future. It is also relevant to examine those foundational issues where consensus is lacking. The first subsection will focus on the definition of obesity and on the various means of measuring it. The lack of consensus around these foundational concepts will be shown to complicate both appropriate identification and the treatment of obesity. The second subsection will provide national and international statistics on trends in the prevalence and incidence of overweight and obesity. These statistics will reveal particular populations in which

obesity has been shown to have become more deeply embedded than others. The following subsection begins by identifying the definitions of overweight and obesity and the contested nature of how it is measured.

#### A.i Obesity: Its Definition and Measurement

In order to understand the scope of the obesity problem, it is important to have knowledge of the manner by which it is most commonly diagnosed, along with proposed alternative methods of diagnosis, and controversies which surround its measurement. Historically, the definition of obesity and the means of diagnosing it have been fraught with controversy.<sup>1</sup> However, measuring the body mass index (BMI) of an individual has emerged as the most common diagnostic tool for overweight and obesity. The use of BMI has been accepted as the measurement of adiposity by the Centers for Disease Control and the World Health Organization.<sup>2</sup> The measurement of BMI provides an estimate of the percentage of body fat based on an individual's height and weight. BMI is calculated by dividing a person's weight (in kilograms) by the square of their height (in meters): BMI =  $kg/m^{2.3}$  A person with a BMI of below 18.5 kg/m<sup>2</sup> is considered to be underweight, and a BMI between 18.5 and 24.9 kg/m<sup>2</sup> is considered average or normal. A person with a BMI equal to or greater than 25 kg/m<sup>2</sup> is considered to be overweight; a BMI of 30 kg/m<sup>2</sup> is considered obese, and a BMI of 40 kg/m<sup>2</sup> is considered to be morbidly, severely, or extremely obese.<sup>4</sup>

The widespread usage of BMI is generally attributed to a contingent social fact namely, the ease with which height and weight can be obtained in a clinical setting.<sup>5</sup> Primary care physicians and office staff can take these measurements rapidly without expensive equipment or time-intensive activities.<sup>6</sup> The use of BMI to define and measure

obesity is thus attractive in clinical practice. Additionally, this rough formula, which estimates the lean tissue ratio relative to adipose tissue, has achieved widespread usage in social science research. Replacing BMI with a different system of measurement may impair the usefulness of data captured under BMI in comparison with data captured with newer, perhaps better, diagnostic tools.<sup>7</sup>

Nonetheless, the use of BMI as the index by which to define and measure obesity has been widely criticized.<sup>8</sup> These criticisms may best be understood in light of the development and evolution of BMI as a practical tool. Lambert Adolphe Quetelet, a Belgian mathematician, developed the Quetelet Index in 1832 as a part of a larger project to define the typical human of the time.<sup>9</sup> This tool was later renamed the Body Mass Index in 1972 by Ancel Keys.<sup>10</sup> Quetelet's quest was to identify the "normal man"—i.e., to identify and document the standard proportions of the human (male) build of the time. He set out to measure various characteristics, including arm length and the age at which men married. Quetelet collected measurements from several hundred people in his native country of Belgium, in the area of Brabant. What Quetelet found was that the weight among those he studied varied in proportion to the square of height. Quetelet's research on the proportional relationship between height and weight was used to refine of the earlier work of French military doctor Paul Broca, who proposed that weight varied in direct proportion to height. Quetelet's findings on weight and other standard proportions of Belgian people in the nineteenth century was published in the book A Treatise on Man and the Development of His Faculties.<sup>11</sup> During Quetelet's lifetime, his heuristic device had little influence in the medical community. Its purpose was descriptive, not diagnostic, and was of little practical value at that time. It was not until the following century that the

use of the BMI became a standard by which weight anomalies, including overweight and obesity, were defined. Subsequently, critics have questioned the wisdom of generalizing results obtained from a relatively small sampling of a specific population group (primarily male citizens from the Brabant region of Belgium in the 1800s) and developing a standard measurement tool based on those results.<sup>12</sup>

The most common and perhaps the most serious criticism of using BMI to define and measure obesity is that the BMI is only an indirect measurement of adiposity and that it does not account for lean body mass (bone, muscle) relative to other body mass (adipose tissue).<sup>13</sup> This important distinction between types of body mass, for which BMI cannot account, may well be crucial in determining the relative health risks associated with weight of those individuals on either end of the weight continuum. Instead of using BMI as a screening tool, the current practice is to use the BMI as a diagnostic tool which is considered informative with regard to health risk. What this means is that merely by being categorized as overweight or obese, an individual is assumed to carry significantly more risk based on weight as related to health than are those of normal weight (again, as measured and defined by BMI). Such categorization and attribution of risk is thought to be problematic on many levels—conceptual, medical, social, and ethical—as this categorization is seen by many to be but a small part of the overall risk assessment for an individual screened for being beyond the norms of weight.<sup>14</sup>

Other criticisms of using BMI to define obesity include that it does not account for the location of the adipose tissue and thus fails to enable distinction between the relative risks of carrying excess visceral or subcutaneous adipose tissue. More recent research has shown that there are significant risk differences in the nature and magnitude

of health risks based upon where one carries excess weight.<sup>15</sup> Another criticism is that BMI measurement does not take into account what might be considered normal bodily changes with aging. These normal weight changes associated with aging may or may not be associated with greater health risks.<sup>16</sup> By ignoring the relevance of age and adipose location to weight-related health risk, the use of BMI as a weight measurement risks being both insufficiently sensitive and insufficiently specific. Use of BMI may result in false negatives and false positives when used to diagnose obesity and associated risk factors.<sup>17</sup>

Finally, BMI and the weight categories it is used to create are criticized for being treated as absolute and rigorously evidence-based, when in reality the thresholds assigned to various BMI levels and weight categories are grounded in perceptions of clinical exigency.<sup>18</sup> In fact, the category thresholds have changed over the years. In 1998 the National Institutes of Health (NIH) altered its category designations to accept those used by the World Health Organization. The NIH at that time lowered the normal weight and overweight cut-off points from a BMI of 27.8 to a BMI of 25. This had the effect of immediately assigning the designation of overweight to approximately twenty-five million Americans who had previously been categorized as being of normal weight.<sup>19</sup> While the BMI categories used by the United States and the WHO are now the same, other countries—including Japan and Singapore—have set cut-off points for categories at lower levels than those used by the United States and the WHO.<sup>20</sup> Those lower thresholds are thought to reflect the smaller physical stature of the individuals from those countries.<sup>21</sup> Some in the United States have even suggested that BMI insufficiently accounts for physical variability present between African Americans and Caucasians.<sup>22</sup>

Other measurements of overweight and obesity such as hip-to-waist ratio, skinfold thickness, and the measurement of waist circumference have been proposed as replacements for BMI. These proposed replacements are thought to have greater diagnostic usefulness for predicting health risk relative to adiposity.<sup>23</sup> However, these methods have not yet been widely adopted in clinical settings. Thus, despite what some would term serious flaws that may endanger health, BMI continues to be the most widely used clinical measurement of normal and anomalous weights, including the designation of overweight and obesity.<sup>24</sup> The following section will discuss the trends being observed in obesity in the United States and other parts of the world. Even with the controversies surrounding which is the most appropriate tool for diagnosis, obesity appears to be increasing both in prevalence and in severity.

#### A.ii Trends in Obesity

There is widespread agreement, based on national and international data, that the problem of overweight and obesity in the United States and in other developed nations is increasing.<sup>25</sup> Indeed, the prevalence and incidence of overweight and obesity has been on the rise for several decades.<sup>26</sup> Prior to the 1950s, there were no reliable estimates of the incidence and prevalence of overweight and obesity.<sup>27</sup> Some have stated that there was little need to capture these statistics because the problem of obesity was rare and in itself unremarkable.<sup>28</sup>

It was not until the 1960s that statistics relative to weight began to be captured. Statistics on the health and nutritional status of adults and children in America, including data on obesity trends, have been collected by the US Department of Health and Human Services through the National Center for Health Statistics (part of the Centers for Disease

Control and Prevention) since the early 1960s. The National Health Survey Act of 1956 provided legislative authorization for gathering health and nutritional statistics, as well as data on the effects of illness and disability in the United States.<sup>29</sup> Surveys were implemented to collect data from three main sources: direct interviews, clinical tests and physical examinations of individuals, and information recorded in doctor's offices, hospitals, and other settings through which people access medical treatment. Among the information collected were data on various "risk factors, aspects of a person's life-style, constitution, heredity or environment that may increase the chances of developing a certain disease or condition."<sup>30</sup> Included were factors such as drug use, alcohol consumption, sexual practices, and weight. The same mandate included obesity among "diseases, medical conditions and health indicators to be studied."<sup>31</sup>

The first in the series of National Health Examination Surveys (NHES), later renamed the National Health and Nutrition Examination Survey (NHANES), was conducted from 1960 to 1962. Since the first of these, at least eight such surveys have been conducted. Over the years the survey's focus has changed to reflect the most prominent health concerns of the time, such as children's health issues, chronic diseases, and obesity.<sup>32</sup> In response to medical research in the 1970s which reported a relationship between nutritional status and health indicators, the survey began to focus additional attention on the relationship between diet or nutrition and health status, such as the relationship between what one eats and the development of obesity and its co-morbidities (e.g. diabetes or cardiovascular disease).<sup>33</sup>

The outcome of the first survey (1960–1962), with 6000 participants, found that 31.5 percent of Americans were overweight, with 13.4 percent being obese and 0.9 percent being extremely obese.<sup>34</sup> These preliminary results serve as the baseline from which subsequent survey results have been

compared. There were two NHANES conducted in the 1970s. The NHANES I was conducted between 1971 and 1974 and included almost 13,000 individuals, while the next survey conducted between 1976 and 1980 and included fewer than 12,000 participants.<sup>35</sup> Statistics from these two surveys began to show an increase in the prevalence of overweight and obesity across categories. Survey results from 1970 through 1974 showed those who were overweight at 32.3 percent, obese at 14.5 percent, and those with extreme obesity were 1.3 percent of the population. Late in that same decade the number of overweight individuals stood at 32.1 percent, those with obesity were at 15.0 percent, and those having extreme obesity had increased to 1.4 percent.<sup>36</sup>

The 1988–1994 NHANES survey of 14,000 found that while there was only a small increase in the number of people who met criteria for overweight, those who met criteria for being obese or extremely obese had seen greater increases.<sup>37</sup> The percentage of those who were overweight was 32.7 percent. Obesity and extreme obesity were at 23.2 percent and 3.0 percent respectively. These figures translate to an eight-point increase in obesity and slightly more than double the number of people with extreme obesity (up from 1.4 percent) in just eight years. The number of those surveyed between 1988 and1994 was over 14,000 people.<sup>38</sup> In 1997 in the United States, the number of adults with a BMI falling into the category indicating obesity was approximately 27 percent, with some sources citing as much as 33 percent.<sup>39</sup> These figures represent almost double the prevalence of obesity just twenty years earlier.

In the nutrition and health surveys conducted between 1999 and 2000 and again between 2001and 2002, the numbers of those being surveyed was noticeably smaller (between 3,600 and 3,900 participants). However, the participants themselves had

continued to increase in size. As discussed earlier in this chapter, the threshold for designating an individual as overweight or obese was lowered in 1998 to be in line with the categories accepted by the WHO.<sup>40</sup> Survey participants who would previously have been considered to be of normal weight were recategorized as overweight based on this threshold realignment. The increasing rates of overweight, obesity, and extreme obesity continued to show increases during these time frames as well. The increased rates for the two survey periods were as follows: overweight individuals at 33.6 percent and 34.4 percent, obese individuals made up 30.9 percent and 31.3 percent, and those with extreme obesity were at rates at 5.0 percent and 5.4 percent.<sup>41</sup>

In the two most recent surveys this unfortunate trend has continued across almost all categories. NHANES (2003–2004), with a survey group of just over 3,700 participants, showed the rate of overweight at 33.4 percent, obesity at 32.9 percent, and extreme obesity at 5.1 percent of the population. NHANES (2005–2006), with just under 4,000 participants, found overweight came in at 32.2 percent, obese at 35.1 percent, and extremely obese individuals at 6.2 percent of the American population.<sup>42</sup> Based upon the most recent statistics available, during the years 2005–2006, the prevalence of obesity (including all those with a BMI greater than 30) and extreme obesity (including all those with a BMI greater than 40) in the United States stood at approximately 41.3 percent.<sup>43</sup> The US population is currently estimated at approximately 310,718,864 people.<sup>44</sup> Therefore, at present there are approximately 128 million Americans who are overweight or obese.

Data collected from the first survey to the present survey have shown an interesting sex-based disparity in the trends found in overweight and obesity. Across the

surveys men have comprised a greater percentage of those occupying the category of overweight, while the greatest percentage of those categorized as obese has been occupied by women.<sup>45</sup>

In addition to agreement that obesity is increasing in the United States (and much of the world), there is also growing consensus that obesity is associated with a variety of demographic factors.<sup>46</sup> In the US, those most vulnerable to weight concerns are minority groups (primarily African Americans and Hispanics), low-income or low socioeconomic groups, men and women over 60, as well as women ages 20–34 who are disproportionately represented among those diagnosed with obesity.<sup>47</sup> While the increasing prevalence of obesity can generally be seen across the nation, there are particular states in which the problem is exacerbated. These states include Alabama, Mississippi, Oklahoma, South Carolina, Tennessee, and West Virginia. These states also report having a high concentration of minorities and lower per capita incomes.<sup>48</sup>

The increasing prevalence of obesity in the United States is not limited to adults. Current studies indicate that approximately 15.5 percent of children and adolescents meet the clinical criteria for obesity and approximately 16 percent are diagnosed as overweight.<sup>49</sup> An additional 34 percent of children and adolescents are at risk for overweight.<sup>50</sup> Since the 1970s, the obesity rate has more than doubled for children ages 2–5 and adolescents between the ages of 12 and 19. In the age range of 6–11 the rate of obesity has more than tripled.<sup>51</sup> The myriad health problems associated with obesity in adults may well be surpassed by those found among obese children in this generation, resulting in a lower life expectancy for this generation of children than for their parents.<sup>52</sup>

These trends in obesity are being observed throughout other parts of the world in both developed and developing countries. Specifically, countries such as Australia, Russia, Brazil, Malaysia, and even China are showing obesity as an increasing problem among their populations.<sup>53</sup> It is estimated by some that in the future obesity will overtake tobacco-related diseases as the number one public health problem leading to patient mortality.<sup>54</sup>

The following section discusses two areas which are affected by overweight and obesity. This section discusses impairments in physical health and quality of life indicators for those who are obese.

B. Obesity's Effects on Physical Health and Quality of Life

The following section explores the effects of obesity on various aspects of physical health and longevity as well as on associated non-health quality-of-life indicators. A point of widespread agreement regarding obesity is that, in general terms, it has negative effects on physical health and quality of life. From a health perspective, progression along the spectrum from merely being diagnosed as overweight to being diagnosed with more serious obesity is generally associated with progressively elevated risks of life-threatening and debilitating physical co-morbidities which ultimately have the effect of decreasing longevity and quality of life.<sup>55</sup> It has been said that "the medical problems caused by obesity begin with the head and end with the toes and involve almost every organ in between."<sup>56</sup> This section is divided into two parts. The first subsection will address the effects of obesity on physical health while the second subsection addresses the effects of obesity on other quality of life indicators.

#### **B.i Physical Health**

Being either overweight or obese is linked to numerous medical sequelae including: type II diabetes, coronary artery disease, hypertension, sleep disturbances, acid reflux disease, fatty liver disease, joint disease, depression, infertility, fetal abnormalities, various malignancies, asthma, incontinence, lower back pain, various skin disorders, and kidney disease.<sup>57</sup>

Approximately 300,000 Americans die each year from obesity-related diseases.<sup>58</sup> This number is approaching the estimated 400,000 deaths that are annually attributed to smoking and tobacco-related diseases.<sup>59</sup> Additionally, in children who are overweight or obese, the latency period between developing obesity and developing secondary diseases may be diminished. This means that diseases such as hypertension or diabetes develop more rapidly in obese children and adolescents than would occur in obese adults.<sup>60</sup>

Research has frequently focused on single co-morbidities such as diabetes or the presence of heart disease.<sup>61</sup> A limitation of such studies is that they are not able to shed light on the relative risk of multiple co-morbidities present in those who are overweight or obese. With this limitation in mind, one particular study undertook a meta-analysis of the twenty chronic diseases thought to be associated with overweight and obesity. Co-morbidity specific studies which included these twenty associated chronic diseases were reviewed. In this meta-analysis, the authors sought, in part, to provide a more comprehensive picture of the relative disease risk across chronic diseases related to being overweight or obese for men and women. The authors confirmed that indeed there are elevated health risks associated with being diagnosed as overweight or obese and that relative risk increases based on the severity of an individual's overweight.<sup>62</sup> Hence, the

more overweight a person is, the greater the relative risk for developing debilitating chronic, co-morbid disease. Additionally, the greatest health threat appears to be from developing type II diabetes. However, elevated relative risk for certain cancers (breast, colorectal, endometrial, esophageal, kidney, ovarian, pancreatic, and prostate), various forms of cardiovascular diseases (hypertension, coronary artery disease, congestive heart failure, pulmonary embolism, and stroke), as well as asthma, gallbladder disease, osteoarthritis, and chronic back pain, is associated with overweight and obesity.<sup>63</sup> The authors conclude that "findings confirm that overweight and obesity carry a profound health burden and will have a significant impact on health expenditures."<sup>64</sup> Each of these additional chronic diseases is associated with it its own trajectory of potential medical complications so that an overweight or obese person diagnosed with type II diabetes incurs additional risks for medical complications such as kidney disease. In effect, overweight and obesity can increase the threat to health and longevity exponentially, as the individual is now susceptible to developing further tertiary disease which carries with it its own set of potential serious life-limiting or mortality-producing medical complications.

Another important and highly stigmatizing, though perhaps not strictly physiological, co-morbidity related to being overweight or obese is an increased risk for developing various mental health disorders.<sup>65</sup> Individuals diagnosed with obesity also tend to have an increased incidence of clinical depression, which in turn has been positively correlated to adverse childhood experiences including self reports of physical, sexual, and verbal abuse as well as neglect.<sup>66</sup> Specifically, those individuals who report exposure to all four types of abuse have the greatest level of severity of both obesity and

depression. The reported long-term repercussions of abuse on the development of both depression and obesity may reflect issues of "powerlessness, loss, and humiliation," according to Stunkard et al.<sup>67</sup> A related analysis suggests that the development of obesity might reflect an attempt at a protective adaptive function for people who have been sexually abused, with the excess weight effectively producing an emotional and physical barrier that may adaptively assist the obese individual in controlling further unwanted attention or thwarting future abuse.<sup>68</sup>

Obesity was found to be associated with significant increases over the general population risk not only of major depression, but also bipolar disorder, panic disorder, and agoraphobia during the subject's lifetime.<sup>69</sup> Other studies have shown a more robust association between anxiety disorders and obesity than between mood disorders and obesity, as well as a strong association between obesity and post-traumatic stress disorder.<sup>70</sup> Whether developing a mental health disorder is a result of the societal stigmatization of those who are overweight and obese, or whether a predisposition to mental health disorders precedes their diagnosis and overweight and obesity are secondary, appears to remain an unresolved question.

The presence of overweight or obesity has been shown to diminish quality in various non-health related areas. The following subsection explores these areas of diminished quality of life.

#### **B.ii Quality of Life**

Similar to physical co-morbidities, the presence of psychiatric co-morbidities can have the effect of reducing quality of life and longevity.<sup>71</sup> Each additional co-morbidity, whether physical or psychological, has the consequence of adding to the aggregate health

and well-being burden for the individual diagnosed with obesity. Moreover, health is only one dimension of well-being or quality of life. Factors comprising quality of life are those factors which make living pleasant.<sup>72</sup> Those items which are considered to be contributing factors to an individual's quality of life assessment are quite diverse and highly subjective. Assessment of quality of life is highly individualized as it is based on the unique combination of factors found in particularly appealing ratios for each person. Hence, there is wide disparity among which or how much of each particular factor makes a life one of quality.<sup>73</sup>

Evidence suggests that in general, individuals who are overweight or obese report lower levels of satisfaction or quality of life based on several commonly accepted attributes of a quality of life.<sup>74</sup> Indicators of quality of life commonly employed in research include a person's educational attainment, employment status, earning potential (both present and future), opportunities for career advancement, the presence of significant intimate relationships (such as marriage or a similarly committed relationship), having children, the ability to get around, and where one resides.<sup>75</sup> Commonly accepted quality of life indicators have all been reported to be inversely related to the presence of overweight or obesity<sup>76</sup>—the more overweight a person is, the less likely he or she is to have attained a high level of education, high income, and significant personal relationships. Numerous reports in the popular press in recent years have pointed out that current and future projected earnings and opportunities for career advancement are inversely related to above normal weight.<sup>77</sup> Research further indicates that parents of overweight and obese children provide less college support for their overweight children than for their thinner offspring.<sup>78</sup> This was found to be true even

when controlling for factors such as parental income and student grades.<sup>79</sup>

Puhl and Brownell, in an article on bias and discrimination against those who are obese, reviewed available research in three primary areas of potential discrimination and bias against those with obesity. Those areas included employment, education, and health care. <sup>80</sup> Their analysis of various research studies on the topic concluded that there is "clear and consistent scientific literature showing pervasive bias against overweight people" across these domains.<sup>81</sup>

The third section begins to address communication problems surrounding how obesity is talked about and how this can lead to subsequent problems with commonly applied ethical standards such as those seen in informed consent, considerations of justice, and possible violations of patient welfare. Additionally, the following section will begin to address the effect of inappropriate ascriptions of blame and the implications for acceptance or rejection of various weight-loss interventions.

#### C. Framing the Ethical Problem

The final section of this chapter discusses the contentious nature of properly framing issues around obesity and the resultant problems of communication which arise in accepting particular frameworks. This section will argue that accepting particular frameworks results in associated problems of communication both in society in general and within the clinical healthcare system charged with providing assistance in solving an individual patient's obesity. This section will introduce the argument that problems of communication arising from errors in framing lead to breaches in commonly accepted and applied ethical standards in health care, which ultimately serve to violate obligations to patients who are obese. The first subsection addresses various problems in accurately

and adequately communicating about obesity and elucidates problems in the healthcare system which arise from failures in communication. The second subsection focuses on the way in which obesity is conceptualized and the associated ethical issues which arise from these conceptions. The final subsection discusses how blame is assigned in obesity and the way in which blame can impair or reinforce acceptance of various weight loss interventions. The discussion begins with problems in communicating about obesity.

#### C.i Problems of Communication and Failure of the Healthcare System

Despite general consensus about increased rates of obesity and demographic trends, as well as substantial consensus about the association of obesity with various lifelimiting, life-threatening, and quality-of-life-diminishing co-morbidities, multiple points of controversy remain. Among these are contested views about the etiology of obesity, its social characterization or construction, and the most appropriate way to frame the problem of obesity and the range of appropriate solutions to the problem.<sup>82</sup> In essence these are problems in communicating about obesity which have potentially far reaching consequences. Moreover, in reality, it remains likely that these three dimensions of the obesity problem will remain contested. For each of the three, the reality is more complex than any one of the proffered explanations, characterizations, and conceptualizations. In this regard, obesity will remain problematic. The etiology of obesity has been and continues to be widely debated. Most believe that obesity is caused by some combination of factors which include but are not limited to genetics or biological factors, the environment, and social policies such as farm subsidies which have altered the way in which Americans access and consume food.<sup>83</sup> Several factors considered contributory to the development and maintenance of obesity are discussed below.

C.i.a Genetics

Though some progress has been made, the role of genetics in the development of the obesity problem is not entirely clear. First-generation investigation into the role of genes in the development of obesity included heritability studies done with identical and nonidentical twins. These studies found that the heritability rate for obesity based on genetic factors falls in the range of 70–80 percent. The only other characteristic which rates consistently higher for heritability is an individual's height.<sup>84</sup>

Some genetic disorders clearly have an obesity component as a primary manifestation, such as Praeder-Willi syndrome or Bardet-Biedl syndrome.<sup>85</sup> These syndromes typically have a developmental anomaly associated with them as well. Additionally, monogenetic obesity syndromes exist which do not carry with them developmental disabilities or other aspects of mental retardation.<sup>86</sup> These syndromes include among them congenital leptin deficiency in which obesity can be corrected with therapeutic doses of leptin.<sup>87</sup> Newer research techniques which include genetic mapping have permitted these particular genetic anomalies to be identified; however, this has been possible in only a small number of obesity-related disorders.

Through genome-wide association studies, several other gene mutations have been implicated in the obesity problem, but their full role remains unclear. Moreover, the genes implicated in the development of less specific obesity patterns are thought to be part of the biological system that regulates energy balance.<sup>88</sup> The mutations are thought to cause disregulation in these systems with obesity as the result. It remains "unclear whether such genes contribute to obesity through many different single-gene mutations or through potentially complex interactions involving several genes each having small

effects of their own (or a combination of both)."<sup>89</sup> The relationship between social policy and the social environment in relationship to obesity is discussed below.

#### C.i.b Social policy and social environment

Recently and historically, American social policies have been implicated in the onset of obesity as population-wide problem in the United States.<sup>90</sup> The rise of obesity may have its historical roots in World War II (1941–45) when mandatory food rationing was enacted. The United States sought to overcome the scarcity of food by reformulating the appeal of certain foods, including a campaign to increase consumption of organ meats, which was ultimately unsuccessful.<sup>91</sup> Despite this and other efforts, the net result was that the typical population food patterns were substantially disrupted during this war era. A relationship between increased body fat and episodic food shortages was first proposed in 1994 by Deitz.<sup>92</sup> In a case study, he proposed that there might be a relationship between "food choices or physiologic adaptations in response to episodic food insufficiency"<sup>93</sup> which could cause increased body fat.

The phenomenon he was tentatively describing is what is now called *food insecurity*. Food insecurity is defined as limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.<sup>94</sup> A related concept is that of *food restriction*, which is the externally imposed restriction of intake due to lack of access to food or foods one would otherwise choose.<sup>95</sup> This term can also be applied to a self-imposed restriction—for example, by dieting. Recent research has shown a relationship between food insecurity and the presence of both disordered eating patterns (binge eating) and obesity.<sup>96</sup> Episodes of mild food insecurity or food restriction, such as those found in America during World

War II, may have mimicked the conditions of food insecurity, based on imposed food restrictions, as we now understand this phenomenon. On the heels of World War II, with unprecedented growth and prosperity in the United States, food was abundant.<sup>97</sup> The implications of food rationing, and the mandated changes in food consumption immediately prior to this time, may have had unforeseen effects on the obesity problem which arose in the decades of abundance that followed.

More recently, agricultural policy has also been cited as a contributing factor in the development and maintenance of the obesity problem in the US. "From 1985 to 2000, the real price of fresh fruits and vegetables went up almost 40 percent in the United States, while the real price of fats and sugars declined."<sup>98</sup> This trend, driven by fifty years of farm policy, has directed farmers toward overproduction of particular crops such as corn and soybeans, resulting in low-cost oils and the availability of high-fructose corn syrup (which has been added as a less expensive replacement for other sugar sources).<sup>99</sup> In the last thirty years, farm policies which support corn and soybean crops have resulted in an increase in the consumption of high-fructose corn syrup of over 1,000 percent.<sup>100</sup> The US consumption of added fats increased more than 35 percent during that same time.<sup>101</sup> It has been stated that "the problem with the extensive use of these cheap commodities in food products is that they fall into the very dietary categories that have been linked to obesity: added sugars and fats."<sup>102</sup>

These less expensive commodities have replaced more expensive counterparts and have served to drive down the cost of unhealthy foods while simultaneously limiting the availability of locally grown, less expensive, and healthier choices in the American diet. For economically constrained individuals, who are disproportionately represented

among the obese, the opportunity to purchase lower cost food may be viewed as a desirable consumer option, even though such food is less healthy than more expensive alternatives.<sup>103</sup> Indeed, purchasing low-cost unhealthy foods may seem the only viable option. Another area for consideration which is addressed below is the way in which housing, roads, and green space are currently being utilized which may facilitate sedentary lifestyles, overweight and obesity.

#### C.i.c Built environment

Characteristics of the modern built environment have also been charged with producing the conditions necessary for obesity to flourish.<sup>104</sup> The built environment includes how land is used in designing and developing housing plans, neighborhoods, and cities.<sup>105</sup> Characteristics such as vehicular and pedestrian traffic patterns, green space set asides for recreational activities, the availability of sidewalks for pedestrian traffic, bicycle lanes, and the proximity of grocery and other stores are features of the built environment that affect the ability of those living in the area to be physically active and have access to affordable healthy food without depending on motorized transport.<sup>106</sup> A meta-analysis of research conducted between 1966 and 2007 on the association between the built environment and obesity found that "eighty-four percent[of studies] reported a statistically significant positive association between some aspect of the built environment and obesity"<sup>107</sup> The authors conclude that "understanding the mechanisms through which environmental factors may influence obesity will aid in developing future communitylevel intervention strategies."<sup>108</sup> There have been many other factors posited as being contributory to the development of obesity. Several of these additionally proposed areas are discussed below.

#### C.i.d Additionally proposed etiology

There have been several other associations proposed as possible contributing factors in developing obesity. A few of these correlative relationships include the length of time mothers breast-feed their children and the social network theory. In a study of the Helsinki Birth Cohort, it was found that those who had been breast-fed for less than two months or greater than eight months had the highest adult rates of BMI and percentage body fat.<sup>109</sup> Of those who were breast-fed the shortest duration, the authors suggest that the higher rate of obesity might be explained by the fact that growth factors or hormones available in breast milk might program the baby in ways that protect against developing adipose tissue in later life. On the upper end of breast-feeding duration, it is thought that prolonged exposure to breast milk may predispose the body to seek high-lipid foods later on, which could contribute to weight gain and a high BMI.<sup>110</sup>

In a study which spanned thirty-two years, the relationship between one's social network members and the potential of developing obesity was examined. It was found that a person's chances of becoming obese increased by 57 percent in a given time interval if he or she had a friend who had also become obese. This was true regardless of the proximity of the person in the social network. In other words, even if the friend did not live in the same locale, the study discerned an interesting association among social network members and weight gain regardless of physical proximity.<sup>111</sup>

The theories and associations provided above are but a few of those proposed to shed light on the etiology of overweight and obesity. While these theories and associations shed light on the complexity of the problem, they do not definitively provide closure on the etiology of overweight and obesity. Indeed, it is most probable that

overweight and obesity are attributable in some part to each of the above areas and several others which have not been addressed here. The following section moves the discussion from the disputed areas contributing to obesity to how obesity is conceptualized.

#### C.ii Conceptualizing Obesity and Associated Ethical Issues

Distinct from the question of obesity's cause, yet related to it, is the question of how obesity is conceptualized. Obesity can be conceived of as a health problem, personal problem, or a social problem. Describing someone as obese can be merely a description, an aesthetic judgment, or a medical diagnosis. Obesity can be conceptualized as a disease, epidemic, condition, trait, or simply as a risk factor. Moreover, obesity can be seen as the physical manifestation of gluttony, or as a social marker of personal wealth or societal economic development.<sup>112</sup> In labeling someone obese we can either identify a fact or make a judgment, or both. In making the claim "Herbert is obese," several kinds of a judgments or indeed presumptions of fact can be asserted based on one's point of reference. How obesity is conceptualized by society in general and healthcare practitioners specifically will likely have implications for what alternatives are offered to patients with obesity who are seeking treatment. The following section discusses various conceptualizations and briefly introduces how various commonly accepted ethical constructs can either be supported or violated based upon the practitioners conception of the problem and hence the appropriate solution for a patient's obesity.

C.ii.a Realist and nominalist conceptions of obesity

Jon Reif argues that from a realist perspective obesity is "a fundamentally real body category."<sup>113</sup> That someone is obese is a scientific fact, an empirical matter to be

discovered. In contrast, from a nominalist perspective, "obesity is a culturally and historically constructed notion."<sup>114</sup> No one is obese but for our describing him or her that way according to some socially determined, culturally bound criteria. Once those criteria emerge or gain acceptance within a society, however, then whether or not Herbert is obese is a matter of fact—a matter of either scientific or social fact, and no wishing or thinking it otherwise can alter Herbert's obesity. Only an intervention resulting in his weight loss can change his status (or diagnosis) as obese.

In support of adopting a nominalist conception of obesity is the fact that social attitudes toward body mass and weight vary across time and across different populations, social classes, ethnicities, and cultures. Indeed, they vary so much that different attitudes toward obesity do not always seem to be differing attitudes toward the same thing, but actually seem to construct obesity as something different altogether in different cultural contexts. Within the United States, for example, various ethnic groups perceive weight in vastly different ways.<sup>115</sup> Currently, among African Americans, Hispanics, and Hawaiians, larger people are seen as being more acceptable and perhaps more sexually appealing and desirable than more svelte counterparts.<sup>116</sup> The same is not true among typical, modern Caucasian Americans, for whom additional weight is considered unappealing and sexually undesirable.<sup>117</sup> However, these modern conceptualizations of size and weight have not been stable concepts across time. In fact, throughout history, the way in which weight has been perceived has dramatically changed.<sup>118</sup> In medieval times, people who were overweight were often portrayed negatively and as lacking in morals and selfcontrol.<sup>119</sup> Similarly, ancient Asian pictures depicted the dreaded tax collector as an overweight person and described this person as greedy and lacking a righteous
character.<sup>120</sup> In contrast, the ideal of American beauty in the late 1800s was epitomized by Lillian Russell, who reportedly weighed over two hundred pounds.<sup>121</sup> In the early twentieth century, a time which saw rampant tuberculosis, the person who was physically large was perceived positively. In fact, girth was seen as a sign of health and an indicator that the person was not infected with tuberculosis, commonly referred to as consumption, of which a primary symptom was emaciation; tuberculosis "consumed" people.<sup>122</sup> There was social value in being a person of substantial weight as it signaled that the person was free from potentially deadly infection and a safe person with which to associate.

During the 1930s, a period of time with both low prevalence and incidence of overweight and obesity, a debate emerged regarding whether obesity should be considered a medical problem or merely a cosmetic concern.<sup>123</sup> During World War II, however, when many women were going into the workforce, the image of the ideal woman began to change to project a slimmer and more capable, perhaps even more masculine ideal.<sup>124</sup> Following World War II, for a time in America, the contours of the ideal woman once again rounded out so that curvaceous women such as Marilyn Monroe epitomized beauty. Coincidentally, this was at a time when men were returning from war and seeking to regain jobs and return women to a more traditional domestic role. In addition, it is thought that this shift toward a more voluptuous image of beauty and health occurred at this time partly due to the immigrants who came to America after having survived the Nazi death camps. Ample weight was a luxury and once again a sign of prosperity and health.<sup>125</sup> In recent years, as the association between ill health and excess weight has become more evident through research, the tides have again changed so that excessively curvaceous, overweight, or obese bodies are the source of societal disdain.

Moreover, other social attitudes or ascriptions, beyond those of healthy or unhealthy, are attached to norms of beauty and body size. Present-day women who exhibit the body contours of the ideal nineteenth-century woman are considered fat and have a long string of negative attributes attached to them based on their weight.<sup>126</sup> Modern women who meet the previous ideal are considered lazy, undisciplined, sexually undesirable, unintelligent, and hedonistic.<sup>127</sup> Even as they are considered sexually undesirable, they are also considered sexually voracious, out-of-control, and threatening for the sheer space they take up, the amount of resources (food, space) they consume, and the insatiable desires they represent.

With respect to the stigma of being overweight and obese, men fare marginally better than women. So long as they and their size are not "gross," overweight or obese men are more often given socially appealing attributions related to their size than are women.<sup>128</sup> They are seen as being powerful, masculine, and, if it not too fleshy, athletic. While for men social attributions appear to be somewhat better and the range of acceptable individual variability from the ideal is arguably broader, men certainly face issues of prejudice in employment and discrimination in social settings based on weight. The experience of bias for men however, allows for greater deviation from the ideal before negative social attributes are employed as descriptors of the individual.<sup>129</sup> In other words, a woman who is overweight to the same degree as a man would likely face prejudice, discrimination, and stigma more frequently and more severely than the man. This is in part because men in general are expected to have insatiable appetites, take up more space, and assert themselves physically and sexually in a way not acceptable for women.<sup>130</sup> Despite temporal, geographic, and cultural differences, one thing remains

constant: societies are seldom neutral about extremes of weight. Despite the social norms that ground a judgment that someone is obese, and despite the additional social judgments—even moral judgments—that frequently accompany the initial judgment or observation of someone's obesity within a particular society or social frame, *that someone is obese* is treated as a matter of fact.

Thus, obesity is not a context in which a debate between nominalist and realist positions can be resolved. Instead, persistent tension between the two approaches can best be addressed by recognizing that obesity is *treated* as a matter of *fact* or medico-scientific judgment. Two terms that have entered popular discourse reflect the dual realist and nominalist perspectives, the emphasis on scientific discovery, or on social judgment. "Obesogenic" refers to a combination of factors including environments that promote over eating which, when combined with limited physical activity, subsequently lead to obesity.<sup>131</sup> This term seems to imply toxicity in the physical and food environments of most Americans. The combination produces damaging results.<sup>132</sup> In contrast, the colloquially used term "obeast" reflects a nominalist conception-even a moralized conception-of obesity, and graphically describes a social perception of obese individuals as in some sense beasts—something both less than fully human and also threatening. Used somewhat differently, the term also highlights the vigilance required by those pursued by weight who are in continual peril of being caught and suffering harmsthe harms of the (o)beast.

The presence, prevalence, and persistence of such terms reflect not only the competing realist and nominalist conceptualizations of obesity, but also competing social characterizations of the growing obesity problem. On one side there are legitimate social

concerns which include its potential public health ramifications and associated costs, and these support application of potential public health interventions.<sup>133</sup> On the other side are the social attitudes toward obesity that prove detrimental to those with obesity and ultimately to society itself.<sup>134</sup> Social ascriptions to the obese of both causal and moral responsibility for their condition result in the stigmatization of obesity, discrimination against those with obesity, and obesity-associated diminished opportunities.<sup>135</sup> The medical decision making of obese patients, with the assistance physicians whose personal conception of obesity is realist, nominalist, or somewhere between, holds potentially serious implications for those who are obese and seeking treatment. Indeed, some research has shown significant reluctance on the part of family practitioners and primary care physicians to address the issue of overweight and obesity with patients.<sup>136</sup> While several reasons may explain this reluctance, including physicians' lack of training, personal negative biases about overweight and obesity, or skepticism about the efficacy of available treatment options, the result is that a lack of information about each of the alternatives for treatment impedes informed medical decision making, constrains justice, and potentially impairs patient welfare overall.

In addressing the issue of weight loss with their obese patients, it has been found that physicians employ some measure of bias against overweight and obese individuals they see in their own practice.<sup>137</sup> In fact, many physicians fail to address the options for obesity treatment with patients at all.<sup>138</sup> Whether this is because physicians feel they lack adequate time to address the issue, believe that interventions provide only marginal success, or perceive the issue of overweight and obesity to be one of discipline and

willpower, the outcome is that many patients never receive adequate information regarding obesity interventions.<sup>139</sup>

Without the proper medical information, patients with obesity cannot make a decision to pursue the option of surgery for weight loss. Some authors suggest that the failure of physicians to fully address a health issue along with its possible interventions constitutes abandonment of the patient.<sup>140</sup> Abandonment of the patient is ethically unjust and prima facie contrary to patient welfare. Failure to provide the patient with necessary information regarding repercussions of overweight and obesity along with the full scope of available treatment options should similarly be construed as abandonment. These topics will be more fully addressed throughout the dissertation. At present, it is sufficient to introduce the notion that societal conceptualizations imbedded in the framing of obesity by physicians and other healthcare providers has deleterious effects on patients seeking treatment for obesity by conscious or inadvertent violation of ethical principles and standards in practice. The following section will build on the manner in which inappropriate ascriptions of blame can also impede social acceptance of various interventions for weight loss.

# C.iii Inappropriate Ascriptions of Blame and Implications for the Social Acceptance of Interventions

Complicating conceptualization of obesity, attributions of responsibility for its onset, and identification of potential solutions or interventions are the competing etiological explanations for individuals' obesity and for the growing social problem of obesity. Not surprisingly, perceptions of cause shape endorsement of one or another set of interventions to address the problem.<sup>141</sup> Those who emphasize built environments and

social policies as primary causal factors in obesity are more likely to embrace policylevel public health interventions to address it.<sup>142</sup> Emphasis on one or another set of causal factors is also likely to affect attitudes toward the obese individual and her role in-or responsibility for—her obesity. Yet there are multiple ways of interpreting etiology. While discovery of obesity-associated genes might be thought to mitigate or alleviate entirely attributions of moral responsibility—and even attributions of personal control and causal responsibility-to individuals with obesity, identification of obesity-related genetic factors may simply lead to greater specificity in responsibility attribution. As with the supposed identification of genetic risk factors for alcoholism, other substance abuse, or sexual orientation, the identification of genes associated with obesity may simply prompt calls for those at genetic risk to use this information to motivate increased behavioral interventions to avoid manifesting the condition. For others, the identification of genetic or environmental factors that increase the risk of developing obesity does serve to alleviate or at least mitigate personal and especially moral responsibility, and to suggest that clinical, medical, public health, or social policy interventions are warranted at the very least to support individual efforts to maintain a healthy weight.

The complex relationship between social attitudes toward obesity and etiological explanations is evident in the terms with which the obesity problem is popularly depicted. Obesity has been referred to in the scientific literature, the popular press, and other forms of mass media as being an "epidemic," "being of epidemic proportions," and a "post-modern epidemic."<sup>143</sup> Despite the common thread of the term "epidemic," rather different perspectives on obesity are revealed by these descriptions.<sup>144</sup> An epidemic is generally described as "the occurrence in a community or region of cases of an illness…or other

related heath events clearly in excess of normal expectancy,"<sup>145</sup> or as "an outbreak or unusually high occurrence of a disease or illness in a population or area."<sup>146</sup> When used as an adjective, "epidemic" is defined as "spreading rapidly and extensively by infection and affecting many individuals in an area or population at the same time, as of a disease or illness."<sup>147</sup> The presence of such a population-based problem is frequently considered to prompt population-based interventions, such as public health measures, to combat contagion (e.g., vaccination) or to address a common threat (e.g., sanitation measures).

In contrast to and yet building upon more traditional definitions, post-modern epidemics have been described as "epidemics in which unevenly medicalized phenomena lacking a clear pathological basis get cast in the language and moral panic of 'traditional epidemics.'"<sup>148</sup> In this characterization of the obesity problem as a post-modern epidemic, causal and moral responsibility—for both its creation and its elimination become blurred. Obesity occasions not just panic, but moral panic, typically with associated blaming, stigmatizing, and disenfranchising behaviors and attitudes—the widespread, ostensibly morally justified fear that arises whenever a population believes that the social or moral order is threatened.

These complex relationships among etiological explanations, social attitudes, and moralizing attitudes about obesity influence the acceptability and adoption of different ways of framing obesity and its potential solutions. Even though contemporary society has largely rejected the framing of obesity as being the manifestations of sin or gluttony for which appropriate solutions are atonement, behavioral change, and absolution, competing frames persist within a generally medico-scientific understanding of obesity. Obesity may be viewed as a problem at the individual level to be addressed by behavioral

and clinical medical approaches, or as a population-level problem susceptible to public health and public policy interventions, or some combination of these.<sup>149</sup> The argument of this project embraces the importance of adopting a combined approach, but focuses its attention on the individual level of clinical medical intervention. The social dimensions of obesity, including moralized attitudes toward it, are nevertheless important to the argument, because the social acceptability of interventions at the individual level depends in part on the social attitudes toward obesity and those who are obese, as well as on socially reinforced etiological explanations of obesity.

#### D. Conclusion

This chapter provided relevant background information on the problem of obesity. The chapter began by examining controversies surrounding the most widely used tool for the diagnosis of obesity, the measurement of BMI, along with several proposed alternatives which might provide a more accurate clinical picture of the problem. Obesity trends seen over the past fifty years through the NHANES system were reviewed. Generally, these surveys have shown that obesity is becoming both more prevalent and more serious in the United States. International indicators have shown that obesity is increasing in other part of the world as well. Increased obesity has subsequently led to increased physical and social co-morbidities such as diabetes, hypertension, reduced longevity, increased mortality, and in general a lesser quality of life based on social indicators. Contested theories on the etiology of obesity and thus various ascriptions of blame were discussed. The implications of the contested terrain surrounding obesity were addressed. This chapter introduced the notion that various conceptualizations of obesity, including the appropriateness of its diagnostic tool, the acceptance of obesity as a disease,

the understanding of obesity as a modern-day epidemic, and the subsequent approval or rejection of various interventions as applied to this problem, may serve to violate commonly accepted ethical frameworks such as those found in medical decision making, considerations of justice, and patient welfare. Subsequent chapters will address the ethical implications of various conceptualizations and the contested terrain of obesity in greater detail. Ascription of blame has implications both for societal acceptance of various interventions and for physician acceptance of particular interventions such as WLS. Chapter two will take up the history of nonsurgical and surgical weight-loss interventions, focusing on the benefits and burdens of each type of intervention along with their perceived acceptability based on conceptualizations of personal responsibility for obesity.

Notes

<sup>3</sup> Jay B. Brodsky and Luiz C. Lerner, "Anesthetic Concerns," in *Obesity Surgery: Principles and Practice*, ed. Cid Pitombo et al. (New York: McGraw Hill Medical, 2008), 84.

<sup>4</sup> Centers for Disease Control, http://www.cdc.gov/healthyweight/assessing/bmi/adult\_bmi/index.html; Henry Buchwald and Jane N. Buchwald, "Evolution of Surgery for Morbid Obesity," in *Obesity Surgery: Principles and Practice*, ed. C. Pitombo et al. (New York: McGraw Hill Medical, 2008), 4.

<sup>5</sup> A. Romero-Corral et al., "Accuracy of Body Mass Index to Diagnose Obesity in the US Adult Population," *International Journal of Obesity* 32, no. 6 (June 2008): 961-62; Francisco Lopez-Jimenez and William R. Miranda, "Diagnosing Obesity: Beyond BMI," *Virtual Mentor* 12, no. 4 (April 2010): 292; Paul Sebo et al., "Reliability of Doctors' Anthropometric Measurements to Detect Obesity," *Preventive Medicine* 47, no. 4 (October 2008): 391-92.

<sup>6</sup> Centers for Disease Control, http://www.cdc.gov/healthyweight/assessing/bmi/adult\_bmi/index.html.

<sup>&</sup>lt;sup>1</sup> Richard V. Burkhauser and John Cawley, "Beyond BMI: The Value of More Accurate Measures of Fatness and Obesity in Social Science Research," *Journal of Health Economics* 27, no. 2 (March 2008): 519–21.

<sup>&</sup>lt;sup>2</sup> Centers for Disease Control, December 23, 2010,

<sup>&</sup>lt;http://www.cdc.gov/healthyweight/assessing/bmi/adult\_bmi/index.html>; World Health Organization, November 20, 2010, http://apps.who.int/bmi/index.jsp?introPage=intro\_3.html.

<sup>&</sup>lt;sup>7</sup> Richard V. Burkhauser and John Cawley, "Beyond BMI: The Value of More Accurate Measures of Fatness and Obesity in Social Science Research," *Journal of Health Economics* 27, no. 2 (March 2008): 527-28; Thang S. Han, Naweed Sattar, and Mike Lean, "Assessment of Obesity and Its Clinical

Implications," in *ABC of Obesity*, ed. Naweed Sattar and Mike Lean (Malden, MA: Blackwell Publishing, 2007), 7.

<sup>8</sup> Burkhauser and Cawley, "Beyond BMI: The Value of More Accurate Measures of Fatness and Obesity in Social Science Research," 519-20.

<sup>9</sup> Garabed Eknoyan, "Adolphe Quetelet (1796–1874)," *Nephrology Dialysis Transplantation* 23 (2008): 48-50.

<sup>10</sup> Ancel Keys et al., "Indices of Relative Weight and Obesity," *Journal of Chronic Diseases* 25, no. 6 (July 1972): 329–43; Eknoyan, "Adolphe Quetelet (1796–1874)," 331.

<sup>11</sup> Garabed Eknoyan, "Adolphe Quetelet (1796-1874)," *Nephrology Dialysis Transplantation* 23 (2008): 48-50.

<sup>12</sup> Eknoyan, "Adolphe Quetelet (1796–1874)," 48-50; Keys et al., "Indices of Relative Weight and Obesity," 339-91; Romero-Corral et al., "Accuracy of Body Mass Index to Diagnose Obesity in the US Adult Population," 961-62

<sup>13</sup> Centers for Disease Control, http://www.cdc.gov/healthyweight/assessing/bmi/adult\_bmi/index.html.

<sup>14</sup> Centers for Disease Control, http://www.cdc.gov/healthyweight/assessing/bmi/adult\_bmi/index.html.

<sup>15</sup> Caroline S. Fox et al., "Abdominal Visceral and Subcutaneous Adipose Tissue Compartments Association with Metabolic Risk Factors in the Framingham Heart Study," *Circulation* July 3 2007: 40-6.

<sup>16</sup> Han, Sattar, and Lean, "Assessment of Obesity and Its Clinical Implications," 6-7; A.M. Prentice and S.A. Jebb, "Beyond Body Mass Index," *Obesity Reviews* 2, no. 3 (August 2001): 143-46.

<sup>17</sup> Prentice and Jebb, "Beyond Body Mass Index," 143-46; Han, Sattar, and Lean, "Assessment of Obesity and Its Clinical Implications," 4-7.

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# Chapter Two: Obesity Treatment Options, Their Underlying Rationales, and the History of Surgical Weight Loss Interventions

To appreciate the different responses weight loss interventions have received from clinicians, overweight individuals, and society in general—it is important to understand the developmental trajectories of three categories of intervention for weight loss: behavioral or lifestyle-focused interventions, pharmacological interventions, and surgical interventions. This chapter's section A examines the history of several types of behavior or lifestyle-mediated technologies for weight loss. The following lifestyle interventions will be considered: self-help groups, commercial weight loss programs, and physician-supervised weight loss. This chapter's section B concludes by surveying the over fifty-year history of weight loss surgery (WLS), along with an exploration of exceptionalism as applied to surgical technologies for weight loss.

Development, support for, and acceptance of different technological innovations—and the term "technology" is used in the sense Nikolas Rose employs—are obviously influenced by culturally normative factors. Nikolas Rose, sociologist, defines technology broadly as an assemblage of social and human relations within which equipment and techniques are only one element. "Technology, here, refers to any assembly structured by practical rationality governed by a more or less conscious goal…hybrid assemblages of knowledge's instruments, persons, systems of government, building spaces, underpinned at the programmatic level by certain presuppositions and assumptions about human beings."<sup>1</sup>

In this sense, even behavioral interventions, from talk therapy to support groups which encourage weight loss, may be understood and analyzed as weight loss

technologies. A discussion of various weight loss interventions supported by Rose's conception of technology permits an analysis of the ethical frameworks which provide the scaffolding for each type of technology. Specifically, the role of cultural norms, power relationships, various perspectives on the technology itself, as well as the products of these weight loss technologies, can be engaged.<sup>2</sup> This conceptualization of "technology" emphasizes the normative basis and hierarchical structuring of technological intervention. To understand and criticize these culturally influenced weight loss technologies, it is important to have knowledge of the basic methods of weight loss intervention, the history of their development, and the particular normative frameworks grounding each of these treatment options.

Currently in the United States, the most commonly employed advice for those seeking to lose weight has been to reduce caloric intake and increase physical activity.<sup>3</sup> Weight loss, simply put, is achieved either when fewer calories are consumed than are expended, or when more calories are burned than are consumed.<sup>4</sup> It appears to be a simple issue of mathematics: "more out, less in" will indeed lead to weight loss. Specifically, in order to lose one pound, it is necessary for an individual to either expended or reduce the number of calories consumed by approximately 3,500.<sup>5</sup>

As discussed in chapter one, in post–World War II America, the problem of obesity began to surface.<sup>6</sup> This burgeoning problem led to several nonsurgical methods to support this seemingly simple equation for weight loss. When diet and exercise changes alone were unable to ameliorate obesity, pharmacological and surgical possibilities began to be developed and utilized with varying degrees of success and risk. The history of

various interventions, along with their normative underpinnings, is explored below. The following section examines various nonsurgical weight loss interventions.

A. History of Nonsurgical Weight Loss Interventions

The following section addresses the history of various types of nonsurgical weight loss technologies. Each of these technologies has been applied to the problem of obesity with generally low levels of sustained success. These technologies fall into four broad categories: self-help initiatives, commercial weight loss programs, weight loss drugs, and physician supervised weight loss by individuals. The four subsections below take up each of these technologies, beginning with a review of self-help initiatives.

# A.i Self-Help Initiatives

Several self-help initiatives have evolved in an effort to help overweight or obese individuals lose weight. One such self-help group, TOPS Club, Inc., was founded in 1948 by Ester Manz and is still in existence. The approach of TOPS, which stands for Take Off Pounds Sensibly, is to encourage healthy lifestyles through weight management and peer support of "good" behaviors.<sup>7</sup> The norm-governed assumptions informing the TOPS program are that weight control is fundamentally an individual responsibility and that weight is controllable by the individual with the proper application of personal willpower and group support. Participants are taught that individual motivation, willpower, personal actions, and the development of patterns of appropriate behaviors are responsible for their success or failure at weight loss.<sup>8</sup> Overweight is thus the result of previous and present failures of willpower and motivation. Participants must accept, at least to some degree, this assignment of backward-looking responsibility in order to access the program's support of forward-looking, responsible behaviors. Upon such acceptance, appropriate

behaviors and individual changes in motivation and action are socially reinforced by other members within the organization. Weight loss, according to this organization, can best be supported through a group mentoring process.

The TOPS organization is comprised of individual chapters, each with voluntary leadership, through which members receive positive reinforcement and encouragement.<sup>9</sup> This structure of motivation is designed to assist members in sticking to healthy food choices and exercise plans. There are modest costs associated with membership in TOPS, Inc., including annual dues for membership (approximately \$26.00) along with an additional monthly fee paid to the local chapter in which members participate (approximately \$5.00). The annual membership fee provides a variety of goods, services, and events that are designed to reinforce members' commitment to weight loss. Some of the available options include a system of competitions, awards, and recognition for success in meeting weight loss goals; a variety of helpful tools, including The Choice Is Mine, a healthy lifestyle guide; retreats, rallies, and recognition events; and TOPS News, a membership magazine.<sup>10</sup> Local chapters offer weekly meetings to their membership. TOPS advertises that it is comprised of men, women, and children age seven and older. They report a membership of approximately 170,000 members in nearly 10,000 chapters throughout the United States and Canada.<sup>11</sup>

As is typical of self-help group formats, ongoing medical monitoring is not a requirement for members participating in this program. However, when members join, they are asked to consult with healthcare professionals to learn what is considered a healthy weight goal for them. Members are asked to share this information with an

official volunteer within the chapter who records this information, presumably to encourage member accountability and assist in the monitoring of progress.<sup>12</sup>

TOPS, Inc. has conducted research into obesity since 1966. Its website reports that TOPS has spent over \$6.5 million on developing and contributing to research on obesity and metabolism at the Medical College in Milwaukee.<sup>13</sup> However, the website reveals nothing about the complex associations among biologic, environmental, and lifestyle factors currently thought to be associated with the development and maintenance of overweight and obesity. This empirically informed and complex relationship has been borne out in much of the research on obesity.<sup>14</sup> Indeed, while biologic and environmental factors beyond individual control have been shown to contribute to the development and maintenance of obesity, the underlying philosophy of TOPS is that it is incumbent upon overweight or obese individuals to address the problem from within an individualistic framework of behavior modification.

Overeaters Anonymous (OA) is another popular self-help group option for weight loss. OA was founded on the twelve-step intervention platform of Alcoholics Anonymous (AA).<sup>15</sup> Both self-help groups (in addition to Narcotics Anonymous and Gamblers Anonymous) employ a progressive disease model. The OA program philosophy, which accepts obesity as a disease, seems to further a normative conception which allows that there are things affecting weight and weight loss beyond the immediate control of the individual.<sup>16</sup> OA explains obesity as the result of a compulsion and thereby focuses on the mental or psychological aspects within a bio-psycho-social model of disease. Similar to the TOPS program, OA effectively ignores the relevance of specific genetic or other biological factors associated with obesity. Departing from typical reliance on a disease

model, this program contends that the factors leading to overweight and obesity are a product of compulsion which can only be overcome by depending on the strength of the higher power.<sup>17</sup> In other words, this program seems to accept that the compulsive eating which can lead to overweight and obesity is part of a disease process (similarly, OA would describe anorexia and bulimia as the manifestation of compulsive eating amenable to its interventions) but utilizes dependence on a supernatural intervention or divine presence to facilitate resolution of the compulsions. This view blurs backward-focused causal and quasi-moral responsibility for obesity. Participants must accept that a failing or weakness in themselves resulted in their obesity and that only reliance on a higher power can overcome that failing.

OA utilizes the twelve steps and eight tools upon which AA is based.<sup>18</sup> These steps and tools are common among the Alcoholics Anonymous, Narcotics Anonymous, Gamblers Anonymous, and Overeaters Anonymous programs. These steps and tools, when properly used in the OA program, are designed to interrupt the disease process and provide an alternative way of coping with the compulsive desire to overeat, a desire which leads to overweight and obesity. The goal is to restore normal eating patterns by relying on the assistance of a "higher power" and on other group members' experience and support on a shared journey to change thought and behavior patterns, which will ultimately lead to changes in weight, restore health, and defeat obesity.

OA was founded by Roxanne S. several years after she attended a GA meeting with a friend in 1958. In 1960, determined to overcome her weight problem she, along with a neighbor and a fellow compulsive overeater, held the first meeting of the fledgling

OA. Currently it is reported that 6,500 groups meet across the world in any given week. OA reports 54,000 members worldwide working towards recovery.<sup>19</sup>

One of the primary traditions on which OA is established is that of anonymity at a public level.<sup>20</sup> Therefore it is difficult to obtain adequate demographic information regarding group membership. However, in 2010 OA undertook a membership survey as part of the organization's strategic plan. The survey was distributed to a small sample of members (n=2,400) in various parts of the world. This particular sample was chosen to receive the survey as it was thought to be representative of the larger membership. The survey asked questions related to the age at which food became a problem, the nature of the problem (compulsive overeating, anorexia, or bulimia), and various demographic questions. Survey responses revealed membership to be predominantly female, age fifty-six to sixty-five, married, white, and college-educated.<sup>21</sup> The average return rate was 36 percent with 836 of the 2,400 surveys returned.<sup>22</sup>

Although the social structure of individual OA groups and member participation are assumed to play a role in supporting weight loss efforts, as previously stated, overweight and obesity are themselves viewed as the results of an individual-level compulsive desire.<sup>23</sup> Unlike TOPS, which emphasizes personal responsibility for both the behaviors that result in becoming overweight and those that remedy the problem, OA urges members to accept the presence of a higher power that must be invoked to support individual efforts to overcome the compulsion to overeat.<sup>24</sup> OA states that it has "among its membership people of many religious faiths as well as atheists and agnostics," but OA is a spiritual program based on each members' personal interpretation of a "higher power."<sup>25</sup> Most members acknowledge that participation, and therefore the opportunity

for success in this program could be curtailed by an inability to accept some form of higher power. This would effectively limit the utility of the OA program for those who are religious nonbelievers.

OA interventions are based, first and foremost, on accepting powerlessness over food and acknowledging the strength of the higher power to overcome the powerlessness.<sup>26</sup> Acceptance of these factors, bolstered by the value of a shared journey with other compulsive eaters, allegedly enables members to overcome the compulsion with food. Only once the participant recognizes this utter powerlessness over food, and acknowledges dependence on a higher power, can the obese individual go on to learn new behaviors which support weight loss (e.g., portion control, making good dietary choices, getting enough exercise). Failure to utilize and draw adequate strength from one's higher power, however conceived by the individual, is conceptualized as a personal failure that is evidenced by ongoing weight issues. If obese individuals were truly to understand and utilize the strength of the higher power and accept their powerlessness over food, OA maintains, they would be successful and the weight problem would resolve.<sup>27</sup>

While there is anecdotal evidence regarding the efficacy of self-help groups for weight loss,<sup>28</sup> the private nature of such groups' activities does not permit the rigorous scientific evaluation needed to determine long-term effectiveness. Therefore, it is difficult to determine adequately the number of participants who have been able to achieve long-term, significant weight loss, to decrease or ameliorate health co-morbidities, and to improve other quality-of-life indicators. The efficacy of these self-help weight loss efforts

therefore remains largely unknown.<sup>29</sup> The following subsection discussed another often used technology for weight loss—commercial weight loss programs.

## A.ii Commercial Weight Loss Programs

Numerous commercial weight loss programs such as Weight Watchers, Jenny Craig, OPTIFAST, and Medifast combine both calorically restrictive food plans with various support mechanisms for individuals seeking to reduce their weight.<sup>30</sup> Generally, moralized norms of backward-looking responsibility, blame, and shame do not inform these programs. Instead the programs are informed by autonomy-oriented, take-chargeof-your-life values. A new and improved "you" is the product being sold. Assigning personal blame for overweight would be contrary to the positive, self-actualizing orientation of these commercial enterprises. Commercial weight-loss programs generally do not characterize obesity as resulting from personal failings or character flaws, but instead focus on cognitive-behavioral changes and the development of new habits.<sup>31</sup> These programs' individual-level intervention is almost entirely forward-looking, with little if any attention to the cause of obesity beyond the assumption that too many calories have been consumed and too few have been expended. These programs tend to acknowledge, albeit very simplistically, the biological factors associated with developing obesity. They seem to reflect little understanding, however, that not all obese people are created equal, and that even a program applied with equal diligence among participants can produce vastly differing results depending on a variety of factors, including genetic variation.

Unlike most self-help programs, there is some governmental oversight of proprietary programs. Commercial weight loss programs are regulated by the Federal

Trade Commission (FTC), not by the Food and Drug Administration (FDA) as might be expected given their health-related focus.<sup>32</sup> While the FDA oversees food safety and regulates drugs and medical devices, commercial weight loss programs fall under FTC jurisdiction because they advertise and therefore the veracity of their advertising claims may be evaluated by the FTC. The authority of the FTC is empowered to intervene when it believes that a program is making misleading or false claims. However, programs are not required to disclose individual or aggregate outcome measures of success or failure. FTC guidelines require only that commercial weight loss programs provide information in the following four categories: key programmatic components, qualifications of the staff, program costs, and any risks of treatment. In other words, it is difficult to adequately ascertain how effective a particular program or intervention is in assisting participants in losing excess weight.<sup>33</sup>

The three largest commercial weight loss programs in the United States are Weight Watchers, Jenny Craig, and LA Weight Loss.<sup>34</sup> Each offers moderately restricted diets in addition to behavioral counseling and motivational interventions to increase physical activity/exercise. These programs do not require or provide physician supervision; therefore they advocate that members with weight-related medical concerns should be monitored by their own physicians. Weight Watchers provides its services using group sessions, whereas the other two programs provide services to members through individual counseling sessions. Payment for services in the Jenny Craig and LA Weight Loss Programs is required upon initiation of the program, whereas payment in the Weight Watchers Program is made on an ongoing weekly basis. Of the three, only the

Jenny Craig program requires additional purchases of prepared and prepackaged meals and snacks.<sup>35</sup>

Of these three prominent commercial weight loss programs, only Weight Watchers has sponsored randomized controlled trials of its program in an effort to establish its effectiveness.<sup>36</sup> Even in this case, there have been few studies conducted. In one study, 423 participants were randomly assigned to attend the traditional Weight Watchers program or to participate in a self-help intervention that included two visits with the dietician. The results showed that participants in the Weight Watchers program had lost 5.3 percent of their initial weight at one year. Participants were able to maintain 3.2 percent of their weight loss at two years. This result was better than that realized by the participants in the group that had two visits with the dietician. Of that group, participants had maintained a loss of 1.5 percent at one year and 0 percent after two years. Weight Watchers members who attended the most meetings were able to maintain the greatest weight loss,<sup>37</sup> although obviously no causal effect of Weight Watchers meeting attendance can be assumed.

An important benefit of weight loss is the reduction of co-morbid disease. With regard to weight loss achieved by participants in Weight Watchers, it was found that the mean weight loss reported in the randomized controlled trials (5 percent) may be sufficient to "prevent or ameliorate weight-related health complications" for its participants.<sup>38</sup> The other two commercial weight loss programs have not been similarly studied, so adequate comparison of participant outcomes is not possible. Additional research should be undertaken to assess the outcomes of these programs with regard to

short- and long-term weight loss, maintenance of loss, and resolution of co-morbid disease states.

Programs such as OPTIFAST and Medifast utilize very-low-calorie (420 kcal/d) or low-calorie diet plans ( $\leq$ 800 kcal/d).<sup>39</sup> OPTIFAST originally offered the very-low-calorie diet (420 kcal/d) but currently recommends its participants utilize the low-calorie ( $\leq$ 800 kcal/d) diet plan instead. Mandatory medical supervision is built into the OPTIFAST program.<sup>40</sup> Medifast permits its participants to utilize either a very-low-calorie choice or the low-calorie choice, and its lack of medical supervision within the Medifast program may also be cause for concern as medical supervision has been shown to be critical to the safe use of very-low-calorie diets.<sup>41</sup>

Many randomized controlled research studies conducted in academic settings have examined either very-low-calorie or low-calorie diets. The initial results of programs utilizing these diets are promising with regard to short-term results. During the first three to six months, participants can expect to lose approximately 15–25 percent of their starting weight. However, very-low-calorie diets and low-calorie diets are often difficult for participants to maintain over a long period of time. For this reason, these plans tend to have high attrition rates.<sup>42</sup> Therefore, it is difficult to assess long-term sustained weight loss and the improvements in or resolution of weight-related comorbidities associated with such severely calorie-restricted diets. Nevertheless, with the percentage of weight initially lost, it is plausible that if even a small portion of the initial weight loss is maintained there might be overall improvements in co-morbidities.<sup>43</sup>

Costs for participating in these programs can be prohibitive. OPTIFAST can cost as much as \$1,700 to \$2,200 for the first three months alone.<sup>44</sup> Participation in Medifast

is far less expensive, in part due to the absence of mandatory medical supervision within the program. The cost for Medifast is approximately \$840 for a three-month period.<sup>45</sup> Even at that reduced rate, the cost may well be out of reach for many potential participants, as the program cost is generally not reimbursed by insurance. While program participation and thus severe restriction in calories are not meant to be sustained over the participant's lifetime, it is necessary to maintain the restrictions until the excess weight is lost. Participants are then taught how to increase their daily caloric consumption, with the goal being maintenance at the new healthier weight.

# **A.iii Pharmaceutical Interventions**

Seeking weight loss through the use of anti-obesity drugs has become commonplace in the United States.<sup>46</sup> The development of pharmacological interventions for the treatment of obesity reflects a dramatic shift in the normative framework undergirding efforts to ameliorate obesity. By employing a branch of medicine (pharmacology) to develop solutions for obesity and its subsequent co-morbidities, there appears to be an acknowledgement of factors beyond the individual's immediate control. Disordered biological systems, instead of disordered thinking or flawed character, are seen as being foundational components of an individual's obesity problem. The pharmacological focus is almost entirely forward-looking and results-oriented. Only those developing the interventions need be concerned with obesity's biological causal factors, and even these need not be entirely understood so long as the pharmacological intervention produces the desired effect. This particular normative view represents an evolution, as the approach is nonpunitive and nonmoralizing with regard to the obese person's weight. This evolved, normative view of obesity's causal factors and of obese

individuals requires and justifies particular biomedical-based interventions to address factors contributing to obesity. Drug manufacturers insist that pharmacological interventions must coexist with behavioral and lifestyle changes to facilitate successful outcomes.<sup>47</sup> This view possibly reflects a greater understanding and acceptance of the multi-factorial nature of obesity which includes genetics, physiological systems, environment, and lifestyle. According to the Department of Health and Human Services, "prescription weight loss medications should be used only by patients who are at increased medical risk because of their weight. They should not be used for 'cosmetic' or 'vanity' weight loss."<sup>48</sup>

The reason for this distinction between health-related and cosmetic or vanity weight loss is based on the increased risk profile associated with pharmaceutical interventions. The development of pharmacological interventions for significant weight loss has, thus far, unfortunately been hampered by dangerous, life-threatening side effects as well as limited long-term success.<sup>49</sup>

The therapeutic mechanisms of anti-obesity drugs fall into three categories. Some work as appetite suppressants, others increase body metabolism, and a third category interferes with the ability of the body to absorb specific nutrients in food such as fats (called lipase inhibition).<sup>50</sup> The anti-obesity drugs on the market in 2009 included Xenical, (a lipase inhibitor available in prescription-dose Orlistat), Alli (a lipase inhibitor available over the counter as low-dose Orlistat), and Meridia (an appetite suppressant). In 2009, global sales for each of these drugs were between \$300 and \$350 million. It is estimated that an additional \$300 to \$600 million in sales were generated by generic products such as phentermine, amphetamines, and sibutramine.<sup>51</sup> Due in part to the

globally increasing problem of obesity and to recently published guidelines which recommend adjunctive drug treatments to improve weight loss in patients with a BMI of  $\geq$ 30, or a BMI of 27–29.9 (if medical co-morbidities are present), it is highly plausible that the use of anti-obesity pharmaceutical treatments will continue to increase.<sup>52</sup> It is also likely that pharmaceutical companies will continue to work to develop more efficacious weight loss drugs. However, one significant problem with anti-obesity drugs thus far has been properly determining their risk-benefit ratio. Several drugs which were initially approved for use have since been pulled from global markets due to significant lifethreatening side effects which seriously overshadow the prospect of patient benefit.<sup>53</sup>

The use of pharmacology to reduce weight began in earnest in the 1990s.<sup>54</sup> The mid-1990s saw doctors prescribing two drugs, either Redux or a combination of fenfluramine and phentermine, commonly known as fen-phen. The medical community was very optimistic following the approval of this drug combination in 1996 because it seemed to produce significant weight loss. Reflective of the optimism that this drug engendered, *Time* magazine reported in a cover story titled "The New Miracle Drug?" that "just three months after the introduction of Redux, doctors are writing 85,000 prescriptions a week."<sup>55</sup> But the optimism was short-lived. In 1997 Redux was removed from the market when the combination was found to cause severe and sometimes deadly damage to the heart valves, pulmonary atrial hypertension, and primary pulmonary hypertension is suffered in 1 in 500,000 people normally, but occurred in 1 in 20,000 fen-phen users, indicating a greatly increased risk of suffering fen-phen-related deaths.<sup>56</sup> The lethal side effects of this anti-obesity drug combination led to one of the

largest monetary settlements ever awarded.<sup>57</sup> Currently, phenterimine (prescribed on its own or in combination with other drugs) is still available, as this drug has been shown not to have the same risks as its counterpart.<sup>58</sup>

Until recently there were only a few FDA-approved medications to promote weight loss: phentermine, sibutramine, and Orlistat.<sup>59</sup> However, in recent months the FDA has approved two new drugs for weight loss, Belvig and Osymia.<sup>60</sup> These new offerings were approved in the summer of 2012 and will be discussed below. Of the older-generation FDA-approved weight loss medications, all but Orlistat are considered to be appetite suppressants. Orlistat's mechanism of action is to block the absorption of approximately 30 percent of ingested fats.<sup>61</sup> Phentermine, diethylpropion, and phendimetrazine are approved for adult short-term use (up to twelve weeks). Orlistat is approved for longer-term use (up to one year) and is approved not only for adults but for children age twelve and older.<sup>62</sup> These medications are considered to be moderately effective in assisting (in combination with changes in diet and exercise) with weight loss. Average users lose anywhere from five to twenty-two pounds over a one-year period.<sup>63</sup> While these numbers may not be considered significant for someone with a hundred pounds or more of excess weight, these medications have been shown to assist in modest weight reduction.<sup>64</sup> The long-term health effects of using weight loss drugs have not yet been determined. The longest study conducted was a four-year study on the drug Orlistat. This study found that Orlistat was safe for usage up to one year. Other medications have been studied for shorter durations of between six and twelve months.<sup>65</sup>

Additional drugs have been shown to promote short-term weight loss in clinical studies and are being prescribed off-label. These drugs include some commonly used to

treat depression, seizures, and diabetes. Drugs such as bupropian (for depression), topiramate or zonisamide (for seizure treatment), and metformin (for diabetes treatment) have been prescribed for weight loss. Additionally, combinations of drugs are being prescribed as adjunct treatment for weight loss. These drug combinations generally utilize two drugs, such as a drug for depression combined with another drug, and are prescribed off-label as well.<sup>66</sup>

In response to continuing concerns around obesity, pharmaceutical companies are continuing to work on new formulations and new drug combinations. Recently, several drugs have been submitted to the FDA for approval. These include Onexa (phenterimine/toperimate), Lorquess (locaserin hydrochloride), and Contrave (Naltrexerone/bupopian). None of these newer-generation drugs received FDA approval when it was sought during 2010.<sup>67</sup> However, since their original FDA review, two of those drugs have been approved.

Belviq was approved June 27, 2012, and Qysmia, formerly called Qnexa, was approved just under a month later on July 17, 2012. These are the new first diet drugs to be approved by the FDA in almost thirteen years. Both are intended to be used in combination with a reduced-calorie diet and exercise regime for weight management.<sup>68</sup>

Belviq (lorcaserin hydrochloride) is approved for use in adults with a BMI or 30 or greater (obese) with no co-morbidities, or in adults with a BMI of 27 or greater (overweight) with at least one weight-related co-morbidity. Belviq works as an appetite suppressant by activating the serotonin 2C receptor in the brain. The activation of this receptor helps the person to feel full sooner after eating smaller amounts of food, leading to weight loss. Prescribing appropriate dosage levels of Belviq is important. At dosage

levels intended for weight loss, Belviq works as described above.<sup>69</sup> At higher dosages it can turn on slightly different serotonin switches, the same as those responsible for the effects of hallucinogens (such as LSD) and other addictive drugs which can be abused. Higher doses of Belviq than intended for weight loss may trigger these switches, leading to both addiction and effects similar to hallucinogenics. For this reason, Belviq is being evaluated to determine whether it should be considered a controlled substance. If it is deemed a controlled substance, it will only be available through certified pharmacies when it does become available, which is expected to be later this year.<sup>70</sup>

The safety of this drug was evaluated in three randomized placebo controlled trials.<sup>71</sup> Combined, these trials included approximately eight thousand participants. Participants were either overweight or obese and could have a diagnosis of type 2 diabetes or be diabetes-free. Participants were evaluated for 52 to 104 weeks. Compared with placebo, treatment with Belviq for up to one year was found to produce an average weight loss of 3 to 3.7 percent. For those without type 2 diabetes, 47 percent realized a weight loss in the 5 percent range, as opposed to 23 percent who received placebo. In participants with type 2 diabetes, 38 percent treated with Belviq saw a weight loss of 5 percent, while only 16 percent who received placebo saw similar weight loss totals. Additionally, Belviq was found to produce positive changes in glycemic control in those with type 2 diabetes.<sup>72</sup> For practical purposes, an obese person weighing 275 pounds and using Belviq for a year in combination with diet and exercise, using the high estimate of 5 percent weight reduction, would lose approximately 14 pounds during the year. After one year they would weigh in at around 261 pounds. While any weight reduction might reduce the potential damage of co-morbidities, this modest weight reduction seems

unlikely to be able to ameliorate either the physical or social co-morbidities experienced by those seeking to significantly reduce their weight and hence potential further lifethreatening damage to bodily systems. Moreover, it is recommended that Belviq be used by patients for the rest of their lives.<sup>73</sup>

It is recommended that Belvig be discontinued if after twelve weeks of treatment patients fail to lose 5 percent of their body weight. Belviq is contraindicated for pregnant women as it can cause harm to the fetus, and should not be used in combination with certain other medications such as some that treat migraine headaches and depression. The primary concerns with regard to this drug are that it may impair the user's attention or memory. Additionally, other common side effects experienced by nondiabetic patients included: headache, dizziness, fatigue, nausea, dry mouth, and constipation. In patients with type 2 diabetes, common side effects were low blood sugar, headache, back pain, cough, and fatigue. There is some further concern over the potential for other, possibly more serious side effects. This includes the potential for heart valve damage, based on past experience with fen-phen, the combination of fenfluramine and dexfenfluramine. As previously stated, this drug was ultimately removed from the market. Belviq has a similar mechanism of activation to fen-phen—both activate serotonin receptors, though in different locations. Fen-phen, which acted on the serotonin 2B receptors (Belviq acts on serotonin 2C receptors), was ultimately found to cause dangerous and life-threatening, irreversible heart valve damage. Heart valve function has been evaluated in Belvig. It was found that there was no statistically significant difference in the development of heart valve abnormalities between Belviq and placebo.<sup>74</sup> However, the FDA has cautioned that Belviq should be used carefully in patients with congestive heart failure. Belviq clinical
trials did not include patients with serious valvular heart disease, and so the manufacturer of the medicine, Arena Phamacueticals in Sweden, will be required by the FDA to conduct a series of post- market studies which include evaluation for negative long-term cardiovascular outcomes and to assess the risk for major adverse cardiac events such as heart attacks, stroke, or valve damage.<sup>75</sup>

Qysmia was first introduced to the FDA in 2010 as Qnexa but was initially rejected due to concerns about serious potential side effects.<sup>76</sup> The drug is a combination of phentermine, which acts as an appetite suppressant, and topiramate, an anti-convulsant also found to cause weight loss in obese patients and produces better control of blood glucose and high blood pressure. Each of these drugs has been approved by the FDA for other uses, and each has been on the market for quite some time. Phentermine was once part of the drug known as fen-phen (see above). The combination found in Qysmia is not thought to have the same devastating side effects, though as with any drug, side effects do exist.<sup>77</sup> These are discussed below.

Qsymia was found in clinical trials to assist those taking it in reducing their body weight by about 10 percent, and the anorectic feature of this weight loss drug reportedly works at the prescribed dosage for several weeks.<sup>78</sup> The seemingly short duration of effectiveness concerns some who fear that as the anorectic effect diminishes, patients may seek or self-prescribe higher dosages of medication to get the same effect, thereby potentially causing themselves unforeseen and potentially irreversible damage. In the case of phentermine, its known side effects include spikes in heart rate and blood pressure. Its mechanism of action appears to ramp up the metabolism with similar physiological reactions to experiencing fear or excitement, potentially leading to heart

palpitations in those who take this drug. The other active ingredient found in Topamax, topiramate, reportedly causes a fairly high incidence of confusion, memory loss, concentration problems, and psychomotor slowing, resulting (among other things) in difficulty finding the correct words. Topiramate also carries warnings for depression and mood problems, fatigue, and sleepiness. Suicidal ideation is listed as one of the more concerning side effects of this portion of the weight loss drug cocktail. Generally, these side effects aren't considered as serious as the potential for heart damage, but they are significant in that they are experienced by a large percentage of those who take the drug.<sup>79</sup> It is reported that 42 percent of those taking topiramate reported one or more cognitive or mental problems. Moreover, it has been found that babies born to mothers who took topiramate have a higher incidence of cleft palate.<sup>80</sup> The potential side effects including the presence of memory loss (generally short-term) is irreversible and possibly quite troubling to the individual taking the medication and those around him or her.

Since each of the drugs found in Qysmia has been on the market separately, the rigorous testing which would be mandated for a novel drug is not needed for approval of this drug combination. The FDA is considering requiring post-approval testing of this new weight loss drug combination to ensure that heart damage is not found to be disproportionately burdensome among those who are taking Qysmia. With an anticipated weight loss of up to 10 percent of body weight, this drug may prove valuable to those who use it, at least in the short-term. As there is no long-term data available on its use and its ability to effect sustained weight loss. Additional weight loss drugs are set to be considered by the FDA in the near future. In all likelihood these drugs, like any technological intervention, will carry the potential for troubling, possibly irreversible side

effects for those who use them. The question will of course be whether the risks and side effects, both reversible and not, are worth the potential benefits of weight loss, for whatever period of time it is sustained.

There has been significant anticipation among those who participated in the various clinical trials of each of these newly approved drugs but who have not been able to access them since the end of the trials. Additionally, physicians seeking effective next-generation drug interventions for their patients are eager to have new products upon which to draw.<sup>81</sup> According to the FDA, there appear to be sufficient data to warrant approval of these medications to aid in the fight against obesity. However, both of these drugs have potentially irreversible and concerning side effects, both require patients to remain on them for the duration of their lives, and both have only short-term outcome data to assess the long-term risk of harm or benefit to those taking the medication. Moreover, the anticipated amount of weight loss appears to be modest for most.<sup>82</sup>

What seems apparent, however, is that pharmaceutical companies will continue to seek the magic pharmacological bullet for eliminating obesity which would provide significant financial remuneration as well as assisting to eliminate a thorny and seemingly increasing global problem. In addition to past and present risk-benefit concerns when using pharmacological interventions, the development and use of effective nextgeneration pharmaceutical interventions may be hampered by misunderstanding and misuse of the drugs that are developed. Some overweight individuals may employ pharmacological interventions without the recommended interventions in diet/exercise and lifestyle, thereby rendering the interventions less effective. Yet social attitudes may also plague the realistic and nonmoralized acceptance of such pharmaceuticals. Some

may view use of weight loss drugs as an inappropriate "quick fix" for weight loss. Rather than viewing weight loss drugs as part of an overall treatment plan, much as antidepressants can enhance the effectiveness of psychotherapy and facilitate development of different cognitive and behavioral patterns, the weight loss drugs may be used by some and criticized by others as an easy solution to a complex, multi-factorial condition. The societal conception of even effective weight loss drugs with a positive risk-benefit profile as a "quick fix" or an "easy way out" may decrease the acceptability of the drugs' usage among those who may indeed benefit from them.

## A.iv Physician-Supervised Weight Loss Interventions

Safe and effective pharmaceutical intervention, as well as some features of commercial and self-help weight loss programs, such as nutritional counseling, could be a part of physician-supervised weight loss interventions. Currently, however, "physician supervised weight loss interventions" refers to primarily to behavioral counseling by physicians, usually in primary care settings, along with monitoring of weight lost.<sup>83</sup> The U.S. Preventative Services Task Force has recommended that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral interventions (at least two visits per month for the first three months) to promote sustained weight loss for obese adults.<sup>84</sup> Additionally, the American Medical Association (AMA) and the American College of Physicians (ACP) have published guidelines for how clinicians might best manage this task with their patients.<sup>85</sup> These guidelines suggest that physicians should engage the topic of weight with patients routinely in the normal course of conducting an office visit. Patients who are at a healthy weight should be encouraged to maintain the lifestyle supporting that weight. For those who are in danger of becoming

overweight, concrete suggestions should be provided regarding dietary changes and increases in exercise, which would reduce the risk of becoming overweight. Conversations should also include information on the potential for developing weight-related co-morbidities. For those currently overweight or obese, regular counseling on dietary changes and modest increases in activity should be encouraged. Adjunctive pharmacological therapies should also be considered for those who have been unsuccessful with dietary changes and increased activity alone.<sup>86</sup> It is suggested that the focus be on achieving modest weight loss goals.<sup>87</sup>

The placement of such behavioral counseling interventions within the healthcare setting explicitly acknowledges the potential importance of as yet unidentified medical interventions to effect long-lasting weight changes which serve to improve overall patient well-being. The focus in primary care physician (PCP)–provided intervention is on behavior, specifically on assisting patients in making positive and sustainable behavioral changes.<sup>88</sup> Like most psychotherapeutic and especially cognitive behavioral counseling, this approach is forward-looking and solution-focused, eschewing attributions of personal blame for an individual's current overweight condition. A limitation of this individual-level intervention is that it generally does not involve exploration or resolution of factors outside of those which are primarily behavioral in nature. It fails to consider causal contributions either at a broader social level or at the level of individual genetics and physiology.

Tsai and Wadden synthesized several studies of PCP—provided weight loss interventions and concluded that practitioners and researchers know little about the efficacy of behavioral weight loss interventions that can be delivered in primary care

practice.<sup>89</sup> All studies included in the review were randomized controlled trials which met CONSORT criteria used to assess the overall quality of a study. One type of study reviewed utilized behavioral counseling conducted either by the PCP directly or by another provider (e.g., nutritionist or dietician) working in the PCP office. The amount of weight lost by patients participating in the low- to-moderate-intensity behavioral counseling efforts was not statistically significant—defined as  $\geq 5$  percent of initial weight.<sup>90</sup> The authors note that "current evidence does not support the use of low-tomoderate-intensity physician counseling for obesity, by itself, to achieve clinically meaningful weight loss."91 Two studies reviewed met criteria for being both randomized controlled trials and providing behavioral counseling of higher intensity (at least twice a month). Of these two studies, in only one did subjects achieve clinically significant weight loss (7.7 kg). The other study which provided high-intensity behavioral counseling produced an average weight loss of 4.3 kg, which is not considered clinically significant weight loss.<sup>92</sup> The authors conclude that research on the management of obesity in primary care is simply not yet advanced enough to provide data that may improve the provision of effective clinically significant weight loss services within this venue. The authors further point out that "without effective therapies, greater resources in their practices, and more adequate reimbursement, PCPs alone cannot be expected to provide effective weight management for all of their patients who require it.<sup>93</sup>

In the section below weight loss interventions which utilize a higher level of physician technical skill along with the application of technology will be addressed. These interventions are broadly termed weight loss surgical interventions or bariatric

surgery. As the technology has evolved significantly since its initial use the review below focuses on improvements in technique and outcomes since their use began.

B. History of Surgical Interventions for Weight Loss

Similar to the genesis of pharmacological interventions, the application of medical knowledge and highly specialized medical skill has also been employed in the development of surgical weight loss interventions. Surgery for weight loss began in the 1950s before the problem of obesity had reached its present proportions and become the public health concern—some would say crisis—which it reportedly is today.<sup>94</sup> The use of laparoscopic surgical interventions has grown exponentially in the years since its introduction. It is estimated that approximately 200,000 people undergo bariatric surgery of some sort every year.<sup>95</sup>

Since the first WLS was performed, over fifty and possibly as many as one hundred variations of the surgery have been done.<sup>96</sup> The surgical interventions currently available fall into three broad categories.<sup>97</sup> The first category includes purely restrictive interventions, which reduce the capacity of the individual to ingest food by making the stomach pouch smaller.<sup>98</sup> A second category includes primarily malabsorptive interventions. In this type of procedure, the individual's anatomy is altered so that the body is no longer able to absorb all of the calories and nutrients which are provided by the food ingested. In this way some nutrients are lost along with a portion of the calories, thereby reducing the individual's overall absorption.<sup>99</sup> The third surgical variation incorporates both restrictive and malabsorptive properties.<sup>100</sup>

#### **B.i Early Surgical Interventions**

The following subsections discuss the progression and evolution of early surgical interventions for weight loss. The discussion will reveal improvements both in technique and patient outcomes since those first surgeries. The discussion will begin with a review of the earliest documented procedures.

B.i.a The 1950s—The first documented bariatric surgical procedures

By the early 1950s, years of clinical observation had shown physicians that a shortened gut leads to weight loss. Physicians began to wonder whether short-gut might be induced as a treatment for those who were morbidly obese.<sup>101</sup> The most noteworthy clinical observations had come from surgeries dating as far back as 1884 on patients who required surgery to repair gastric ulcers. For these patients, a portion of the gastrointestinal system was bypassed or shortened to remove the diseased tissue. From coincidental clinical observations of subsequent weight loss came early attempts to harness this surgical side effect. The use of this clinical observation to develop surgical options for the treatment of people with obesity turned a negative and unintended side effect into a potential medical benefit for an unrelated population of patients.

The first effort at surgical weight loss intervention has been attributed to Victor Henrikson of Sweden. He published his efforts in 1952 in the *Journal of Nordisk Medicine*. His article was translated as "Can Small Bowel Resection Be Defended as a Treatment for Obesity?" in 1994.<sup>102</sup> In this article Henrikson briefly and rather unscientifically, by modern standards, describes a small bowel resection performed on a "thirty-two-year-old woman suffering from obesity, constipation, something that slowed her metabolism (without myxedema) and the inability to complete a weight loss program successfully."<sup>103</sup> By his own admission, the surgery had a "numerically bad result" in that the patient did not lose weight from the surgery as hoped and in fact reportedly weighed two kilograms more fourteen months postoperatively than she had preoperatively. Henrikson further reported, however, that the patient was, "subjectively speaking, content, and feels healthy and energetic."<sup>104</sup> This initial pioneering effort was the first attempt at utilizing a bariatric procedure to induce weight loss and reduce co-morbidities.

In the United States, the first surgical intervention performed on a human was a malabsorptive procedure which was only briefly mentioned in a veterinary publication discussing the small intestines of dogs. In that 1954 article, a brief reference was made to a patient who had received a jejunoileal bypass (JIB, a malabsorpitve procedure) for weight loss.<sup>105</sup> In fact, the 1950s ended without any detailed published report of the first American surgeries, their outcomes, or the specific procedures done. The lack of publication on this surgical intervention is thought to "reflect a lack of interest by surgeons and others in this concept."<sup>106</sup> No reason for this perceived lack of interest is proposed. Perhaps these efforts were seen as having limited use, as the number of patients for whom this intervention might be efficacious was minimal at the time. Perhaps the lack of interest in surgical weight loss interventions was a product of a societal view that overweight and obesity were primarily caused by personal moral failings or character defect on the part of the patient, and therefore medical intervention in obesity would be as foreign as employing Antibuse to treat alcoholism, which was also perceived at that time as a problem of weak will and poor character. The seriousness of the surgical side effects, along with the rudimentary knowledge base of best practices at this time, made the widespread discussion and utilization of this option premature.<sup>107</sup>

B.i.b The 1960s— Attempts to reduce side effects and standardize pouch size

The next decade saw continued evolution of the surgical interventions available. Efforts undertaken during this time period were primarily focused on reducing the deleterious side effects of the surgery, which often necessitated its reversal, and on standardizing the size of the remaining stomach pouch. Both malabsorptive procedures and restrictive procedures evolved during the 1960s. The primary operation at the beginning of this decade was the continuation of the JIB surgery. During this decade, numerous surgeons were involved in developing surgical variations on a theme in an effort to reduce the debilitating side effects of this type of surgery.<sup>108</sup> Side effects were so serious that they often necessitated reversal of the surgery, which also reversed any weight loss the patients had seen.<sup>109</sup> The goal of the surgical interventions developed during this period was to achieve the obese individual's desired weight loss without causing him or her to overshoot the weight loss target, which would then likely require an additional surgery to restore more typical gastrointestinal functioning once the patient had achieved ideal body weight. It was not uncommon in the early years for two surgeries to be required. One surgery was to initiate the weight loss, and a subsequent surgery was performed to halt the weight loss and restore more typical function once the nimiety of weight had been lost. In 1969 surgeons Payne and DeWind reported that "we and others have tried to develop a technic [sic] which could be applied with safety and would avoid the necessity of a second operation to restore intestinal continuity with consequent serious weight gain."<sup>110</sup>

Another surgical option which evolved during the latter 1960s was both malabsorptive and restrictive. This surgery, done by Mason and Ito at the University of

Iowa, involved reducing the size of the stomach pouch in addition to bypassing a portion of the small intestine. The efforts of Mason and Ito are marked in weight loss surgical history as the original gastric bypass procedure. The gastric bypass surgery decades later "easily supplanted the jejunoleal bypass but was not free of problems."<sup>111</sup> Complications from this surgical variation included iron deficiency, anemia, dumping (rapid gastric emptying), vitamin malabsorption leading to secondary medical problems, increased potential for bowel obstruction that could potentially cause rupture if left untreated, and loss of ability to visualize the bypassed parts of the stomach.<sup>112</sup> Variations on a surgical theme focused on determining the correct size to which the stomach pouch should be reduced. Stomach pouch alterations during this time were either too large or too small. By the end of the decade, the first standard size (50 ml) was recommended. At the end of the 1960s, the JIB surgery was still the most prominent option, but that trend would eventually change.<sup>113</sup>

The 1960s saw more extensive pools of patients receiving surgical weight loss interventions. Patient outcomes were followed more closely, with various surgical techniques and the individual case outcomes being compared against each other in an effort to discern more scientifically best patient outcomes, reduce risk, and maximize patient benefit.<sup>114</sup>

In applying the bioethics and medical calculus of benefits versus burden, the benefits did not seem to outweigh the burdens for patients at this time because the side effects of the surgery made typical gastrointestinal functioning almost impossible for the patient post-surgery.<sup>115</sup> Additionally, since the complications were potentially life-

threatening, the intervention often had to be reversed, and any gain seen was eventually lost as patients regained their formerly obese status.

## **B.ii Surgical Interventions for Weight Loss Refined**

Following on the footsteps of the earliest weight loss surgeries which often produced unfavorable results and side effects for patients those earliest interventions began to be improved. Increased skill in technique as well as changes in the tools used to conduct the surgery began to produce superior outcomes. The following subsections explore various areas of improvement in technique, reductions in side effects, and overall patient outcomes.

# B.ii.a The 1970s—New procedures developed

The volume and speed of development of surgical treatments for weight loss increased during 1970s. The efforts of this decade included the development of a new malabsorptive procedure called the biliopancreatic diversion (BPD) and work done on various ways to partition the stomach to maximize patient outcomes.<sup>116</sup> Additionally, refinements to established malabsorptive and restrictive surgeries continued, the procedural forerunners of what would become gastric banding took place, and modern malabsorptive procedures were developed.<sup>117</sup> Specifically, additional work was done to improve technique in the JIB surgery in an effort to reduce complications. Ultimately however, during this decade, the JIB surgery was supplanted by a different malabsorptive surgery—the biliopancreatic diversion. The primary work done on this surgery was performed by Dr. Scopinaro.<sup>118</sup> One of the goals of this new surgical technique was to induce a state of malabsorption without the potentially dire side effect seen in the JIB of

bacterial overgrowth which led to serious, sometimes life-threatening liver damage. In this surgery,

"bile and pancreatic fluids released into the duodenum to digest food and break down fats, carbohydrates and proteins are diverted away from ingested food hence the name biliopancreatic diversion. The digestive enzymes eventually join the ingested food—but at a point in the distal small intestine where there is much less chance for complete breakdown and absorption."<sup>119</sup>

BPD requires the physical removal of a large portion of the stomach, up to 70 percent. The side effects of this surgical procedure also had many unappealing and life-limiting side effects which made the surgery an unattractive option to patients who suffered from undigested fats which cause gas and loose, foul-smelling bowel movements.<sup>120</sup>

During this decade, work by Alden and Griffen altered how the stomach was partitioned. These efforts built on the earlier work of Mason from the previous decade.<sup>121</sup> The modifications to this malabsorptive/restrictive surgery, called the Roux-en-Y gastrointestinal bypass, allowed patients to achieve the same levels of weight loss as the JIB surgery with fewer and less serious complications. The modifications were reported to have changed the face of bariatric surgery and for the next two decades established gastric bypass as the dominant operation in this field.<sup>122</sup> Mason turned his work towards restrictive operations during the 1970s. His work during this time was on a purely restrictive operation called gastroplasty, which partitioned the stomach using the newly introduced mechanical staplers. These operations were designed to avoid the complications of the JIB, but this purely restrictive bypass did not seem to result in sustained or satisfactory long-term weight loss.<sup>123</sup>

During the same period, the procedural forerunners of what would become gastric banding took place. Wilkinson placed the first nonadjustable mesh band around a portion

of the stomach to separate the upper portion of the stomach from the lower portion. While this surgery was not successful in the long run, as the upper pouch eventually stretched and permitted patients to ingest larger quantities of food, variations on this theme would advance and become prominent several decades later.<sup>124</sup>

Other innovations in the 1970s attempted to alter the lateral hypothalamus to cause weight reduction. Efforts by Quaade et al. in 1974 were described as "stereotaxic stimulation and electocoagulation of sites in the lateral hypothalamus."<sup>125</sup> These efforts produced transient results, but the weight lost was significant in the short-term. Literature on the use of jaw wiring as an intervention for weight loss, although not specifically surgical, began to be seen during this decade as well.<sup>126</sup>

# B.ii.b The 1980s—Gastric bypass surgery: variations on a theme

The scientific advancement of 1980s occurred in three primary areas: the evolution of several forms of gastric bypass surgeries, including multiple variations of the Roux-en-Y gastric bypass first performed in the previous decade; progress in vertical-banded gastroplasty; and the development of the precursors to what would become gastric banding.<sup>127</sup> Variations in gastric bypass techniques included such things as dividing and stapling the stomach vertically instead of horizontally, adding a band to reinforce the outlet, the introduction of a long-limb variation designed to produce better results in treatment for the "super obese," and the addition of a silastic ring as part of the procedure, among other improvements. The Roux-en-Y surgery is still considered by many to be the "gold standard" of surgical interventions for weight loss.<sup>128</sup>

During this time period, numerous surgical variations were undertaken on vertical banded gastroplasty. Gastroplasty is a restrictive procedure in which the stomach is

modified by dividing it in order to reduce its size and capacity without bypassing portions of the intestine. Some variations which were also being seen in partitioning the stomach as part of the Roux-en-Y surgical techniques described above were also being undertaken in gastroplasty. These included partitioning the stomach vertically with the use of surgical staples, or using both staples and surgical sutures, or in some instances introducing polypropylene mesh or a silastic ring at the site of the partition.<sup>129</sup>

Pitombo et al. note that "clinical progress with gastric banding, a purely restrictive procedure, in the 1980s was rather dormant; however, the basic interventions necessary for the popularity of gastric banding were introduced during this decade."<sup>130</sup> The technical innovations which were introduced into gastric banding would eventually increase the popularity of this weight loss intervention. The first adjustable gastric bands were used on patients during this decade. Kuzmak devised a gastric band which was lined with an inflatable balloon in 1986. The balloon essentially allowed for the adjustment of the band to either tighten it to increase weight loss or loosen it to reduce weight loss.<sup>131</sup> These bands were placed during open surgical procedures.

## **B.iii Introduction of Laparoscopy**

A series of discoveries led to the eventual adoption of laparoscopic techniques for surgery. These techniques used in many different types of surgeries began to be used in bariatric surgeries as well. The evolution of weight loss surgeries utilizing laparoscopic techniques is discussed below.

#### B.iii.a The 1990s—A Less invasive technique

Surgical innovations during the 1990s included the introduction of laparoscopy, a modification to the biliopancreatic diversion called the duodenal switch (found primarily

in the United States), and the first attempts at electrical pacing of the stomach to induce weight loss. The introduction of laparoscopic procedures has been enduring and lauded as an advancement which has improved patient outcomes and reduced patient risk.<sup>132</sup>

Historical precursors to laparoscopic surgery can be traced to Philip Bozzini as far back as 1805. He was the first to attempt to use candles and reflecting mirrors to direct light into internal body cavities for better visualization. Decades later, Maximilian Nitze and Josef Leiter introduced the first rigid endoscope, introduced in 1879, the same year Thomas Edison invented the light bulb. The first rigid endoscope contained a built-in light, but it was not until the 1990s that the technology had advanced sufficiently for practical application in this venue.<sup>133</sup>

Laparoscopic procedures, whose first reported use in weight loss surgical interventions was published in 1994, utilized several small openings in the patient's abdomen through which a camera would guide the movements of the surgeon performing the procedure without requiring the surgeon's hands to physically enter the patient's body.<sup>134</sup> The standard until that time had been open surgery during which a large incision was made vertically along the patient's abdomen through which the surgery would be performed. Laparoscopy permitted specially trained surgeons to use less-invasive surgical techniques that reduced patients' recovery time and reduced the complications associated with open surgery.<sup>135</sup> Gastric bypass procedures using the laparoscopic technique began to be widespread during this decade. While it was not and is still not possible to perform all WLS via laparoscopy, this significant advance has served to reduce patient risk and shorten patient recovery times.<sup>136</sup>

The introduction of laparoscopic surgery also facilitated the popularity of adjustable gastric banding. Adjustable gastric banding, considered less invasive and more easily reversed than other surgical interventions, had been hampered by the need to place the band during an open surgical procedure. The introduction of laparoscopy reduced the reliance on that invasive technique and permitted more patients to have easier access to the placement of adjustable gastric bands for weight loss.<sup>137</sup>

Continued evolution in malabsorptive surgeries, which had begun late in the previous decade, continued in the 1990s.<sup>138</sup> Specifically, Hess and Marceau worked to introduce the duodenal switch (DS) in the United States. This surgical innovation was designed to be an improvement on the earlier BPDs which were prominent in the 1970s and 1980s. The primary difference between the BPD and the DS is the shape of the stomach that remains. In the BPD the stomach is cut horizontally, while in the DS the stomach is cut vertically. This change was introduced because the duodenum has better resistance to acid, and therefore the incidence of ulcers was thought to be decreased as a side effect from this new modification.<sup>139</sup>

There remain sustained efforts to improve techniques and outcomes for patients. Additionally, there remain areas of debate and contention regarding WLS. These are addressed here.

#### **B.iv Current Efforts and Current Debates**

Nearly sixty years following the introduction of surgical interventions for weight loss, most surgeries are performed laparoscopically, and the surgical options are more varied than ever.<sup>140</sup> Malabsorptive, restrictive, and combination malabsorptive/restrictive surgeries continue to be performed. The most common procedures include gastric bypass,

adjustable gastric band, and biliopancreatic diversion with duodenal switch. Most of these procedures are performed laparascopically using minimally invasive techniques.<sup>141</sup>

While some of the original procedures have fallen by the wayside, several others (e.g., adjustable gastric banding), considered less invasive and more reversible, have grown in use.<sup>142</sup> Early surgical weight loss procedures did indeed have side effects that may have seriously overshadowed the potential benefits to the patient, but current surgical interventions have been refined such that surgical risk is now largely predictable and manageable.<sup>143</sup>

In addition to the acknowledged risks of any type of surgery, such as complications which develop from general anesthesiology or exposure to hospitalacquired infections, there are complications and risks specific to bariatric surgical procedures. These complications can be divided into three general categories: postoperative complications generally related to the surgery itself, short-term complications (occurring within the first year following surgery), and long-term complications (including surgical, metabolic, and nutritional concerns).

Immediate postoperative risks can include increased susceptibility to infection at the surgical site or intra-abdominal infection, as well as leaks, venous thrombosis, and bowel obstruction causing acute gastric distention. Additionally, the development of gallstones and the persistent presence of nausea and vomiting can also be observed immediately following surgery for weight loss. Longer term complications can include those listed above as well as nutritional and metabolic concerns caused by malabsorption of key nutrients.<sup>144</sup> A study conducted by Abell and Minocha examined the most often seen complications from obesity surgery. They identified the ten most commonly

reported complications found in restrictive procedures or procedures combining restrictive and malabsorptive features. In general, the more complex the surgical procedure, the greater likelihood that complications will manifest. The most commonly seen complications, irrespective of the type of procedure performed, are, in descending order of prevalence: dumping (rapid emptying of gut contents into the small bowel, which can cause nausea, cramps, and vasomotor symptoms), vitamin/mineral deficiencies, vomiting/nausea, staple-line failure, infection, stenosis/bowel obstruction, ulceration, bleeding, splenic injury, and death.<sup>145</sup> Additionally, the authors reported that there may be other issues related to rapid weight loss, including bacterial overgrowth and diarrhea. Abell and Minocha note that "since the complications of bariatric surgery are treatable once proper diagnosis is made, all physicians seeing post-bariatric surgery patients need to be aware of potential complications so that diagnosis and therapy can be promptly made."<sup>146</sup>

Mortality is a concern of all surgical procedures, including bariatric surgery. In a review of 110,000 bariatric surgeries performed by 495 bariatric surgeons associated with American Society of Metabolic and Bariatric Surgery (ASMBS) Centers for Surgical Excellence, it was reported that the postoperative in-hospital mortality rate was approximately 0.14 percent immediately following surgery. The postoperative mortality rate reported at thirty days was 0.29 percent, and at ninety days was 0.35 percent.<sup>147</sup> Data gathered from a variety of other studies reporting on hospital mortality and postoperative mortality rates at thirty and ninety days post–WLS show similar results.<sup>148</sup> In yet another study conducted by the agency for Health Care Research and Quality, it was reported that the death rate from bariatric surgery is 0.5 percent.<sup>149</sup> The mortality risk immediately

following WLS is approximately equal to that of patients undergoing gallbladder surgery.<sup>150</sup> This statistically small risk has been shown to be offset by a gain in lifespan of one to six years depending on the patient's age at time of surgery. Younger patients experienced a higher gain in lifespan.<sup>151</sup>

The current risk-benefit analysis appears to be favorable for those choosing bariatric surgery. Research has been conducted on outcome measures which have established the positive impact of WLS on co-morbid, obesity-related diseases such as type 2 diabetes, heart disease, and sleep apnea. In two separate studies on the potential of gastric bypass surgery to resolve type 2 diabetes, it was found that this particular type of intervention resolved diabetes in approximately 80-90 percent of patients.<sup>152</sup> Gastric banding surgery was found to resolve type 2 diabetes in approximately 73 percent of patients.<sup>153</sup> Another major health risk for those who are obese is coronary artery disease. The risk of developing obesity-related coronary artery disease was cut by 50 percent in those who underwent gastric bypass surgery.<sup>154</sup> Additionally, sleep apnea was resolved in more than 85 percent of gastric bypass patients.<sup>155</sup>

In a prospective study that followed patients who received surgical intervention for weight loss, 119 subjects were studied between January and December of 2005. The study noted that there was a large reduction medication usage in subjects across comorbid conditions. Diabetes medication usage was reduced by 72 percent, and depression medication use was reduced by 50 percent at one year post-surgery. The authors estimate that the cost of the surgery can be recouped in approximately seven years based solely on the cost savings from reduced medications.<sup>156</sup>

A well-known study, the Swedish Obese Subjects Study, followed patients at various intervals post-surgery. The research matched bariatric surgery and conventionally treated patients. The study was designed to examine the amelioration of metabolic and cardiovascular risk at various time intervals post-intervention. The authors concluded that compared with conventional therapy, bariatric surgery appears to be a viable option for the treatment of severe obesity. It results in long-term weight loss, recovery from diabetes, improved lifestyle, and the amelioration of risk factors which had been elevated at the point of surgical intervention.<sup>157</sup>

Patients undergoing these interventions were also found to improve life expectancy by 89 percent and to reduce the risk of premature death by 30-40 percent.<sup>158</sup> Co-morbid death risks from diabetes, cancer, and coronary artery disease were reduced by 92 percent, 60 percent, and 56 percent respectively.<sup>159</sup> Surgical interventions have thus established themselves as "the first effective therapy for the disease of morbid obesity."<sup>160</sup> Weight loss surgical interventions are intended to be used as a tool in the arsenal used to fight severe obesity. In addition to surgical intervention, those undergoing WLS are reminded that, similar to other types of weight loss technologies, ongoing diet and exercise changes must be incorporated in order to sustain long-lasting results.<sup>161</sup>

In spite of the reported low long-term success rates of self-help, pharmaceutical, and commercial interventions, the more successful option of WLS continues to be a contentious and confounding intervention. The debate continues to rage over whether WLS should be widely promoted as a solution for individuals struggling with obesity and its potentially life-threatening co-morbidities.<sup>162</sup> Weight loss surgery is sometimes criticized for focusing at the individual level, rather than on the social and environmental

causes of obesity associated with viewing obesity as a public health problem. Weight loss surgery, like pharmacological interventions, is also criticized for being a "quick fix" for what is viewed as either a complex, multi-factorial health problem or a failure of willpower and character. But in fact, surgical interventions seem to recognize obesity as a complex health problem involving genetic and other physiological factors as they interact with the current social and physical environment. The utilization of WLS as a treatment and as a potential cure for secondary life-threatening co-morbidities effectively treats obesity as a medical condition for which moralizing, dependence on a higher power, or application of purely behavior modification programs have been shown to be ineffective and inefficient.<sup>163</sup>

One debate has centered on the appropriateness of utilizing a physically invasive technique such as surgery to treat obesity. This stance assumes that other technologies are significantly less invasive simply because they are not physical in nature. The following section articulates this debate and argues that it misunderstands various forms of invasiveness and their potential for irreversibly altering lives.

## **B.v** The Exceptionalism Debate

The term "exceptionalism" was first used in an article published in 1991 on human immunodeficiency virus (HIV) testing and results.<sup>164</sup> Since its entrance into our healthcare vernacular, the concept has been applied as a critique of treating a medical condition or particular healthcare information as being so unique or special, so different from the norm, that the application of more stringent ethical and legal standards and safeguards is warranted.<sup>165</sup> By elevating the level of suspicion with which particular interventions or information is regarded, it then follows that the development and

application of additional safeguards, designed to protect the patient, would be prudent. Thus, exceptionalism can be used to justify a person's or group's choosing to not recommend or even consider a common idea or activity that has widespread acceptance.<sup>166</sup> In other words, exceptionalism can be used in attempts to justify paternalism.

In the case of HIV testing, exceptionalism has meant that the information gleaned is thought to be qualitatively distinct from other medical data, such as height or blood type, and therefore requires additional safeguards in order to protect the individual from harm that might occur due to the misuse of such sensitive and potentially easily misconstrued information.<sup>167</sup> Specific harm such as discrimination in insurance coverage and employment opportunities, as well as potentially rash behaviors on the part of the patient such as attempting to harm himself in light of the information, have been cited as reasons to treat such information as being exceptional and therefore subject to additional levels of ethical consideration and regulatory safeguards.<sup>168</sup> In the case of HIV test results, genetic information, and neuro-imaging, claims for such exceptional treatment have largely been rejected, save for a few legal safeguards.<sup>169</sup> Critical analyses of the factors once thought to justify exceptionalist treatment of such information have determined these factors to be insufficient reasons for exceptionalism. Some of these reasons are centered on the disease itself or the characteristics of the people diagnosed. Exceptionalism has been deemed inappropriate.

Exceptionalism has also been applied to surgery.<sup>170</sup> Surgical exceptionalism means that this surgical intervention is thought to be essentially different from other interventions and thus warrants enhanced safeguards and limitations—or particularly

strict criteria—for its use. Those who engage in surgical exceptionalism see surgery as radical, invasive, irreversible, immediately life-threatening, and fraught with the potential for adverse effects in a way and to a degree not true of other interventions. For those who would adopt an exceptionalist position, surgery is a last-resort intervention to be avoided whenever possible.

The exceptionalism applied to surgery is based in part on a narrow and strongly held physicalist view of the risks and other characteristics associated with a spectrum of medical interventions. Surgery is indeed a physical somatic intervention. It generally requires damaging the body by cutting into it in some fashion. In the case of surgery, the body experiences not only the sought-after transformation but also collateral damage. It is necessary to do harm in order to achieve a desired intermediate outcome—e.g., removal of a tumor or the restructuring of a valve—which is thought to (re)establish superior physiological outcomes or functioning with the ultimate goal of the patient's improved health and functioning. Surgical exceptionalists' preoccupation with the physical— physical bodily invasion, physical collateral damage, physical repair, which are admittedly required to restore the patient's functioning through surgical means—may nevertheless disguise them from nonphysical but otherwise similar aspects of nonsurgical interventions.<sup>171</sup>

A purely physicalist understanding of alteration and change grounds the view that surgery is irreversible and deflects attention from the ways in which, for example, psychotherapy can irreversibly alter a patient's self-concept, worldview, responses to others, or values and priorities. Psychotherapy "may utilize insight, persuasion, suggestion, reassurance, and instruction so that patients may see themselves and their

problems more realistically and have the desire to cope effectively with them."<sup>172</sup> Through the process of psychotherapy, the emotional defenses of the person receiving treatment are often stripped away, laying bare much of the individual's capability to protect herself psychologically. This therapeutic technology relies on an invasive technique as surely as surgical weight loss. One key difference is the degree to which the invasion is readily observable. During a surgical procedure such as WLS, the wounds brought to bear on the body from the laser or the scalpel when the instrument cuts into the patient are readily observable. There is blood loss, and upon completion of the intervention, wounds are sealed by stitches, surgical glue, or other means. In contrast to the invasiveness of psychotherapy or the effects of hormonal pharmacological interventions, surgery is an invasion which is physically apparent. In the case of psychotherapy the invasion may be equally life-changing and invasive, but it is easier to perceive this intervention as noninvasive or less invasive because there may well be no physical remnants of the intervention. There are likely no discernible physical scars, no observable bandages, and no residual traces of the invasion and its aftermath.

Psychotherapeutic interventions, like surgical ones, are not readily reversible, however. In fact, much of the basis of psychotherapy has the purpose of effecting lasting or irreversible personal change which fundamentally alters the way in which the patient might view, approach or respond to the world or situations in the world.<sup>173</sup> Collateral damage may be experienced as the changes in the individual further cause lasting changes in intimate relationships and friendships. In many instances, psychotherapy has been known to facilitate ending relationships that, while perhaps comfortable, are no longer productive or that might in fact be damaging. The changes can indeed be life-

altering and the aftermath may be irreversible. Accessing psychotherapy does not require more stringent criteria for its use. In fact, as long as one can afford such an intervention either through insurance or private pay, and assuming the availability of a therapist, there are no restrictions applied to accessing psychotherapeutic interventions.

Claims that surgery is exceptional and warrants special safeguards or a higher bar to warrant its use must be predicated on comparison to other relevant interventions.<sup>174</sup> In the case of obesity, technologies relevantly comparable to WLS include diet and exercise, pharmacology, commercial weight loss programs, and behavioral interventions. Weight loss surgery and the obese seeking it must be sufficiently different from other weight loss interventions or other patients seeking surgical remedies for their conditions as to warrant a more robust application of ethical analysis or stricter criteria for its use.<sup>175</sup> In order for this surgery to warrant a more suspect and cautionary approach, and for stricter criteria to be applied to obese patients seeking WLS than to other patients seeking surgical solutions, the argument goes; WLS and obese patients must be of a different order than other interventions and other patients. But such claims of difference are mistaken, though their origin may be understandable. The obviousness and physical nature of the collateral damage resulting from surgical intervention—e.g., damaged tissue, loss of functioning organ tissue, perhaps iatrogenic infection-eclipse recognition of the ways in which other weight loss interventions also are invasive, risky, irreversible, and may involve collateral damage or adverse consequences when they are ineffective, even when they do provide sustained weight loss.

For instance, the application of diet and exercise, either by an individual or through a more guided experience such as commercial weight loss programs whose goal

is to ameliorate obesity, will require a long-term alteration of the obese person's resources, both financial and time.<sup>176</sup> Perhaps time formerly spent at work earning money will need to be curtailed in order to apply the necessary level of intensity to the activities of exercise or food preparation required to lose weight. The financial effect may not be insignificant in the overall picture. Choosing healthier foods or paying for a gym membership will likely add an additional financial burden to the obese person and his family.<sup>177</sup> The obese person will need to come to see himself differently as well. Family activities that focus on meals or food will need to be changed in some manner to accommodate the new focus on diet and exercise. Once the obese person loses weight through these various technologies, he may have different expectations of his life and his partnerships. What had formerly been acceptable may no longer be for the person who has lost one hundred pounds. Familial relationships might be put to the test or altered in irreversible, not always better ways. As new patterns are established, old patterns that involve others will out of necessity change.<sup>178</sup> These irreversible changes may or may not be acceptable in those relationships. These relationships may be improved or damaged in response to those changes. Indeed, there may be a cascade effect seen in applying something as seemingly uncontroversial as changes in diet and exercise.

This is true of other technologies for weight loss as well. Pharmacological interventions, as seen in the past, have had the irreversible effect of damaging the body in a manner so significant and so unanticipated as to jeopardize the life of the patient who uses this type of intervention. Additionally, pharmacological interventions are meant to be combined with diet and lifestyle changes and so would be subject to many of the other ramifications discussed above. For those seeking weight loss by employing one of the

self-help groups such as OA, accepting a higher power and admitting their relative powerlessness involves an irreversible alteration in their worldview and self-concept. Although this is not a physical change, the potential ramifications should be noted. For each of the technologies that might be applied for weight loss, there will likely be irreversible changes, sometimes drastic and long-lasting, which will be both necessary and potentially deleterious to the individual physically and emotionally.<sup>179</sup> Since these changes, though irreversible and life-altering, are often not readily perceived, the obese person seeking to lose weight is generally not subject to stricter criteria for accessing these technologies.

Patients seeking WLS are not relevantly different from others seeking surgical intervention to solve a medical condition or disease. Candidates for WLS in the majority of cases cite concern over health as their primary motivation.<sup>180</sup> In each case, the surgical candidate must meet some set of clinical criteria for the surgery. The question asked is, will the surgical intervention have an acceptable probability of resolving the medical problem relative to other possible interventions?<sup>181</sup> As part of this analysis, the surgical candidate, regardless of the type of surgery sought, is evaluated for physical appropriateness for the intervention. Activities to assess the strength of the cardiac system, lack of active infection, and other possible contraindications are considered. Additionally, some evaluation of the patient's ability to follow up with appropriate post-surgical changes will likely be considered by the medical team. Whenever surgery is considered an option, the medical evaluation should be based on appropriate medical criteria and done in keeping with standards of care.<sup>182</sup>

The recognition that each technology for weight loss intervention carries with it potentially irreversible and life-altering ramifications, and the fact that the obese patient is not relevantly different from other patients seeking surgical intervention, should be especially troubling with regard to adopting an exceptionalist position. This knowledge is especially relevant in light of the fact that WLS has been shown to produce superior results in comparison to other types of weight loss technologies.<sup>183</sup> Since each of the possible technologies that could be applied carry with them irreversible and life-altering consequences which might not always be positive or desirable, and given the fact that the greatest chance for long-term weight loss is with surgical intervention, the surgical exceptionalist demand for a higher bar before considering the use of surgery must be questioned. Earlier in this chapter, the success measurements of WLS relative to other interventions were discussed in detail. Weight loss surgery produces sustained weight loss for longer periods of time, along with superior amelioration of disease and psychosocial co-morbidities than other interventions.<sup>184</sup>

Surgical exceptionalist reservations regarding WLS may decrease the likelihood that clinicians will discuss WLS with patients. Together with other value-laden social attitudes associated with responsibility for obesity and its treatment, the surgical exceptionalist view of WLS may lead clinicians to withhold information about it.<sup>185</sup> They may do so in the mistaken belief that they are preventing patients from choosing an unnecessarily risky, radical, irreversible intervention. This paternalistic approach is not only unwarranted because it is not clear that avoiding WLS is in the best interests of obese patients, but it is also perhaps motivated by value-laden perspectives on both WLS and obesity. These issues are explored further in chapter three.

The efficacy of surgical weight loss interventions has been established.<sup>186</sup> The interventions ameliorate obesity along with its health and quality of life co-morbidities. However, there appears to be ongoing and significant societal ambivalence in accepting this medically beneficial intervention with manageable risks. The following chapter will outline and discuss various social, cultural, and theological constructs influencing societal ambivalence toward both weight and obesity interventions.

#### C. Conclusion

This chapter explored the numerous technologies and their associated normative frameworks which have been employed to treat obesity. Each of these technologies has met with varying degrees of success. Where possible, the chapter addressed available research data on the overall success of each program or intervention both in assisting obese people to lose weight and ameliorating physical and quality of life co-morbidities. Among organized self-help initiatives and commercial programs, it was found that Weight Watchers, Inc. provided participants with superior weight loss results which may assist in diminishing co-morbidities associated with excess weight. Overall, self-help initiatives and commercial weight loss companies have a normative framework of selfreliance, with some additional guidance offered to assist in overcoming a problem with myriad contributory factors. Often these programs choose to diminish one or several of the identified factors which are beyond an individual's direct control but which have been associated with the development or maintenance of obesity. In general, rigorous assessment of the efficacy of self-help initiatives and commercial weight loss programs is difficult because of particular features of these programs such as participant anonymity or a paucity of research. Largely disappointing or failed efforts at pharmacological

interventions were reviewed as well. Pharmacological interventions for obesity have traditionally suffered from either poor overall results or from an imbalanced risk-benefit ratio for patients prescribed these medications. The result of this imbalanced equation has been serious and irreversible patient outcomes which have necessitated the removal of some weight loss drugs from the market. Two new medications have been introduced, Belviq and Qysmia, which are thought to hold promise to overcome the serious concerns found earlier-generation weight loss drugs. However, as two of these drugs were introduced just recently, their long-term efficacy is at present unknown. The use and development of pharmacological treatments have advanced the normative framework to include an understanding that obesity may require a more robust intervention than diet and exercise alone can produce. Indeed, obesity may be amenable to medical technologies. Finally, this chapter reviewed the development of various surgical interventions for weight loss which have developed over the course of the past halfcentury. Data were provided from various research studies that indicate that surgery for weight loss thus far provides the best long-term outcomes when combined with subsequent lifestyle changes, and that the risks of surgery have been greatly diminished to the point of being considered manageable and similar to those experienced by patients when the gallbladder is removed. In spite of the efficacy of WLS and its manageable risks, exceptionalism has been and continues to be erroneously applied to this intervention. The application of exceptionalism to WLS is inappropriate and should be avoided in the same way that charges of exceptionalism to genetic information or HIV status were ultimately determined to be unfounded. Continued exceptionalism applied to WLS likely has the effect of the intervention being viewed as too radical, and hence real

discussion of this intervention at a clinical level between patients and physicians may be

thwarted. Chapter three will take up the ethical principles and social constructs which

inform an understanding of obesity and WLS.

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<sup>33</sup> Tsai and Wadden, "Systematic Review: An Evaluation of Major Commercial Weight Loss Programs in the United States," 56.

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### Chapter Three: Social Constructs and Theological Concepts Applied to Obesity

As shown in Chapter Two, there are many unsettled issues and diverse opinions surrounding the etiology and treatment of obesity; however, there is near uniformity of social opinion regarding the negative valence with which obesity and obese individuals are regarded.<sup>1</sup> To explain the development and implications of this negative consensus, it is useful to employ feminist epistemological concepts and approaches to understand how obesity has been framed. This is important because how a problem is conceptually framed constrains the range of solutions that are recognized as viable.

This chapter will argue, with reference to key feminist epistemological concepts, that how obesity is framed—the currently dominant understandings of those who are obese—is flawed and inadequate. Dominant understandings of obesity neglect or explicitly discount important perspectives which must be considered in order to provide a more complete picture of the problem and its potential solutions. This chapter will argue that secular and theological social norms inhibit development of a more nuanced and complete understanding of obesity, as well as a wider acceptance and promotion of weight loss surgery (WLS). By examining the social construction of obesity, through the corrective lens of feminist epistemology, it is possible to identify current flaws in the construction of the obese identity, injustice in the treatment of obese people, and implications for the embrace of weight loss solutions.

Section A will explore the concepts, goals, and approaches of feminist epistemology. It will be argued that feminist epistemology's focus on social context and power relationships affords a more accurate formulation of the problem of obesity and its potential solutions than is currently employed. Feminist epistemology and its methods as

discussed in this first section will be applied throughout this chapter to illuminate errors in the construction of obesity and articulate the values that inform them. Section B will examine gendered notions of appropriate bodies. To illustrate the way such norms thoroughly infiltrate and inform social attitudes, this section will examine normative constructions of bodies by the popular media and religious concepts. Section C will integrate previous feminist conceptual analysis with concerns about the stigmatization of obesity. This section will employ feminist attention to particularity and narrative to present concrete examples of the material implications for obese individuals of these phenomena grounded in the socially constructed norms of the body. The final section elucidates different senses of responsibility and argues that confusing causal with moral responsibility, as well as failing to distinguish appropriately between different goals of assigning responsibility, has led to inappropriately moralized views of obesity. These confusions, in turn, lead to ambivalent social attitudes towards WLS and failure to embrace it as the most effective clinical intervention currently available. The following section discusses the ways in which feminist epistemology can be used to correct the present construction of obesity.

A. Applying Feminist Epistemology to Analyze the Social Construction of Obesity

It is a fundamental tenet of feminist epistemology and ethics that standpoint matters.<sup>2</sup> Where one stands in relation to an issue—one's normative commitments, the values that inform one's point of view—matter as much for conceptualizing social issues as where one literally stands at the back or front of an animal one is asked to describe. "The insights of feminist standpoint theory," writes feminist bioethicist Mary Mahowald, "provide a corrective to the nearsightedness, unselfconsciousness, and arrogance that

arise in health care and in bioethics, as in other areas of life and work."<sup>3</sup> Mahowald explains that although she "focuses on sexism, similar arguments apply to racism and classism", and there is obvious overlap in application. "The common element is that the differences between groups are the grounds by which one group obtains and maintains advantages or power over another."<sup>4</sup> This section focuses on the difference between those with normal or socially appropriate bodies and those who are obese.

The first subsection utilizes feminist standpoint theory to explicate how attending to the perspective of actual obese individuals can begin to correct the dominant understanding of obesity. The second subsection uses the work of Iris Young to explain how, at a conceptual level, dominant understandings are socially constructed. The third subsection employs Young's theory to analyze power relationships between dominant and marginalized groups. The fourth subsection explores the ethical and epistemological significance of the intersection of multiple marginalizations to describe the material implications of intersectionality for obese individuals. The fifth subsection integrates standpoint theory with narrative approaches drawn from sociology and ethics.

# A.i Standpoint, Partiality, and Privilege in Constructing a View of Obesity

'Standpoint' is a term used to define any "perspectival view of the world."<sup>5</sup> According to Mahowald, "feminist standpoint theory is based not only on the notion that human knowledge derives from situated perspectives, but also on the realization that some perspectives are privileged in comparison with others."<sup>6</sup> In other words, knowledge is situated and partial. What and how something is seen reflects the viewer's situation and is both partial *qua* incomplete and partial *qua* serving the particular interests of the viewer. Some standpoints are privileged. 'Privilege' is understood in two senses. First

and most obvious is the privilege of power. "Because the dominant group generally defines and evaluates the world according to its own limited perspective, the only possibility for expanding and correcting that view is through the standpoints of those who are dominated."<sup>7</sup> Thus, feminist standpoint theory accords privileges to the perspectives of non-dominant groups and individuals.

Paying attention to the observations, opinions, and experiences of members of non-dominant groups corrects the nearsightedness and unselfconsciousness reflected in the opinions and observations of those occupying a dominant perspective. As explained further in the next subsection, power—social, political, economic, and physical—is possessed by some people over others. These more powerful (at least *vis a vis* some less powerful others) are said to occupy the dominant position or perspective and are termed the dominant group, and have power. Those with social, political, economic, and physical power have vested interests in maintaining that power, and exercise what power they have to do so. Similarly, these interests and this power enables them to insulate themselves from challenges to their epistemological authority. What Mahowald terms nearsightedness and unselfconsciousness result.

Nearsightedness, unselfconsciousness, and arrogance are related flaws, each reinforcing a natural tendency to construe one's partial perspective as the full picture. By nearsightedness, I mean that none of us, as finite, situated individuals, can see all of the parameters of the decisions we make.<sup>8</sup>

But, even as she recognizes the epistemological privilege of the powerful or dominant perspective, she foreshadows the epistemological privilege of the non-domiant. She continues:

This limitation [of nearsightedness] says something positive as well as negative. I allow that we at least see what is near, even though we cannot see what is beyond our range of vision  $\dots^{9}$ 

Thus, feminist epistemology argues, there is value in attending to particular, albeit nearsighted, perspectives. Doing so, Mahowald argues, helps to correct for unselfconsciousness, "used here to mean the lack of a sense of one's limitations. Some unselfconscious persons assume themselves capable of 'point-of-viewlessness, defining their particular views as universal."<sup>10</sup> Those in positions of social, economic, and political power—members of the dominant group or culture—tend to be unaware of the partial nature of their perspective, their worldview.

Thus it is with people who have normal sized bodies. While those who are obese may be acutely aware of the bodily norms that they fail to achieve, normal-sized people tend to think less about the existence of such norms and generally expend less energy trying to achieve them or to compensate for failing to do so. Those who are obese may have a constant, at least low-level awareness of the impact of their genes, diet, and environmental stresses on their bodies. Not fitting into the dominant group of normal bodies, those who are obese are forced to be the opposite of epistemologically unselfconscious: "a self-conscious person acknowledges her weaknesses as well as strengths, and acts accordingly."<sup>11</sup> Again, Mahowald does not find that this epistemic position of the non-dominant all negative. Self-consciousness in this sense affords obese individuals a different sort of epistemic privilege. They are those who either themselves recognize, or who provide the epistemic material for others to theorize, how bodily norms are socially constructed and operate to create dominant/normal and non-dominant/abnormal categories and social groups. Elizabeth Grosz and Iris Young are feminist theorists who explain how these categories are created at a conceptual level and how they are applied to

create material conditions of oppression. The next subsection examines their accounts of this process.

# A.ii Dichotomous Thinking, Logic of Identity, and the "Moralizing" of Obesity

According to feminist philosopher Elizabeth Grosz, the process of "dichotomous thinking naturally hierarchizes and ranks the two polarized terms so that one becomes the privileged term and the other its suppressed, subordinated, negative counterpart."<sup>12</sup> She notes that this "bifurcation" is not merely a "neutral division of an otherwise allencompassing descriptive field."<sup>13</sup> Dichotomy itself "contains inherent explanatory force which, if naturalized and used reflexively, can operate to predetermine the meaning of the *nature* of A and Not-A, *and* the relation between them."<sup>14</sup> The predilection of Westernstyle human reasoning to understand the world in terms of dichotomous categories, either/or binaries, or polar opposites—terms used by feminist psychologist Helen Haste<sup>15</sup>—is explained in detail by Iris Young.

According to Young, the 'logic of identity' is at once an account of the intellectual and psychological process of understanding the world and a theory of social discourse, the "Western philosophical and theoretical discourse that denies and represses difference."<sup>16</sup> The logic of identity is "one construction of the meaning and operations of reason: an urge to think things together, to reduce them to unity." <sup>17</sup> To understand, explain, or "give a rational account is to find the universal, the one principle … covering the phenomena to be accounted for. Reason seeks essence, a single formula that classifies concrete particulars as inside or outside a category."<sup>18</sup>

The logic of identity denies or represses difference. ... Any identifiable something presupposes a something else against which it stands as background, from which it is differentiated. ... Understood as different, entities, events, meanings, are neither identical nor opposed. They can be likened in certain respects, but

similarity is never sameness, and the similar can be noticed only through difference. Difference, however, is not absolute otherness, a complete absence of relationship of shared attributes.

The logic of identity flees from the sensuous particularity of experience, with its ambiguities, and seeks to generate stable categories. Through the logic of identity thought aims to master that sensuous heterogeneous embodiment by bringing the object fully under a concept.<sup>19</sup>

This account may begin to explain the social construction and dominance of norms of appropriate bodies. Bodies come in all shapes, sizes, and colors. Human bodies are a quintessential of the theorized "sensuous heterogeneous embodiment" to which Young refers. To make sense of this heterogeneity and to make a place for one's own body among such obvious difference, Young argues that human reason compares and categorizes.

This project of reducing the heterogeneity of sensuous particulars to the unity of thought itself submits to a relentless logic of identity, as thought itself, the thinking subject, must be reduced to unity. Such a subject is conceived as a pure transcendental origin ... it is self-generating and autonomous. ... The logic of identity also seeks to reduce the plurality of particular subjects, their bodily, perspectival experience, to a unity, by measuring them against the unvarying standard of universal reason.<sup>20</sup>

People as thinking subjects come to be conceived in terms of their reason, as fundamentally, essentially reasoners. That they also feel, love, use their five senses, and experience emotions become secondary characteristics. People as embodied also are subjected to this logic of identity, and as embodied people norms of appropriate bodies apply to them, creating a narrow range or unity that marks an acceptable body and that marks as outside that category all other bodies, including the obese.

Young then explores the negative implications of this process of understanding and describing the world, including people and their bodies, in terms of falling inside or outside narrowly constructed categories. She writes that "the irony of the logic of identity is that by seeking to reduce the differently similar to the same, it turns the merely different into the absolutely other.<sup>21</sup> In some cases, she explains the human response to the absolutely other is anxiety, fear, revulsion, and abjection.<sup>22</sup>

The logic of identity' inevitably generates dichotomy instead of unity, because the move to bring particulars under a universal category creates a distinction between inside and outside. Since each particular entity or situation has both similarities and differences with other particular entities or situations, and they are neither completely identical nor absolutely other, the urge to bring them into unity under a category or principle necessarily entails expelling some of the properties of the entities or situations.<sup>23</sup>

This process is witnessed, as will be explained further below, in the process of constructing bodily norms and, in contrast, the obese identity. Because fat people do not fit within the category of the normal body, despite all of their similarities to those with normal bodies—their talents, intelligence, interests—those similarities are stripped away from their identity as they are understood. As a result of this process at a conceptual level, obese individuals are themselves expelled from social groups and relationships, and excluded from opportunities, to which they might otherwise have access. Young continues to explain the pernicious effect of this way of thinking.

Because the totalizing movement always leaves a remainder, the project of reducing particulars to a unity must fail. *Not satisfied then to admit defeat in the face of difference*, the logic of identity shoves difference into dichotomous hierarchical oppositions: essence/accident, *good/bad, normal/deviant*.<sup>24</sup> (emphasis added)

Faced with threat to its own coherence, the logic of identity transforms difference into dichotomies. Therefore, faced with threat to their dominant status as normal bodied and with the material threat to their normality represented by perhaps becoming overweight, the non-obese cast obese individuals as very negative, polar opposites to themselves.

The final step in this process of conceptualizing the world is the gendering and moralizing of the categories. The first differences that children are taught as differences are the difference between good and bad, right and wrong, and boys and girls. Good/bad and right/wrong are taught as explicitly normative moralized differences. The difference between boys and girls is taught as a natural difference, one of the first, out-there-in-theworld, differences that does not depend on what you or anyone else *thinks*. Theories of biological sex (e.g., chromosomal vs. anatomical) aside, biological sex has been largely relegated by even feminist theorists to the natural world. Gender, on the other hand, what makes a person a man or an occupant of a male social role, is considered a matter of socially constructed norms. By applying the logic of identity to its own dichotomous categories, the moralizing and gendering of seemingly morally neutral, sexless, and gender-free categories can be explained. In Western discourse, Young argues, the many "mutually exclusive oppositions" the logic of identity constructs and justifies—e.g., mind/body, male/female, nature/culture, normal/abnormal-"are structured by the dichotomy good/bad, pure/impure."25

The first side of the dichotomy is elevated over the second because it designates the unified, the self-identical, whereas the second side lies outside the unified as the chaotic, unformed, transforming, that always threatens to cross the border and break up the unity of the good.<sup>26</sup>

In short, in an attempt to think things together, to unify even its dichotomous categories into a simply binary, one pole of each supposed polar opposite is categorized as good. Its opposite is marked as bad. This may explain how in some discourse at least what is natural, intellectual, or normal is marked as good, i.e., the moralizing of categories that are not on their face matters of morality. It does not explain what feminists term the 'gendering' of the categories. Beyond boy/girl, male/female, and perhaps attributes associated with men versus women, the attribution of gender to categories may seem obscure. This is true if 'gender' is linked primarily to biological sex and apparent differences between the two opposite sexes.<sup>27</sup> If instead gender is understood in terms of power or position within social hierarchy, rather than in relation to biological sex, the gendering of seemingly sex-neutral binaries is explained. Somewhat confusingly, but for lack of better terms, the terms of 'male' and 'female' are still employed, but they are best interpreted as male=more powerful=dominant versus female=less powerful=non-dominant. Thus the gendering of the nature/culture, science/art, and normal/abnormal binaries can be understood. The natural, scientific, and normal are coded as male, dominant, mainstream, and at least putatively good. Matters of culture are more suspect. "It is an art, not science" marks what is being described as more subjective, soft. The abnormal therefore stands in need of correction and normalizing.

By considering gender in terms of various power relationships and relational intersections,<sup>28</sup> feminist epistemology and feminist scholarship more generally employ gender as an analytic category. While feminism first focused on women's experiences and concerns, with "a *feminist standpoint* ... being one that reflects the perspectives of women while challenging the social dominance of men's perspectives,"<sup>29</sup> but feminist approaches have gradually been refocused to analyze other relationships of relative power, such as those grounded in aspects of race, class, poverty, and sexual identity. With this expanded focus, gender has become a category of analysis, useful for understanding associations of power and oppression, and the way that such relationships serve to inform perspectives and construct reality.<sup>30</sup>

Thus far in this section feminist standpoint theory has been employed to assert that the dominant view of obesity is partial in the senses of being incomplete and of serving the interests of the dominant group. Examination of the processes of dichotomous thinking and the logic of identity has explained how obesity acquires a normative, moralized valence. The next subsection examines the interests of the normal bodied dominant group in maintaining the moralized binary between normal and obese, their experience of obesity as a threat, and the implications of these interests and experience for obese individuals.

# A.iii Dominant Responses to Obesity: Abjection and Border Anxiety

Even though the social, economic, or political power places some people in powerful positions or dominant groups, and even though the logic of identity creates dominant categories used to construct prevailing dominant perspectives on the world, there is the threat of instability or impermanence in those dominant positions, categories, and perspectives. The messy heterogeneous world intrudes on the neat categorizations, and for example, a more powerful normal bodied person may recognize particular similarities between himself and an obese counterpart. He may think, "There but for the grace of God, or my genes, or my circumstances, go I." For some this may occasion empathy, but feminist scholarship suggests that, instead, a common response is to feel and defend against threat. Those in the epistemologically dominant group experience what Young terms "border anxiety," a fear or insecurity about the ability to maintain the dominant position.<sup>31</sup> Border anxiety is the result of recognizing that an individual in the dominant position stands to lose advantage or status afforded them by this membership.

Border anxiety for those who are thin may be the result of several factors. First,

historically the clinical diagnostic definition of obesity has changed, as has the fad of what body types are in-style or out-of-style. At one time those who had been seen as normal were reassigned to the category of deviant with the seemingly arbitrary realignment of BMI categories.<sup>32</sup> Moreover, while thin bodies have dominated recent social norms of beauty, normality, and desirability, such has not always been the case. The seemingly arbitrary nature of who is defined as being obese at any given moment in time may heighten the experience of border anxiety by those who presently reside in the dominant group. It seems reasonable that recognizing the costs associated with the loss of such status would fortify efforts to maintain such an advantage. Second, for those considered to be marginally acceptable, the border between fat/marginalized and thin/privileged may be seen as being dangerously permeable. In this case it would be easy for a thin person to cross that border simply by gaining a few pounds, thus becoming obese and a member of the oppressed group with diminished power and status. This border crossing would likely have serious negative consequences for the individual at a social level in addition to potentially negative health consequences. Third, those who are considered firmly within the category of the normal bodied by societal standards become more aware of the advantage such status affords them when confronted by those lacking such status. Having benefited from being considered thin, they are committed to maintaining strong boundaries between those inside and outside the category of thin because doing so helps to ensure their advantage. Anxiety regarding the conceptual and material borders between thin and overweight thus spurs members of the dominant (thin), to maintain their advantage, feeds the dominant group's efforts to maintain the conceptual, social, and even moral border between themselves and the other.<sup>33</sup>

Obese individuals thus challenge social norms, even though their existence presents a difference in contrast to which the dominant norm is constructed. As concrete individuals who are not only different from their normal bodied counterparts, but also similar in some ways and thus threatening, obese individuals may occasion strong emotional reaction. Abjection is an emotional response that is partly the result of deeply ingrained dichotomous thinking. Feminist philosopher Julia Kristeva explains that abjection "does not radically cut off the subject from what threatens it—on the contrary, abjection acknowledges it to be in perpetual danger."<sup>34</sup>

Abjection is the feeling of loathing and disgust one has in encountering the abject—certain images, phenomena, matter, and even fantasies that seem so horrible that one can only respond with aversion, nausea and distraction. The abject is at the same time fascinating; it draws the subject in order to repel it.<sup>35</sup>

Abjection serves to construct and reinforce the dominant opinion of those labeled as the Other.<sup>36</sup> Obese people occasion such abjection in others. It reinforces the universalizing of negative characteristics of the obese. The intensity of the reaction encourages those experiencing it to attribute fundamental disgustingness to those who occasion it.

Obese people defined as essentially and absolutely Other may also experience internalized abjection. Internalized abjection is the acceptance of the feelings of disgustingness or hideousness felt by those in the dominant group towards the marginalized group.<sup>37</sup> The obese person takes those initially perceived and externally projected negative feelings of the dominant group and begins to accept them as authentic and deserved. She may come to believe that she is inferior because she violates a variety of norms constructed as appropriate by the dominant group and therefore is deserving of societal distain, her own self-loathing, the diminished opportunities afforded her by society, and perhaps even the poor health outcomes associated with her obesity. As discussed later in this chapter, obese individuals may come to believe that their obesity is indeed evidence of moral failing and hence justifiably subject to social sanction. The dominant view of the obese along with the abjection it produces comes to be seen as natural, deserved, and appropriate by those in the authoritative group *and* those in the marginalized group.

With an increasing portion of the population identified as overweight or obese, it would seem that the dominant view of obesity, constructed from the perspective of the normal bodied, would be challenged by the sheer number of those who literally occupy a non-dominant obese perspective. However those who are obese also, somewhat confoundingly upon initial analysis, sometimes experience abjection of their obese peers. Relevant to this phenomenon is Young's explanation that "members of culturally imperialized groups-themselves often exhibit symptoms of fear, aversion, or devaluation toward members of their own group and other oppressed groups."<sup>38</sup> Subject to the same dichotomous thinking, logic of identity and incentives to align themselves with what positive poles of the dichotomous categories they can, members of oppressed groups find reason to subdivide their own marginalized, non-dominant group. Thus, African-Americans distinguish between light and dark-skinned blacks, or between those of African or Caribbean descent. To address the impact of this intragroup divide and conquer by categorizing strategy, as well as to analyze the impact of power relationships on members of multiple marginalized groups or identities, feminist scholars have begun to examine the intersection of different marginalizations. The next subsection employs intersectionality to examine these implications for developing a more complete understanding of the social construction of obesity.

# A.iv Obesity at the Intersection of Multiple Marginalizations

Since feminist epistemology attempts to consider multiple standpoints, each privileged in a different way (e.g., one dominant, another experientially informed by less empowered voices, another medico-scientifically informed, and so on), employing feminist epistemological approaches enables us to consider the intersectionality of multiple standpoints and multiple marginalizations. The term intersectionality was coined by Kimberle Crenshaw, a legal scholar, in the late 1980s.<sup>39</sup> The term was intended to underscore the multi-dimensional nature of marginalized subjects' lived experiences.<sup>40</sup> In feminist epistemology, 'intersectionality' is typically used to refer to the combination, and subsequent synergistic exponential effect, of occupying several oppressed groups, social positions, or conceptual categories simultaneously.

Intersectionality originally served to inform the ways in which two particular identities, race and gender, interacted to shape various dimensions of Black women's lived experiences.<sup>41</sup> The approach initially recognized that the specific marginalizations which apply by virtue of being a woman are intertwined with those marginalizations associated with being Black. The overlap of marginalizations thus manifests itself differently, though likely exponentially, given the number and intensity of intersecting vectors. The purpose of intersectionality analysis is to diminish common analytic binaries such as race/gender, obesity/gender, obesity/class in order to enable a more robust examination of these various identities and their influence on marginalizations.<sup>42</sup> Its underlying insight is feminist standpoint theory's recognition of the privilege perspective of non-dominant individuals. Feminist legal activist Mari Matsuda contends that "those who have experienced discrimination speak with a special voice to which we should

listen.<sup>43</sup> Jennifer Nash, whose work focuses on Black feminism, states that "for intersectional theorists, marginalized subjects have an epistemic advantage, a particular perspective that scholars should consider, if not adopt, when crafting a normative vision of a just society."<sup>44</sup> As a tool of feminist research, intersectionality analysis has been criticized for being too narrowly based on the prototypical experience of Black women, having an inadequately defined methodology, possessing ambiguity with regard to the definition of intersectionality itself, and lacking coherence between various intersections and lived experience. Nonetheless it provides a viable means for the complex analysis of the implications of power relationships related to the convergence of numerous discounted identities.<sup>45</sup>

A more evolved application of intersectionality permits the analysis of an almost unlimited array of marginalizations.<sup>46</sup> This fact is particularly important for the correction of the dominant understanding of obesity, as the intersection of numerous oppressive circumstances and identities must be considered to more fully inform and understand the experience of those who are obese. In fact, the dominant social construction of obesity or an obese identity serves as yet another of the oppressive attributions that may intersect with other oppressive identities based in gender, class, or sexual orientation. A white man who is poor and obese may likely have a very different experience, and thus different perspective or knowledge, than an African-American obese man who is wealthy, or a Latino woman who is obese and poor. Similarly, the additional experience of having been sexually abused or food insecure may have very different synergistically oppressive effects depending on whether one is rich or poor, male or female, white, black or brown. Compared to the effects of race, sex, and gender, the effect of social class has been

relatively recently introduced into bioethical analysis, but theorizing the effect of class on experiences of health, morbidity, and healthcare helps to illuminate the non-individual *systematic* variation in experience of those at the intersection of multiple marginalities.<sup>47</sup>

The intersection and synergistic effects of multiple marginalizations are evident in the lives of obese individuals. Within a conceptual framework constructed by dichotomous thinking, categories do not mix. Within the world, however, individuals occupy multiple categories. It is partly for this reason that feminist epistemology has stressed the importance of attending to the lived experience of individuals and to the particularity of their experience and perspectives. The next subsection examines how these insights and approaches of feminist theory integrate with goals of social science to support their attention to particularity and their integration of narrative approaches.

#### A.v Epistemological and Ethical Reasons to Attend to Particularity and Narrative

Concepts drawn from feminist epistemology—dyadic reasoning, epistemic privilege, standpoint, and partial knowledge help to articulate a more accurate understanding of obesity, its various treatments, and the social construction of these. The less powerful, non-dominant, experientially informed perspective of those who are obese—like the perspective of other non-dominant groups, such as those who are poor or abused or who are members of a minority identity group—is subverted by the socially dominant perspectives of those who seek to maintain their dominant position within a socially constructed hierarchy. It is through the inclusion of narrative provided by those who are obese that the partiality of the dominant view of obesity may be seen and challenged.<sup>48</sup> Erroneous assumptions both about the nature of obesity itself and inappropriate assumptions about those who are obese can be revealed by incorporating

these subordinate voices.<sup>49</sup> The well-regarded qualitative research tradition can be drawn upon to support the inclusion of personal stories and narratives which highlight particularity in understanding complex social phenomenon more fully. In this way the inclusion and analysis of personal accounts of obesity act as a much needed counterbalance to dyadic reasoning on the topic. This method has been utilized and refined for nearly a hundred years.

The Chicago School of Sociology developed qualitative research methods in the early part of the twentieth-century, one of which utilizes personal interview, more broadly conceived as personal narrative or case study, in order to seek a holistic understanding of problems experienced by marginalized individuals.<sup>50</sup> Originally these qualitative methods were used to generate data about the historical issues of race and class. The goals of incorporating ethnography or interviewing were to evaluate more fully the individual experience and particular circumstances of those who suffered from some stigma or injustice and, in the longer-term, to improve inadequate social systems or treatment. These methods were incorporated as a counter-balance to strictly quantitative empirical research methods which had been found to provide insufficient insight into the lived experience of those within a particular subjugated population.<sup>51</sup> The Chicago School of Sociology believed that quantitative data collection was a good beginning point, but an inadequate endpoint if the goal was to effect positive change in the lives of those marginalized. It would be through the understanding of the particulars of the lived experience captured through narrative that adequate levels of knowledge could be gained and inroads made toward design of interventions and solution of complex social problems. Feminist researchers, among others, subsequently adopted and adapted this

qualitative research method as they too found that it provided the particularity necessary to understand the lived experience of the marginalized. In a textbook by Pauline Young, trained in this method at the Chicago School of Sociology at the University of Chicago, she articulated the foundation of the method as follows: "When people are least interrupted when they can tell their stories in their own way...they can react naturally and really and express themselves fully."<sup>52</sup>

In short, the stories of individuals, when properly attended to and incorporated into an understanding of a social problem, can provide the type of highly nuanced and contextual information which is unavailable to us through other methods. First, these individual accounts challenge the accepted dominant understanding of obesity offered by other sources grounded in reductionistic and inadequate dyadic reasoning. Second, feminist ethics and epistemology have established the value of attention to particularity. It is not just statistically significant information, but also particular, nuanced information that can appropriately serve to inform discussion of a topic and the power relationships in which the topic and the parties to it are embedded.<sup>53</sup> Young observes:

Moral reason certainly does require reflection, an ability to take some distance from one's immediate impulses, intuitions, desires, and interests in order to consider their relation to the demands of others, their consequences if acted upon, and so on. This process of reflection, however, does not require that one adopt a point of view emptied of particularity, a point of view that is the same for everyone; indeed, it is hard to see how such a universal point of view could aid reflection that leads to action at all.<sup>54</sup>

Thus, the goal of accurate understanding and the goal of ethical action both embrace appropriate attention to particularity.

At several points in this dissertation, first-person narratives relating the experiences of living as an overweight or obese person and of utilizing various weight

loss technologies are included. The inclusion of personal stories is in keeping with these well-established feminist research methods and methods of feminist ethics. They provide vital, highly particular information both in the subjective individual sense and with regard to the social, historical, and cultural context of the lived experience of those who are obese. Though not generating, providing, or even reporting statistically significant data, the inclusion of these individual narratives provides additional information and sources to afford a more nuanced understanding of the experience of members of this subordinated group. What these narratives describe is not generalizable on the basis of statistical significance, but nevertheless vividly present general themes without which an adequate understanding of the experience of obesity and weight loss is incomplete and inadequate.

The next section turns to the social construction of gendered norms regarding bodies and obesity. The section will explore how norms constructed in part by popular media and religious concepts impair the lived experience of obese individuals and impede their utilization of weight loss interventions.

B. Socially Constructed Norms of Appropriate Bodies and the Problem of Obesity

Feminist epistemological approaches reveal how norms of appropriate bodies are socially constructed, moralized, and operate to the disadvantage of obese individuals. The influences on social norms concerning the body come from multiple sources including the media, religious teaching, and social institutions. Subsection B.i illustrates the social construction of appropriate male and female bodies. This discussion illustrates the intersectionality of gendered social roles, sex, embodiment, and relative power to reveal not only the different norms applying to men and women, but also their application to obese bodies. Subsection B.ii emphasizes the role of religious influences and the media

on this social construction. Subsection B.iii analyzes the impact of norms on obese individuals with particular attention to the stigmatization of obesity and its internalization. Personal narratives from obese individuals will illuminate these processes. This section's focus on the moralizing of body norms and obese bodies sets the stage for discussion in Section C regarding ascriptions of responsibility for obesity.

## **B.i Gendered Beauty and Boundaries**

The majority of Americans, including those who are overweight, maintain the opinion that overweight and obese people are lazy and undisciplined.<sup>55</sup> Characteristics such as unintelligent, unmotivated, unattractive, gross, immoral, sinful, inferior, and primitive are often attributed to them,<sup>56</sup> and these, frequently, go unchallenged by either the obese individual or society.<sup>57</sup> In addition, gender mediates and complicates social understanding of body size and overweight.<sup>58</sup> The way in which overweight and obese people are regarded differs based upon weight-associated gender expectations coupled with the individual's degree of deviation from gender norms.<sup>59</sup> This subsection illustrates the intersectionality of gendered social roles, sex, embodiment, and relative power and reveals not only the different norms applying to men and women, but also their application to obese bodies. Comparative analysis of the norms governing male and female bodies illustrates how all bodies are subjected to such norms and the relationship of the norms to structures of relative power and control.<sup>60</sup>

As discussed in Chapter Two, the ideal of what constitutes an appropriate female or male body has changed throughout history. Until recently there was greater cultural dependence and variability in these norms, but with the ascendency of Western cultural hegemony in arenas of fashion, media representations, and associations of norms of

beauty with economic prosperity and political power, norms of appropriate embodiment have become more homogenized.<sup>61</sup> The fluidity with which norms and idealization of bodies has changed over the course of history indicates their socially constructed nature, and the specific changes demonstrate the relationship between bodily norms and power.

For women especially, social status and social opportunities have long been influenced by changing bodily norms. In some historical periods, rounded fleshy female bodies were perceived as being both healthy and erotic and were the most highly desired.<sup>62</sup> Current research on body images reflected in international media reveals that body ideals are increasingly standardized with fewer acceptable variations based on cultural preferences.<sup>63</sup> Recently the feminine body ideal for both European white women and African-American women has tended toward a seemingly impossible standard which simultaneously integrates thinness and curvaceousness.<sup>64</sup> Curvaceousness is characterized by medium to large breasts, a thin narrow waist, and wide hips or large buttocks. In other words, the current ideal is the classic if somewhat exaggerated hourglass shape. For women in wealthy, primarily white, dominant cultures, being thin has been seen as a highly desirable attribute for over fifty years.<sup>65</sup> Possessing this body ideal has been associated with youth, social attractiveness, and self-control or self-discipline. Failing to meet this standard, or indeed becoming fat after having once met the standard, has implications for overall acceptability of the woman.<sup>66</sup>

The construction of gendered social roles and norms of appropriate bodies are obviously intertwined. Iris Young analyzes the social construction of gender and the development of socially acceptable behaviors, affect, and gender-specific body comportments by girls and boys. She argues that instead of being biologically natural,

sex-associated differences in ways of behaving are shaped by social norms reflecting beliefs about what is gender-appropriate and therefore good. Differences between the way boys/men and girls/women walk, sit, dress, smile, throw a ball, and use their bodies is influenced less by biological differences in a body than by social norms governing behavior and social roles.<sup>67</sup> Over time, those in positions of power—men, adults, elders, teachers, clergy, fashion trendsetters—either approve or disapprove of behaviors, adornments, or ways of behaving, and do so differentially with regard to boys and girls. (That some of those in power are female, or that some powerful social roles are occupied by women, e.g. nuns or grade school teachers, does not negate the fact that they have typically internalized social norms shaped by male privilege.) These gender-sanctioned behaviors and appearances become both descriptive and prescriptive social norms. With time, what is approved and then prescribed as gender-appropriate becomes naturalized, i.e., appears natural and is erroneously perceived as being biologically determined and thus free from social influence. The gendered norms come to be viewed as descriptive of a natural phenomenon, rather than as socially-constructed prescriptions.<sup>68</sup>

Some behaviors, appearances, and ways of being become so routine and uniform that they are viewed as essential attributes of one gender or the other, e.g., the widespread belief that men are emotionally strong and women emotionally weak. Essentializing of gender differences leads to viewing deviations as deeply problematic, as "unnatural" in a pejorative and moralized sense,<sup>69</sup> because they challenge both dominant notions of gender identity and the plausibility of accepting that gender differences are anything but natural or biologically determined. Social responses to disruptive challenges to gendered norms may have severe implications for the self and social identity of men

and women. Violations of prescribed and proscribed behaviors and modes of bodily comportment impose costs on the violator, including stigmatization, discrimination, and shame, discussed below.<sup>70</sup>

The social construction of body and weight is particularly complex for women, as women's bodies must satisfy the roles of both subject and object.<sup>71</sup> A woman's body is *subject*, in that it is the vehicle through which she interacts with the world. It is through her body that she walks, talks, works, loves, bears children, relates to, and otherwise interacts in the universe. A woman's body is also perceived as *object*, and expected to fulfill appropriate gender roles aimed at gaining the status of wife and mother. A heterosexual woman must adequately satisfy the sexual desires of the male gaze with her body.<sup>72</sup> She must be visually pleasing as an object or adornment—all the while doing so unselfconsciously.

Through the male gaze, a woman is objectified. Jeremy Bentham's concept of the panopticon elucidates how the male gaze functions to constrain a woman's behavior and construct norms governing her body.<sup>73</sup> The term panopticon was originally used to describe an institution in which observers (e.g., prison guards) can oversee the observed (e.g., prisoners) without their knowing whether or not they are being watched at any particular moment. With regard to the surveillance of women's bodies and habits, 'panopticon' connotes a similar continual societal surveillance of women.<sup>74</sup> The outcome of universalization of the male gaze is that the bodies of women are always both the object of another's gaze while simultaneously the material aspect of the subject (the woman) acting upon the world by vehicle of the body.

Foucault explored this social phenomenon and concluded that the outcome of such societal surveillance is twofold. First, the constant surveillance provides a policing of behaviors of the individuals being observed. Second, the individual who is under scrutiny begins to behave as if she were being observed even when she is not. This internalization of societal surveillance means that eventually the constant observation is no longer required as the individual perceives it even in its absence and responds as if it were present. In this case, the observation-cum-ownership of the female body becomes a part of a broader system of societal control.<sup>75</sup> The female body is no longer under the woman's own control but is now influenced by those who see her as object and by the internalization of their scrutinizing gaze.<sup>76</sup>

For the obese woman, the experience of societal surveillance is frequently more explicit. That her very presence violates social norms is readily apparent, and social responses to that violation are frequently explicit. For obese women social surveillance has been described as harassment. One woman writes:

If you met me, one of the first things you'd notice about me is that I'm fat. Not like, "Oh darn, Anthroplogie doesn't have this in a 12!" kind of fat, but rather the kind of fat that has to shop in the special fat-lady store. The kind of fat that has to consider the structural integrity of thrift-shop furniture. And, unfortunately, the kind of fat that elicits public humiliation and harrassment [sic] more often than I'd prefer to face.

Going on to describe her response to particular forms of surveillance she notes,

The aggressive stuff I can deal with -- I can eviscerate a jerk like a boss. I've had a lot of practice. The most recent instance took place in a Home Depot parking lot, where I was walking to my car with a bag of potting soil. Some dude who apparently spends his days hanging out in his car in the Home Depot parking lot with his equally-pathetic dudebro friends saw his opportunity and seized the moment, hollering at me, "DAMN BITCH, YOU ARE HUGE.<sup>77</sup>

She uses humor to deflect the harmful effect of this interaction,

You know, I like a little creativity in my harrassment [sic]. If you're gonna yell, make it something good. Ideally something I can laugh about later when I'm telling the story to my friends. The standard harrassment [sic] is just boring. "SURPRISE, YOU'RE FAT! LIKE IN CASE YOU FORGOT FOR A MINUTE. I'M REMINDING YOU. YOU'RE WELCOME." (Harrassers [sic] speak in all caps, all the time, I have decided.)

My usual response is to shout back, "YES!" or "IT'S SO TRUE!" or, if I'm feeling especially sassy, to wag my ponderous ass in their direction whilst smacking same.<sup>78</sup>

Nevertheless she labels others' comments as harassment, as comments intended to

disturb, upset, and persecute. The narrator continues,

Sometimes fate takes the wheel. There was the time a guy called me a "fat slut," evidently for failing to cross the street quickly enough in front of his car, and in his haste to zoom away, he drove into a curb and busted a tire. I like to think I made that happen with my mind.<sup>79</sup>

In these exchanges, the response of others to her obesity and her response to them, are

characterized by aggressiveness, physicality, and even violence.

The visceral response of others illustrates what Young suggested about the

concept and response of abjection on the part of dominant others to those both less

privileged and potentially threatening of the boundary between dominant and

marginalized. This writer also articulates the connections drawn by Young between

power and the violation of body norms and gender roles.

....Street harassment is ultimately about entitlement -- it's about a dude (usually a dude, though women are occasionally guilty of it too) who is emboldened by gendered power dynamics into feeling as though your body is public property, and he has a right to comment on it, whether he thinks he's paying you a "compliment" for which you ought to be grateful, or trying to tear you down for not being attractive according to his exacting specifications.<sup>80</sup>

It is power, and the fact that men have generally held more of it than women, that explains why men have generally not been subject to the same level of intense scrutiny. Where they are subject to similarly exacting social norms, however, the explanation resides in relationships of relative power.

Overweight and obese men are subject to societal surveillance and may experience the panopticon gaze as well. However, men are generally given more flexibility than women with respect to violating gender-based norms for weight.<sup>81</sup> Up to a point, violations of gender-based norms of corporeal appropriateness for men increase perceived masculinity. Men are expected to be larger, stronger, and more muscular than women.<sup>82</sup> Therefore, overweight or obese men are more often than women given socially appealing attributions related to their size. They are seen as being powerful, masculine, and if it not too fleshy, athletic. Before negative social attributes are employed as descriptors of them, men are allowed greater deviation from the ideal.<sup>83</sup> Specifically, researchers have found that men begin to experience noticeable increases in weight bias when their body mass index (BMI) reaches 35 or higher, while women begin experiencing notable increases in weight discrimination risk at a BMI level of 27.<sup>84</sup>

Nevertheless, despite greater latitude in deviations from the ideal body image for men, once serious violation of the norm has occurred, these men are considered effete.<sup>85</sup> Significantly obese men lose the social advantages afforded to most typical males and come to be regarded much as women are, with diminished authority and power to act upon the world. Sufficiently obese men lose their privileged position in the eyes of society, and their authority and power gradient diminishes to more closely resemble that of women. This connection among weight, sexuality, and power is evident in the case of Al Roker, a prominent African-American man who has hosted the NBC *Today* show for many years. After struggling with his weight he lost a significant amount. His wife

described his hug before his weight loss saying that "he was always a cuddly hug," while after his weight loss she commented, "Now, he's this strong and sexy hug."<sup>86</sup> His weight loss seems to have moved him from diminished sexual status to a stronger, more sexual, and more typically male status. Mrs. Roker's perceptions should not be criticized for reflecting a dominant perspective on the obesity, sexuality, masculine power connection. Her stated perceptions were influenced by the social construction of obesity and its ascribed character traits.

The above examination underscores the socially constructed nature of bodily norms. The following subsections will discuss various influences on this social construction, beginning with the media. Further, theologically informed concepts are examined to elucidate their role in explaining alleged causes of obesity and to reveal moralizing about obese bodies.

# **B.ii Influential Sources for Social Norms Governing Bodies**

This subsection discusses how norms of appropriate bodies—appropriate size, image, and comportment—are explicitly shaped by several social sources. The first is the constellation of media that mark normal, abnormal or aberrant, and beautiful bodies. These media sources include art, fashion, news outlets, and the entertainment industry which portray idealized unattainable bodies as the norm.<sup>87</sup> The second source is religious institutions that explicitly teach about the appropriate care and use of bodies.<sup>88</sup> It will be argued that religious teaching has been used explicitly to moralize the particular body norms advocated. Together, these sources provide a framework upon which norms of acceptable bodies have been constructed and within which actual bodies are evaluated.

# **B.iii Media Representations of Male and Female Bodies**

The current ideal male body type is similar to that observed in ancient Grecian sculpture, and the standard of the male ideal has deviated less over time than has the ideal of the female form.<sup>89</sup> It is described as a muscular mesomorphic shape with welldeveloped musculature across the arms and upper torso, and a narrow waist and hips. The ectomorph body type is thin and angular with less developed or obvious musculature. At the other end of this spectrum is the endomorphic body type, which would best describe those men who are overweight or obese.<sup>90</sup> For the most part the modern idealized male body norm is to be generally lean with moderate muscles.<sup>91</sup> Research on male body ideals has primarily addressed body image concerns, most often stated in terms of muscularity instead of body weight or thinness.<sup>92</sup> Research suggests that while muscularity is the ideal, the boundary of acceptable muscularity has limitations. An extreme level of muscularity, such as that found among professional bodybuilders, was perceived as being unnatural, largely unattainable, and reflective of a conceited or narcissistic personality.<sup>93</sup> Additionally, lower levels of body fat are an important part of the idealized male body as this permits the proper viewing of muscles on the male form. Too much adipose would obscure the view of the muscles while too little is generally inconsistent with welldeveloped muscles.<sup>94</sup> Flat, firm torsos are idealized.

The present dominant perspective on appropriate female bodily norms comes, in large measure, from media representations which promote unnatural leanness to the exclusion of more typical, attainable, and healthy ideals of beauty.<sup>95</sup> In research conducted to reveal media trends in depicting feminine beauty, Sypeck et al. examined images shown in the most popular women's fashion magazines.<sup>96</sup> The retrospective

review revealed that between 1959-1999 among fashion models in three of the four high circulation women's magazines there was an increasing trend towards thinness.

Additionally, the research concluded that a

...strong message communicated by the print media over the last 40 years regarding female beauty seems to have changed from one espousing the importance of a pretty face to one that additionally emphasized an extremely thin figure, as women have been increasingly exposed to models' bodies and as these bodies have become progressively thinner.<sup>97</sup>

In a 2012 ABC evening news segment, Diane Sawyer reported that most of today's runway models meet the body mass index criteria for anorexia. Twenty years ago the disparity between the average women and fashion models was less pronounced. At that time the average fashion model weighed about 8 percent less than the average woman. Current fashion models weigh approximately 23 percent less than the average woman today. This does not accurately depict the proportions of a typical woman.<sup>98</sup> Research conducted on pervasive female images in the media found that the cultural ideal of female beauty emphasizes the desirability of thinness, with content analysis confirming the desirability of tall, young, and extremely thin models. A number of studies have demonstrated that female centerfolds featured in *Playboy* magazine have shown a significant decrease in body weight over the past 40 years.<sup>99</sup>

Video games' depictions of bodies also exert influence. Martins et al. found that among the 150 top-selling video games in the United States, games rated at high levels of photo realism contained imagery of females who are systematically thinner than the average female. Comparing the proportions of females depicted in the games with actual anthropometric data, the authors concluded that video games which have a high degree of photo realism may pose a threat to development of positive body images and may

promote body dissatisfaction among females routinely exposed to them.<sup>100</sup> As the next section discusses, overweight and obese people are not represented favorably by the media.

#### **B.iv Media representations of Overweight and Obese People**

Depictions of overweight and obese people help to reinforce particular conceptions of individuals in each of these groups. Research examining body characteristics of characters in prime-time television shows, revealed that of 1,018 major television characters, 14 percent of females and 24 percent of males were overweight or obese, which is less than half the prevalence of obesity found in the general population. Overweight or obese female characters were less likely to be considered attractive, to interact with romantic partners, or to show physical affection. Overweight and obese male characters were also less likely to have romantic partners and friends or to talk about dating; they were also more likely to be shown eating than engaged in more physically active endeavors. Larger characters were more likely to be ethnic minority group members, older, married, and unemployed. Larger characters were also more likely to be guests on shows rather than be main characters and were more likely to be shown in comedic than in dramatic roles. The study concluded that "overweight and obese characters are associated with specific negative characteristics."<sup>101</sup>

The following narrative personalizes the lived experience discussed above.

If you look at the way we are portrayed on TV we supposedly like being identified by our fat. It makes us funny. It makes us stupid comic relief. It makes us acceptable for other people to acknowledge our existence. In fact I've come across people who have actually tried to cite TV characters as proof that there is nothing wrong with being a fat guy (and let me tell you I'm making myself use "fat guy" as much as possible in order make myself okay with using it). Yeah Homer Simpson, Peter Griffin, and Kevin James' character on King of Queens prove that everyone is fine with the existence of fat guys.<sup>102</sup>

It seems that this blogger is frustrated by his designation as an obese male and by the social implications of that part of his identity.

When obviously uninformed people make silly comments like that I just want to commit violence. But then I'd be the crazy fat guy (and remember I'm black so I'd become the Big Scary Black Man) and it would be my fault for "taking it personally." Yeah.<sup>103</sup>

His range of socially acceptable responses is further constrained by the social construction of another factor—namely, his race.

Repeated exposure to particular media content leads the viewer to accept the portrayals as representations of what is real.<sup>104</sup> Continued viewing of an ultra-thin body ideal has been shown to lead to increased body dissatisfaction among those whose bodies least resemble the images being portrayed. A meta-analysis of studies on the role of the media in the development of body image concerns strongly supports the notion that exposure to mass media depicting the thin body as ideal is related to women's vulnerability to disturbances in body image.<sup>105</sup> This was true across studies employing both experimental and correlational designs, and across multiple measures of women's body image, eating behaviors, and beliefs. Research suggests that men are affected similarly by idealized male body images in comparison to their own perceived body disparities from that ideal.<sup>106</sup>

The social construction of male and female body norms involve the attribution of character traits to both ideal and deviant body images. Various culturally constructed norms of what is implicitly alleged to be *the* appropriate male or female body influence the dominant view of beauty, the degree of acceptance of what falls beyond those norms, and thus, what is likely to be rejected by a given society.
As analyzed in the next section, another powerful mode of developing and transmitting social norms of acceptability of the body is found in religious teachings. Various religious teachings have served to define what constitutes an appropriate body and to imbue bodies—appropriate or inappropriate—with moral significance.

## **B.v** Theological Constructions of Appropriate Bodies

Theologically grounded concepts help to construct the societal understanding of all bodies including those that are overweight. This section illuminates how the theological concepts of human dignity, embodiment, and sin, as well as theological norms governing the proper use of food, influence the construction of obesity.

Theological teachings present the norms governing appropriate bodies in a particularly moralized manner associated with godliness or a lack of godliness. This theological influence is often implicit and even operates in secularized ways and contexts. Theological influences have infiltrated American culture in ways that influence lives, shape the ways in which people strive to live, or frame the meanings people find in their existence, whether or not they consider themselves religious. For many people, theologically grounded concepts may be almost seamlessly embedded, sometimes subconsciously, in both their self-identities and their ways of viewing other people and their circumstances.

A colloquial expression of these theologically inspired ideas is that one's body is a temple and as such, it deserves respect and care. This belief informs the admonishment that one should be careful what one does with (or puts into) one's body. Respect for the body has traditionally been included in the theological conceptualization of human dignity. Respect for the body flows from belief that the body is the earthly home of the

soul and that the human being is the embodied divinity of the creator.<sup>107</sup> The concept of *imago dei*, or in the image of God, as found in the Old Testament in the book of Genesis states, "So God created man in his own image, in the image of God he created him; male and female he created them."<sup>108</sup> While some faiths specifically hold that the physical form of God is similar to that of humans, this passage from Genesis is uniformly interpreted as setting humans apart from other, seemingly less complex creatures. It suggests that humans possess unique characteristics such as reasoning, creativity, consciousness, personality, and abstract thinking, which are intended to be used in order to establish a relationship and be in union with God.<sup>109</sup>

In Jewish writings, the *Tzelem Elohim* or *Imago Dei* is the infused divine value that all humans have, and this value gives rise to the sanctity of life. According to Rabbi Doron Shultziner, "God implanted in human beings a sacred kernel of worth, and demanded that we protect human dignity in us and in others, and thus, damaging human dignity is a direct offence to God."<sup>110</sup> Maintaining human dignity requires the proper care of body through the proper use of food. The President's Council on Bioethics suggested a place for human dignity bioethical analysis and highlighted the religious foundations upon which the concept is based.<sup>111</sup>

[T]he human being has special dignity because he shares in the godlike powers of reason, freedom, judgment and moral concern, and as a result lives a life freighted with moral self-consciousness—a life above and beyond what other animals are capable of. Speech and freedom are used, among other things to promulgate moral rules and pass moral judgments, first among which is that homicide is to be punished in kind because it violates the dignity of such a moral being. We reach a crucial conclusion: that the inviolability of human life rests absolutely on the higher dignity-the-god-likeness of human beings.<sup>112</sup>

The following discussion reveals the pervasive social influence of non-secular conceptions of the body and human dignity.

The bible is replete with stories of the evils related to violations of God's laws for

the proper use of food. The story of Adam and Eve is a widely known example of the

misuse of food which according to scripture, leads to original sin causing the vast

separation between humans and God.

So when the woman saw that the tree was good for food, and that it was a delight to the eyes, and that the tree was to be desired to make one wise, she took of its fruit and ate; and she also gave some to her husband, who was with her, and he ate."<sup>113</sup>

While obesity was not an issue, the violation of the proper usage of God's abundant

resources and His laws surrounding food was.

Narrowly understood, obesity can be said to result from the improper use of food. In a book of biblical limericks the implied connection is exposed:

The fruit of that tree, do not try it. Give an order and man will defy it. Those very first bites Left us laden with plights Sin, death, and opinions on diets.<sup>114</sup>

Whether one is a person of theologically-based faith or not, this story of the good and evil nature of food and the concept of human greed has been culturally wide-spread.

Another biblical story refers to the temptation of Jesus with food following his baptism in the River Jordan. Scripture recounts that Jesus was led by the Spirit into the desert where He fasted. After fasting for forty days He was obviously hungry, and Satan approached Jesus and said, "If you are the Son of God tell these stones to become bread." He answered, "Man does not live on bread alone, but on every word that comes from the mouth of God."<sup>115</sup> Jesus is understood to be saying that food has a proper place and that it is not only food that should fill us. Of more importance is God's word. Improper use of food in both of these instances is understood to have the potential to cause a chasm between humanity and God. In the story of Adam and Eve, it was food, obtained outside of the law of God, which caused the downfall of humanity. While improper use of food in this instance is simply the vehicle for the betrayal of God's laws, the story seals a strong and ongoing prohibition against using food improperly. The story of Jesus in the desert provides evidence that desire for food should be considered, at all times, secondary to regard for God and that a valuing of food ahead of God's word would be a grievous misalignment of God's ideal order and the place of food within it.

Religious teachings often espouse an obligation for an intimate autonomous relationship with God. Anything that comes between or separates an individual from God, including those things which might be described as offending human dignity, are considered sinful.<sup>116</sup> These things are to be avoided since they distance the individual from an intimate relationship with their creator. Additionally, religious teachings often hold that believers have social responsibilities which are communitarian in nature, or meant to reflect a broader societal obligation of individuals, one to another. Societal obligations, as discussed by Rabbi Shultziner, might include acting for the greater good of the community even if that entails making personal sacrifices for the betterment of the whole.<sup>117</sup> These religious concepts, both individual and societal, provide another framework within which individuals or particular behaviors can be judged as good or evil. Religious concepts therefore provide an additional layer of surveillance and modification of human behavior in accordance with one's adherence or deviance from socially constructed religious ideals.<sup>118</sup> It is partly within this broad theological

understanding of an individual's obligation to God and to society that obesity is constructed as a sign of character flaw, immorality, and godlessness.

Given the belief that the body houses one's divinity, a moral obligation to care for the body follows straightforwardly.<sup>119</sup> Within a theologically informed framework, failure to care for the body appropriately by being overweight or obese is construed as evidence of committing the sin of gluttony. Obesity is viewed as *prima facie* material evidence of sin-specifically, the sin of lacking respect for one's self, one's body, others in the community, and God. Sin can be defined as a violation of our obligation(s) to God.<sup>120</sup> Indeed, gluttony is considered one of the cardinal sins; and thus overweight and obesity are both evidence and the result of this vice or character flaw.<sup>121</sup> There is some textual support that the original meaning of the word gluttony in the Bible was meant to encompass more than simply overconsumption of food. Gluttony was initially construed as a preoccupation with materialism or as the perversion of natural God-given appetites, such as love being distorted into lust, or self-esteem being transformed into pride. St. Thomas Aquinas further defined the sin of gluttony. He writes, "Gluttony denotes, not any desire of eating and drinking, but an inordinate desire...leaving the order of reason, wherein the good of moral virtue consists."<sup>122</sup>

Pope Gregory the Great during the 6<sup>th</sup> century was the first to articulate the seven deadly sins: lust, gluttony, greed, sloth, wrath, envy and pride. He outlined five actions which were considered to be gluttonous. These actions included: eating before the time of meals in order to satisfy the palate; seeking delicacies and better quality of food to gratify the sense of taste, which he referred to as vile; seeking after sauces and seasonings for the enjoyment of the palate; exceeding the necessary amount of food; and taking food with

too much eagerness, even when eating the proper amount, and even if the food is not luxurious.<sup>123</sup> It has been said, that "the concept of obesity as a moral imperfection originated with the theological philosophy of this great early church leader."<sup>124</sup> The common understanding and usage of the term gluttony has now been relegated almost exclusively to the misuse of food.<sup>125</sup>

While these influential theological writings on gluttony do not specifically address obesity, obesity is thought to be a clear manifestation of such gluttonous, sinful behavior. Additionally, these theologians point to the fact that gluttony is the gateway to other sinful behaviors such as sloth or unchaste sexual appetites.<sup>126</sup> The Ten Commandments' injunction against killing is understood to prohibit killing oneself as well as killing others. Since obesity along with its co-morbidities has been shown to reduce one's lifespan, being obese may be seen as killing oneself and therefore would be considered similarly sinful.<sup>127</sup>

Thus one interpretation of obesity is that those who are obese are morally flawed—sinners. Obesity is an affront to God's image because it damages the body which is the earthly home of the spirit. As humans are thought to be created in God's image, destruction of that image is an example of distancing of oneself from God. A logical conclusion then might be that the overweight and obese should indeed be condemned by society for violating these obligations to God, to themselves, and to society. Stigmatization, the topic of the next section, has thereby been perceived as being morally justified on theological grounds.

C. Stigmatization, Internalized Stigma, and the Formation of the Obese Identity

The following section discusses the impact of socially constructed norms of the body, with particular attention to the stigmatization of those who are obese. Indeed, prejudice based on an individual's body size is seen as the last socially acceptable arena of discrimination: "bias against overweight people has grown at the same time the prevalence of obesity has increased."<sup>128</sup>

The first subsection discusses stigma and shame resulting from social recognition—or an individual's own recognition—of the disparity between the overweight individual's actual state and what is perceived as normal and acceptable. Stigmatization and the feeling of shame are inherently relational; here they presuppose a relationship—a negative one—between the overweight marginalized individual, dominant others and society itself.<sup>129</sup> The stigmatization of obesity is the concomitant phenomenon and conceptually opposite dyad of valorizing of norms of beauty and appropriate bodies. The second subsection describes from the obese individual's perspective how stigma functions like the disciplining panopticon, criticizing inappropriate bodies even in the absence of material discrimination. The stigma of obesity becomes internalized and functions as a means of self-evaluation by which obese people limit themselves and their opportunities. While substantial attention has been paid to internalized stigma of age and race,<sup>130</sup> less attention has been paid to internalized stigma associated with obesity. The following subsection reveals the stigma of obesity and its effects.

# C.i The Stigma of Obesity

Sociologist Erving Goffman, who pioneered work on the mechanisms of stigma development and the consequences of stigmatization, defined stigma as "the phenomenon whereby an individual with an attribute is deeply discredited by his/her society and is rejected as a result of the attribute. Stigmatization is a process by which the reaction of others spoils normal identity."<sup>131</sup> Fat serves as such a stigma.

Stigmatization—and, in turn, an individual's experience of stigma or of being stigmatized—occurs when the stigmatized person is identified as deviant.<sup>132</sup> Stigma refers to the negative beliefs, attitudes, and conceptions held by the general population, which lead to stereotyping, prejudice, and discrimination, for example, against individuals who are obese.<sup>133</sup> Sociologist Gerhard Falk states that *existential stigma* derives "from a condition which the target of the stigma either did not cause or over which he has little control."<sup>134</sup> In contrast *achieved stigma* is "stigma that is earned because of conduct and/or because they contributed heavily to attaining the stigma in question."<sup>135</sup> Both may attach to obesity, depending on which attributions of obesity's underlying causality are made. If obesity is attributed primarily to genetics rather than to individual choice or lifestyle, for example, then existential stigma would apply.

Lifestyle is frequently regarded as something which is chosen when instead it may determined by social factors of class, economics, opportunity, and geography.<sup>136</sup> Nevertheless, 'lifestyle' implies individual choice and autonomy, in contrast to fatalistic genetic determinants. Research found that the more that people believe that weight is voluntary (i.e., can be controlled by willpower and discipline through diet and exercise), the more negative is the attitude of prejudice expressed towards the overweight

individual.<sup>137</sup> As the final section of this chapter discusses, embracing different causal accounts of obesity and different assignments of responsibility for being obese results in different, though largely negative, social attitudes toward people who are obese.

April Michelle Herndon relates her own experience as a "self-identified Fat woman and a Fat Studies Scholar" who inadvertently lost a significant amount of weight.<sup>138</sup> Working with a dietician, her primary goal was to avoid diabetes, not to lose weight. In the process she lost a significant amount of weight, but was unprepared for the social response. Formerly obese Herndon offers a unique before and after perspective on the experience of the stigma of obesity.

Prior to her weight loss she had become inured to the negative comments she would routinely receive regarding her fatness. Following her weight loss, she reports "feeling like I'm in disguise has been especially hard for someone like me, a person who hasn't bought the traditional narrative of why people are fat."<sup>139</sup> After what she describes as "slipping onto the world of thin privilege,"<sup>140</sup> she found that "losing weight seems to have signaled to those around me that I must have always or must now believe these stereotypes of fat people; my weight loss also seems to have suggested to them that it is now OK for them to admit they believe those stereotypes."<sup>141</sup> Herndon concludes, "The knowledge I've gained in the privileged class is both oddly comforting, because it means that as a fat person I wasn't imagining what was happening, and also disconcerting, because it says to me....that things are worse than I thought."<sup>142</sup>

Another woman describing the experience of obesity in her blog connects her obesity with the attribution of other negative traits:

Harrassment [sic] doesn't always take place on the street, either. A few weeks ago I was sitting in a museum cafe, eating a salad, when I noticed a table occupied by

three young men staring and pointing at me and giggling to one another in a manner so lacking in subtlety that I was less upset that they seemed to be talking about me in first place, and more offended that they thought I was too intensely stupid to notice.<sup>143</sup>

Such attributions wound and anger, yet because they are not explicit, the object of such attributions cannot directly respond or refute them. The woman continues:

Sometimes I think this sort of thing is worse than being catcalled in public by dudes -- at least with the yellers I can yell back and exorcise my fury, even though this is not always the wisest nor the safest course of action...<sup>144</sup>

Empirical research supports the themes revealed in these narratives. People do attribute negative character traits to those who are obese.<sup>145</sup> A study of employers found that managers routinely prefer to hire otherwise equally qualified non-overweight employees because those who are overweight are perceived not to work as hard, cost the company more money, take more breaks, and take more time off of work.<sup>146</sup> Overweight and obese people are often further regarded as being of lower intelligence in both employment and other settings.<sup>147</sup>

## C.ii Internalized Stigma and Implications for Care-Seeking Behaviors

Internalized stigma refers to the perceived devaluation, shame, secrecy, and social withdrawal experienced by those who deviate from social norms, such as those constructing appropriate bodies. Living in an environment which approves the stigmatization of people who are overweight, an overweight individual may come to accept and internalize these attitudes and believe she is deserving of such treatment.<sup>148</sup> Lower self-esteem, lower social expectations, and a reinforcing cycle of social withdrawal and rejection result.

One blogger describes his experience of others' stigmatization and details the

attribution of negative stereotypes to him, based on his being situated at the intersection

of multiple sources of marginalization.

You see as a fat guy people like to draw conclusions about you. You're an athlete (and let me tell you that assumption is not as cool as it sounds). You're not very smart (I don't know how the association between fat and stupid makes sense). You have unhealthy eating habits. You are gonna die young. You hate exercise and physical activity (totally conflicting with the assumption of being an athlete). The list goes on.<sup>149</sup>

He recounts how his particular experience of obesity stigma is different because he is a

man, and as such a different set of socially constructed gender based norms regarding

emotional expression apply to him.

And I get the feeling that there is an extra bit of pain that fat guys feel. You see as part of the script of being a man we are not only not supposed to let things like that hurt us but in the event that they do we are not supposed to talk about it. Not show it. Just keep it bottled up inside let people pick on us and then go home and cry ourselves to sleep at night. And the way fat guys are shown on TV its [sic] no wonder people go around thinking it's all good in the hood to tease, pick on, and otherwise harass us.<sup>150</sup>

He explains how the persistent stereotyping has changed him.

For longer than I can recall now this is the type of stuff I've heard and I've taken it in so deeply that I actually pray for the very invisibility that people say they are burdened with. Maybe its [sic] a sign that something is wrong with me but I don't feel invisible with my fat. In fact I feel like I'm the elephant in the room (yeah you see what I did there right?). And elephant that wishes he were a fly.

To be so hurt by a simple characteristic you wish you could fade into the background. No to be so hurt by the way people put so much stock in a simple characteristic you wish you could fade into the background.<sup>151</sup>

He has internalized the public stigma of obesity; the stigmatizing nature of that which

stigmatizes him has become a part of his self-identity.

The internalization of stigma serves to justify and naturalize others' negative

reactions to obese individuals. In turn, obese individuals' responses are rendered

unjustified. The dominant perspective of obesity thus exerts influence publicly and privately, socially and psychologically. The precise nature of that stigmatization depends in part upon the stigmatizer's understanding of the etiology of obesity and the degree to which the obese person is held responsible for his condition. The next section explores these ascriptions of responsibility.

D. Ways of Being Responsible and Ascriptions of Responsibility for Obesity

Among the social norms that inform attitudes toward obesity are norms concerning assignment of responsibility. The first subsection considers different senses of responsibility—causal and moral—and related concepts of causation, control, agency, blame, liability, and "taking care." The second subsection the attempts to use these concepts to untangle the frequently conflated senses in which people are considered responsible for their obesity. It explores the implications of confusing backward-looking ascription of causal responsibility with a moralized ascription of personal responsibility, i.e., confusing causal and moral responsibility, as well as confusing ascription of backward-looking agent-responsibility (AR) with a forward-looking, empowering sense of responsibility-taking.<sup>152</sup> The third subsection analyzes social manifestations of different ascriptions of responsibility for obesity. These manifestations include a "personal responsibility for health" movement, sin-taxes, and ineffective doctor-patient communication regarding obesity. The subsection argues that appropriate ascriptions of responsibility would instead support improved communication and access to WLS for those who medically qualify to benefit from it. It is critical, however, to begin with the clarification of different senses of responsibility.

#### D.i Ascriptions of Thing-Responsibility, Agent-Responsibility, and Blame

Philosopher Kurt Baier provides a useful taxonomy for considering different senses of responsibility. When we claim that failed brakes or an icy road are responsible for an auto accident, he states, we ascribe "thing-responsibility" (TR), whereby:

[T]he central idea is to single out the decisive factor that *must actually be operative* when an undesirable event is being prevented or a desirable one produced. This factor may be singled out because it is the most easily controlled [the brakes]... or perhaps because it is abnormal [icy conditions] ... Even when the factor identified as responsible is not itself controllable, knowledge of its responsibility may be of some, albeit limited, practical use, since it may prevent us from wasting our efforts on controllable factors which are not efficacious, or may warn us that there is nothing we can do ...<sup>153</sup>

Baier notes that "the rationale of ascribing responsibility is thus ultimately forwardlooking, to improve the future; but the actual ascribing of TR is backward-looking."<sup>154</sup> Ascribing TR is akin to, but not identical with, identifying a cause.

As discussed in Chapter Two with regard to obesity's etiology, accurately ascribing TR is often a difficult empirical matter. Nevertheless, ascribing *backward-looking* AR is more conceptually complicated. Moral agents cannot only be blamed, but also be blameworthy; they may be at fault, be culpable, be liable for damages, or be deserving of condemnation. The complexity lies in the fact that backward-looking AR can only be appropriately ascribed when the agent has failed to fulfill a *forward-looking* AR. While brakes become thing-responsible for an accident simply by being its cause, a driver is agent-responsible only if she failed in a forward-looking AR, for example, by failing to fulfill her duty or the standard of care. "The forward-looking aspect of agent-responsibility consists in a social requirement, whether customary, legal, or moral.<sup>155</sup>

Being the cause is neither necessary nor sufficient to be agent-responsible. In cases of vicarious AR, for example, the party responsible for a harm is not the party who caused it. It is a failure to fulfill the previously ascribed social requirement that makes an agent agent-responsible for harm and other negative outcomes. (In like manner, it would seem that fulfillment of some social role, requirement, or norms is requisite for appropriate ascription of AR for praise-worthy, positive outcomes.)

The rationale or goal for assigning AR is also more complex. The goal of ascribing backward-looking AR may be to blame, condemn, or punish, or it may be to identify a source of resources to address the problem for which the party is agentresponsible. A party may be held responsible in the *backward-looking* agent-responsible sense without being subjected to blame or being found blameworthy in a moralized or punitive sense. Further, an agent may be ascribed—or may assume—responsibility in a forward-looking agent-responsible sense. An agent may be ascribed or assume a forwardlooking AR—a social requirement—simply because he is identified as having the resources to fulfill the requirement, or because he cares and assumes the responsibility to take care of a problem. Sometimes mustering those resources must involve identifying a cause, ascribing TR, or ascribing backward-looking AR (including failure to fulfill the forward-looking social requirement). Sometimes one or more of these investigations will divert resources from taking care of what needs to be done. The next subsection addresses notions of responsibility for obesity. It also expresses concern about the impairment or diversion of resources—financial, intellectual, and emotional—that can occur for the sake of ascribing responsibility for obesity and blaming the culprit.

# D.ii Ascriptions of Agent-Responsibility for Obesity and Moral Agency

As Chapter Two established, substantial effort and financial and social resources are expended to try to explain obesity's etiology. Yet identification of *the* cause of obesity, the assignment of TR to a single modifiable cause, is proving a futile goal, because myriad things contribute to obesity. This is true of the so-called obesity epidemic and is likely true of any particular individual's condition of overweight or obesity. Yet much media attention, many social policies, and even scientific studies approach obesity with the logic of identity, focusing on one factor to the exclusion of most or all others. Take for example New York City's recently overturned regulations which sought to outlaw large portions of low nutritional value soft drinks.<sup>156</sup> This soft drink ban would have failed to enact similar portion control safeguards for other calorically-dense nutritionally-poor foods, which continue to be available, unrestricted. Such efforts misapply single source responsibility to what is a multi-factorial condition. Additionally, research conducted on obesity often focuses on one particular factor of obesity's development such as genetics, or diet, or exercise to the exclusion of other contributory factors.157

The gold standard of research—randomized clinical trials—and genomic research studies rely on controlling for, or assuming the consistency of, confounding factors; however, outside of these rarified experimental environments, confounding factors mix with the factor under study. Research must always simplify, but as the trend toward translational research acknowledges, it is important to begin to study the causes of health conditions and the effectiveness of interventions in the actual lived environments of the people those interventions are intended to benefit.

The drive to identify the "but for" cause of obesity—as in, "but for this single contributing factor, this person would not be obese"—seems to derive from not only the difficulty of studying multiple contributing factors at once, but also the impulse to ascribe moralized responsibility for the problem. Where effective intervention in, correction of, and prevention of a problem are the goals, as Baier argues, the rationale for identifying the cause or causes is to intervene for the sake of future improvement. When multiple contributing factors are identified, the low hanging fruit, the factors that are most easily or efficiently susceptible to intervention tend to be addressed. Indeed, it is frequently not important to identify *all* contributing factors in order to commence intervention in some.

Popular understandings of obesity—and indeed some more scholarly treatments of obesity—frequently fail to appreciate obesity's actual complexity.<sup>158</sup> The overwhelming popular opinion is that overweight and obesity are voluntary conditions brought about primarily by malleable lifestyle habits.<sup>159</sup> Even if genetic contributions to obesity become better established, it seems likely that the social construction of obesity will not shift to incorporate the TR of genes as a first-order explanation for an individual's obesity. It seems obvious that a person is neither agent- nor thing-responsible for her genes. Thus if obesity were solely caused by "bad" genes, then a person would and should not be held agent-responsible for her obese condition. But, obesity is a complex multi-factorial condition, not merely a genetic condition. Moreover, even if there are genes that increase risk for obesity or that affect metabolism in such a way that a person with a severely restricted caloric diet would still become overweight, human beings need to ingest and metabolize nutrition. There is reason to suspect that were some individuals' obesity shown to be strongly genetically associated, even genetically

"caused," they would still be unreflectively blamed for eating. Eating is still a voluntary behavior, even if without doing so one would die.

Obesity is not the only health condition for which a genetic component is likely to fail as a condition excusing the person from AR for manifesting it. Consider the following "genetic conditions." People born with genomic anomalies e.g., phenylketonuria (PKU) or cystic fibrosis are not held responsible for their conditions. Even when particular behaviors complicate management of a condition—for example, when a person with cystic fibrosis visits an environment that exacerbates her respiratory problems—the ascription of AR for that behavioral contributing factor may not carry blame. In contrast, when a condition known or even just assumed to have strongly genetic components is also experienced by people with a socially disparaged identity, they are less likely to have access to the excusing condition of being not-agent-responsible. And any ascription of AR is likely to carry blame as well. It is well-documented, for example, that when African-Americans with sickle cell disease, a condition known to be genetic, experience sickle cell crisis requiring prescription of strong pain-relievers (frequently, narcotics), they are frequently regarded with suspicion in emergency departments as putative drug-seeking addicts.<sup>160</sup> Racism—and frequently class-based norms—combine to construct the person as a likely addict, and the social construction as addict warrants refusal of pain relief. Similarly, even when an individual's obesity is viewed as being the result of a combination of genetic predisposition and behaviors (e.g., diet and exercise), blame typically accompanies ascription of AR. In contrast, it is frequently considered "understandable" that the person with cystic fibrosis would nevertheless visit a horse

barn, or that a teenager with PKU eats pizza, triggering symptoms of their genetic conditions.<sup>161</sup>

Therefore, ascriptions of personal AR and blame—based on belief in person-asthing-responsible and as agent-responsible for failing to fulfill some social requirement complicate and undermine efforts to address obesity in a manner similar to other healthrelated conditions.<sup>162</sup>

The stigma attached to obese individuals because of their ostensibly obesitycausing conduct complicates efforts both to identify obesity's multiple causal components and to devise and implement interventions to address it. This dissertation argues that the impulse to ascribe moralized AR serves as a barrier to embracing WLS.

The search for the thing-responsible culprit, the cause, takes on a dual social goal. Identifying the cause is not only to serve the forward-looking rationale of improving the future but, also to ground ascription of AR *and* blame. AR is ascribed as soon as the agent, the obese person, is identified as involved in the causal chain leading to her obesity, which of course she must be, because she must eat.

American culture is heavily invested in the myth of the self-made man.<sup>163</sup> The depth of cultural investment may be due to the erroneous belief that if one is not completely thing- and agent-responsible for the good things one enjoys, then one does not merit them. Recognition of the role in one's own economic success of, for example, social infrastructure or one's ancestors' wealth or educational attainments is considered by some to suggest that one does not merit one's attainment. The suggestion that a complex web of factors, including one's effort and agency, is responsible for one's success seems to threaten the pleasure and satisfaction some take in their positive

circumstances. Failing to hold people responsible for their negative circumstances, including health conditions like obesity, would similarly threaten this worldview and sense of merited pleasure such people take in the positive aspects of their lives. As a consequence, Americans tend to view their fates as of their own making—even when there is legitimate evidence to the contrary, as is the case with obesity.<sup>164</sup>

Two paradoxes result from applying to the problem of obesity these notions of identifying backward-looking TR, ascribing backward-looking AR for failure to fulfill a forward-looking social requirement, and blaming/being blameworthy. First, paradoxically, even as obese individuals are frequently blamed for their obesity, they are regarded as having diminished capacity for moral agency due to the lack of self-control and self-governance of the body evidenced by their obesity. Having moral agency is predicated on being able to control oneself in light of one's understanding of what is right and what is wrong informed by accepted social norms. Without such ability to control, one lacks agency.<sup>165</sup> "Slenderness symbolizes being in-control."<sup>166</sup> Obesity functions for obese people as evidence of both their having made wrong judgments with regard to their bodies and their being incapable of self-control. While being incapable of self-control might in other contexts serve as an excuse for wrong action due to impaired or absent judgment, for obese people, lack of self-control serves to compound their blameworthiness and serves as a quasi-causal pathway for their culpable behavior. Obesity has come to serve as a social marker of inferior moral character, as well as inferior social status, because of its association with poverty.<sup>167</sup>

Second, if an obese person exercises agency and assumes forward-looking AR for her obesity, i.e., undertakes to reduce her weight and improve her health, she is likely to

be ascribed backward-looking AR and blame for becoming overweight in the first place. In the context of obesity, the moral position of assuming the responsibility of taking care of a problem cannot be blamelessly occupied by an obese person herself.<sup>168</sup> This paradox may help to explain why WLS is socially constructed as an illicitly easy way out of obesity, even though the post-surgical protocol requires substantial effort. Compared to dietary restriction and the exertion of exercise, WLS does not look sufficiently like penance for the sin of gluttony.

The next subsection examines implications of these paradoxes for both obese patients' care-seeking behaviors and physicians' treatment of obese patients.

## D.iii Implications of Misplaced Ascriptions of Responsibility for Obesity

This subsection analyzes clinical implications and social manifestations of ascribing responsibility for obesity inappropriately. These manifestations include a "personal responsibility for health" movement, sin-taxes, and ineffective doctor-patient communication regarding obesity.

Recently, a growing trend towards ascribing personal responsibility for obesity has been observed.<sup>169</sup> The Patient Protection and Affordable Care Act and the 2012 Presidential election focused on questions of "socializing" medicine in America, with public discussion and state initiatives seeking to encourage personal responsibility for health, particularly weight-related ill health. One line of reasoning seeks to impose increased healthcare costs through increased insurance rates based on violating insurance norms for weight.<sup>170</sup>

To address the additional healthcare costs associated with overconsumption of high calorie low nutrient foods, a number of states are considering enacting sin taxes on

junk foods in an effort to diminish their appeal.<sup>171</sup> By enacting sin taxes, states deter consumption, encourage healthier selections, and receive some compensation for anticipated healthcare costs associated with obesity.<sup>172</sup> The monies realized from food sin-taxes would be used to promote public health initiatives aimed at the amelioration of obesity related disease, such as diabetes or hypertension. Since sin-taxes have shown some past success, as in the case of tobacco, there is a superficial plausibility from a public health perspective to this line of thought.

However, there are several problems with taxation of junk foods. First, food, unlike tobacco, is necessary for survival. Second, it is not uncontroversial to determine with precision and fairness which foods are junk foods and therefore subject to the tax. There is a lack of objective criteria on which to base determinations of sin tax appropriate foods. Third, food taxes often disproportionately impact those of limited financial means, which generally includes substantial minority populations. The outcome of such taxes would place a greater financial burden on those already experiencing exaggerated economic hardships, who have been shown to be the most vulnerable to obesity, and who have the fewest options to obtain healthful foods in their communities.<sup>173</sup> Fourth, revenues from such taxes intended to fund public health programs are often diverted from the appropriate disease-ameliorating programs to cover general budget deficits. Finally, sin-taxes can increase stigmatization and internalized stigma among those who purchase such foods and beverages. While stigma and shame have altered the consumption of tobacco products; however, for food and obesity, stigmatization has not yet had the same effect.<sup>174</sup> Additional stigma and subsequent internal shame may not serve the purpose

intended nor may sin taxes on junk foods provide the same retrenchment to responsible behaviors as has been seen in other areas.

Perhaps the most important social manifestation of the social construction of obesity and ascription of moralized personal responsibility for it may be witnessed within clinical medicine. When physicians subscribe to the societal norms of appropriate bodies, they may treat unjustly those who present as overweight or obese in their practices. This injustice can manifest in any number of ways including failure to discuss the medical problem of obesity, dismissal of symptoms because it is assumed that weight is the cause, or judgmental or disrespectful tone and affect with the patient. The problem of addressing obesity becomes especially intractable when physicians confuse patients' contributions to the causal pathway resulting in their obesity with moral responsibility for their condition. The problem is exacerbated when physicians, like other members of the dominant culture, universalize the "character faults" marked by obesity and attribute other negative characteristics to their patients, including laziness, voracious appetites, sloppiness, and carelessness with regard to appearance or health.<sup>175</sup>

Physicians are traditionally the trusted experts and irreplaceable supports to those who are diagnosed with disease. From the time of diagnosis throughout various treatment interventions for many patients with disease, physicians fill this role. However, in the case of patients who are overweight or obese this supportive experience is often lacking. When inappropriately moralized ascriptions of responsibility or negative character attributions come from those in medicine, they are not simply emotionally painful to the obese person; they are clinically counterproductive and may negatively influence the implementation of potentially effective weight loss interventions.

In his Memoirs of an Obese Physician, formerly obese physician Joseph Majdan, M.D. tells of his own stigmatizing experiences both as a medical student and later as a practicing physician at the hands of student and professional colleagues.<sup>176</sup> His recollections reveal the liminal space he occupied as both an outsider, as an obese person, and insider, as a medical practitioner. He recounts indignities and prejudices he suffered for many years due to "constant, insensitive, unprofessional attitudes of fellow colleagues who preached empathy to their students and residents."<sup>177</sup> but showed little to him. Majdan recounts losing large amounts of weight through various diet programs only to regain the weight each time. He tells of inappropriate jokes at his expense by mentors, colleagues, and other medical students. Majdan, a cardiologist and award-winning educator, describes other physicians who shared that their refusal to refer patients to him was because of his weight. He recounts one story of a patient who, due to his reputation for good medical care, specifically requested a referral to him. The physician responsible for making the referral reportedly responded to the patient, "Why do you want to go to him? He's fat."<sup>178</sup> It can perhaps be argued that the medical profession might be tougher on one of their own because a fellow physician is a representative of medicine and therefore reflects negatively upon the profession as an obese person. Nonetheless, his story of stigma and the shame he experienced due to ongoing bias at the hands of colleagues within this ostensibly caring profession remain, at the very least, unsettling.

Majdan also recounts episodes throughout his obesity of people feeling comfortable in offering him unsolicited advice regarding proper ways to solve his weight problem. He states that people would approach him and comment negatively about the food on his tray or suggest that he exercise more or even pursue particular weight loss

technologies.<sup>179</sup> His actions were under near constant scrutiny. These recollections are poignant examples of how obese individuals are transformed from subject in their own life to object through the panopticon of the societal gaze. As object, the body normviolating obese person becomes public property, a social object for critique, because of their perceived deviance and lack of appropriate self-control. As the obese person, Majdan is to be helpfully managed and controlled by well-meaning and responsible concerned medically-trained professionals and good citizens. His obesity stripped him of his own professional identity. He was placed under societal surveillance due to what was perceived as his obvious diminished moral agency.

While Majdan's experience could be anomalous, research indicates that these or similar experiences may be quite common. Similar to the general public, physicians hold negative attitudes about obese individuals.<sup>180</sup> Researchers surveyed 5,000 primary care physicians about their attitudes toward obese patients and the causes and treatments of obesity. Of the 620 respondents, at least 50 percent agreed with statements indicating that they found obese persons to be ugly, non-compliant, awkward, and unattractive. Approximately 30 percent of the same group indicated that obese individuals are lazy or sloppy. In the same study general practitioners rated physical inactivity as the most important factor in obesity, whereas obesity experts rated genetic factors as being the most important contributor.<sup>181</sup> Others in the healthcare field including nurses, dieticians, and nutritionists showed attitudinal patterns similar to general practitioners, along with a marked dislike of caring for patients who are obese.<sup>182</sup> In research designed to ascertain medical student perceptions of patients through the use of derogatory or cynical humor in the clinical setting it was found that patients were categorized as appropriate objects of

humor and deemed to be "fair game" based upon obesity or other conditions which are thought to be self-inflicted.<sup>183</sup>

Another study found that physicians play a significant role in lowering the quality of health care that both overweight and obese patients receive. These more recent studies confirm work done by Mizrahi in the 1980s.<sup>184</sup> It was confirmed that among medical residents "patients whose afflictions were the consequence of self-abuse were evaluated as less 'worthy' of care than those whose pathology was perceived as no fault of their own."<sup>185</sup> As previously discussed obesity is often perceived as a self-inflicted condition.

Even those medical professionals working in the field of obesity treatment and research have revealed complex implicit and explicit bias against the overweight and obese patients with whom they work.<sup>186</sup> On both implicit and explicit bias health professionals working in the field of obesity associated the attributes lazy, stupid, and worthless with obese people.<sup>187</sup> This is a group of professionals who are supposed to understand that obesity is caused by the interaction of genetic, environmental, and lifestyle factors and is not simply a function of irresponsible individual behavior and inappropriate personal choices. The stigma of obesity appears to be so dominant that even those most knowledgeable about the condition make the judgment that obese people are to be blamed for their problem because they are lazy. Furthermore, these biases extend to the characteristics of intelligence and personal worth.<sup>188</sup>

As discussed earlier, obese individuals are more at risk for developing particular cancers than people with more typical weights or BMI.<sup>189</sup> In light of this fact, there should be an added imperative for people who are obese to receive adequate surveillance for cancers. However, research indicates that many obese people do not undergo

diagnostic examinations for these diseases at the same rate as those whose weight is considered normal.<sup>190</sup> In a study on colorectal cancer (CRC), the third most common cancer in the United States and the third leading cause of cancer death, it was found that obese patients are less likely to receive CRC surveillance.<sup>191</sup> This is especially troubling since obese people have 50 percent or greater risk of developing CRC compared to normal weight people, including as much as a 90 percent greater risk of mortality from CRC. Yet, if diagnosed early the 5-year survival rate is approximately 90 percent.<sup>192</sup>

Research regarding routine surveillance of other diseases disproportionately diagnosed in those who are obese have found similar outcomes regarding the lack of surveillance.<sup>193</sup> While many reasons for the avoidance of routine health screenings have been considered, research has found that the stigma associated with obesity and evidenced in physician-patient interactions is routinely identified as a factor impeding disease surveillance. Patients report general feelings of disrespect, embarrassment, negative attitudes of providers, medical equipment that is inadequate for the patient size and unsolicited advice on how to lose weight.<sup>194</sup> Given the stigma experienced by individuals who are obese in daily life circumstances, it seems highly plausible that seeking treatment for the problem of obesity is fraught with additional stress and legitimate fear of stigmatization. For those individuals who might otherwise seek the supportive counsel of their physicians to assist them in weight loss efforts, experiences of stigma in other medical encounters may color patient expectations and diminish the likelihood of their pursuing this avenue of potential assistance.<sup>195</sup> In essence, the opportunity for the patient to make effective decisions and life plans is further impaired by the bias and stigma of previous medical interactions. The obese person's ability to

learn about and choose freely among potential treatment solutions is constrained by past experience. The obese patient's assumption of an empowering forward-looking responsibility for her future health is rendered more difficult and less likely because of inappropriately moralized ascriptions of responsibility for her current obesity. As chapter four details, WLS, for various reasons, is especially unlikely to be recommended to her as a means of assuming such forward-looking, care-taking responsibility.

## E. Conclusion

This chapter revealed several prominent ways in which obesity is a socially constructed phenomenon. It argued that dominant understandings of obesity neglect or explicitly discount important perspectives which must be considered. By utilizing feminist epistemological frameworks it was possible to identify current flaws in the construction of obesity, injustices in the treatment of obese people, and impediments to a wider acceptance of WLS.

The first section showed that feminist epistemology's focus on social context and power relationships affords a more accurate formulation of the complex problem of obesity. The second section explored gendered notions of appropriate bodies and the influence of media and theological teaching on the social construction of obesity. The third section integrated feminist conceptual analysis with the phenomena of stigmatization and internalized stigma. This section employed attention to particularity and narrative to reveal the concrete implications for obese individuals of these phenomena. The final section returned to the questions posed earlier regarding the etiology of obesity and moralized questions of assigning responsibility for it. This section argued that confusing causal with moral responsibility, and failing to distinguish clearly

between different purposes of assigning blame lead to ambivalent social attitudes towards

WLS. Chapter Four will take up issues of justice regarding the use of WLS as an

individual-level clinical intervention.

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<sup>5</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 98.

<sup>6</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 100.

<sup>7</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 100.

<sup>8</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 96.

<sup>9</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 96.

<sup>10</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 97.

<sup>11</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 97.

<sup>12</sup> Grosz, Volatile Bodies: Toward a More Corporeal Feminism, 3.

<sup>13</sup> Grosz, Volatile Bodies: Toward a More Corporeal Feminism, 3.

<sup>14</sup> Raia Prokhovnik, *Rational Woman: A Feminist Critique of Dichotomy* (New York: Manchester University Press, 2002), 32.

<sup>15</sup> Helen Haste, *The Sexual Metaphor* (London: Harvester Wheatsheaf, 1993), 3.

<sup>16</sup> Young, Justice and the Politics of Difference, 98.

<sup>17</sup> Young, Justice and the Politics of Difference, 98.

<sup>18</sup> Young, Justice and the Politics of Difference, 98.

<sup>19</sup> Iris Marion Young, *Justice and the Politics of Difference* (Princeton, NJ: Princeton University Press, 1990), 98.

<sup>20</sup> Young, Justice and the Politics of Difference, 99.

<sup>21</sup> Young, Justice and the Politics of Difference, 99.

<sup>22</sup> Young, Justice and the Politics of Difference, 143.

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<sup>&</sup>lt;sup>2</sup> Elizabeth Grosz, *Volatile Bodies: Toward a More Corporeal Feminism* (Bloomington, IN: Indiana University Press, 1994), 3; Mary Belenky et al., *Women's Ways of Knowing: The Development of Self Voice* (New York: Basic Books, 1997), 23-154.

<sup>&</sup>lt;sup>3</sup> Mary Bribdy Mahowald, *Philosophy of Woman: An Anthology of Classic and Current Concepts* (Indianapolis: Hackett, 1992), 95.

<sup>23</sup> Young, Justice and the Politics of Difference, 99.

<sup>24</sup> Young, Justice and the Politics of Difference, 99.

<sup>25</sup> Young, Justice and the Politics of Difference, 99.

<sup>26</sup> Young, Justice and the Politics of Difference, 99.

<sup>27</sup> Anne Fausto-Sterling, "The Five Sexes: Why Male and Female Are Not Enough," *The Sciences* 33 (March/April 1993): 20-24.

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<sup>29</sup> Mahowald, Philosophy of Woman: An Anthology of Classic and Current Concepts, 95.

<sup>30</sup> Nancy Tuana and Sandra. Morgen, *Engendering Rationalities* (Albany, NY: State University of New York Press, 2001), 1-22.

<sup>31</sup> Young, Justice and the Politics of Difference, 144-48.

<sup>32</sup> CNN, *Who's Fat? New Definition Adopted*. June 17 1998, CNN, June 17, 2011 <a href="http://www.cnn.com/HEALTH/9806/17/weight.guidelines/">http://www.cnn.com/HEALTH/9806/17/weight.guidelines/</a>>.

<sup>33</sup> Young, Justice and the Politics of Difference, 141-48.

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<sup>35</sup> Young, Justice and the Politics of Difference, 143.

<sup>36</sup> Young, Justice and the Politics of Difference, 143-48.

<sup>37</sup> Young, Justice and the Politics of Difference, 143-48.

<sup>38</sup> Young, Justice and the Politics of Difference, 147.

<sup>39</sup> Crenshaw, "Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color," 58.

<sup>40</sup> Crenshaw, "Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color," 58-60.

<sup>41</sup> Crenshaw, "Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color," 1258-61.

<sup>42</sup> Crenshaw, "Mapping the Margins: Intersectionality, Identity Politics, and Violence Against Women of Color," 1296.

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<sup>45</sup> Nash, "Re-Thinking Intersectionality," 4.

<sup>46</sup> Nash, "Re-Thinking Intersectionality," 9-14.

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<sup>58</sup> Young, On Female Body Experience: "Throwing Like a Girl" and Other Essays, 15-25.

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<sup>70</sup> Young, On Female Body Experience: "Throwing Like a Girl" and Other Essays, 27-45.

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## Chapter Four: The Concepts of Utility as Applied to Weight Loss Surgery

Commonly employed bioethical considerations such as justice, fairness, and autonomy have not been adequately engaged in evaluating the appropriateness of employing the technology of weight loss surgery (WLS). Moreover, it appears that what ethical considerations have been engaged have focused almost exclusively on its social utility—its overall benefit to the broader problem; the potential for WLS to significantly diminish the public health problem of the *epidemic* of obesity, as the problem is often framed. Even with regard to these considerations of utility, rigorous analysis of the potential benefits of WLS has been at best insufficient and often inappropriate. This lack of rigorous analysis appears to be a departure from levels of bioethical attention traditionally devoted to emerging healthcare technologies and its more recent (e.g., since the mid-1990s) attention to issues affecting relatively disempowered patient populations.<sup>1</sup> This relative lack of attention may evidence bias against those who are obese, even on the part of bioethicists, or it may suggest that bioethicists fail to recognize the myriad ethical implications of obesity and its interventions as well as the social disempowerment of obese individuals.

Indeed, interventions initially regarded as radical or exotic, such as transplantation or dialysis, have received extensive attention in the field of bioethics.<sup>2</sup> The attention given to these interventions, including significant bioethical analysis, began almost immediately following the initiation of their use and in many instances occurred during developmental phases of the technology. Moreover, the pre-occupation of bioethics with the next new technology has often been a criticism of the field.<sup>3</sup> The same cannot be said of the bioethical attention afforded WLS, which rivals transplantation technologies for at

one time being regarded as a new "high-tech" intervention, even as its history is approximately as long as that of organ transplantation. WLS is distinctive for its dearth of immediate and rigorous bioethical attention. A review of the literature to specifically identify ethical analysis of WLS reveals few articles. Further, it is notable that in spite of the long history of surgical weight loss procedures significant ethical consideration and analysis of these procedures appears to have been only recently initiated.<sup>4</sup> These few recent articles do attempt to address the ethical challenges of WLS, including a bias in favor of public health efforts, issues of informed consent, patient autonomy, and some considerations of justice;<sup>5</sup> they serve as a much delayed starting point for such ethical analysis.

This fourth chapter builds upon this modest initial body of ethical analysis by evaluating WLS based upon various ways of conceptualizing and assessing its utility. This chapter will apply three senses of utility—social, clinical, and personal—to establish the usefulness of WLS in these different, albeit overlapping domains. Social utility refers to the usefulness of WLS at as a population-level intervention for obesity. The clinical utility of WLS refers to its benefit in serving individual patients in addressing their medical problem of obesity. Finally, personal or individual utility is used to refer to the non-medical benefit individuals receive from WLS. Recognition of both the distinction between these senses of utility and their points of interconnection is critical to appreciate the value of WLS as an effective clinical intervention and yet understand why WLS has not been more widely embraced or been deemed more socially acceptable since its emergence.

In concrete terms, this chapter argues that it is inappropriate to dismiss WLS as a valid intervention for obesity treatment based on its failure to address the public health problem of obesity or its relative lack of *social* utility in comparison to macro-level public health interventions. The chapter argues that such a dismissal of surgical interventions for obesity is based on an erroneous application of public health goals to what is also, fundamentally, an issue of clinical medicine. The chapter argues that this category mistake—of demanding direct and primary public health benefit of a fundamentally clinical intervention—is obscured by both modern moralizing public health rhetoric and the ethical attraction of solving the problem of obesity through preventive public health intervention. The chapter reveals the fallacious reasoning that enables obesity to be cast and quantified, alternately, as a population-level problem and a problem of individual ill health. Both characterizations serve to undermine the legitimacy of individuals' utilization of WLS.

This chapter further argues that those who primarily advocate public health approaches for ameliorating obesity are choosing to disregard a more immediate moral obligation to the individual with co-morbid disease related to being obese in favor of developing or altering systems to alleviate this condition for future generations and as yet unidentified individuals. This is itself a departure from the usual bioethical and medical response whereby the individual diagnosed with a condition in the present is generally seen to have a stronger claim on medical support and intervention than those in future generations.<sup>6</sup> This suggests that obesity short-circuits usual sympathies for those so afflicted in a way not seen in the majority of other conditions. As discussed in the previous chapter this again suggests that obesity results in abjection.<sup>7</sup> The failure to

properly regard, categorize, and support appropriate individual-level efficacious obesity treatments, including surgical interventions for weight loss, violates the moral obligation to the individual patient which has been the hallmark of clinical medicine.

Assessing the utility of WLS is complicated by the fact that obesity is conceptualized and addressed within two health-related enterprises: public health and clinical medicine. In reality, these enterprises are and should be complementary.<sup>8</sup> With respect to obesity, however, they may be seen as competing, with a normative bias in favor of public health approaches. At the very least, each offers a competing way of conceptualizing the root causes of obesity and interventions This chapter argues that it is a category mistake, with substantial ethical sequelae, to apply only or primarily a public health paradigm to address obesity, given the number of obese individuals who already need clinical intervention to prevent co-morbidity and mortality. Even if it could be agreed that prevention is (always or usually) superior to treatment, this aphoristic commitment yields two ironies in the context of obesity where support for populationbased approaches exceeds and undermines acceptance of WLS as appropriate treatment. First, this view fails to recognize that WLS functions as a preventive intervention albeit at an individual-level; it seeks to prevent further or worsening co-morbidities in the individual.<sup>9</sup> Second, successful treatment of an individual's obesity, including WLS, frequently has a positive weight and health-related impact on the population surrounding him, e.g., family and friends.<sup>10</sup>

The conflation of public health goals with those of clinical medicine in this case inappropriately diverts the attention of bioethical analysis away from the usefulness of WLS as the primarily individual-level clinical intervention it is intended to be. Further,

the conflation leads those who do consider the appropriateness of WLS to criticize it for failing to address the population-level obesity problem. Coupled with social attitudes toward obesity as evidence of individual moral failing, as discussed in the previous chapter, this conflation seems to underwrite further stigmatization and blaming of obese individuals, which in turn warrants refusing to recognize WLS as an appropriate intervention for them. In contrast, accurately assessing the usefulness of WLS to address the clinical medical problem of individuals' obesity supports viewing it as both ethically and medically appropriate. Foreshadowing the argument of chapter five, it may be noted here that for other life-threatening health conditions, such as heart or kidney disease, there is little evidence of a social impulse to choose between promotion of public health approaches and endorsement of effective individual-level clinical interventions as that would be seen as a violation of justice.

This chapter will begin by addressing WLS in light of public health practices. It will show that the public health paradigm which requires direct population-level social utility is misplaced in evaluating the individual-level technology of WLS. The second section will discuss the benefits of WLS as an individual-level treatment intervention for obesity, i.e., its clinical and personal utility for individuals. The third section will reframe the utility of WLS within its more appropriate clinical medical context to argue that the concept of utility must be understood and applied at an individual-level to support WLS.

A. Obesity as a Public Health Concern and the Utility of Weight Loss Surgery

After presenting an overview of the history of public health problems, tools, and the normative framework of a "public health approach," this section argues, first, that it is a mistake to demand direct social utility of WLS because it is fundamentally an

intervention to treat an individual's health problem just like other surgeries or using statins to prevent heart disease or anti-virals to treat infection. Second, the section further argues that even though WLS is an individual-level *therapeutic* intervention, it is also properly considered and evaluated as a *preventive* clinical intervention. Third, the section discusses the positive externalities associated with successful surgical weight loss, again paralleling population-level benefits that result from individual interventions, like preventing others' infection.

'Public health' as a noun or adjective has many meanings. As a system it is "a broad social enterprise, more akin to a movement that seeks to extend the benefits of current knowledge in ways that will have the maximum impact on the health status of a population."<sup>11</sup> The health status of a population—typically within a geographically defined context—may also be referred to as the public health or the public's health. Used as an adjective to modify an approach to or way of conceptualizing a problem, 'public health' emphasizes this population focus. One of the earliest definitions, provided by Charles-Edward A Winslow, defined public health as:

the science and the art of preventing disease, prolonging life, and promoting physical health and efficiency through organized community efforts for the sanitation of the environment, the control of community infections, the education of individuals in principles of personal hygiene [and] the organization of medical and nursing services for the early diagnosis and treatment of disease.<sup>12</sup>

More recently the Institute of Medicine stated, "Public health is what we, as a society, do collectively to assure the conditions for people to be healthy."<sup>13</sup> Key points in each of these definitions include the focus on the health status of populations of people, and the tenet that societal efforts are made to ensure environments in which people are able avoid developing diseases. These characteristics will be of particular importance in

properly analyzing the usefulness of WLS below. The following section briefly explores key historical problems which gave rise to the public health system with its unique focus, framework, and tools of intervention.

# A.i History of Public Health Problems and Interventions, and the Emergence of the Contemporary Clinical Obligation of Individual Care

Since its beginning, public health has focused on the prevention of diseases, injury, and avoidable disability at the population-level. Historically, public health problems included sanitation, provision of clean water, vaccination, and the eradication of disease.<sup>14</sup> The first public health efforts have been traced to ancient Roman and Greek civilizations. It was during these historical periods that a rudimentary understanding of disease contributors such as polluted water and poor sanitation systems began to emerge.<sup>15</sup> These cultures' attempts to understand and address diseases manifesting within large sectors of citizenry are considered the foundations of what would become public health. The association between the presence of swamps and development of wide spread malaria was established during this time, even though the reasons for the association and effective interventions were then unknown. Even in antiquity, the focus was on the prevention of population-level diseases by altering the environment. In subsequent centuries, additional advances too extensive to detail eventually evolved to become modern public health. In the 18<sup>th</sup> and 19<sup>th</sup> centuries those advances began to be more systematically tied to improving societal health by eradicating population-level diseases resulting from infection and pathogens.<sup>16</sup>

Modern public health efforts are traced globally to the 18<sup>th</sup> and 19<sup>th</sup> centuries with major advances seen in Britain and the United States.<sup>17</sup> In Britain, public health efforts

were prompted by the smallpox and cholera epidemics of those two centuries.

Devastating parts of Europe, the smallpox epidemic was reportedly responsible for the deaths of almost a half of a million people in the 18<sup>th</sup> century. Smallpox was eventually eradicated through development and use of widely distributed vaccinations. Edward Jenner, a naturalist, is generally credited with the first scientific attempt to control an infectious disease by the deliberate use of vaccination. Strictly speaking, Jenner did not discover vaccination, nor is he thought to have been the first to use vaccination for smallpox, but he was the first person to elevate the practice to a scientific tool and persist in its rigorous investigation.<sup>18</sup>

In the 30 years following Britain's first confirmed case of cholera in 1831, there would be four cholera epidemics. Initially thought to be caused by miasma or bad air, cholera was eventually believed to result from contaminated water sources. John Sutherland and John Snow separately advanced theories of cholera's pathology, with Sutherland believing that finding clean water sources was essential to the health of the public. Snow advanced thinking on the particular mechanisms of cholera transmission, which eventually led to the now famous removal of the water pump handle at Broad Street. It was not until after Snow's death over three decades later that the true cause of the cholera epidemics, cholera bacillus was described by Robert Koch.<sup>19</sup>

In the United States, the first settler's struggles with diseases such as smallpox, malaria, and influenza established the colonies' initial need for public health efforts. Though the settlers had some immunity, Native Americans, who had not previously been exposed, generally succumbed to these diseases. The American civil war in 1861 "enforced a national consciousness of epidemic disease: two-thirds of the 360,000 Union

soldiers who died were killed by infectious diseases rather than by enemy fire".<sup>20</sup> In the post-war period, industrialization brought new diseases which were the result of the movement of masses of people into urban settings without the understanding or benefit of the sanitation systems for waste disposal. The rise in deaths due to potentially avoidable industrial accidents also became a growing concern of public health efforts at this time.<sup>21</sup>

Public health also began to concern itself with the class stratification resulting from wealth gained by some industrialists. Public health sought ways to reduce the health-related disparities between the wealthy and others, including laborers. Social reform initiatives on child labor, maternal health, and improved housing became a focus.

Following World War II, when public health addressed malaria, to which large numbers of troops were routinely exposed,<sup>22</sup> the focus of public health became less well-defined. Immediate threats were no longer to be found among communicable diseases or large scale industrial mishaps. Shifting attention from health threats whose social destructive power was immediately evident to health risks like poverty and obesity, whose intricacies do not permit silver bullet solutions like vaccination or sanitation has complicated modern public health efforts. As public health law and ethics commentator, Lawrence Gostin states, "Somehow, America lost its commitment to public health in the latter part of the twentieth century.<sup>23</sup> More recently, public health has sought to re-define itself in light of its numerous accomplishments in overcoming its original adversaries.<sup>24</sup>

In the early days of public health and medicine few lifesaving interventions were curative once a disease like cholera, small-pox, tuberculosis, or influenza had taken hold. With no means to cure those already afflicted, the only options were palliation and prevention to avoid the spread of disease. Patterns of behavior and environmental factors

were observed to be associated with disease and its spread.<sup>25</sup> The identification of the Broad street water pump as the source of transmission, the presence of mosquitoes in malaria-affected areas, recognition of the so-called natural immunity from smallpox of dairy-maids, and the observation that doctors did not seem to contract disease directly from their patients, attributed to their hand-washing (personal sanitation) practices, are examples of such observed patterns.<sup>26</sup> Altering environmental conditions and personal behaviors in response to such observations—a preventive strategy—emerged in part because of the impossibility of curative intervention in the disease course of those already afflicted.

However, once individual-level interventions such as penicillin were developed, both attention and prestige within the medical profession shifted from population-focused prevention to the treatment and cure of individual ill patients.<sup>27</sup> The contemporary medical ethos of a physician owing her primary fiduciary duties to her individual patient, articulated by Hippocrates, was reinforced and has remained largely unchallenged until recently when concern about escalating healthcare costs and limited effectiveness of some interventions had led to the notion of physicians as stewards of healthcare resources for the good of all.<sup>28</sup> Historical and ethical analyses have argued that, with few exceptions (e.g., battlefield triage) it is unethical to withhold individual-level healthcare or medical intervention for the sake of the greater good or in pursuit of public health goals. Other individual-level sacrifices—e.g., of personal liberty in the case of necessary quarantine may be required for the sake of public health, but the sacrifice of individual health in favor of public health was deemed contrary to the goals of both clinical medicine and public health.<sup>29</sup> When reasonably efficacious individual-level technologies were

discovered or developed, providing them became a moral imperative in clinical medicine. The imperative to provide the appropriate individual-level intervention did not negate broader public health obligations to prevent and ameliorate the disease at the population level, but neither was it seen as appropriate to withhold individual-level interventions and technologies if individually appropriate based on their potential individual benefit.

The ethical failures in the Tuskegee Study of Untreated Syphilis in the Negro Male are often cited to illustrate the importance of not violating the obligation of individual care in the interest of pursuing public health goals, including research goals. Once penicillin was found to be an effective treatment for syphilis, withholding this efficacious individual-level intervention from subjects was eventually determined by history to be morally reprehensible and fundamentally unjust. Withholding access to penicillin from the Tuskegee research subjects in the interest of answering the question posed regarding the natural course of untreated syphilis in the Negro male violated the clinical obligation of individual care, prevented the men from making informed decisions about their own healthcare, and in so doing, unjustly failed to treat these men according to the same standard of care afforded to others outside of the study.<sup>30</sup>

## A.ii The Goals, Normative Framework, and Tools of Public Health

The normative framework of public health is different from that of clinical medicine. Public health efforts necessitate "utilitarian, paternalistic and communitarian orientations," whereas clinical medicine favors "civil liberties and individual autonomy."<sup>31</sup> The public health normative framework requires that efforts put forth are in service to providing the overall greatest benefit, typically the avoidance of disease for most members of a particular population. The public health framework permits and

sometimes requires intrusions into otherwise personal actions by making compulsory particular activities undertaken for the good of the wider community though they may burden particular individuals.<sup>32</sup> In contrast, clinical medicine focuses not at the societal level but at the individual-level and seeks the individual's health-related good. There is generally no obligation that considerations of societal benefit be included in that which is considered clinical medicine.

Public health practice and clinical medicine have different goals. Public health directs its efforts at populations to "create conditions under which all members of the population can experience the maximum degree of good health, within the limits which may be imposed by economics, genetics, or the state of our knowledge".<sup>33</sup> The success of interventions is measured in terms of the aggregate effect on the identified population, even if individuals are affected in the process (as when individuals are vaccinated to avoid disease or required to wear seatbelts or motorcycle helmets to avoid injury). Public health interventions are generally broad and are intended to change systems—social, environmental, biological— which in turn, change the outcome, incidence, or intensity of disease and disability.<sup>34</sup>

Early and contemporary public health initiatives employ information dissemination, persuasion, and as a last resort, coercion and intrusions into areas of personal privacy. Quarantine, compulsory vaccinations, and other paternalistic intrusions which constrain the liberties and even override the rights of individuals were and are justified by the greater societal benefit.<sup>35</sup> A determinable link between behaviors which lead to broader contamination and interventions to prevent disease spread justify intrusions into what would otherwise be seen as matters of personal regulation.

According to Gostin, public health tactics, particularly those that infringe personal liberties, must be matched to the scope and immediacy of the threat, with the least restrictive alternative chosen among the range of possible interventions.<sup>36</sup>

Prevention efforts are elucidated in terms of their target. One framework, proposed by the Commission on Chronic Illness in the 1950's, elucidates two types of disease prevention, <sup>37</sup> to which a third was later added. Primary, secondary, and teriatry prevention are explained in the *Journal of Public Health Reports*:

Three decades have elapsed since a working group under the Commission on Chronic Illness proposed the classification of disease prevention into the categories primary and secondary. An additional term, 'tertiary prevention,' has gained currency since, and the classification is now ubiquitous in textbooks of epidemiology and preventive medicine. These classes are summarily defined as primary-practiced prior to the biologic origin of disease; secondary-practiced after the disease can be recognized, but before it has caused suffering and disability; and tertiary-practiced after suffering or disability have been experienced, in order to prevent further deterioration.<sup>38</sup>

This classification system, as envisioned at the time of its development, recognizes a variety of appropriate interventions depending on whether or not disease had manifest or was merely a risk. Complete avoidance of disease is *one* of public health's highly desirable goals, however, the framework recognizes that disease avoidance is not always feasible. In that case, secondary prevention efforts would apply to those who had already manifested the disease but were at present asymptomatic.<sup>39</sup> By way of example, a person with hyperglycemia who is unaware of it until screening occurs would be the target for secondary prevention efforts. Tertiary prevention efforts could include active clinical treatment which is undertaken to reduce the severity of the primary disease or to reduce its complications.<sup>40</sup> As Robert Gordon's piece criticizes, the various levels of prevention were not meant to be used in a hierarchical manner with primary being seen as a superior

preventive effort to the others but instead were intended to be applied based on the particular context of the disease and its degree of manifestation and burden. He states:

Although it was not the intention of the Commission to suggest that primary is preferable, and secondary is second rate, this impression may develop, particularly among lay persons who may have responsibility for important decisions that bear on preventive programs. Careful quantitative analysis of benefits, costs, risks, and effectiveness frequently reveals that a preventive intervention is best applied only to a high-risk group, the evidence of high risk being a finding that can be related to the biologic origin of disease. Though 'secondary,' this may well be the optimal preventive strategy.<sup>41</sup>

Presumably, Gordon's analysis that the inappropriate ordinal priority ranking of these interventions based on the potentially misleading terms primary and secondary would also extend to tertiary interventions.

Application of this classification to asthma prevention in minority populations illustrates the integration of the three levels.<sup>42</sup> Primary prevention of asthma might include targeting a major risk factor in its development such as low-birth weight. By focusing on pre-natal care and increasing birth weight, children would likely be able to fully avoid ever developing asthma. A secondary prevention activity would be early identification through screening programs. After proper screening the child with undiagnosed asthma and his family could make changes in their environment to avoid the progression of symptoms and the full blown manifestation of the disease. For those whose asthma had already manifested and were experiencing active symptoms tertiary prevention would focus on mitigating disease complications through ensuring access to and correct use of medications, or earlier intervention when symptoms surface.<sup>43</sup>

As the example of asthma illustrates, the classification system of prevention stages acknowledges the importance of clinical interventions to reduce the severity of the symptoms associated with already present disease. Yet the concern which Gordon raised

regarding the potential for the levels of preventive efforts to be misunderstood as indicating priority or preferability is, this chapter argues, evident in analyses of obesity. Consider the application of the classification framework to preventive efforts aimed at obesity and its co-morbidities. Primary efforts at complete avoidance of obesity focus on such things as changing the built environment. Secondary preventive efforts include measurement of BMI, along with screening for obesity and its co-morbidities. Weight loss surgery when used to diminish the burden of disease in those already diagnosed can be seen as both a secondary and tertiary level intervention, designed to prevent further obesity and to prevent obesity associated co-morbidities. As in the case of asthma, each level of prevention should be deemed equally valuable. Each is intended to meet a particular goal as a tool of public health efforts at various points along the disease manifestation continuum.<sup>44</sup> That stage of temporal intervention is confused with social priority or ethical hierarchy among the levels of intervention evidences a continuing confusion about their meaning and goals. For reasons discussed in the previous chapter and explained below, the social construction of obesity and the tendency to moralize about it, may exacerbate both this confusion and the negative impact of regarding some types of prevention as ethically preferable.

#### A.iii Contemporary Moralizing Attached to Public Health Campaigns

Since the early days of public health, its evolution and successes have been both gratifying and troubling. The success of public health initiatives has meant that as a population, residents of the United States and other wealthy nations are safer and less likely to fall victim to relatively avoidable, by modern standards, health threats such as smallpox and diphtheria. Immediate dangers to life and quality of life in developed

countries have been substantially diminished.<sup>45</sup> The counterpoint to that success, however, has been a kind of identity crisis within public health.<sup>46</sup> Immediate health threats which are under control require only ongoing surveillance and modification of the interventions already in place. Annual flu vaccination campaigns require ongoing surveillance, modification to account for variations in the strains of influenza expected to manifest, and annual education campaigns, but the course of action and intervention need has been fairly well-established over the years.

Modern public health efforts are substantially different from the early public health successes.<sup>47</sup> The recent focus of public health has been described as increasing the standard of living among citizens and providing *expert advice* on a range of issues including nutrition, physical health, longevity, and the imposition of rules thought to benefit the masses. Today public health is grounded in epidemiology but interventions are shaped by economic, social, and political concerns.<sup>48</sup> The modern scope of public health has been criticized for being so broad as to engender substantial confusion over its proper place in the lives of citizens, the amount of control with which it should exert its authority, and the type of tactics it should use to produce its desired results.<sup>49</sup> While many of these questions are not dissimilar to early ruminations in the exercise of public health, the issues to which they apply are. The majority of modern public health issues are muddier with less well-defined immediate and communicable risks than those which have already been addressed.<sup>50</sup> Public health issues, as well as the interventions to address them, interact with economic, social, and political concerns.

Much has been written on the new moralizing vocation of modern public health.<sup>51</sup> Expert advice dispensed by those who are knowledgeable has sometimes been thought to

be sufficient for rational moral agents to act in their own health interests. Unfortunately, the expert public health advice may not be able to be wholly or even partially applicable because of the personal situations of the individuals the advice is intended to motivate. Thus, as described by Bernard Turnock , when the expert advice of public health, fails to effect the type of changes anticipated, the entire field of public health, or individual voices within it, may chastise those who ignored the advice. Targets of such chastising may include patients who contract HIV or Hepatitis C in spite of sincere and thorough expert public health initiatives, or the obese who fail to realize significant weight loss in the face of health promotion and weight loss activities.<sup>52</sup> Public health's zeal and good intentions may serve as spurious justification for its moralizing tone.

Public health initiatives directed at conditions having a substantial behavioral component have now adopted a stance which can be described as the idealistic, moralizing, and stigmatizing.<sup>53</sup> Public health efforts are idealistic because they reflect and valorize the way in which individuals and systems *should* behave and *should* act in order to obtain the best possible health outcomes. The modern focus of public health is the avoidance of disease in future generations of as yet identified individuals. As in the past, this focus on future generations ignores the risks to and manifestation of disease in current individuals. In the past, such a future focus could be justified because of the lack of curative interventions. Today an exclusive or excessive future focus denies the reality of effective individual-level interventions do currently exist. In light of effective individual-level technologies choosing one level or prevention to the exclusion of the other is unethical.

# A.iv Obesity, Weight Loss Surgery, and Public Health

The utilization of surgical weight loss interventions has been criticized because it provides individual benefit but fails to address the greater public health concern of increasingly large numbers of people diagnosed as being obese.<sup>54</sup> In one of the rare bioethical treatments of obesity and WLS, an article by ethicist Rosemarie Tong, provides an analysis of the relative risks and benefits of both the "high risk (clinical) and population (public health) approach to obesity and overweight."<sup>55</sup> In her comparative analysis Tong offers the following insight:

Instead of wasting time and resources on normal weight individuals, the clinician focuses on an already overweight individual, particularly those who threaten to enter the obese category. Why waste money educating slim-enough people about the dangers of a condition they do not manifest? Instead, hammer the message about "fat" home to those patients whose clothes are already painfully tight.<sup>56</sup>

Tong analyzes the relative merits of public health and clinical strategies by likening bariatric surgery to a "quick fix" which she further suggests Americans love. Finally she summarizes her analysis by concluding that "the benefits [of a public health campaign] outweigh the risks of a public health campaign against obesity."<sup>57</sup>

Tong's article ultimately acknowledges a need for both clinical interventions and public health strategies to address obesity. Yet is persistently confuses the purpose and focus of each type of initiative, and fails to acknowledge the complexity of obesity for the individual so diagnosed. Moreover, it appears that she does not fully comprehend the usefulness of bariatric surgery for those immediately afflicted who are seeking resolution to serious problems within a narrow window of time. The comparative time frame of effectiveness of these strategies is the obese person's own statistically diminished life span, not one or even several generations in the future. This longer time frame of multiple generations has been required to realize public health's successes in tobacco cessation, while this level of success has yet to be achieved by public health strategies intended to diminish overconsumption of alcohol.<sup>58</sup> Tong's article suggests that ethicists are not comfortable working in the realm of public health but are more comfortable in the realm of clinical medicine. While it is indeed true that clinical medical issues have occupied much more of bioethicists' attention and the bioethical literature, when bioethicists do turn their attention to topics that cross into both the clinical and public health spheres, they must be careful to clearly distinguish the goals and the focus of each of these enterprises. This is particularly true if ethicists choose one strategy over the other to address a particular issue.

Unlike Tong, who acknowledges what appears to be competition between clinical and public health strategies addressing obesity, another article intended as comprehensive ethical analysis of bariatric surgery fails to acknowledge this competition as an ethical concern. An article by Bjorn Hoffmann lays out what he sees as the ethical issues surrounding bariatric or WLS. He terms his method of ethical analysis to be an "axiological approach."<sup>59</sup> The intended goal of his approach is to pose several morally relevant questions which are designed to reveal the ethical values applied to a particular intervention, in this case WLS.<sup>60</sup> His analysis fails however to take up or even acknowledge the concern of conflating the population-level goals of public health initiatives with the individual-level goals of clinical medicine interventions for its treatment. In a follow-up commentary to Hoffmann's original piece two authors did take up this particular concern.<sup>61</sup> It appears however, that they too are confused by the proper ethical framework which ought to be applied to public health initiatives on obesity and a

different ethical framework which applies to clinical interventions. The commentary critical of Hoffmann's ethical analysis states:

Bariatric Surgery is a technology-intensive, personalized response to a global public health problem. It is far too expensive and far too risky to be an effective solution for a problem of that kind.<sup>62</sup>

In stating that bariatric surgery is a response to a global health problem the commentators misunderstand the appropriate focus of such interventions; they conflate the goals of clinical medicine with the goals of public health. Later in the same commentary they suggest that it is inappropriate to focus on WLS as an intervention since other venues, primarily public health initiatives have not yet been given sufficient resources or a genuine opportunity to ameliorate obesity. They write:

Similarly, if full-scale public health initiatives were mounted, the comparative cost effectiveness of various treatments including bariatric surgery might change dramatically. So, rather than pointing out the need for additional research on bariatric surgery, the call should be for additional study of all possible parts of a public health response and a new comparative analysis.<sup>63</sup>

In characterizing their position, they refer to it as "big picture approach" intended to offer better conceptualization of the problem and pointing to more promising solutions.<sup>64</sup>The big picture approach appears to be one focused on the health of the public, not the health of the individual currently diagnosed with obesity and its related co-morbidity. It is equally true that theirs is a zero-sum approach; they seem to assume that public health and clinical pathways cannot be simultaneously pursued or that pursuit of one must be purchased by ignoring the other.

Finally, the commentators summarize their position on WLS in the following way:

Bariatric surgery is short-term in that it is highly individualized (rather than population based) and focused on post facto treatment (rather than prevention). As

such, it should not be the sole, or even the primary response to a genuine public health crisis. It is critical that the social sources of the obesity epidemic be taken seriously in order to prevent a skewed analysis of bariatric surgery that vastly overestimates its potential as a solution.<sup>65</sup>

The authors are correct in asserting that WLS is not the answer to the growing public health problem of obesity. However, their analysis fails to recognize that WLS should not be utilized to solve the public health problem of obesity. The commentators commit the category-mistake discussed earlier in this chapter. Furthermore, the authors fail to recognize that by re-directing resources toward mounting comprehensive public health initiatives to ameliorate obesity, individuals in the present will likely continue to grow increasingly more debilitated and lose both quality and years of life.

A Danish study seems to support the prejudice that obesity amelioration through public health initiatives should be given higher priority than clinical approaches. The study showed that people are willing to fund public health approaches more often than clinical treatment, including WLS.<sup>66</sup> The survey study's aim was to investigate the Danish public's support for publicly funded obesity treatment versus prevention. (It is important to note that the study was conducted in a country, unlike the United States, with publicly funded health care which would likely pay for weight loss interventions such as surgery.) The study also examined whether levels of support, or lack thereof, could be explained by negative attitudes toward obese people and/or the belief that those who are obese are personally responsible for their condition. Participants (n = 1,141) completed a web-based questionnaire designed to assess attitudes toward public funding for obesity-related health care, and to investigate the impact, of the following attitudes: dislike of obese people, and the perceived controllability of obesity. The study found that public funding of some obesity treatments, such as weight-loss surgery, attracted very

limited public support. A majority of the Danish public did support what the authors' term as "softer" treatment interventions such as supervised diet and exercise and public health initiatives focusing on primary prevention. Attitudes about the acceptability of various interventions for obesity were found to be best predicted by the belief that individuals are personally responsible for their obesity. Participants believing that obesity is an issue of personal responsibility were more likely to favor public health strategies than participants whose belief about the origins of obesity were less strongly tied to personal responsibility. Furthermore, when the option of WLS was re-framed as a life-saving intervention "a sizable proportion who initially disapproved of public funding for WLS changed their minds."<sup>67</sup> The following article reveals attitudes on the support of public health efforts towards ameliorating childhood obesity.

An article on childhood obesity calls for more resources to support public health efforts to address obesity and expresses skepticism about developing additional treatment interventions presumably including weight loss surgical treatment. The authors write:

This public health crisis demands increased funding for research into new dietary, physical activity, behavioral, environmental and pharmacological approaches for prevention and treatment of obesity, and improved reimbursement for effective family-based and school-based programmes. However, because this epidemic was not caused by inherent biological defects, increased funding for research and health care, focusing on new treatments will probably not solve the problem of paediatric obesity...<sup>68</sup>

While it has been shown that obesity is an increasing public health concern,<sup>69</sup> to discount the benefit of obesity surgery for the individual because it does not effect a cure for obesity as a public health issue fundamentally misunderstands the social role of clinical medicine, a role which should co-exist with public health efforts to address obesity. In

contrast, one commentator recognizes the potential role of WLS in the treatment and prevention of co-morbidities, here obesity-related diabetes (diabesity):

Prevention of this diabesity epidemic through effective public health lifestyle and environmental initiatives to change the population's dietary and movement behaviors would be of highest priority. For those already suffering from diabesity, effective treatment is important. A therapy that provides remission of both diabetes and obesity should attract enormous interest and activity.<sup>70</sup>

This commentary goes on to express the belief that WLS should have an important role in the early intervention of co-morbid disease associated with obesity. The article acknowledges the importance of both strategies and expresses what appears to be the unique insight that, at least at the present time, public health strategies are not able do the work of clinical medicine to resolve individual-level obesity. Instead, individual-level treatments such as WLS must be employed to help resolve immediate problems of those currently afflicted.

It is thus clear that the three-level classification of public health prevention strategies discussed in the previous section permits more than one narrow conception of prevention. <sup>71</sup> Although popular conceptions of prevention may be limited to ensuring that the disease never manifests in an individual—i.e., the avoidance of disease rather than the curtailment of disease once manifest—if the full scope of prevention strategies is properly applied, surgery would appropriately be considered secondary or tertiary prevention techniques and would therefore be seen as acceptable even perhaps a victory in the domain of public health. (Indeed, in the case of breast cancer prevention, prophylactic mastectomy is the most effective preventive intervention for those carrying BRCA1/2 mutations.) Public health initiatives defined as primary do continue to be confused as having ethically salient ordinal ranking ahead of other types of efforts. <sup>72</sup> The

following describes several public health strategies which have been employed to reduce obesity.

To "combat the nation's obesity epidemic"<sup>73</sup> public health strategies include increased taxation of "junk foods", eat-less-and-exercise-more campaigns, state specific bans on trans-fats, high-fructose corn syrup awareness advertising campaigns, removal of snack and soda vending machines from elementary and high schools, requiring that nutritional information be posted on restaurant menus, re-inventing guides to proper food portions (e.g. phasing out the food pyramid guide in favor of the eat-well plate) among others. Research done on public health strategies for obesity has found that such interventions, many of which have been initiated only recently, either have not had sufficient time, opportunity, or resources to show significant results or that it is difficult to discern what if any improvements are attributable to these efforts.<sup>74</sup> It has also been noted that some public health initiatives are difficult to evaluate due to the limited number of studies that meet rigorous research standards and the fact that they tend to report non-comparable outcomes.<sup>75</sup> A meta-analysis by Katz et al. examined the success of initiatives undertaken in schools and in workplace settings reviewed all published results of such interventions between 1966 and 2001, Initially 44 studies were included in the school sample and 35 in the work place sample; however, after being evaluated for quality, only 10 school and 20 worksite studies were included in the meta-analysis. All interventions were related to altering diet or increasing physical activity; the outcome measures were primarily weight-related measures such as BMI, weight or other anthropometric measures (e.g., waist to hip ratio), with subjects followed for at least 6 months.<sup>76</sup> Some studies showed modest weight loss in six months, approximately 4

pounds on average for participants; however, the task force conducting meta-analysis determined that "insufficient evidence existed to determine the effectiveness of combination nutrition and physical activity interventions to prevent or reduce overweight and obesity in school settings because of the limited number of qualifying studies reporting non-comparable outcomes."<sup>77</sup> This meta-analysis demonstrates that accurate evaluation of the efficacy of school and work-based public health initiatives for weight loss is hampered by lack of rigor, but suggests that the amount of weight loss realized through such initiatives is likely modest.<sup>78</sup> For those who are obese, an average of 4 pounds of weight loss in six months' time would likely be insufficient to improve their overall health and well-being and rid them of both the physical and social co-morbidities associated with extra weight.

Another concern potentially hampering public health efforts to reduce obesity may be the lack of relatability in health promotion messages. A meta-analysis by Malterud and Tonstad sought to analyze challenges faced by health promotion strategies to address obesity within a Scandinavian context.<sup>79</sup> The review of primary studies on health promotion efforts in Norway and Finland found that these health promotion efforts faced several challenges related to the unequal distribution of vulnerability to weight gain within the population. Individual factors such as race, age, socioeconomic factors, and the presence of abuse or neglect, among others, made developing effective general population-based public health efforts an unrealistic expectation. The very nature of such a broad-based population-wide intervention discounted variables and failed to address the highly nuanced and individualized factors believed to influence the development and maintenance of obesity. The authors outlined implications of their analysis for practice.

They recommended that health promotion needs to be highly individualized and tailored to the obese person. Preventing weight gain requires attention to the person's sociodemographic, cultural, and genetic characteristics. Health promotion initiatives, as a part of the public health arsenal of tools, are unable to provide this individualized attention.<sup>80</sup> Even more, when such interventions fail, this failure can wrongly be used to turn weight control into a question of morality and self-control. The study suggests that when general health promotion messages are delivered (even those which lack reliability) and then prove ineffective in assisting the individual to lose weight and gain health, the assumption is that the message recipient (the obese person) has failed to appropriately take up and use the helpful professional expertise provided.<sup>81</sup> The situation then becomes one of blaming the victim. The study concludes that "cultural aspects on identity and morality may create victim blaming and disempowerment obstructing health promotion strategies for weight control."82 The obese person, originally thought to lack morality and self-control, has now "proven" his moral inferiority by once again failing to lose weight in accordance with the non-specific health promotion messages promulgated.

Commentators Puhl and Heuer concur, arguing that he possibility of obesity stigma, whether intended or unintended, should be an important consideration in the development of more useful and helpful public health messages. "For the public health community to address the widespread health and social disparities faced by obese people," they state, "we must move past the victim-blaming approach and instead advocate a comprehensive obesity prevention strategy that includes efforts to reduce weigh-based stigma and discriminations."<sup>83</sup> Recognizing the additional burden that public health initiatives can impose by seeming to blame obese people for both their condition

and their failure to utilize expert information may be a first step toward avoiding campaigns that are actually counter-productive to achieving the goals of public health.

Public health and clinical medicine are best used as complementary efforts. With regard to obesity, public health efforts should be focused on the prevention of obesity, the prevention of further weight gain, or the curtailment of disease in those who are already obese. Clinical medicine addresses the needs of the individual who has become obese and faces secondary and tertiary co-morbidities associated with excess weight. Neither approach should be expected to accomplish the goals of the other, though both must embrace *preventive* interventions to achieve their respective goals. Commentators who advocate public health approaches to the exclusion of clinical medical interventions to address obesity mix their differing foci and goals, and further, risk employing the normative framework appropriate to population-level interventions to criticize individual-focused interventions like WLS. This category mistake may result in applying a moralized framework within the clinical medical context where promoting patient autonomy and well-being are the appropriate normative goals of the professional obligation of individual care.

In summary, the goals of public health and clinical medicine are not the same. Public health focuses at the population-level and permits for various degrees of disease prevention from never developing disease to effectively curtailing its co-morbidities in those who have already developed the disease. Clinical medicine is focused on the individual and on resolving the particular, often highly nuanced, medical issues of the identified patient and avoiding the onset of (additional) co-morbidities.<sup>84</sup> Each enterprise makes a distinct contribution to the development and implementation of systems intended

to address the many problems, origins, and solutions attributable to obesity. Public health efforts, as well as clinical medical technologies, should both be employed.<sup>85</sup> However, holding WLS accountable for not alleviating the public health problem of obesity and discrediting its clinical utility because it does not have direct social utility, is to conflate the goals of public health and clinical medicine. This category mistake has unfortunate ethical implications when bioethicists, policymakers, or the public are led to discount the value of WLS. Embracing public health initiatives to the exclusion of providing a medically warranted continuum of care to obese individuals would unjustly sacrifice currently obese individuals for the good of future populations.

Applying the public health yardstick to measure what is essentially a clinical medicine issue undermines assessment of the potential utility of WLS. Weight-loss surgery has its greatest potential utility at the level of an individual's health, and it may be the individual-level intervention with the greatest clinical utility, i.e., it may have the highest probability of promoting patient well-being. It has been shown to be more effective than other individual-level interventions, and it has also been shown to be a cost effective clinical intervention in the long-run.

Although it is beyond the scope of this dissertation's argument to engage in an exhaustive cost effectiveness analysis, both the clinical utility and the potential cost effectiveness of WLS will be addressed in the next sections of this chapter. This project's second chapter presented some evidence of the general efficacy of WLS as an intervention for obesity. The following section will provide detailed evidence of the ability of WLS to reduce or fully alleviate various co-morbidities—both physical and social—and to thereby constitute an effective individual-level preventive and

therapeutic/curative treatment. Establishing the clinical utility of WLS supports the argument that it should be fully embraced by clinicians and the public as part of the establishing an effective continuum of care for obesity.

B. The Clinical Utility of Weight Loss Surgery and Its Personal Utility

This section will first review the general data on the effectiveness of WLS to effect durable weight loss. It will then provide detailed empirical evidence which shows that WLS does indeed constitute a useful technology to employ in ameliorating the major physical and psycho-social co-morbidities of those who are obese. It will argue that WLS is therefore an effective clinical intervention for obesity. In short, this section will show that WLS has clinical utility at the individual patient level. Clinical utility is defined and used here as "the usefulness of an intervention for, or in, clinical practice."<sup>86</sup> Moreover, this section will briefly discuss the financial costs of providing WLS to ameliorate its comorbidities in comparison to the financial costs associated with treating the co-morbidities of obesity over the course of a lifetime. Finally, this section will use individual narratives of those who have undergone WLS to demonstrate that WLS has personal utility in meeting patients' unique, highly personal goals.

#### **B.i Clinical Utility of Weight Loss Surgery**

Where appropriate, this subsection will discuss the outcomes of specific interventions such as gastric banding or Roux-en Y gastric bypass; however, in general, the resolution of co-morbidities has been most effective and durable for those who are obese and have undergone Roux-en-Y gastric bypass surgery.<sup>87</sup> The ability of WLS to resolve individuals' obesity-related patho-physiology will be discussed and will include the following areas: hypertension, diabetes, sleep apnea, cancer, mortality, depression,

and other various quality of life indicators. To begin, however, this sub-section reviews the clinical utility of WLS for weight loss itself.

As previously discussed in Chapter two various forms of WLS have been in use for over sixty years.<sup>88</sup> While some earlier permutations of the surgery are no longer utilized and have been supplanted by more successful less invasive options, WLS is generally regarded as "the most effective treatment" for those who have extreme obesity.<sup>89</sup> A systematic meta-analysis of short and medium term weight-loss durability was conducted by reviewing data from 43 outcome studies on subjects who had undergone various types of WLS. "The most important single observation to be drawn from this meta-analysis is that pooled data of all operations demonstrates that bariatric surgery can achieve a major reduction in weight which is sustained for at least ten years."<sup>90</sup> The authors conclude that current bariatric operations achieve a major and durable weight loss in the medium term.

Bariatric surgery results in significant and durable weight loss. Specifically, surgical patients have been shown to lose as much as 60 percent of excess weight in the first six months following surgery and 77 percent of excess weight at the twelve month mark following the intervention.<sup>91</sup> Overall, the likelihood of major complications is about 2.5 percent across all types of surgery.<sup>92</sup> Mortality attributable to the bariatric surgery is approximately 0.1 percent.<sup>93</sup> Furthermore, clinical evidence has shown that the risks of morbid obesity outweigh the risks of bariatric interventions for obesity.<sup>94</sup> Bariatric surgery has also been shown to extend the life span of the gastric bypass patient by as much as 89 percent. The risks of premature death due to obesity have been shown to be reduced by 30-40 percent for those undergoing WLS.<sup>95</sup> Bariatric surgery is also useful in

preventing, improving or resolving more than forty obesity related diseases and conditions.<sup>96</sup> Several of the major and most dangerous co-morbidities, both physical and psychosocial, associated with obesity are improved by WLS. The research in each of these areas is discussed below.

#### B.i.a Hypertension

Sugerman et al. evaluated the pre and postoperative relationships between hypertension and type 2 diabetes in severely obese patients and the effects of gastric bypass induced weight loss. Data regarding patients' pre and postoperative diabetes, hypertension, and other co-morbidities including sleep apnea and joint disease, were collected on 1,025 patients who had surgery by one general surgeon at a Universityaffiliated hospital over a nineteen year period of time.<sup>97</sup> Pre-operatively, 51 percent of the sample had hypertension either alone or in combination with diabetes. Postoperatively, after one year with a follow up rate of 91 percent, hypertension had resolved in 69 percent of those who had undergone the procedure. At follow up of between five and seven years the resolution of hypertension remained at 66 percent. African American patients, who have a higher risk of hypertension in general, were less likely to have significant resolution of their hypertension following the WLS. Additionally the study showed that for those whose hypertension resolved it was associated with a greater excess weight loss relative to their initial weight.<sup>98</sup>

The Swedish Obese Subjects Study, a long term longitudinal published in the *New England Journal of Medicine,* evaluated the effects of WLS across many clinical indicators at the two and ten year post-surgical intervals. Unique in its design, this study matched 2,010 patients who underwent gastric surgery with 2,037 who were

conventionally treated to evaluate numerous co-morbidities associated with obesity. Initially there was significant improvement in hypertension found in surgically treated patients as compared to matched controls. However, the improvements noted at two years were no longer present at the eight year interval post-surgery. It was noted that those who underwent gastric bypass surgery, as opposed to other surgical techniques, had a significantly greater weight loss and also were better able to maintain a decrease in blood pressure for a more sustained period of time following surgical weight loss intervention.<sup>99</sup> Research on the resolution of diabetes is provided in the next subsection.

# **B.i.b** Diabetes

A meta-analysis conducted of all articles published between January 1, 1990 and April 30, 2006, included 621 studies, on the effects of weight loss surgical interventions indicated that overall 78.1 percent of diabetic patients showed complete resolution of diabetes while diabetes was improved in 86.6 percent of patients.<sup>100</sup> Diabetes resolution was greatest in patients who had undergone biliopancreatic diversion or duodenal switch. The second most efficacious intervention for resolving diabetes was gastric bypass surgery. Banding interventions followed gastric bypass in resolving diabetes.<sup>101</sup> The meta-analysis concluded that:

the clinical and laboratory manifestations of type 2 diabetes are resolved or improved in the greater majority of patients following bariatric surgery; these responses are more pronounced in procedures associated with a greater percentage excess of body weight loss and [diabetes resolution] is maintained for two years or more.<sup>102</sup>

A 2009 study in the journal *Surgery for Obesity and Related Diseases* showed that early remission of type 2 diabetes occurred in 89 percent of patients following Rouxen-Y gastric bypass.<sup>103</sup> The study included 177 patients, and the follow up period ranged

from 5-16 years post operatively. Of the 177 patients, 157 had a complete remission of type 2 diabetes postoperatively. Twenty patients did not benefit from a remission in their type 2 diabetes even though they had experienced significant loss of excess weight. The study further showed that the durability of remission from type 2 diabetes diminished over time. At more than 5 years post-surgical intervention 43.1 percent of patients continued to show a remission in their diabetes. While remission of type 2 diabetes was found to be more durable in men it was also found that weight regain was statistically significant but a weak predictor of diabetes reoccurrence. The study posits that durable remission of type 2 diabetes remission is most closely correlated with an early disease stage at gastric bypass,<sup>104</sup> which suggests that earlier surgical intervention may be optimal as the window of opportunity time to resolve this co-morbidity may diminish with delayed intervention.<sup>105</sup>

Two studies published in March 2012—one conducted at Catholic University in Rome, the other at the Cleveland Clinic—further establish a positive relationship between surgical weight loss interventions and the resolution of diabetes.<sup>106</sup> The Catholic University study compared two types of surgery with usual medical treatment. After two years, the surgical groups had complete remission rates of 75 percent and 95 percent; there were no remissions in patients who received medical treatment.<sup>107</sup> The second Cleveland Clinic study compared two types of surgery with an intensive medical regimen. The remission rates one year after surgery were lower than in the Italian study—42 percent and 37 percent—at least in part because the American study used a stricter definition of remission. The intensive medical treatment led to remission in 12 percent of patients. The study suggests that the mechanism for resolution of type 2

diabetes may have to do with changes in the gut which are not fully understood at the present time.<sup>108</sup> Limitations of the studies include that each was done at a single institution and only report results over two years; however, the results may warrant earlier surgical treatment for weight loss in those with type 2 diabetes.<sup>109</sup>

In order to maximize the window of opportunity for resolving type 2 diabetes it may be necessary that obese patients embark as early as possible on a continuum of clinical care that takes them, from the offices of primary care physicians to specialists in WLS. To accomplish this the stigma currently associated with obesity and obesity interventions would need to be addressed, since we have seen that bias and stigma can prevent physicians from engaging in conversation about surgical interventions for obesity. Empirical research indicating the restorative effects of surgical weight loss interventions, with resultant remission of co-morbidities, should motivate efforts to address physicians' personal negative feelings about those who are obese. Improvements in sleep apnea are revealed in the following subsection.

## B.i.c Sleep apnea

A study of the effectiveness of bariatric surgery as a treatment for obstructive sleep apnea (OSA) in patients with clinically significant obesity demonstrated that OSA is prevalent pre-operatively in 60 percent of patients who were to undergo bariatric surgery.<sup>110</sup> In this study 100 patients were evaluated for symptoms of OSA by polysomnography before gastric bypass surgery. Pre-operativee and postoperative scores of Epworth Sleepiness Scale (ESS), Respiratory Disturbance Index (RDI), and other parameters of sleep quality were compared to determine if bariatric surgery altered OSA as weight loss progressed. Pre-operative evaluation revealed that 13 patients had no OSA,

29 had mild OSA, while the remaining 58 patients were being treated pre-operativeely for moderate-severe OSA.<sup>111</sup> Following bariatric surgery, at a median of 6 months follow-up, BMI and ESS scores improved to date, 11 patients had completed postoperative polysomnography (3-21 months) after losing weight. There was significant improvement in ESS, minimum O2 saturation, and sleep efficiency when comparing pre-operative and postoperative scores. The study concludes that gastric bypass is an effective treatment for OSA in patients with clinically significant obesity.<sup>112</sup>

Another study evaluating the impact of surgically induced weight loss on Obstructive Sleep Apnea/Hypopnea Syndrome (OSAHS) examined electrocardiographic changes, pulmonary arterial pressure, and daytime sleepiness in morbidly obese patients in 16 women and 13 men who underwent bariatric surgery within a 3-year period.<sup>113</sup> Weight loss induced by surgery eliminated OSAHS in 46 percent of obese patients with an important improvement in oxygen saturation. Neck, thorax, waist and hip circumferences decreased significantly after surgical intervention but only neck circumference correlated significantly with the apnea/hypopnea index. Electrocardiographic abnormalities were present in 9 patients (31 percent) preoperatively (sinus arrhythmia, ventricular arrhythmias, and sinus arrest). The number of electrocardiographic abnormalities decreased after surgery but new abnormalities appeared in some patients. Systolic pulmonary arterial pressure significantly decreased in the group of patients in whom OSAHS disappeared after surgery. The study concluded that bariatric surgery effectively reduces respiratory disturbances during sleep and improves pulmonary hypertension. Electro cardiographic abnormalities change after
surgery and that some daytime sleepiness appeared not to be related to respiratory disturbances during sleep.<sup>114</sup>

Obstructive sleep apnea and hypopnea syndrome are associated with high mortality and serious morbidity, and it appears that weight loss induced through surgical intervention will correct both, thus improving both the physical co-morbidity and providing a useful resolution to diminished quality of life associated with daytime sleepiness.<sup>115</sup> From the perspective of the individual with sleep apnea or hypopnea syndrome associated with excess weight, there appears to be evidence that surgical weight loss intervention is individually useful in providing relief from this life limiting co-morbidity. Post-surgical reductions in cancers are discussed below.

## B.i.d Cancer/Malignancy

One study reviewed the incidence of cancer and mortality data through 2007 from the Utah Cancer Registry (UCR) which compared 6,596 Utah patients who had undergone gastric bypass between the years 1984–2002 with 9,442 severely obese persons who had applied for Utah Driver's Licenses during the same time.<sup>116</sup> Controls were group matched to represent the gender, age, and BMI distribution of the surgical patients. The study outcomes included data on the incidence, case-fatality, and mortality for cancer by site and stage at diagnosis of all gastric bypass patients, compared to severely obese controls that had not undergone surgical weight loss interventions. Follow-up was conducted over a 24-year period with the mean follow up time being approximately 12.5 years.<sup>117</sup>

Study findings included that the total cancer incidence was significantly lower in the surgical group as compared to matched controls. A lower incidence of cancer in the

WLS patients versus the control group was primarily attributed to decreased incidence of cancer diagnosed at regional or distant stages. The terms regional or distant refer how far the cancer had spread from its site of origin—regional refers to affected areas closer in proximity, such as immediately adjacent lymph nodes, while distant refers to cancer which has spread farther from the original site. Cancer mortality was found to be 46 percent lower in the surgery group compared to matched controls. Although the apparent protective effect of surgery on risk of developing cancer was limited to cancers likely known to be obesity related, the inverse association for mortality was seen for all cancers. Significant reduction in total cancer mortality in gastric bypass patients compared with severely obese controls was associated with decreased incidence, primarily among subjects with advanced cancers. The study findings suggest that gastric bypass provides useful reduction in an individual's cancer risk, presumably related to weight loss. The study reported a significant 60 percent reduction in cancer mortality when comparing post-gastric bypass patients to severely obese controls. Additional follow-up at five years found that a 46 percent reduction in cancer mortality persisted.<sup>118</sup>

These findings suggest that gastric bypass surgery may result in lower cancer incidence and mortality. The study authors emphasize that bariatric surgery is not an accepted therapy for cancer, and in fact, history of an internal malignancy within a 5-year period is often considered a contraindication for obesity surgery. The cancer-related benefits of gastric bypass surgery were shown to be strongest in the women studied. The study noted that since severe obesity is more prevalent in women than men and 80 percent of patients who undergo gastric bypass surgery are women, the results of our study have important medical and population implications. Although the benefit of

reduced incidence was limited to cancers likely related to obesity, reduction of cancer mortality was seen for both obesity-related and non-obesity-related cancers. The research findings support recommendations for reducing weight to lower cancer risk and suggest that since surgical weight loss interventions have been shown to provide the most sustainable weight loss for individuals, surgically induced weight loss may provide a valuable tool for individuals seeking to reduce the likelihood of developing obesity related cancers and malignancies.<sup>119</sup>

The previously discussed Swedish Obese Subjects Study also provides longitudinal data on the incidence of cancer in those who have undergone WLS and matched controls. Information regarding the incidence of cancer was gleaned from the available data set. The number of first-time cancers after subjects were included in the study was found to be lower in the surgery group (n=117) than in the control group (n=169). In female subjects, the number of first-time cancers was lower in the surgery group (n=79) than in the control group (n=130), however the study showed no similar effect in male subjects with 38 male subjects in the WLS group who developed first time cancer compared 39 in the male control group. Study authors posit that bariatric surgery is associated with reduced cancer incidence in obese women, however, they note that the same positive results were not indicated for the men included in the study.<sup>120</sup> Improvements inoverall mortality rates are shown below.

#### B.i.e Mortality

A study designed to test the hypothesis that bariatric surgery can reduce long-term mortality and the morbidly of obese patients used an observational 2-cohort method consisting of a treatment cohort (n=1,035) which included patients who had undergone

bariatric surgery at the McGill University Health Centre between 1986 and 2002 and a control group (n = 5,746) matched for age and gender. Subjects were identified from the Quebec provincial health insurance database. Those with medical conditions (other than morbid obesity) at cohort-inception were excluded. The cohorts were followed for 5 vears.<sup>121</sup> The study found that bariatric surgery resulted in significant reduction (approximately 67.1 percent) in mean percent excess weight loss. The study further showed that bariatric surgery patients had reductions in risk for developing cardiovascular, cancer, endocrine, infectious, psychiatric, and mental disorders compared with matched controls. The only exceptions were hematologic and digestive diseases. There was no difference found in hematologic disease mortality and morbidity, and there were increased rates of digestive diseases found among the bariatric surgery cohort. Overall, the mortality rate in the bariatric surgery cohort was 0.68 percent compared with 6.17 percent in controls, which translates to a reduction in the relative risk of death by 89 percent. This study shows that weight-loss surgery is useful in significantly decreasing the overall mortality of those who undergo surgical weight loss interventions. Moreover, surgically induced weight loss reduces the development of new health related conditions in morbidly obese patients.<sup>122</sup>

A *New England Journal of Medicine* article analyzed the extensive data set from the Swedish Obese Subjects Study to report on the overall mortality found during 10.9 year follow up. At the time of data analysis regarding overall mortality, the follow up rate was reportedly 99.9 percent with all but three of the subject's vital statistics being known to the investigators.<sup>123</sup> With regard to overall mortality there were 129 deaths among those in the control group (n=2,037) and 101 deaths among those in the surgery group

(n=2,010) during the study time frame. The most common cause of death was found to be heart attack with 25 subjects in the control group and 13 subjects in the surgery group succumbing to the heart attack. The second most commonly noted reason for mortality was cancer with 47 control group and 29 surgery group members dying of cancer during the study follow up.<sup>124</sup> Overall the study concluded "that bariatric surgery in obese subjects was associated with a reduction in overall mortality, as compared with conventional treatment in contemporaneously matched, obese controls.<sup>125</sup> In the section below information is provided on the resolution of other co-morbidities related to obesity. B.i.f Other co-morbidities

It is not possible to review all of the available data regarding the usefulness of surgical interventions for obese individuals in resolving physical co-morbidities associated with excess weight. It is necessary to limit this review to the key studies of the many commonly experienced co-morbidities. These provide the critical empirical data which should inform physician judgment and counsel of their obese patients. There are several other areas of physical co-morbidity which, while not covered here in detail, have also shown to improve physical symptoms found among obese individuals. Research has shown that surgically induced weight loss also improves lower back pain and decreases the pain associated with degenerative joint diseases (which decrease mobility), improves female hormone dysfunction which can cause infertility, reduces idiopathic inter-cranial hypertension (pseudo tumorcerebri), hernia risk, and nonalcoholic liver disease.<sup>126</sup> These findings may have more salience for some obese individuals than others based on their individual goals and activities.

This discussion of the clinical utility of WLS in addressing various co-morbidities will now turn to depression and suicide. Depression has been strongly associated with obesity in the literature and is common, debilitating, and complex. Like obesity, depression has a biological basis but patients' experience of the condition is exacerbated by the stigma that attaches to it as a mental illness. For those who have both obesity and depression, the intersectionality of the associated stigma can be particularly debilitating.<sup>127</sup>

## **B.i.g Depression**

Research conducted as a part of a doctoral dissertation in counselor education and supervision at Duquesne University evaluated the pre and post-surgical experience of depression, anxiety, and general quality of life measurements at two, four, and six months post-surgery in patients who had undergone bariatric surgical interventions at West Penn Hospital in Pittsburgh,PA.<sup>128</sup> Subjects had undergone bariatric surgery between 1999 and 2005. During that time 720 individuals, 540 men and 146 women received gastric bypass surgery for weight loss. The disproportionately male study participants were thus atypical with regard to gender. Archival data was retrieved from pre-procedure baseline and post procedure administration of the Beck Depression Inventory, Beck Anxiety Inventory and the RAND SF-36 Health Survey. The study showed a significant and linear improvement in the experience of depression found among pre-surgical candidates to post-surgical candidates. The improvements showed steady decreases in the experience of depression immediately following gastric bypass surgery and at the three postoperative evaluations.<sup>129</sup>

In a 2011 study designed to examine whether there are improvements in depressive symptoms following bariatric surgery and in what specific depression domains improvements may manifest, Hayden et al. used the Beck Depression Inventory (BDI). The study included obese patients who had undergone laparoscopic adjustable gastric banding (LAGB) surgery and had completed the BDI at baseline and 1 year following surgery. There were two groups of patients included in the study, a general background group and a group identified as experiencing elevated depressive symptoms based on the BDI.<sup>130</sup> Study results showed that BDI scores fell for both groups, indicating a reduction in the experience of depression post-surgery. With regard to specific changes in the experience of depression in particular depression domains, patient scores on the negative self-attitude subscale were significantly greater prior to surgery than the two other subscales and showed the greatest improvement 1 year following LAGB. The study further showed that pre-existing antidepressant therapy had little or no association on the BDI scores or on its change following weight loss. This study showed that while high rates of depression are generally reported in relation to obesity there is a significant decrease in depressive symptoms experienced following weight loss due to surgical intervention.<sup>131</sup> Rather than pointing to an overlap in physical symptoms between obesity and depression, this study seems to show that the negative attitudes towards self is the reason that BDI scores are elevated pre-intervention. These results may indicate that the social construction of the stigmatizing condition of obesity may lead to a negative selfattitude and depression prior to WLS and that improvement in social acceptability as part of weight loss subsequently leads to improvements in perceived social acceptability and hence decreases in the experience of depression. However not all of the data show that

depression is adequately resolved in all patients following bariatric surgical interventions. While this may be true for many there is a mounting body of research which indicates that for a concerning number of patients there is an increased risk of both suicide attempts and completions following surgical weight loss interventions. Suicide attempts and completions are generally regarded as the outcome of untreated depression and are discussed below.

## B.i.h Suicide

This subsection reveals data on post-surgical suicides. Tindle et al. examined post-bariatric surgery suicides, including as variables elapsed time since the operation, sex, age, and suicide death rates, and compared this data with US suicide rates. They studied medical data, obtained from the Pennsylvania Health Care Cost and Containment Council, on Pennsylvania residents who had received bariatric surgery between January 1, 1995 and December 31, 2004. The study matched mortality data from suicides between September 1, 1996 and December 28, 2006 with the medical records of those who had undergone WLS between January 1, 1995 and December 31, 2004. Statistics were obtained from the Division of Vital Records, Pennsylvania State Department of Health. The data showed that there were 31 suicides in 16,683 operations. In this group the overall rate was 6.6 per 10,000 people. Among men the rate was 13.7 per 10,000 people and for women the rate was 5.2 per 10,000.<sup>132</sup> About 30 percent of suicides happened within the first 2 years after surgical intervention for weight loss, with almost 70 percent occurring within the first 3 years. For every age category except the youngest, suicide rates were also found to be higher among men than women. Age- and sex-matched suicide rates in the general US population (ages 35-64 years) who had not undergone

weight loss surgical intervention were reported as 2.4 per10,000 (men) and 0.7 per10,000 (women).Compared with age and sex-matched suicide rates in the US, there was a substantial increase in the number of suicides among all patients who had bariatric surgery in Pennsylvania during a 10-year period. It was concluded by the investigators that these data show a need to develop a more comprehensive surveillance and follow-up methods of patients undergoing surgical weight loss interventions in order to evaluate factors which may lead to post-bariatric surgery suicide.<sup>133</sup>

The usefulness of weight loss surgical interventions to individuals across many commonly identified and experienced categories of co-morbidity has been validated in numerous studies covering many domains. Due to the sheer number of variations in surgical weight loss interventions it is somewhat difficult to make specific comparisons with regard to the impact of particular surgical weight loss interventions as related to specific outcomes as much of the research combines patients who have undergone any one of a number of accepted surgical weight loss interventions. The following subsection addresses the financial cost associated with WLS.

## B.i.i Financial costs

This section will now briefly turn to the financial costs of providing WLS to ameliorate its co-morbidities in comparison to the financial costs associated with treating the co-morbidities of obesity over the course of a lifetime. Powers et al. examined both the financial impact of obesity on society and the financial consequence of treating patients who are obese with WLS across several published studies. They reviewed various studies and quantified the economic savings and benefits to quality-of-life and length-of-life associated with decreased mortality and health costs across these studies.<sup>134</sup>

While the specific studies examined found differing levels of cost savings, and savings were unequally distributed among third-party payers, the patient, and the employers this study concluded:

In summary, for morbidly obese people who have costly comorbid conditions, operative therapy offers a large potential benefit in quality of adjusted life-years and savings to the total medical expenses incurred by patients and their employers.<sup>135</sup>

A study conducted by the Veterans Administration Health System explored the economic burden of caring for veterans with clinical obesity and co-morbidities.<sup>136</sup> It retrospectively examined the records of 25 male patients who had undergone WLS between 1999 and 2001, and reviewed all obesity-related health care costs including hospitalizations, outpatient doctor visits, medication usage, and the cost of home health devices both one year prior to WLS and one year post-surgery. All patients had undergone Roux-en-Y gastric bypass surgery (RYGBP). The study concluded that operative treatment of clinically severe obesity reduced obesity-related costs and the utilization of healthcare resources at the time of follow-up, which was approximately eighteen months following surgery. The study further found that "the cost of undertaking RYGBP at the VA is offset by reduction of health care costs within the first year of surgery."<sup>137</sup> Furthermore, based solely on cost saving from decreased utilization of health care relative to the cost of surgery, it concluded that the data support "allocation of resources to support existing bariatric surgery programs throughout the VA system."<sup>138</sup>

An employer-based study of WLS costs evaluated the private third party payer return on investment for bariatric surgery. <sup>139</sup> The study identified morbidly obese patients age 18 years or older through an employer claims database of more than 5 million employees between the years 1999-2005. Each patient (N=3,651) who had

undergone WLS during this time was matched with a control subject who was also morbidly obese but had not undergone WLS. The patient and control matching included demographic, co-morbidity, and the types of health care expenditures which were incurred. The two groups were compared for total healthcare costs in the six months prior to surgery through the end of their enrollment in the employer sponsored health plan. The average bariatric surgery cost was between \$17,000-\$26,000 dollars. In comparing the two groups, the study authors state "we estimated all costs to have been recouped within 2 years for laparoscopic surgery patients and within 4 years for open surgery patients."<sup>140</sup> The study did not specifically evaluate quality-of-life or length-of-life benefits attributable to the surgery. In what the study termed "take-away points" the authors note, that "even ignoring potential quality of life and length of life benefits, as well as disability and work loss, third-party payers can rely on bariatric surgery paying for itself through decreased co-morbidities within 2-4 years."<sup>141</sup>

While an exhaustive review of the financial costs associated both with obesity and its treatments are not possible here the above data do offer some insight that overall, the costs associated providing WLS are lower than the costs of treating the co-morbid diseases associated. This cost savings was reported across several different studies. The above economic data appear to support WLS as a potentially cost effective intervention for obesity. WLS does not appear to further burden the health care system by being disproportionately expensive in relation to the cost of treating the co-morbidities of those who do not receive WLS. On the contrary, there appears to be a cost savings as well as an improvement in quality-of-life and length-of-life for these patients along with a reduction in the overall financial burden of obesity for third party payers.

### **B.ii Personal Utility of Weight Loss Surgery**

Empirical research detailed above as well as a plethora of other studies not specifically discussed in this dissertation, establish the clinical utility of WLS as an individual-level intervention for sustained weight loss and reduction of obesity-associated co-morbidity. That is, however, only one part of the evidence to be evaluated. Even with widespread general agreement that WLS decreases physical and psychological comorbidities consistent with several of the generally accepted and identified goals of medicine, these endpoints do not provide a complete picture. The usefulness of WLS may also be evaluated in terms of its personal utility for those who choose this weight loss option. Conceptions of the personal utility of WLS can be as unique and intricate as the reasons for the development and maintenance of an individual's obesity in the first place. Evidence of the personal utility of WLS is found throughout the narratives included in this section.

As established in chapter three, there are few venues for those who have undergone WLS to share their experience without concern about rejection and stigmatization. One safe forum in which to share such narratives is a blog on WLS. The following narrative expounds the usefulness of WLS for a particular patient, named Rauncie who underwent Roux-en-Y gastric bypass surgery in 2010. Her story, recounted in her words, reveals an often overlooked dimension of the usefulness of WLS. She begins her story by informing readers that her development of obesity was complex and partly the result of attempting to protect herself from additional victimization, having had the unfortunate experience of being raped. She writes:

I had some struggles as a young woman and was a victim of rape and had severe abandonment issues. Food had been my best friend. I lived my life in a daze only

feeling from the neck up. I allowed people to abuse me and I felt life happened to me rather than feeling I had any control over anything. I lost weight only to gain weight back over and over and finally eating myself up to 287 pounds. At 5'4" with a small frame that is a lot of weight to carry.<sup>142</sup>

She goes on to describe the way in which she internalized the various victimizations

which she had experienced so that she began to accept societal stigmatization as being

deserved.

I was numb emotionally but I hated myself. I went from bad relationship to bad relationship partly because I felt that was all I deserved. I talked to myself in the mirror in a way that would have gotten me slapped by someone else. I was cruel to myself and destructive in many ways.

However, she also recounts that she began to see herself in a different light, in essence to

acknowledge that a different story, one with an alternative ending, was indeed possible.

She continues:

As I grew older I began to have an inner shift. I realized that I needed to love myself right where I was. I was never going to be able to take care of me if I did not. I began to do deep work and my words in the mirror began to change. I began to say "I care about you". At first there were many tears but years of hatred and self-loathing began to fall away and I decided I was no longer going to live with the label of victim.<sup>143</sup>

But the realization of this alternate life story that this would require assistance.

I began to do research on weight loss surgery. It was something I had considered before but always thought it was the easy way out. I went to an information session for the first time about 3 years ago. I walked away thinking it was not for me that I would just do it on my own. I continued to work on my inner self and then the year of my 49th birthday I decided that year 50 would be my year. One night after spending time with a very dear friend she pulled me aside in tears and told me that she was afraid she was going to lose me. She shared how heartbroken she was to see me using a cane. In the past I would have been upset and offended that someone would have said something about my weight. This time I was not offended I knew that what she was saying was true. In addition I had a friend who offered to pay for me to attend Weight Watchers meetings at work with her.

I thought to myself ...I have people who really love me, they loved me enough to speak up in love. It gave me that extra push to move forward and I went back to an information session and made up my mind after weighing the options that I was going to have RNY bypass surgery. I had diabetes, high blood pressure and sleep apnea. I was walking with a cane. I was tired all the time and had no energy.  $^{144}$ 

Like many patients who eventually undergo WLS Rauncie had to overcome the societal

stigma which she had internalized which told her she was unworthy because of

intersection of various marginalizations as a rape victim, a woman, and an obese person.

Furthermore she related additional feelings of failure based on the fact that she could not

overcome obesity without WLS, despite several attempts. These deeply entrenched

socially-constructed messages had to be de-constructed before she was able to access

efficacious treatment. Regarding the pre-surgical process Rauncie recalls:

The process began for me in July of 2010 with an initial appointment. I then had to go for a psychological evaluation and nutritional appointments. I was finally approved for surgery and given the date of Dec 3, 2010. I remember that the week before surgery I was so scared that I had thoughts of backing out. I was afraid I would die on the table. In reality...I did have a rebirth. I left behind the victim in that operating room. For me this was a rite of passage from one part of my life to another. This tool has changed my life.<sup>145</sup>

Her narrative recounts numerous post-surgical improvements in physical health and

quality of life.

Today it is 13 months since I had my surgery. I weighed in this morning at 142 pounds. I have lost half my weight since my surgery. But more than that I am healthy. I am no longer on medication for diabetes or High Blood Pressure and I gave my cane away. I have so much energy that I have done more in the past year than I have done in probably 10 years. I am teaching classes, going to the gym, dancing, singing...and living my life with open arms and open eyes. My inner work has excelled and I have found that the true key to all this is that it is a tool. I must work at it every single day. I never thought in a million years that structure and accountability would be the thing that freed me to live a happy life. I always thought the opposite...<sup>146</sup>

For Rauncie, WLS assisted her in re-gaining her health and re-established many quality

of life factors which had been so diminished by obesity. For her it was a procedure which

offered and made good on opportunities to reclaim both health and the vitality of living.

She continues:

...My life has changed in such positive ways that I would do this over again in a heartbeat but I would not have waited so long. My advice to anyone considering the surgery is this: If you want to be successful see this for what it is a tool for lifestyle change. If you have the surgery and then try to figure out what you can get away with doing afterwards you are going to end up right back where you started from. Everyone loses in the beginning; it is the way the surgery works. But if you are eating the same or cheating early in the game eventually the weight will come back. I spend each day of my life awake, alive, vigilant and responsible for my actions. I do not pray, hope or wish that the scale would stay where it is or go lower...I work at it. We are responsible for the final outcome of the surgery. We are given a valuable tool that can change our lives if we use it correctly. If you think this is the easy way then follow my journey for just a day and you will see that I and others like me must work at it every single day. I write all my food down, I do research, I take responsibility for what I put in my mouth every single time I open it...<sup>147</sup>

She appears to be realistic that WLS is a tool which offers significant help for a condition

she could not overcome on her own but for which she will ultimately be responsible for

maintaining in the future.

Rauncie speaks openly about the trade-offs of having surgery and some of the

side-effects which are possible. She remarks that on balance, in looking at the risks,

benefits, and side-effects relative to what she has gained she believes she made a good

decision. The very individualized criteria of personal utility were satisfied for Rauncie by

WLS. She writes:

... People ask me about loose skin, missing foods, any regrets... I do have loose skin but I do not care about that. I would rather have loose skin than diabetes, High blood pressure and a cane as my constant companion. I do not miss the food that made me sluggish and fat. I have no regrets.

At 145 pounds I fit in a size 8 jeans, I can wear heals [sic], I can play on the floor with my grandchildren and I have a lap they can sit on. My name is Rauncie. My 50th birthday present to myself was a new life. I wanted to grow old watching my grandchildren grow up and living a life of purpose. I will live the rest of my life grateful for this second chance to live my life fully engaged and loving myself. Starting weight 287 Current weight 142 Surgery: RNY gastric bypass Dec 3, 2010<sup>1148</sup>

Rauncie's narrative shows that WLS was able to provide both clinical utility and personal utility. Clinical utility was realized because the surgery used as a tool provided sufficient weight loss to ameliorate her physical and quality of life co-morbidities. As shown above the research indicates that her weight loss and thus likely the resolution of her co-morbidities will remain durable for at least ten years. Moreover, WLS was useful in assisting Rauncie to meet her own highly personal goals for weight loss which included over-coming several forms of victimization and marginalizations which so burdened her and which resulted in the manifestation of her obesity in the first place. For Rauncie WLS was a tool for helping her to claim an alternative narrative other than that of the victim of damaging life experiences. Rauncie needed assistance to claim an alternative story. She needed the assistance of those in medicine.

The following narrative further illustrates the personal utility of WLS for another patient:

At the age of twenty-one, I had Roux-en-Y gastric bypass (weight loss surgery). Even though I was young, I had already reached 285 pounds, and I was saddled with the co-morbidities of obesity. My adolescent body was bearing what should have been the diseases of a much older adult. I was on medications for high cholesterol, asthma, and depression and had been diagnosed with fatty liver disease, high blood pressure, and pre-diabetes. I was a very sick young woman, and I was in dire need of treatment. For me, the answer was weight loss surgery. Because I was a college student, bariatric surgery was only a viable option for me because I was still on my parent's excellent health insurance.<sup>149</sup>

The author speaks not only about losing excess weight and its associated physical comorbidities, but also about having been able to abandon other signs of her obesity. It appears that these "badges" as she refers to them include the stigma associated with being obese: Now, two years out from surgery, my story is very different. I no longer openly carry the badges of obesity, and my comorbidities have been alleviated. I am a healthy weight individual.<sup>150</sup>

This narrative reveals that for this young woman WSL proved to be personally useful as she recalls the difference between her impaired life prior to WLS and her co-morbidity free life following the intervention. Some of the personal meaning of no longer being obese may lie within her comment about no longer openly carrying the badges of obesity; its social and thus personal meanings no longer apply to her.

The following section discusses the importance of the physician-patient relationship. Specifically this section will address the way that this important relationship can serve to assist or impede those who are obese from gaining access to WLS. The physician-patient relationship, with its potential for inherent power dynamic, may be further affected by the stigmatization of obesity and a differential application of common bioethical principles which govern clinical medicine.

### **B.** iii Clinical Medicine and the Doctor-Patient Relationship

In contrast to public health, the goals of clinical medical intervention are to restore *individual* patient health, to prevent or ameliorate morbidity when possible, or failing in those aims, to provide effective palliation.<sup>151</sup> To achieve these goals, clinical medicine is also highly dependent on a mutually trusting physician-patient relationship. Some have argued that the overall effectiveness of clinical medicine is mediated by the quality of the physician-patient relationship, of which trust and trustworthiness are integral components.<sup>152</sup> In the ideal case, within the context of this trusting fiduciary relationship various treatment options can safely be explored, agreed upon, and undertaken. Although, as Dorothy Roberts describes, this ideal doctor-patient relationship

does not occur for various disempowered members of society.<sup>153</sup> Roberts writes about the experience of women of color as patients within the institution of medicine. Using intersectionality as her approach, she expounds on the political dimension of the doctor-patient relationship. Roberts writes, "Black women experience various forms of oppressions simultaneously, as a complex interaction of race, gender, and class that is more than the sum of its parts."<sup>154</sup> As has been argued elsewhere in this dissertation, obesity must be included as a form of marginalization along with those identified by Roberts. Whether male or female, black or white, those who are obese have diminished power and authority relative to the dominant group in much the same way as the women of color about whom Roberts writes. With regard to the experience of women of color who seek medical treatment Roberts says that various marginalizations intersect to alter their experience physician-patient relationship moving it further away from the ideal:

Race, class, and gender structure doctors' knowledge of their patients and their interpretation of the ethical principles they apply to their interactions with patients. My point is not only that physicians bring to their encounters with patients the same prejudices as exist in the rest of society. The relationship between doctor and patient is determined by political arrangements and not solely by the individual characteristics of the two actors.<sup>155</sup>

The outcome of the oppressions, whose sum is indeed greater than its parts, of which Roberts writes, is that the ethical principles generally utilized in the physician-patient relationship and intended to be foundational in the practice of medicine are applied differently. "The experience of women of color confirms that these principles are themselves determined according to power. In other words, the very meaning of truth, consent, and confidentiality depends on social arrangements."<sup>156</sup> Assuming the accuracy of Robert's analysis, the physician-patient relationship may be more susceptible to the usual power differentials in the presence of intersecting marginalizations. Informed decision-making, and specifically informed consent, is predicated on the existence of an effective provider-patient relationship.<sup>157</sup> Failure to provide material information regarding obesity and its treatment options may substantially undermine trust within the physician-patient relationship, and certainly undercuts patient autonomy and the possibility of informed decision making. Failures of trust and failure to provide material information thus undermines the efforts of clinical medicine to treat patients' obesity. Lack of trust, inadequate information and communication, or all of these can also limit the clinical and individual usefulness of WLS. These topics will be taken up in greater detail in subsequent chapters. The final section of this chapter will provide a superior framework from which to view the utility of WLS in light of discussions above regarding its social, clinical, and personal utility.

C. Re-Framing Obesity and the Utility of Weight Loss Surgery

Although WLS does not adequately solve the public health problem of obesity and as an individual-level intervention should not be held to that standard, WLS does effectively promote the traditionally espoused goals of clinical medicine. These goals include the promotion of individual patient's health and/or prevention of disease, maintaining or improving patient quality of life, cure of disease, prevention of premature death, improving or maintaining patient functional status, educating patients regarding their conditions and likely prognosis, prevention of harm to the patient in the course of care, and when all else fails, assisting the patient in a peaceful death.<sup>158</sup> Providing information about the full range of treatment options—and, as this dissertation argues, treating obesity like other medical conditions—promotes justice, informed decisionmaking, and trust within the patient-doctor relationship.

To criticize surgical interventions for weight loss based on their limited social utility in addressing the public health issue of obesity is to confuse the aims of these different health-related enterprises. From the perspectives of the individual medical practitioner and her patient the question of the utility of employing WLS to treat obesity should be understood as an issue of clinical medicine and not of public health practice. In this way the ethical confusion over the limited social utility of WLS as an appropriate clinical medicine intervention should be dissolved. Therefore, it is possible to reframe a fundamental criticism of WLS as one of mistaking clinical medicine goals for public health goals. Viewed within the framework of clinical medicine, WLS may be seen to have great clinical and personal utility. The following section reveals that WLS reduces the transmission of obesity in families and across generations.

### C.i Diminished Intergenerational and Familial Transmission of Obesity

It is important to note that research has shown that the effects of WLS may indeed have a broader utility than had previously been attributed to it. In short, WLS can have benefit beyond the individual surgical candidate.<sup>159</sup> The broader usefulness of the surgery includes evidence that it may serve to curtail the generational transmission of obesity which is often found in families. Research has shown that mothers who have undergone WLS, and subsequently lost a significant amount of weight, prevented the transmission of obesity to their children, who were followed up to eighteen years post maternal surgery. Kral et al. compared the prevalence of obesity in 172 children between the ages of 2 to 18 years and born to 113 obese mothers who had realized substantial weight loss after biliopancreatic bypass surgery with 45 same-age siblings who were born before maternal surgery. Both groups were compared with current population standards for weight. The

researchers used data from patient records, as well as follow up telephone calls to collect data on childhood and adolescent weights.<sup>160</sup> Data analysis revealed that following maternal surgery, the prevalence of obesity in the offspring showed a 52 percent decrease and severe obesity a 45.1 percent decrease, with no increase in the prevalence of being under-weight. Additionally, data showed that for both male and female children who were aged 6 to 18 years of age and born after maternal surgery, the prevalence of overweight was reduced to population levels. Researchers concluded that the prevalence of overweight and obesity in children of mothers with large voluntary post-surgical weight loss was similar to that in the general population, with no increase in underweight. The researchers suggest that study results demonstrate the importance of potentially modifiable epigenetic factors in the cause of obesity.<sup>161</sup> The following section discusses some of the broader effects of WLS.

#### **C.ii Broader Positive Effects**

Much has been written on the social contagion aspects of weight gain.<sup>162</sup> The question of whether the opposite might be true, that for those who lose weight there may be some associated benefit for family members, was the focus of study conducted by Woodard et al.<sup>163</sup> The study, among the first of its kind, sought to answer whether the experience of WLS and the weight loss effected by it for one member of the family might have a broader usefulness for other adult family members living with the patient. The researchers sought to better understand whether healthy behavior transmission may be enhanced by one member of the family undergoing a Roux-en-Y gastric bypass surgery. Prospective, longitudinal, and multidimensional health assessments were administered to the patient and family members before and 1 year after index Roux-en-Y gastric bypass

surgery. The study, conducted at an academic bariatric center for excellence between January 1, 2007 and December 31, 2009, included eighty-five participants (35 patients, 35 adult family members, and 15 children <18 years old). The patient subjects underwent Roux-en-Y gastric bypass surgery and associated dietary and lifestyle counseling. The primary outcomes included weight and expected body mass index. Secondary outcomes included waist circumference, quality of life (36-Item Short Form or Pediatric Quality of Life Inventory), healthy behaviors, eating behaviors, and activity levels. Family participants were grouped by relationship to the patient for data analysis.<sup>164</sup> The data indicated that before the operation, 60 percent of adult family members and 73 percent of children of patients undergoing Roux-en-Y gastric bypass surgery were themselves obese. At 12 months after the operation, significant weight loss was observed in obese adult family members (from 234 to 226 pounds; P = .01). The data revealed a trend for obese children to have a lower body mass index than expected for their growth curve (31.2 expected versus 29.6 observed; P = .07). Additionally, it was found that family members had increased their daily activity levels (adults, from 8 to 17 metabolic equivalent task-hours, P = .005; and children, from 13 to 22, P = .04). Adult family members also had improved eating habits with less uncontrollable eating (from 35 to 28; P = .01), emotional eating (from 36 to 28; P = .04), and alcohol consumption (from 11) drinks per month to 1 drink per month; P = .009).<sup>165</sup> The researchers concluded that gastric bypass surgery may "render an additional benefit of weight loss and improved healthy behavior for bariatric patients' family members."<sup>166</sup> While this study sample was small and the data gathered were from only one bariatric center for excellence, nonetheless broader effects of WLS were observed in the sample, which indicates that

WLS can have beneficial outcomes for other family members with modest improvements in healthy behaviors and weight loss.

In addition, a meta-analysis examining the psychosocial outcomes of bariatric surgery especially considering the presence of or reduction in psychiatric co-morbidity, psychopathology, psychosocial functioning, econometric data, and general quality of life indicator suggests that WLS has clear benefits. A review of literature reporting all controlled and non-controlled published trials between 1980 and 2002 that examined the relationship between pre and post bariatric surgery psychosocial functioning reveals that patient perceptions of stigma (including self- stigmatization), their employability, risk for depression, experience of depression and anxiety, social functioning, eating pathology, self-esteem, income, use of sick time, disability benefits, and other quality of life indicators improve at statistically significant levels following weight loss produced with the assistance of surgical intervention.<sup>167</sup> The relevant literature was identified by a search of computerized databases and included all articles published in English and German during the two decade period. The study included only research which met the requirements of the evidenced-based guidelines of the Agency for Health Care Policy and Research and the Scottish Intercollegiate Guidelines Network. In all, there were 171 publications which met criteria and were included for review. There were 63 articles, including two systematic reviews, identified. A total of 40 studies were focused on psychosocial outcomes after obesity surgery. This meta-analysis of available research concluded that mental health and psychosocial status, including social relations and employment, opportunities improve for the majority of people after bariatric surgery. This led to an improved quality of life among bariatric surgical patients. The presence of

psychiatric co-morbidity, predominantly affective disorders, and psychopathologic symptoms decreased post-surgically. One exception noted to the improvements found among bariatric patients was with those who had a severe pre-existing (pre-surgical) psychiatric co-morbidity. In this group no significant improvements in psychosocial functioning were found. The researchers concluded that concerns that obesity surgery will reinforce psychiatric symptoms and lead to a reduction in patient quality of life seem to be unfounded. In fact the opposite appears to be the case. In general, improvements in psychosocial functioning were reported across the studies reviewed and these improvements led to increases in reported overall quality of life.<sup>168</sup>

Each of these quality of life indicators can be shown to have an impact on familial relationships and parental choices regarding how to care for children. In other words, weight loss surgical interventions may indeed have some measure of positive influence on third parties and thus potentially on populations, the focus of the public health enterprise. Moreover, quite obviously obesity is manifested in individuals just like influenza or HIV. If each of these disabling conditions could be effectively treated in the individual, their public health threat—their burden at the population level—would be significantly decreased. In each case, primary or secondary prevention may be more cost-effective, but effective individual treatment may also reduce the population-level societal burden of obesity.

## D. Conclusion

This chapter has argued that it is inappropriate to dismiss WLS as a valid individual-level clinical technology based on the erroneous application of public health goals to what is, fundamentally, also an issue of clinical medicine. To conflate the goals

of *public health initiatives* with the goals of *clinical medicine* was shown to be unacceptable in light of the availability of WLS which carries with it both acceptable levels of known risk, and an empirically substantiated ability to meet several of the goals of medicine and reduce co-morbid disease. Moreover, this conflation further diminishes the relevance of a trusting and caring physician patient relationship in addressing obesity—also identified under the goals of medicine. The conflation between public health goals and the goals of clinical medicine thus applies an unattainable and inappropriate set of outcome standards to WLS. In light of a clearer understanding of the standards by which weight loss surgical interventions should be evaluated, substantial empirical evidence of its clinical usefulness, and bolstered by patient narrative extolling its personal utility, more should be done to assist patients in understanding WLS as a valid choice along a continuum of care. This, as yet to be adopted, obesity continuum of care could and should be offered to obese patients attempting to resolve their co-morbid diseases associated with excess weight.

Chapter five will argue that given the myriad of social, environmental, and biological factors associated with the development and maintenance of obesity and in light of the empirical and narrative evidence of its clinical and personal utility as a treatment which provides resolution or improvement of various life limiting comorbidities, medicine is obligated to recognize and overcome its own biases and stigma in order to present a complete picture of the available continuum of care to obese patients, including the recognition that surgical intervention for obesity is an ethically valid option. Issues of justice, fairness, autonomy in treating this condition and promoting patient welfare requires that the present medical system and those working within it

overcome outdated personal bias in favor of empirical evidence, on which such science should rightly rest, of the usefulness of WLS as an individual-level intervention. Moreover, continued failure to do so violates the goals of medicine and the obligation of patient non-abandonment to which physicians, on behalf of the medical system, are called to abide and promote.

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# Chapter Five: Justice, Fairness, and Autonomy in Treating Disease and Promoting Patient Welfare

This chapter discusses how interactions between physicians and obese patients may fail to fulfill the demands of respect for autonomy, patient welfare promotion, and justice. These problematic interactions may occur in the context of appointments whose primary purpose is to address the patient's obesity, but they can also occur in the contexts whose focus is on another health concern of the patient. The chapter will argue that physicians' failure to address patient obesity is a form of patient abandonment, and further that the healthcare system abandons obese patients. Physician failure to address patient obesity, and to do so with respect and compassion, effectively re-victimizes obese patients. This is particularly ethically problematic because the healthcare system should protect and promote the welfare of the vulnerable, not participate in their victimization.

The chapter will further argue that in these respects obesity is treated in a manner different from other health conditions. It will argue that this differential treatment of patients with obesity constitutes an injustice. Physicians address patient obesity less frequently, less adequately, and less respectfully than they treat other life-threatening and co-morbidity producing conditions such as hypertension. This is, the chapter will argue, unfair. Further, physician reluctance to refer obese patients for weight loss surgery (WLS) constitutes a specific injustice, as well as being contrary to patient welfare. In contrast to discussion and referrals for surgical intervention in other conditions, WLS is frequently not presented as a treatment option.

Even in the context of cirrhosis secondary to alcoholism—similar to obesity because the health condition arises from ingestion that harms the body—designations of

blame have been largely replaced by more compassionate treatment. The focus is on resolution of the disease-causing behavior and curtailment of the disease. For instance, liver transplantation for the former alcoholic is not seen as being particularly ethically problematic even though there may be a residual charge of failed personal responsibility.<sup>1</sup> In this instance the physician's obligation to continue to care for the patient with endstage liver disease through this difficult and life-threatening ailment supersedes her personal feelings regarding the cause of the disease. Moreover, the bioethical literature supports the physician's obligation of continued care and the healthcare system's provision of treatment. Most analyses support the former alcoholic's equal status in competing for scarce organs for transplantation. A similar shift away from ascriptions of moral failing and toward provision of a continuum of appropriate, compassionate care has occurred with regard to those who have HIV in the United States.<sup>2</sup> The once highly contentious backward-looking ascriptions of responsibility and moral depravity have subsided in favor of a clinically based continuum of care which seeks to find solutions to symptoms and disease processes as they arise. To the extent that physician and healthcare ascription of responsibility in these instances is backward-looking, the point is not to moralize, but to understand causation in order to prevent further harm and to provide efficacious treatment. A new liver for an active alcoholic will only temporarily resolve his health issue; discovering whether an HIV-infected person is having unprotected sex, and seeking to persuade him not to, maximizes protection of future partners from HIV infection and the patient from opportunistic infections. The overall goal of identifying cause is forward-looking, and all viable treatment options are rightly considered. The physician does not abandon such patients in their time of greatest need. Instead the
physician examines all viable treatment options and often encourages the patient to consider previously unconsidered options. Doing so may enhance the physician-patient relationship, promotes patient self-determination, and fulfills the physician's fiduciary responsibilities *vis-à-vis* her patient. This chapter argues that a similar shift from a moralizing stance must occur in obesity treatment. Physicians should examine their obese patients' behaviors not to ascribe backward-looking moralized responsibility, but to identify opportunities for future-oriented intervention. Physicians should not ignore their patients' obesity, but address it and discuss the full range of viable treatment options. Doing so would promote patient welfare and autonomy. It would also treat obesity in a manner similar to other similarly serious health conditions. Justice demands no less.

Section one of this chapter will take up systemic barriers, violations of respect for patient autonomy, informed consent, and veracity as they relate to obese patients' accessing WLS. This section provides insight into the ways that foundational principles and practices have been disregarded with deleterious outcomes for patient welfare and self-determination. The second section of this chapter will discuss how ascriptions of moralized responsibility or blame to obese patients have permitted physicians and the healthcare system to transgress the demands of fair treatment with regard to obese patients' access to WLS. Comparison to the treatment of other conditions will be made to establish that obesity and obese patients are not treated fairly. Section three will offer an alternative approach to improve current practices which will better promote and support commonly accepted ethical principles and the goals of medicine. This alternative, consistent with feminist thought and focused on holistically caring for those marginalized by their obesity, takes into account the need to infuse *care* into healthcare interactions

and systems in the treatment of obesity. An ethic of care which incorporates an understanding both of the vulnerability and overlapping marginalizations of those who are obese, along with recognition of the medical relevance of highly personal factors, will facilitate a more comprehensive continuum of care and more just and beneficial treatment of obesity. The outcome of implementing this approach will be improved clinical care which offers true care of those who are obese and affords them the opportunity to make more fully informed decisions based on their vision of their own welfare and values. The first section begins by discussing autonomous decision making, informed consent, and physician veracity in light of the goals of medicine with regard to obesity and access to WLS.

A. Barriers to Accessing Weight Loss Surgery, Autonomy, Informed Consent, and

### Veracity

This section briefly reviews the goals of medicine and the commonly accepted ethical practices which have come to support them. This section will address the ways in which current practices observed in the physician-patient relationship involving obese patients violate the goals of medicine and the obligations of physicians. Specific breaches of physician obligation with regard to patient welfare, autonomy, informed consent, and veracity are elucidated, in part with reference to research on the attitudes and practices of physicians with regard to the referral of obese patients for WLS. Research findings highlight the disparity between physicians' belief in the efficacy of WLS and physician referral practices for WLS. Various reasons for the disparity between strong evidence of effectiveness and low referral rates will be addressed. Subsection one explores systemic and other impediments to accessing WLS. Subsection two discusses physician

obligations to their patients including respect for autonomy, informed consent doctrine, and the concept of veracity.

# A.i Goals of Medicine and Systemic Barriers to Accessing Weight Loss Surgery

As briefly discussed in the previous chapter, the goals of medicine include: promotion of health and prevention of disease; maintenance or improvement of quality of life through relief of symptoms, pain and suffering; cure of disease; prevention of untimely death; improvement of functional status or maintenance of functional status; education and counseling of patients regarding their condition and prognosis; avoidance of harm to the patient in the course of care; and when no other options exist assisting in a peaceful death.<sup>3</sup> In both clinical medicine and much of bioethical literature, there is an assumption that the goals of medicine are well understood and thus do not require further inquiry.<sup>4</sup> One implication of this assumption is that in the practice of clinical medicine carrying out the goals of medicine are routinely and uncontroversially pursued no matter the diagnosis. Bioethicist Daniel Callahan states that the goals of medicine are

treated as a topic to which, it is thought, everyone already knows the answer and thus is not worth spending time on: or as an interesting but highly abstract, academic topic of little importance to clinicians and busy health care workers.<sup>5</sup>

However, it seems that a common understanding or acceptance of the goals of medicine as they relate to the treatment of those who are obese should not be so readily assumed.

The use of WLS in the treatment of obesity and its manifold co-morbidities has plateaued in the United States.<sup>6</sup> Comparative data on the utilization of bariatric surgery between 1993 and 2007 reveal that while obesity continues to generally be on the rise the use of bariatric surgery for sustained weight loss has "remained stable since 2003".<sup>7</sup> While there are many possible system-level contributors to this plateau, one may be the

requirement of bariatric center of excellence designation to be eligible for Medicare reimbursement. In November 2003, the American Society for Bariatric Surgery established the Surgical Review Corporation (SRC) as an independent nonprofit entity for quality control of bariatric surgery and as a resource for data collection and analysis in an effort to discern best practices. SRC developed standards that were accepted and implemented by the bariatric surgical community. A system was developed for hospitals and clinics to receive designation as a center for excellence. The process takes substantial time and resources.<sup>8</sup> Obtaining center for excellence designation is generally easier for larger hospitals with substantial resources than it is for community facilities with modest resources. Hence, this requirement has effectively moved access to bariatric surgery farther from rural patients and has funneled services to larger, urban, university affiliated programs thought to produce better results. Another possible reason for the plateau in utilization is the near simultaneous reductions in the number of third-party insurances providing coverage for surgical weight loss procedures and reductions in reimbursements for re-hospitalizations following surgery.<sup>9</sup> As a result of these factors it is more difficult for people to access WLS as treatment for their obesity and its co-morbidities.

In addition to system-level concerns about access, which certainly can impair selfdetermination and autonomy, individual-level contributors impair access to WLS. In questioning the overall low usage of various types of metabolic/bariatric surgery worldwide Henry Buchwald and Danette Oien, physicians at the University of Minnesota in the Department of Surgery, state in their address to the 14<sup>th</sup> World Congress of the International Federation for the Surgery of Obesity and Metabolic Disorders:

It is also difficult to believe that only 1 percent of eligible individuals would elect surgery if it were available to them. The answer, therefore, must be denial of patient access to bariatric surgery by private or governmental payers for healthcare, lack of knowledge of the bariatric surgery option in some communities, misunderstanding about the management of obesity as a disease, and the continuing underlying prejudice against the obese.<sup>10</sup>

Buchwald and Oien acknowledge both systemic and individual-level barriers to accessing WLS. They specifically posit issues of prejudice against obese people among the barriers. Influence of prejudice against obese people to which they refer can be identified within the physician-patient relationship, specifically in violations of respect for autonomy, the requirements of informed consent, and the obligation of veracity. It is upon these physician-patient based relationship barriers to WLS that the following subsection will focus.

# A.ii Respect for Autonomy, Informed Consent, and Veracity

Respect for autonomy is of immense importance in medical ethics and in ethics more generally. Bioethicists Tom Beauchamp and James Childress observe that "respect for the autonomous choices of persons runs as deep in common morality as any principle..."<sup>11</sup> According to Beauchamp and Childress, to respect the autonomy of agents is:

...to acknowledge their right to hold views, to make choices, and to take actions based on their personal values and beliefs. Such respect involves respectful *action*, not merely a respectful *attitude*. It requires more than non-interference in others' personal affairs. It includes, in some contexts, building up or maintaining others' capacities for autonomous choice while helping to allay fears and other conditions that destroy or disrupt autonomous action. Respect, in this account, involves acknowledging the value and decision-making rights of persons and enabling them to act autonomously, whereas disrespect for autonomy involves attitudes and actions that ignore, insult, demean, or are inattentive to other's rights of autonomous action.

The goals of respecting autonomy in the doctor-patient relationship have at their root both considerations of human dignity and patient welfare. Beauchamp and Childress

## continue:

Personal autonomy encompasses at a minimum self-rule that is free from both controlling interference by others and from certain limitations such as inadequate understanding that prevents meaningful choice. The autonomous individual acts freely in accordance with a self-chosen plan, analogous to the way an independent government manages its territories and establishes its policies. A person of diminished autonomy, by contrast, is in some respect controlled by others or incapable of deliberating or acting on the basis of his or her desires or plans.<sup>13</sup>

With regard to obese patients, physicians can fail to respect autonomy and fail to promote autonomy in several ways. Firstly, physicians often fail to address or even acknowledge a patient's obesity. Secondly, physicians can fail to discuss WLS as a possible treatment option at all and finally, they can choose to discuss surgical options for weight loss in only very advanced stages of the disease process where few or no other technologies are available.

In the first case, when obesity is not acknowledged by the physician at all, patients are denied the opportunity to avail themselves of assistance and education about associated a potentially serious medical problems. In a study conducted on the initiation of weight loss discussions with patients in primary care it was found that although 65 percent of the random sample of patients was overweight or obese, discussions were initiated by the physician about excess weight in only 17 percent of these interactions.<sup>14</sup> In this case patients may not be made aware of the potentially serious nature of their problem and thus will not be able to take evasive measures to avoid co-morbidities in the future. Additionally, in cases where earlier intervention might be feasible, this opportunity is lost if the discussion of weight never occurs. In essence, patient autonomy, which in this instance includes the ability to act sooner rather than later, is not promoted when physicians fail to address legitimate concerns about patient weight.

In the second instance, when the option of WLS is never discussed with the patient as a matter of course in clinical care, the patient may not see it as a viable option or conversely may not be motivated to take alternative actions, if possible, to avoid surgery down the road. In the absence of physician discussion of WLS, the patient may assume that if bariatric surgery were a viable option to achieve sustained weight loss, the physician would discuss it. Alternatively, when the option of WLS is not introduced until the patient is in advanced stages of obesity perhaps with multiple co-morbidities prevents the patient from utilizing WLS to avoid those co-morbidities or their further advance. Each of these situations fails to evidence respect for patients' right of self-determination and to maximize opportunities for autonomous decision making and self-care.

Avidor et al. surveyed over 478 physicians from six subspecialties to learn their attitudes and practices regarding the treatment of their morbidly obese patients.<sup>15</sup> Bariatric surgery was perceived as the most effective treatment option available to the patient with 49 percent of respondents indicating that they believe the intervention to be effective. One component of the study focused on the referral rates for bariatric surgery. Across this diverse group of cardiologists, gynecologists, endocrinologists, internists, family practitioners, and bariatricians in comparing physician recommendations for bariatric surgery and other interventions for weight loss such as diet and exercise or pharmaceuticals, it was found that overall, "notwithstanding physicians' strong perception of the successful outcomes associated with bariatric surgery, all six groups surveyed recommended it infrequently, suggesting surgery to only 15.4 percent of their morbidly obese patients."<sup>16</sup> While the patients met the criteria for bariatric surgical interventions based on the BMI guidelines set forth by the National Institutes of Health,

the physicians cited various reasons for not making appropriate referrals: they preferred to manage the patient by themselves, they did not *believe in* referring patients for bariatric surgery, and they felt that most patients meeting criteria for surgery *would not benefit* in the long term. Additional reasons cited were that referrals require too much leg work, the physician was unfamiliar with local bariatric surgeons, or they thought their patients would not meet criteria for the surgery.<sup>17</sup> The study authors concluded that "therapy for the morbidly obese, therefore, does not mirror accepted guidelines....Morbidly obese patients deserve to benefit from improved care, the hallmark of which could be referral for bariatric surgery."<sup>18</sup>

This study above reveals a complex relationship between physicians' personal beliefs and evidence based medicine (EMB) indicating that WLS does indeed produce long-term sustained improvements in co-morbidities while improving longevity and quality of life and personal beliefs. Personal beliefs, likely based at least in part on the social construction of obesity and stigmatization of obese people as lazy, unmotivated and unworthy, coupled with the medical acceptability of particular technologies for the resolution of obesity (e.g., individual diet and exercise, commercial weight loss programs, pharmacology) appear to dissuade physicians from discussion of efficacious surgical treatment. As a result, patients must work harder to overcome practitioner bias to access an intervention that the physicians themselves believe to be effective. Furthermore, utilization of WLS will require the support of the physician throughout the evaluation process and through post-intervention follow up.

Respect for autonomy obligates healthcare providers both to act ways that enhance their patients' autonomy or afford them opportunities to exercise and advance

their autonomy, and not to act in ways that impede or impair patients' autonomous decision making. Failing to discuss potentially efficacious WLS violates both obligations. Insofar as obesity itself impairs patients' abilities to pursue their life plans, failure to discuss a means of addressing their obesity fails to afford them autonomy-enhancing opportunities. Failing to present material information regarding their health condition and its treatment prevents patients from making autonomous healthcare decisions and, as the following argues, violates requirements of informed consent, a doctrine and practice that seeks to enable such autonomous decision making.

As a legal doctrine, informed consent in medicine has a long history evolving from tort law regarding battery. As an ethical, legal, and regulatory doctrine governing research, informed consent has developed from hard lessons learned about the need to respect persons and protect their welfare.<sup>19</sup> In the twentieth century, the doctor-patient relationship evolved from a paternalistic one in which decisions were made *for* patients to one usually characterized by shared decision making<sup>20</sup> and governed by the requirements not merely of consent,<sup>21</sup> but of *informed* consent.<sup>22</sup>

Several conceptions of informed consent have been elucidated including viewing informed consent as a "specific rule-governed practice, as autonomous authorization, and as shared decision making".<sup>23</sup> Informed consent as a rule-governed practice focuses on the way it functions institutionally—both within healthcare settings and within the law (for clinical care) and regulatory structures (for research).<sup>24</sup> The rule or norm-governed practice prescribes how informed consent should be obtained and its components, and establishes the legality of obtaining an individual's authorization or refusal as subsequently documented in physician notes or on a consent document. The model of

autonomous authorization refers to informed consent as an action whereby the patient (or research subject) authorizes the physician (or investigator) to act on the patient's behalf and whereby the patient/subject retains responsibility for having so authorized.<sup>25</sup> Social scientist and bioethicist Ruth Faden and her co-author philosopher bioethicist Tom Beauchamp carefully explain the ways in which these two senses of informed consent do and do not overlap. Philosopher bioethicist Dan Brock explains the model of shared decision making, the presumed facts-values "division of labor" within the relationship, and how the model interacts with the demands of informed consent.<sup>26</sup> Brock provides reasons to question the notion that physicians provide the medical facts within the doctorpatient relationship, while patients provide their values, and then through some dialogical process a shared decision is reached. Instead, he argues, patients also bring factual information to the interaction, patients form values and preferences in light of the medical information physicians disclose, and the medical information itself is not value-free as the "division of labor" would imply. What all conceptions of informed consent share, however, is that at its core informed consent is a process which is intended to promote patient autonomy and support pursuit of the patient's conception of her own welfare.

As a clinical and legal practice, the process of informed consent is generally considered to involve five elements: competence (of the patient), disclosure (of material information by the physician), understanding (of that information by the patient), voluntariness (of the patient's decision), and the decision (i.e., the patient's consent or refusal).<sup>27</sup> Disclosure cannot be of all information that is true of the clinical situation, nor can patients be expected to understand all such information. Instead, what is required is that physician's disclosure the information that is *material* to the patient's decision, and

in turn, the patient must have *substantial* understanding of it. The commonly accepted "information elements" considered material to such decision making are the patient's disease process, prognosis, benefits and burdens of the recommended treatment option, the benefits and burdens of reasonable alternative treatments, and the likely outcome of choosing to forgo any treatment.<sup>28</sup> These elements must be disclosed for informed consent in the norm-governed, legally effective sense to have occurred. A prerequisite for such informed consent is that the patient must be competent to make the particular decision being asked of her. Further, informed consent is to be obtained from a patient with free will, i.e., one who is not unduly influenced by pressure from others, fear, internal compulsions, or some other factor that overwhelms her free will.<sup>29</sup>

Returning now to the patient-physician interactions in the treatment of those who are obese, it becomes clear that physicians' failure to discuss WLS as a treatment option may violate the disclosure requirements of informed consent and fail to fulfill the ideal of shared decision making. For patients currently meeting the eligibility criteria for the surgery, failure to discuss it is a clear violation of the requirement to provide information regarding treatment options. Even for those who do not currently meet such criteria, the failure to discuss it as a potential future option may be considered a violation. At the very least, not discussing WLS fails to educate and empower obese patients and does not enhance opportunities for autonomous action. For those patients for whom WLS would be either a potentially efficacious treatment, or potentially the most efficacious option, failure to provide such information fails to promote their welfare.

It appears that there could be a residual charge of apparent paternalism in the approach taken by physicians with regard to their obese patients. Paternalism is defined

as a policy or practice of treating or governing people in a fatherly manner, especially by providing for their needs without giving them rights or responsibilities.<sup>30</sup> Paternalism is generally seen to have two interwoven parts: overriding patient rights or liberties and doing so to preserve patient welfare. A paternalistic approach would limit the options available to the patient to those which the authority believes to be in the patient's best interest. In medical contexts, any potentially justifiable paternalism would require that the physician seeking the patient's good would have adequate knowledge of the highly personal factors which patients find relevant to their welfare, or it assumes that the clinical outcome is the only consideration and therefore the path to be chosen is clear based on these limited and subjective considerations. Yet insofar as physicians fail to afford their patients access to WLS in cases where WLS would be an efficacious treatment option, their withholding of information cannot be truly paternalistic, as it does not adequately provide for patient needs or seek their welfare. Clearly physicians who routinely withhold information about WLS where it may be efficacious do not accurately give priority to the clinical outcome of weight loss, as the evidence surrounding it establishes its potential efficacy. Moreover, as previous chapters have established, there is also reason to think that many physicians ignore or discount the personal factors relevant to their patients' experience of obesity.

An additional aspect of paternalism pertinent for considering physician interaction with obese patients is provided by considering philosopher Joel Feinberg's distinction between hard and soft paternalism.

Hard paternalism will accept ... that it is necessary to protect competent adults, against their will, from the harmful consequences even of their fully voluntary choices and undertakings. Soft paternalism holds that the state [or others have] ... the right to prevent self-regarding harmful conduct...when but only when that

conduct is substantially nonvoluntary, or when temporary intervention is necessary to establish whether it is voluntary or not."<sup>31</sup>

The distinction rests on whether the party interfering with another's freedom of action or self-regarding conduct believes that person to be competent and autonomous (hard paternalism) or believes him to be somehow less than fully autonomous (soft paternalism). Perhaps physicians who withhold information about WLS from their obese patients believe that these patients are less than fully autonomous. They may take their patients' obesity as evidence of their inadequate will (willpower) or less than full moral agency. Where these physicians might generally avoid hard paternalism with patients they deem competent, they may find soft paternalism acceptable with regard to obese patients to whom they apply stereotypes of being less intelligent or out of control. This line of reasoning is purely speculative. Moreover, these physicians would still have to be able to reasonably assume that these patients' pursuit of WLS would be self-regarding harmful conduct, and this assumption cannot be supported by current data.

If a physician believes that the patient lacks some relevant information about the procedure, its risks, benefits, or necessary post-surgical changes in life-style, or is in some way being unduly pressured and hence is unable to make an autonomous decision soft paternalism may well be justified in the short run. However, these elements which may initially be seen to necessitate such soft paternalism can be overcome. If a physician believes that a patient is not capable of understanding and making a decision about WLS, or of undertaking post-surgical life-style changes, then the appropriate response is not to withhold the option, but to pursue alternate means of patient education or to seek a supportive party or even surrogate decision maker. If a physician believes that a patient is being pressured into seeking WLS, it is incumbent on her to learn who or what may be

applying pressure on the patient and determine whether these pressures can be addressed. Rather than pursuing soft paternalism, creating the conditions of information exchange, understanding, and voluntariness necessary for truly informed consent would enable the patient to access the treatment option with maximal potential for clinical and personal utility. Failing to discuss the full range of treatment options available to obese patients is morally unjustified because it violates both the physician's obligations to respect patient autonomy and promote patient welfare and the tenets of a valid informed consent process.

Another possible reason for withholding information about WLS could be that the physician is skeptical about the efficaciousness of various treatment options and believes that withholding information about it is for the patient's own good. Nevertheless, it is incumbent upon the physician to be able to provide appropriate evidence based information regarding various treatment options.<sup>32</sup> The obligation is grounded in the ethico-legal doctrine of informed consent and in the ethical requirement of respecting and supporting the patient's autonomy. If the physician is unable to fulfill this obligation, she should provide the proper referral for her patient so that the patient can obtain accurate information that meets the standard of care.

If, instead of being motivated my misguided but "good intentions," the failure to provide information about WLS is based upon the physician's own bias against those who are obese, perhaps a moralizing attitude that people responsible for their weight gain should not be afforded a "quick fix" of surgery, then the physician cannot be deemed paternalistic, but simply acts unethically in terms of concerns for justice and patient autonomy and welfare. In either case—explained by either misinformed paternalism or outright bias—the outcome is similar: information is withheld from patients which is vital

to making informed decisions about any of their medical conditions and treatment options. Additional moral obligations such as that of truth-telling are also infringed upon by current practices.

The obligation of truth-telling flows from respect for autonomy and the requirements of informed consent. This obligation of veracity is violated when physicians fail to discuss the full range of available treatment options with their obese patients. Beauchamp and Childress discuss this as a moral rule which among others is vital to the professional-patient relationship and to promoting trust within it.<sup>33</sup> Veracity refers to providing the "comprehensive, accurate, and objective transmission of information, as well as the way the professional fosters the patient's or subject's understanding. In this regard, veracity is closely related to respect for autonomy."<sup>34</sup> Furthermore, veracity is closely tied to obligations of fidelity, promise keeping and contract.

[When] ... we communicate with others, we implicitly promise that we will speak truthfully and that we will not deceive listeners. By entering into a relationship in health or research, the patient or subject enters into a contract that includes the right to truthful information regarding diagnosis, prognosis, procedures, and the like... relationships between health professionals and patients and subjects require trust, and adherence to rules of veracity is essential to trust.<sup>35</sup>

Failure to discuss the full spectrum of options for weight reduction in accordance with the standards of informed consent is therefore a breach of trust and veracity. Moreover, while the full scope of treatment options for weight loss should rightly be discussed, it is particularly ethically troubling that the most efficacious technology to date for sustained weight loss would be excluded in discussions with obese patients who may well benefit from the procedures.

The discussion of surgical intervention for weight loss serves several purposes which enhance the goals of medicine and more fully meet the physician moral obligations to their patients. Specifically, discussions about the option of WLS may better prepare the patient for the evaluation process and assist in understanding that WLS is but one of the long term tools needed for sustained weight loss and reduction in life-threatening co-morbidities. Further, a candid compassionate discussion of WLS can help to reduce the internalization of cultural stigma which can impair patients from accessing WLS. In essence, honest discussion of WLS as a viable option enhances patient autonomy; it treats the patient as an agent with decisional authority. It may increase some patients' self-esteem. It respects the patient as a moral equal in a process of shared decision making. Failure to discuss this option seriously diminishes the opportunity for patients to make informed decisions based on their conceptions of well-being and is an untruthful representation of the options available. The following section argues that failure to discuss the full range of medically appropriate treatment options with obese patients is also unjust.

B. Blame and the Principle of Justice in the Context of Obesity Treatment

This section takes up justice concerns with regard to obesity treatment. It is argued that obese patients are treated unjustly when the full range of treatment options is not disclosed to them or when their obese condition is ignored by their physician. There is injustice in treating obese patients as putatively less capable of participating in shared decision making, less entitled to the protections afforded by disclosure within informed consent, or less worthy of a potentially life-saving and quality of life enhancing intervention, in comparison to patients with conditions other than obesity. This chapter argues that violations of the principle of justice continue unabated in the sphere of obesity

treatment when treatment of obesity is compared to treatment of other medical conditions with complex lifestyle, genetic, or environmental origins.

The first subsection argues that attributions of moral blame and personal responsibility for obesity have been relied upon to justify this disparate treatment. The second subsection analyzes the injustice of such attributions and then advocates changes in the healthcare system and doctor-patient relationship that will make the treatment of obese patients more just by them equal treatment and less restricted access to evaluation for efficacious treatment.

## **B.i Blame and Access to Treatment**

Blameworthiness and personal responsibility for one's medical condition have historically influenced the way in which the individual with the disease, the disease itself, and the application of potential interventions has been seen.<sup>36</sup> History has shown that perceptions of blame are often inaccurate as they tell only part of the complex story. Moreover, with thoughtful focused efforts these misperceptions of culpability can be changed or dispelled leading to more just treatment of patients and a reduction in the revictimization of the individual with the medical condition.<sup>37</sup> This section will first discuss the concept of blame for various diseases and for obesity. Then, the way in which perceptions of blame influence access to potential treatments will be discussed.

The writings of Susan Sontag articulate the experience of illness and the metaphors which surround various types of illness and which are applied to those who are ill. Often the metaphors involve the perceived guilt of the patient either for causing the illness or for failing to avoid illness. In Sontag's first book she writes of her own experience of having been diagnosed with cancer. She recounts that some forms of cancer

such as lung cancer are seen as being more blameworthy (having been caused by the patient's cigar smoking). The perception of patient culpability permits both the medical profession and society at large to pass judgment on the moral character of the person.<sup>38</sup> Obesity is subject to similar charges of blameworthiness and occasions similar metaphors.

In her second book Sontag takes up the once highly charged issue of personal responsibility and derelict moral character for acquiring HIV<sup>39</sup> Sontag argues that as with cancer, the metaphors of HIV have influenced societal response to those so diagnosed and their clinical care. Sontag suggests that diseases whose cause is uncertain and whose treatment is limited tend to evoke fear and revulsion.<sup>40</sup> In the beginning of the HIV/AIDS epidemic, society at large and the culture of medicine was focused on issues of blame, personal responsibility, and sin.<sup>41</sup> Since the first reports of American men dying of Pneumocystis Carninii Pnemonia in the early 1980's stigma and shame were attached to the diagnosis. The first deaths due to HIV/AIDS were among those already marginalized and considered to be deviant based on sexual orientation or personal behavior. 'If only they weren't homosexual', 'if only they weren't IV drug users', were common ascriptions of culpability. These various ascriptions were used against sufferers as a means of avoiding caring for these marginalized patients.<sup>42</sup> From the perspective of dominant, majority culture, all four phases of care that Tronto identifies were withheld from those with HIV/AIDS. They were not cared about; no one took responsibility for them; caregiving was not afforded them by mainstream communities, and they did not receive care. The uncertainty of the cause of AIDS, its modes of transmission, and the then undetermined likelihood that caring for those with AIDS would lead to deadly infection

seemed to legitimate the failure of the healthcare system to respond compassionately or quickly. Some saw the diagnosis as appropriate punishment for the immoral behaviors of homosexuality, bisexuality, promiscuity, prostitution, or drug use. The early HIV/AIDS epidemic was fraught with ascriptions of blame which were as unhelpful in one-on-one clinical interactions as they were stigmatizing and divisive at a social level. These ascriptions are said to have delayed appropriate investigation into the disease, its potential treatments, and their application under President Reagan's administration. The slow governmental response to this epidemic is said to have facilitated additional potentially avoidable deaths early on.<sup>43</sup> At the time a widely distributed quote, which was unable to be properly attributed but was said to come from an anonymous surgeon, stated, "We used to hate faggots on an emotional basis. Now we have a good reason."<sup>44</sup> It was the attribution of moral depravity to those infected which was seen to warrant both a slow response to the epidemic and a paucity of compassion within the medical community and from the society at large. As discussed in previous chapters, a similar though perhaps less overt lack of compassion exists for those who are obese. This failure of compassion is based upon the construction of obese people as Other, as being inferior both morally and intellectually, and as being outside or marginalized from dominant mainstream culture. Moreover, the presumption that obesity is primarily a self-inflicted condition has fostered ongoing ascriptions of blame.

An analogous situation occurred around alcoholism. However, based on medical evidence and the promotion of the disease model of addictions, the construction of those who are alcoholic softened.<sup>45</sup> The attributions of personal blame and responsibility which once overwhelmed the medical treatment of alcoholism have abated, or at least overt

attributions of blame are less acceptable.<sup>46</sup> Now the healthcare system treats the disease of addiction to alcohol, not an irresponsible, non-compliant, "did it to themselves," resource draining, morally flawed character. The changes which have been realized in attributions of blame for those who are alcoholic have been lead in part by changes initiated by the medicine. These changes included a shift in the construction of alcoholism and drug abuse from being caused by moral failure to instead being a disease state which is progressive in nature. Though the disease of alcoholism is not fully understood, ascriptions of blame have receded. The shift away from unhelpful ascriptions of blame paved the way for increased access to appropriate treatment interventions for this disease and decreased stigma of those who are alcoholic.

The ideological shift with regard to both alcoholism and HIV/AIDS reinforces that present ascriptions of blame against those who are obese can be altered. By similarly diminishing ascriptions of culpability for this highly complex multifactorial condition it may be possible to improve both the experience of compassion and access to effective treatment for those who are obese.

Patients are vulnerable on many levels, including financial and personal levels. As Sontag succinctly puts it, "Etymologically, patient means sufferer."<sup>47</sup> Moreover many patients experience altered concepts of their own identity which can be deeply disturbing.<sup>48</sup> Much has been written about the various aspects of patient vulnerability.<sup>49</sup> Even if patients bear some degree of responsibility for their condition, once they become a patient—a sufferer—ascriptions of blame are no longer useful. The patient suffers, and the role of medicine is to reduce suffering whenever possible by utilizing the full scope of available technologies to do so.<sup>50</sup>

In chapter three the influences of theology on the construction of both obesity and those who are obese was discussed. Examination of evolving theological constructs around suffering provides insight into the unhelpful nature and plausible consequences of assigning blame to those who suffer. In a recent work by Father James Keenan SJ, Professor of Theological Ethics at Boston College, he focused on the evolution of the concept of suffering in moral theology in the twentieth century.<sup>51</sup>Tracing the understanding of suffering across this time span he focuses on the work of four scholars: Bernhard Häring, <sup>52</sup> Gustavo Gutierrez, <sup>53</sup> Edward Schillebeeckx, <sup>54</sup> and Margaret Farley, <sup>55</sup> In discussing the work of Gustavo Gutierrez, Keenan acknowledges his significant contribution in identifying a deep concern for the oppressive suffering of the poor.<sup>56</sup> Gutierrez' work summoned people to stand in solidarity with those who are marginalized by power and economic forces beyond their control.<sup>57</sup> Much like feminist theorists who employ the concept of intersectionality, Gutierrez urged action to reduce the suffering of those who are marginalized by "interlocking patterns of oppression and domination, established by structures of economic and social power."<sup>58</sup> Since the publication of Gutierrez' seminal work, the "preferential option for the poor" has come to encompass all those who are marginalized or pushed to the periphery of society, including those who are ill.<sup>59</sup> Those who are obese have been shown to be marginalized in several key life areas including health and economic advancement. Moreover a disproportionate number of those who are obese are also marginalized due to race or class or geographic location. As such, Gutierrez would likely urge that the obese are sufferers to whom a particular obligation of solidarity, advocacy, and compassion are owed.<sup>60</sup>

Schillebeeckx' work on suffering is notable for his analysis of the common response to suffering shared by religions. Schillebeeckx suggests that the proper response to suffering of any kind is to find a way to eliminate it.<sup>61</sup> Keenan takes exception however to Schillebeeckx' distinction between merited suffering and unmerited suffering, stating:

I think holding onto this distinction is deeply problematic. To the extent that we leave the distinction intact, to that extent we still believe that we can determine who should be the beneficiaries of our compassion and who should not. But, how can we know that someone's suffering is really "unmerited?" How do we arrive at such divine judgment? Does the AIDS victim really have to be a child or a hemophiliac? Does the cancer victim really have to have been taking every precaution against carcinogens? Does [the] tortured political activist really have to have been politically prudent? Does the date rape victim really have to be insisting on "No" the entire time?...if we insist on the distinction, it seems to me that a deep residue of moralism is apparent whenever listeners are encouraged to sift out the "merited" from the "unmerited suffers.<sup>62</sup>

One might similarly ask if it is appropriate to demand that a person who is obese have avoided every dessert, exercised at least three times a week, and tried all possible solutions for weight loss from diet and exercise to Weight Watchers to pharmacology in order to gain compassion for her suffering. Furthermore, one might ask if we also need to inquire whether those who are obese also have sufficiently attempted to overcome other overlapping marginalizations such as race or gender or genetics which also influence the development of obesity. Keenan summarizes the consequences of continued failure to relinquish the concepts of merited and unmerited suffering, stating:

Let us not deny that evidently some suffering is tragically unmerited but I am sure that in most instances our difficulty is not in acknowledging that, but in our propensity to judge another's suffering as merited. Is not the ultimate purpose of the distinction to winnow out those people whom we believe are not worthy of our compassion?...So are we not finally left with the distinction as little more than a device that allows us to withdraw compassion and confirm our self–serving righteousness? The distinction allows us, I think, the opportunity to parse out our sympathy in very condescending and stingy ways.<sup>63</sup>

For those in medicine who retain the distinction that obesity is merited suffering, the result may be a lack of compassion and a parsing out of which interventions are appropriate or inappropriate based on the blameworthiness of the individual. This may serve to prevent the physician from exploring the full scope of efficacious treatments, including WLS, with the sufferer. Being able to re-conceptualize suffering to reject the distinction between merited and unmerited suffering would be a strong step forward in reducing unhelpful attributions of blame found in the treatment of those who are obese.

It may be possible to positively influence efforts to reduce this unhelpful distinction between merited and unmerited suffering among physicians. In one study, Roberts et al. paired a small group of third-year medical students with obese patients undergoing evaluation for bariatric surgery.<sup>64</sup> Students established a longitudinal relationship with the patient and family members lasting approximately a year, received faculty mentorship from the physician caring for the patient, and kept a journal in which they reflected on their various experiences. Students' reflections were analyzed for common themes and changes in perceptions or attitudes. Goals of the study included: determining whether such extended interactions with obese patients would alter the perceptions, attitudes, and potentially the future practices of the medical students. Two specific goals of the study were to determine whether students would develop a better understanding of the impact of obesity on individuals from a personal, social, medical and financial perspective and to determine the impact, if any, of this extended relationship on medical students' beliefs about obesity as a disease and those who are obese.65

Questionnaires at baseline and at the study's conclusion queried student attitudes, stereotypes, ability to accurately estimate body size and BMI as well as the ability to ascertain deficits in other physicians' knowledge and attitudes about obesity. With regard to accurately estimating body size and BMI it was hypothesized that if students underestimated patient weight these inaccurate estimations may serve as a barrier which would preclude any discussion of weight or weight loss options. Student responses to knowledge and attitude assessment queries were found to differ from those previously reported for practicing physicians on many survey statements, including student participants more strongly agreeing with the relationship between obesity and serious medical conditions, the need to educate patients about obesity risks, and willingness to recommend bariatric surgery evaluation. These differences were maintained after clinical clerkships had been completed. Reflection themes included a growing ability to recognize obesity stereotypes, improved estimation of body mass index, and an awareness of other physicians' negative attitudes about obesity and those who are obese.<sup>66</sup>

The investigators concluded that those students who get to know patients who are obese, thus relying on personal experience instead of social construction of those who are obese, may have different, more compassionate, and more accurate attitudes toward obesity than those reflected in prior data regarding attitudes of physicians in practice. This development, implementation, and assessment of a novel pilot program to teach third-year medical students about obesity and bariatric surgery suggests a potential impact on student attitudes and understanding of obesity and obesity surgery. It is important to emphasize that the study also concluded that this small group of medical

students would be more likely to recommend evaluation for bariatric surgery to their patients in the future.<sup>67</sup>

Ascriptions of blame and personal moralized responsibility have once again been shown to be as unhelpful for solving the problem of obesity as they have been for other medical conditions. In fact, these backward-looking ascriptions of responsibility shift the focus away from solutions. As has occurred with HIV, alcoholism, and other complex diseases, it is possible to reduce the ascription of blame for obesity and to erase the distinction between merited or unmerited suffering. In order to accomplish these goals, a concerted effort to change the way obesity and suffering are conceptualized, as well as concrete efforts to alter physician understanding of those who are obese, will be necessary. The following section discusses the ways in which concern for justice may help to motivate such efforts. The section opens with an analysis of the unfair treatment of those who are obese.

## **B.ii Justice**

All conceptions of the demands of justice share the underlying principle of formal justice: relevantly similar people or situations must be treated similarly.<sup>68</sup> Formal justice in medicine requires treating patients similarly on the basis of their similar need for care. This section argues that the withholding of access to WLS constitutes a failure to fulfill the demands of formal justice and that this failure may be attributed to general social attitudes and physicians' beliefs that obese people fail to merit interventions in the same way as patients afflicted with other medical conditions. Employing merit as the basis for access to healthcare interventions has been determined to be ethically unacceptable since there was social and bioethical rejection of the criteria employed by the Seattle God

Committee in allocating dialysis.<sup>69</sup> Second, insofar as merit can be meaningfully considered, obese people merit treatment for their condition as much as people with hypertension, multiple sclerosis, diabetes, cancer, and alcoholism do. All of these conditions are complex, multifactorial conditions to which the individual patient's behavior may contribute to symptom manifestation; however, in no case is it considered appropriate to say that the person merits her disease and therefore does not merit treatment.

For many other invasive medical procedures, including high cost and technologyladen transplantation, bioethical analysis appears to have effectively dealt with the issues of social justice and patient deservingness by employing the principle of respect for autonomy as well as stringent clinical protocols for medical appropriateness.<sup>70</sup> For instance, candidates for liver transplantation whose liver disease can be attributed to alcoholism are subject to appropriate clinical measures to determine their clinical suitability but are no longer treated as less deserving of transplantation because of the behavioral components of their disease process.<sup>71</sup> Discussion and exploration of the option of liver transplantation is not withheld from those suffering with liver disease because they have in the past been causally responsible for the damage to their liver.

The first step in a developing a more just system for the treatment of obesity is to ensure that obesity is addressed, and that it is routinely raised with patients as a health concern and topic appropriate for clinical discussion (not a moral problem). In keeping with the goals of medicine, the patient should be educated on the risks of excess weight and potential for life-threatening co-morbidities. Educational dialogue such as this meets the goal of medicine which encourages "education and counseling of patients regarding

their condition and prognosis.<sup>772</sup> The physician's willingness to initiate such discussions may help to create an environment of appropriate trust and mutual respect. The clinical encounter should be one that is marked by respect, emotional safety, and a lack of stigma, embarrassment, blame, and ridicule.<sup>73</sup> As established before, failure to broach this important health topic constitutes a breach the goals of medicine. What makes this a matter of justice, is that the entire continuum of individually appropriate treatments should be presented to obese patients as would be done for patients with cancer, leukemia or any other disease. As with all medical conditions, all treatment options should be considered with the patient from least invasive and lowest risk to more invasive, higher risk interventions; in the case of obesity this continuum would include diet and exercise, pharmacological interventions and when appropriate, the option of surgical weight loss should be discussed.

Chronic kidney disease is one condition for which a continuum of care focused on appropriate clinical indicators and best practices has been instituted. Like obesity, chronic kidney disease is a progressive and debilitating health problem. It is caused by and influenced by a myriad of factors including lifestyle choices and genetics.<sup>74</sup> For this medical condition, steps have been taken to standardize diagnosis, staging, and the appropriate interventions to be considered at each stage. A consensus statement by the Kidney Disease Outcomes Quality Initiative outlines a progressive clinical management system which attempts to standardize clinical understanding of this disease as well as appropriate clinical interventions across the spectrum and in keeping with best practices at each stage. While the recommendations are focused on avoiding invasive, expensive interventions needed at later stages of disease progression, there are specific guidelines

for initiating both discussion of and the use of renal replacement therapy through various forms of dialysis. Moreover, consideration of patients for kidney transplantation, an invasive surgical technology, is also addressed as part of this comprehensive clinical continuum of care.<sup>75</sup> This document institutionalized a continuum of care for those who are identified as having chronic kidney disease.<sup>76</sup> No such continuum of care has been adopted for the treatment of those who are obese.<sup>77</sup>

The current lack of a continuum of care for obesity is in direct violation of the formal principle of justice and appropriate standards of medical care. This problem has deep roots and is systemic.<sup>78</sup> John Dixon, Head of Obesity Research at Monash University in Australia, discusses the disparity between indications for bariatric surgery and actual referral rates for evaluation for surgical weight loss interventions which he cites as being "less than 1 percent of those eligible."<sup>79</sup> He goes on to say, "…even discussion of surgical referral is optional. It is time we articulated and defined a group of patients where referral for a surgical opinion is no longer merely an option but a physician's responsibility as best care for the patient."<sup>80</sup>

...currently, we have no indications or guidelines that physicians could use for the obligatory referral for bariatric surgical assessment as a best practice. In turn, health care providers, insurers and payers can use their discretion in providing bariatric surgical services.<sup>81</sup>

Citing the 1991 National Institutes of Health criteria for patient selection for

gastrointestinal surgery for severe obesity he notes these expert recommendations:

 Patients seeking therapy for severe obesity for the first time should be considered for treatment in a non-surgical program with integrated components of dietary regimen, appropriate exercise and behavioral modification and support.
 Gastric restrictive or bypass procedures could be considered for well-informed and motivated patients with acceptable operative risks.

3. Patients who are candidates for surgical procedures should be selected carefully after evaluation by a multi-disciplinary team.

4. The operation be performed by a surgeon substantially experienced with the appropriate procedures and working in a clinical setting with adequate support for all aspects of management and assessment, and
5. Lifelong medical surveillance after surgical therapy is a necessity to monitor for complications and lifestyle adjustments.<sup>82</sup>

In spite of these broad recommendations made over two decades ago, as yet there remains no standard for physicians to use regarding when, or even whether, to refer or initiate a discussion of bariatric surgery with patients who meet the BMI criteria. Physicians are left to rely on their own, socially influenced, potentially biased judgment and personal experience.

Dixon suggests areas of refinement in the broad recommendations of the NIH. His refinements would take the broad NIH recommendations to a level which standardizes and institutionalizes a clinically appropriate continuum of care for patients who are obese. He outlines two clinical criteria based on BMI and/or co-morbidities, which include more clearly defined situations under which the physician would either be "obligated to discuss surgery as an option" or "when surgical referral is appropriate and indicated as best care for the patient."<sup>83</sup> His proposed refinement of the NIH recommendations would serve to align discussion of a continuum of obesity treatment with the approach employed for other medical conditions. Dixon makes clear the connection between concern for justice and the development and implementation of standards of, and guidelines for, obesity care.

If those familiar with the current evidence regarding the net benefits of surgically induced weight loss cannot define and articulate a specific group of patients that a caring physician must refer for a surgical opinion, then we allow, by our silence, the current arbitrary and discretionary approach that is applied by health care providers, payers, insurers, and referring physicians.

He concludes his recommendations with a call for the advocacy necessary to institute

# such change.

It is time for leaders with a clear understanding of outcomes of bariatric surgery to stand up and advocate for a standard of best care for those suffering from the more serious forms of this serious chronic relapsing condition. Guidance and education will be needed for both patients about their opportunities, and their primary care physicians about their responsibilities.<sup>84</sup>

With regard to other conditions, and in medicine generally, it has been recognized that development of evidence-based clinical practice guidelines can help to ensure the equitable treatment of patients.<sup>85</sup> Therefore, respect for patient autonomy and concern for patient welfare, along with considerations of justice support ensuring access to a continuum of obesity treatment.

Individual practitioners should not be enabled to appoint themselves as gatekeepers, restricting access to important treatment information which should instead be provided to inform patients and empower them to make truly informed decisions about treatment. To withhold information or access to treatment alternatives is a violation of respect for patient autonomy, patient rights, and the requirements of informed consent doctrine. Further, as this section argued, the present system of obesity treatment is not just because it fails to treat patients with similar serious chronic conditions similarly.

The final section of this chapter returns to physicians' obligations and the goals of medicine to argue for the non-abandonment of obese patients and then applies a feminist ethic of care to the treatment of obesity to provide an ethical framework for improving the medical care of obese patients. In the first subsection, the obligation of non-abandonment and the ethical goals it serves are discussed in relation to the harms obese patients in particular may experience if physicians refuse to provide them appropriate care. The second subsection presents an ethic of care and then applies it to the problem of

address obesity and the health problems of obese patients. It is argued that an ethic of care provides an ethical frame work for improving the treatment of obese patients and providing them the continuum of care that characterizes treatment of other life-threatening chronic and acute conditions.

C. The Physician Obligation of Non-Abandonment, and the Application of an Ethic of

### Care to Obesity

The previous section argued that justice demands similar treatment of those similarly situated and highlighted the ways in which justice is lacking in the clinical treatment of those who are obese. It was argued that patient welfare can be improved by adopting an appropriate continuum of care for those who are obese and that justice requires doing so to the extent that a continuum and guidelines for implementing exist for other conditions.<sup>86</sup> The proposed continuum should not be solely reliant on physician discretion and lack of bias, but should be institutionalized as a matter of professional practice guidelines to ensure that all available technologies are explored, including discussion of surgical weight loss options. This final section of the chapter provides additional grounds for implementation of a continuum of care and locates these grounds in the physician's obligation of non-abandonment. In the first subsection, the obligation of non-abandonment and the ethical goals it serves are discussed in relation to the harms obese patients in particular may experience if physicians refuse to provide them appropriate care. The second subsection presents an ethic of care and then applies it to the problem of addressing obesity and the health problems of obese patients. It is argued that an ethic of care provides an ethical foundation for improving the treatment of obese

patients and providing them the continuum of care that characterizes treatment of other life-threatening chronic and acute conditions.

#### C.i Non-Abandonment

This chapter has addressed several obligations incumbent upon physicians in exercising their professional duties. These have included the obligation to evidence respect for persons, to respect autonomy, to be truthful, and to obtain informed consent. The professional obligation of non-abandonment also strongly supports provision of information about WLS to obese patients. In writing about the ethical obligations central to the social role of physicians, physicians Timothy Quill and Christine Cassel assert that "non-abandonment places the physician's open ended, long term caring commitment to joint problem solving at the core of medical ethics and clinical medicine".<sup>87</sup> Especially in the context of chronic conditions like obesity, non-abandonment becomes an important obligation. While in the past, the acute nature of illness for which there were few curative interventions often caused quick death, today chronic conditions are an increasing focus of medical attention.<sup>88</sup> While Quill and Cassel do not specifically address obesity as a chronic illness it easy to see how obesity and its co-morbidities fit the description of the types of diseases to which they refer and how issues of abandonment and a call for nonabandonment are warranted here.<sup>89</sup> Quill and Cassel discuss the obligation of "nonabandonment as an obligation to respond to vulnerable persons whom we contact in our daily work."90 According to them, non-abandonment involves advocating for what is in the best interest of the patient, based on his unique clinical predicament, and in accordance with the patient's goals and own conception of welfare.

Similarly, in an article on patient-centered duties and limitations placed on the

right to refuse treatment for moral, religious or ethical reasons, Jill Morrison and Mikole Allekotte, attorneys with the National Women's Law Center, outline an argument regarding physician refusals of reproductive technologies that cites various harms and other unintended consequences of such refusals for patients.<sup>91</sup> Though their argument is not centered on refusals to treat obesity or those who are obese much of the analysis applies and will be used here to explicate types of refusals and the potential patient harms they may cause to those who are obese. They begin by linking non-abandonment, trust, internal morality, and goals of medicine.

By entering the medical profession, practitioners agree to a set of ethical principles which ensure that they will put the patient's interests before their own. Medical professionals have superior scientific knowledge and skill to that of the patient, which puts them in a position of trust and influence. Modern medical practice continues to move away from a model of paternalistic physician control over patients towards patient decision-making, which requires the professional to impart enough medical information for the patient to make an informed decision.<sup>92</sup>

Quill and Cassel discuss the interplay of the obligation to non-abandonment with traditional bioethical principles. With regard to respect for autonomy, they write that "passively acceding to a patient's request that defies the physician's recommendations and clinical judgment without fully informing the patient and actively exploring alternatives can be a form of abandonment."<sup>93</sup> In the case of a patient who prefers not to discuss her weight issues it certainly may be easier for the physician to choose not to bring up the subject at all since the patient "doesn't want to hear it." However, according to Quill and Cassel this would be a form of abandonment by failing to empower the patient to explore her options to seek her health-related welfare in light of her own values and priorities. Or the physician may fail to provide comprehensive information on weight loss alternatives because various weight loss technologies are not in keeping with the

physicians own values which dictate that weight loss should be earned and that surgical weight loss is too simple. That too would constitute a violation of respect for autonomy and is also a form of patient abandonment.<sup>94</sup>

Quill and Cassel align the obligation of non-abandonment with the principle of beneficence through the benefit afforded by the physician-patient relationship itself: adherence to the principle of beneficence, they write, "ensures that a physician's actions benefit the patient...Whether a given act is beneficent may depend on the nature of the act itself or on its meaning to the participants in the context of their relationship."<sup>95</sup> For patients who may have internalized the stigma of their obesity or experience obesity-related abjection, the persistence of a physician in a relationship may afford special meaning and thus benefit.

Despite the potential importance for obese patients of non-abandonment, there is evidence that obese patients are abandoned and refused treatment because of their condition. The popular media reported, for example, that some physicians refuse to accept new patients who are obese.<sup>96</sup> Specifically, in South Florida a group of obstetricians-gynecologists (OB-GYNS) have refused to accept obese patients. Some of these physicians cited that they are concerned with doing more harm than good in treating such patients, while still others have simply stated that their equipment (such as examination tables or gowns) are ill-equipped to handle larger patients. Still others are worried about malpractice suits following difficult births to mothers who are obese. The implications of such refusals to treat are far reaching.

First, when professionals refuse to treat obese people, there may be nowhere else in the patient's community to obtain similar care, or the cost of seeking treatment

elsewhere may have impose additional financial burdens on the individual or family. At a minimum, the obese person may experience a delay in obtaining necessary treatment. Moreover, a patient turned away by a practice may experience the emotional sequelae of rejection or abandonment, even if it is easy for him to access care elsewhere. For a member of a stigmatized or marginalized group, such emotional sequelae may be particularly damaging and reinforcing of already internalized stigma. When a physician refuses to treat an obese person for any ailment or condition, then no physician-patient conversation regarding obesity and treatment options can occur. The physician who has refused to provide treatment has effectively cut off an avenue to educate and potentially improve the condition of the patient.

Second, within an existing physician-patient relationship, a physician may refuse to provide an obese patient information about the full range of treatment options for obesity, including WLS. The patient may not even be aware that he has been denied potentially medically desirable treatment options. Failure to discuss options, give complete information about the likely consequences of obesity, or blatant disregard of the topic because it is too difficult or too fraught with emotion could equally be considered varying forms and degrees of patient abandonment.

A third type of refusal of care occurs when physicians fail to make appropriate referrals for evaluation to bariatric surgery when requested by the patient. The 1991 NIH recommendations laid out a rudimentary clinical pathway.<sup>97</sup> Physicians who fail to make appropriate referrals for WLS—either for those patients who request such referral, or for whom referral is the next appropriate step in providing care—breach of their duty of care. This either effectively denies patients potentially efficacious treatment, or leaves the

patient to seek alternatives without support. Because ongoing support is needed throughout the evaluation process for WLS and for post-surgical follow-up, the unwillingness of a local, primary care physician may effectively render a patient ineligible as a WLS candidate.

These three types of treatment refusal constitute different degrees of patient abandonment. They fail to serve the patient's interest and the goals of medicine. Such partial and total abandonments subject obese patients to serious physical, emotional and financial consequences.

They diminish the opportunity for the patient to access efficacious treatment along the continuum of their obesity. For instance, if when a patient is 25 pounds overweight detailed and ongoing discussions occurred with various physicians the patient may be able to make significant changes through diet and exercise or pharmacological interventions, which would ultimately enable him to avoid bariatric surgery. If the patient were unable to do so, then earlier conversations about all potential options, including WLS, would facilitate better informed decision making as a process which unfolds over the course of time. A process of shared decision making about obesity treatment could unfold over time, and if WLS is eventually deemed appropriate, informed consent for it would not be a relatively perfunctory event-based act which merely meets the legal criteria of consent. Instead, evaluation of and consent to WLS could fulfill the spirit of the doctrine of true informed consent.

Ironically, by refusing to treat obese people or provide them with appropriate and timely information and referrals, physicians may be contributing to the need for WLS when in fact their expressed or unrecognized goal was to avoid surgery.<sup>98</sup> Failing to
provide information about each of the treatment options' benefits and burdens may mean that patients fail to take seriously the nature of obesity and its potential to damage bodily function and quality of life. If the discussion is not undertaken with the patient, it may not be possible for the patient to realize its seriousness early enough to avoid permanent damage. In this case, patients for whom earlier interventions might have been possible may have advanced beyond that window of opportunity and now have fewer viable options to save their life and improve their condition. Take for example this personal story, recounted by a social worker who had worked on a surgical bariatric floor.<sup>99</sup> The social worker was waiting with a patient who was preparing for WLS later that day. The patient was tearful, obviously distraught, and very afraid according to the social worker. The patient shared with the social worker that no one had ever mentioned WLS to her before the last year, even though she had been overweight for decades and had suffered from a number of obesity-related diseases. The patient now she felt she had no option but to go through with WLS because the physicians were telling her now that it was either WLS or death from her co-morbidities. The patient felt that she really had no choice at this late stage of disease even though she was told that she may indeed die on the operating table as at this point she was a marginal surgical candidate. The choice she faced was risking death due to co-morbidities or death during surgery. The patient wondered aloud why her doctors had been willing to treat her diabetes, hypertension, and other diseases but had been unwilling to discuss WLS with her. She wondered if she could have been better prepared if she had known about WLS sooner when she was healthier. While the patient did choose the option of surgery, she shared that she did not feel she had a true choice. She was angry and disillusioned by those who had taken an

oath to help her through sickness. This patient articulated that she felt as though her right to make a truly autonomous choice about her care had been denied her because pertinent information needed to make a fully informed decision had been withheld over a period of several years.

Refusals of treatment, information, or referral can serve to reduce the effectiveness of surgical weight loss interventions when they are eventually accessed. If a patient is refused information or is refused appropriate referral for treatment she may delay in seeking time sensitive treatment which if obtained earlier may have been more likely to succeed.<sup>100</sup> For instance, research has shown that in the case of effectuating sustainable remission of type II diabetes, earlier intervention via WLS is superior to surgical intervention for weight loss once the patient's body has sustained greater damage.<sup>101</sup> In essence there is a point of diminishing returns for ameliorating co-morbid disease even with the use of the most efficacious treatment currently available.

Treatment refusals can present financial harms to patients and reduce the efficiency in health care delivery patients.<sup>102</sup> Additional costs associated with seeking another provider who offers more comprehensive care of the obese patient may mean that low income people are denied access altogether. Moreover, patients may have limitations placed upon them by their insurance providers that are exacerbated by treatment refusals. For instance, some insurance limits the number of physician or specialist visits per year for patients. Any access to healthcare above that limit will need to be paid for by the patient out of pocket or at a higher rate. In addition to insurance and access issues, refusals can impose additional costs for treatment.<sup>103</sup> If the patient does eventually access WLS it may be later rather than sooner and therefore additional patient share costs

incurred due to hospital day stays or co-payments may be present which would not otherwise have applied. Since the incidence of complications is greater the longer surgery is delayed and the sicker patients are it seems reasonable to assume that the financial burden to patients will be greater by delaying efficacious treatment as well.

The obligation of non-abandonment requires that obesity and its treatment options, including bariatric surgery, be addressed by medical professionals. Nonabandonment is marked by a willingness to engage the patient in ongoing discussions about what options exist for treatment even when those treatments are not optimal, and even if professionals believe that personal responsibility is at play in the patient's condition. The obligation of non-abandonment therefore requires medical professionals to discuss surgical options for weight loss when it might be clinically warranted in the future and certainly if it is clinically warranted under present circumstances. The following section discusses incorporating an ethic of care in the treatment of those who are obese and argues that this relational model which is sensitive to individual nuance and recognition of patient vulnerabilities, affords an ethical foundation for improving the care of those with obesity.

### C.ii An Ethic of Care

Deontological, consequentialist, or rights-based approaches in ethics share a commitment to viewing individual moral agents as the fundamentally important unit of ethical analysis, societies as composed of individuals, and have tended to varying degrees to view individuals as substantially independent, autonomous, and rational. The emphasis of these theories is on rules, <u>duties</u>, <u>justice</u>, positive and negative <u>rights</u>, impartiality, universality, or utility.<sup>104</sup> Care ethics on the other hand, evolved from a different

conception or construction of the person in society. The understanding of the individual as conceived by the ethic of care is that of an interdependent, essentially relational person. The individual is not an island but is instead part of multiple overlapping larger groups which begin in the family and continue into the larger society. An ethic of care emphasizes the ethical importance of human relationships and emotion based virtues such as benevolence, mercy, care, friendship, <u>reconciliation</u>, and sensitivity.<sup>105</sup> According to philosopher Joan Tronto, an ethic of care is best understood not only as an approach in moral philosophy, but also as a political theory with relevance for all aspects of society.<sup>106</sup> To be implemented in a just, productive, and non-self-abnegating way, she argues, an ethic of care requires a political structure that supports care activities.

In the literature of ethics, the word care is frequently defined as a practice, value, disposition, or a virtue. These descriptors are often explained as overlapping and interrelated.<sup>107</sup> For philosopher Virginia Held care is a form of labor and an ideal that is intended to guide normative judgment and action. Held explains care as "clusters" of practices and values.<sup>108</sup> Another definition of care, advanced by Tronto and Berenice Fischer, defines care as "a species of activity that includes everything we do to maintain, contain, and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, ourselves, and our environment."<sup>109</sup> Care in this regard is a holistic notion meant to encompass a broad swath of activities and domains including the body. Care requires morally good persons for fulfillment. "To be a morally good person requires, among other things, that a person strives to meet the demands of caring that present themselves in his or her life".<sup>110</sup>

An ethic of care is often explicitly tied to medicine and bioethics.<sup>111</sup> This seems a somewhat natural pairing since medicine is a profession based on entering into a relationship the foundation of which is caring for patients. In essence by entering into the practice of medicine physicians and other healthcare professional have chosen to put themselves in a position where opportunities for caring present themselves continuously. In fact, meeting the care demands of people is at the heart of these professions. Treatment of obesity, as with other medical conditions, occurs in large part due to the efforts of those in caring professions such as physicians and nurses. Physicians enter the field of medicine for many reasons. Presumably one primary motivator to enter into the field of medicine is because of a desire to care for people in various states of health or illness.<sup>112</sup> Hence there is an expectation that taking up the demands of care will be present among those who enter become physicians and will manifest in particular ways.

The work of Tronto on both the practice of an ethic of care and its elements will be the starting point for this analysis. This framework will then be applied to the clinical care and treatment of those who are obese. Comparisons between the current and proposed systems will highlight the superiority of an approach grounded in an ethic of care for clinical engagement with obesity and its treatments.

In discussing an ethic of care Tronto points out that "an ethic of care … requires some specific moral qualities."<sup>113</sup> These include: attentiveness, responsibility, competence, and responsiveness.<sup>114</sup> Attentiveness refers to recognizing that areas of need exist in the first place. Tronto states that this is the starting point of an ethic of care because without well-honed skills at noticing an opportunity for care there can be no subsequent action of providing care or meeting the need.<sup>115</sup> Following that logic,

inattentiveness or blatantly ignoring areas or situations in need of care is considered a violation of this standard and a form of failure to provide care. Lack of attentiveness would then seem even more of a moral failing within a profession whose purpose it is to recognize the needs of caring for a person. Tronto goes on to say that "one needs, in a sense, to suspend one's own goals ambitions, plans for life, and concerns in order to recognize and be attentive to others."<sup>116</sup> While this may be idealistic, traditional medical ethics requires physicians to suspend their own interests to act for the sake of their patients' interests. It would also seem appropriate to require suspension of physicians' socially constructed bias regarding obesity; even temporary suspension may be required in order to be attentive to the needs of the obese patient. The second quality required of an ethic of care is responsibility. Recognizing the potential for confusion between the concepts of responsibility and obligation (such as those found in the Hippocratic Oath) Tronto distinguishes between the two by positing that responsibility deals with cultural practices which support care rather than a set of formal rules or duties which arise from caring obligations.<sup>117</sup> Thus responsibility of caring might entail how a parent is to respond to the needs of his children. On the other hand, an obligation would be manifest in the duty of informed consent by a physician. For physicians it would seem that there is both a responsibility and subsequent obligations which arise from this professional caring role. As discussed in chapter three, responsibility involves taking care of the problem that attentiveness identifies.

The third quality required for care is competence. Tronto explains the importance of this element when she says, "Intending to provide care, even accepting responsibility for it, but then failing to provide good care, means that in the end the need for care is not

met."<sup>118</sup> Failure to act competently fails at caring. Physicians who fail to recognize the relative merits of different weight loss interventions, for example, may be said to fail at caring for want to competence, not for lack of good intentions. In fact, some physicians who withhold information about WLS or refuse to refer patients for evaluation may be acting with paternalistic intentions, but fail to be truly caring because they lack particular competencies—namely, understanding their patients' particular needs and the potential benefits of WLS, overestimating the risks of surgery, or misunderstanding the etiology of obesity so they think surgery cannot truly benefit their patients. The final quality which Tronto discusses as being necessary to an ethic of care is that of responsiveness. Responsiveness is understood by Tronto as the care receiver's reaction to or acceptance of various elements found in the ethic of care. Responsiveness and vulnerability are closely linked according to Tronto.<sup>119</sup> It is in the care receivers' recognition of vulnerability (need) that independence is challenged and interdependence acknowledged so that the moral actors can move forward together. The integrity of care is the culmination of each element described above which "must fit into a whole."<sup>120</sup>

Tronto acknowledges the complexity of care as a practice stating that:

... it involves more than simply good intentions. It requires a deep and thoughtful knowledge of the situation, and of all of the actors' situations, needs and competencies. To use the ethic of care requires knowledge of the context of the care process.<sup>121</sup>

At present the treatment of obese people by medicine seems to be lacking elements expected to be found in an ethic of care.

An ethic of care, if properly applied, is of value in understanding the needs of those who are obese and the requirements of improving their treatment. Moreover, an ethic of care as applied here stands to "allow us to move to a more just and caring humane society.<sup>*n*<sup>122</sup></sup> for those who are obese and suffer from its disabling co-morbidity. This is true for several reasons. First, an ethic of care stresses the importance of attending to particularity or to the specific circumstances surrounding an issue.<sup>123</sup> Thus an ethic of care reinforces the individual-level attention demanded by all clinical medical encounters, including those where obesity or its co-morbidities is the health concern. Second, an ethic of care focuses on intervening with an understanding that individuals are in relationship (both with others and within systems such as the medical system).<sup>124</sup> Finally an ethic of care understands care to refer to some sort of active engagement which requires both an outward reach (on the part of the physician and the patient) as well as the implicit action towards resolution of the problem.<sup>125</sup> It seeks a forward-looking goal, not the backward-looking assignment of causal or moral responsibility.

Multiple factors of an ethic of care make it a productive normative framework for medical care in general and for obesity specifically. An ethic of care urges that engagement with the patient that begins at the level of the individual and her particular circumstances, not at the level of a condition considered generally. In other words, the person is the focus and not the obesity. An ethic of care provides for a vigorous engagement of potential solutions based upon needs of the individual while simultaneously focusing on the broader social and moral context of the care of all people with obesity within the medical system. Thus, an ethic of care allows for greater contextualization of the individual's problem of obesity, which simultaneously diminishes blame attributions while bolstering the focus on solution.<sup>126</sup>

It is necessary to analyze why this distinction between person-first versus condition-first is important and how it will serve to positively alter the experience of the

patient. In starting with the person there is acknowledgment of obesity as a multi-factorial and highly contextualized problem, one requiring examination of the factors associated with this particular person's obesity and not obesity in general. So while it may be true that the patient does not get enough exercise and eats out too often, attending to obesity as multi-factorial and highly contextualized problem would lead the caring physician to examine in greater detail the contributors to lack of exercise and eating out frequently. If the inquiry is taken a few steps further by the caring physician then it may be revealed that patient is now caring for a disabled sibling which severely limits the time available for exercise and food preparation. Or it may be revealed that the patient has been verbally abused by his parents and now by his spouse and that he manages his emotions by covering them with food. Having done so for years in an effort to protect himself from one type of harm other types of harm have occurred. His body has borne substantial damage from this protective mechanism. Each of these highly contextual factors may be vital in determining the most appropriate course of clinical action and developing an individualized care plan with the goals of the patient and the patient's best interest at the forefront of the encounter.

Contrast this approach with a more typical encounter which places the obesity at the center and the individual who is obese on the periphery. In this model, not based on the patient as individual but on the patient as a manifestation of the obesity, the process, the outcome, and the level of care experienced by the patient is likely to be vastly different. In more traditional models of patient interaction the physician observing that the patient is obese based upon BMI *may* counsel her on the importance of weight reduction and may even go so far as to discuss likely potential outcomes of failing to do

so. However, this more traditional model is likely to be lacking in an exploration of the multi-factorial etiology of the disease for this particular individual. As the patient is obese he or she obviously does not exercise and obviously eats more on a regular basis than is necessary. What is missing here is the exhaustive exploration of particularity which is found in a model which more closely attends to caring. The outcome of such an interaction may well be a superficial analysis of the problem leading to a faulty application of what is intended to be helpful professional advice. The patient is left feeling misunderstood and dissatisfied with perhaps no greater insight into the problem or its solutions while the physician is left feeling that discussing weight or weight loss options is futile. These feelings have now been reinforced for both parties.

An ethic of care with its focus on attentiveness, responsibility, competence, and responsiveness concentrates on the various aspects needed to for healthcare to provide a more compassionate and active response to the medical condition of obesity. An ethic of care motivates and justifies forward-looking responsibility-taking in order to achieve a positive outcome, and will frequently eschew ascription of blame or backward-looking moral responsibility. An ethic of care seeks to understand a web of causes of a problem that needs to be taken care of; it therefore is not particularly concerned with looking backward to identify *the* cause of the problem. It instead views the multiple causes of a problem as multiple potential points of intervention or multiple resources for redress. The incorporation of the unique particularity of each person, upon which an ethic of care is based permits a system which is first concerned with the sufferer and second concerned with the obesity. It acknowledges the intersection of marginalizations and offers more compassionate understanding of the struggles associated with an individual's obesity. As

was shown in the research conducted with medical residents, perhaps both the patient and the practitioner can benefit from interventions that encourage active engagement of practitioners with patients as individuals. Such engagement increases understanding, builds mutual trust and respect, and facilitates finding potential resources to help address patients' needs. Such engagement and more nuanced understanding of the patients' needs promotes identification of solutions which are in keeping with the patient's conception of well-being and in alignment with accepted clinical standards for treatment. An ethic of care provides the ethical foundation that justifies and informs such a project of engagement.

### D. Conclusion

This chapter argued that the present system for the treatment of obesity fails to meet the goals of medicine, violates commonly accepted ethical principles and obligations, and is unjust. The current unjust approach to treating obesity was shown to have serious material implications for the welfare of those who are obese including delayed access to WLS or the withholding of WLS as a viable option. The current approach was revealed as violating the principle of formal justice by failing to afford patients with obesity the same care and access to efficacious treatment that is routinely provided to similarly situated patients with chronic, complex, debilitating, and lifethreatening conditions. This disparate treatment was attributed, in part, to unhelpful ascriptions of culpability for the condition. It was posited that such ascriptions may also lead physicians, imbued with the dominant social construction of obesity, to act in ways that are not truly in their patients' interests even as they misguidedly believe that they are acting paternalistically. The chapter further argued that physicians' failure to address patient obesity is a form of abandonment, and moreover that the healthcare system abandons obese patients. Physician failure to address patient obesity, and to do so with respect and compassion, was shown to effectively re-victimize obese patients and cause them additional harms. This was shown to be particularly ethically problematic because the healthcare system should protect and promote the welfare of the vulnerable, not participate in their victimization.

Such attitudes and failures were shown to reduce the opportunity for patient selfdetermination and access to effective treatment. In examining the ways in which the current system curtails or violates respect for autonomy and patient welfare while perpetuating injustice, a picture of how the current system should be amended was introduced and grounded in an ethic of care. The new system requires abandoning the concepts of merited and unmerited suffering, facilitating a more comprehensive system based on an ethic of care, and finally adopting the proposed continuum of treatment for those who are obese. These changes will improve upon an unjust system thus providing one which is more caring, responsive, and ethically sound.

The final chapter of this dissertation reviews the argument of this dissertation and provides a synopsis of individual chapter topics.

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#### **Chapter Six: Dissertation Conclusion**

The final chapter reviews the overall argument of this dissertation and provides a synopsis of each of the chapters. The dissertation conclusion is provided in two sections. Section A summarizes the main points of the dissertation's argument while section B provides a brief review of material contained in each of this dissertation's chapters. The following section begins with a review of the arguments.

## A. Dissertation Argument Reviewed

This dissertation provided an ethical justification of surgical weight loss interventions in the treatment of obesity. Situating obesity as not only as a public health concern but also fundamentally a clinical medicine problem confronting individual patients and physicians, the dissertation argued that the time frame of public health interventions is too long for individuals presently facing obesity and its deleterious physical and social co-morbidities. It reviewed the risks of morbidity and mortality associated with obesity and the rates of success in reducing these risks associated with various interventions. It further argued that it is inappropriate to hold WLS to the goals of public health. This dissertation argued that failure to address weight loss on an individual level, and specifically to consider the clinical appropriateness of weight loss surgery (WLS) along a clinical continuum, raises serious questions about patient abandonment, failure to respect autonomy, and failure promote patient welfare. Moreover, social skepticism or rejection of WLS as a treatment option was revealed to raise concerns about fairness as these failures indicate that obesity is not regarded in relevantly similar ways to other life-threatening and health-impairing conditions.

To ground this argument, the dissertation examined various reasons that obesity and its myriad interventions, including WLS, are inadequately addressed in the clinical setting. It argued that considerations with cultural and ethical valence play a critical role in obesity's different and unfair treatment within clinical medicine. Gendered and theologically informed attributions of blame, shame, and self-stigma were shown to influence the attitudes and actions of both patients and clinicians with regard to addressing obesity. Inappropriate and conceptually confused ascriptions of responsibility were shown to impede social acceptance of, and access to, WLS. The dissertation criticized and subsequently reconceptualized these ascriptions of responsibility from a perspective informed by feminist epistemology and ethics in order to provide a more humane and nuanced foundation upon which reform of current clinical practices surrounding treatment of obesity can be built. These reforms included improvements in doctor-patient discussions of obesity and the adoption of clinical practice guidelines providing for a continuum of care. Informed by these feminist insights and a systems theory approach drawn from social work, the dissertation suggested specific revisions of the customary candidate selection process for those seeking WLS. Finally, this dissertation concluded that WLS is a valid option for those seeking resolution to lifethreatening co-morbid obesity related disease and that barriers to its access should be removed in healthcare. In support of the overall argument of this work, individual chapters provided areas of support which are briefly reviewed below.

### B. Chapter Synopses

Chapter one provided relevant background information on the problem of obesity. The chapter examined controversies surrounding the most widely used tool for the

diagnosis of obesity, the measurement of BMI, along with reviewing several proposed alternatives which might provide a more accurate clinical data. Obesity trends as seen throughout the past fifty years of government data collection were reviewed. These surveys showed that obesity has become both more prevalent and more serious in the United States. Other international indicators revealed that obesity is a global problem. Increased obesity has subsequently led to increased physical and social co-morbidities such as diabetes, hypertension, reduced longevity, increased mortality, and in general diminished quality of life. Contested theories on the etiology of obesity and thus various ascriptions of blame were discussed. This chapter introduced the notion that various conceptualizations of obesity, including the appropriateness of its diagnostic tool, the acceptance of obesity as a disease, the understanding of obesity as a modern-day epidemic, and the subsequent approval or rejection of various interventions as applied to this problem, may serve to violate commonly accepted ethical frameworks such as those found in medical decision making, considerations of justice, and patient welfare.

Chapter two explored the numerous technologies from self-help initiatives to surgical interventions and their associated normative frameworks which have been employed to treat obesity. Each of these technologies was shown to have met with varying degrees of success. Among organized self-help initiatives and commercial programs, it was shown that Weight Watchers, Inc. provided participants with superior weight loss results which may assist in diminishing co-morbidities associated with excess weight. Overall, self-help initiatives and commercial weight loss companies were shown to have a normative framework of self-reliance with some additional guidance offered to assist in overcoming a problem with myriad contributory factors. These programs were

shown to diminish one or several of the identified factors which are beyond an individual's direct control but which have been associated with the development or maintenance of obesity. Largely disappointing or failed efforts at pharmacological interventions were reviewed. Pharmacological interventions for obesity were shown to have traditionally suffered from either poor overall results or from an imbalanced riskbenefit ratio for patients prescribed these medications. The result of this imbalanced equation has been serious and irreversible patient outcomes which necessitated the removal of some weight loss drugs from the market. The use and development of pharmacological treatments were shown to have advanced the normative framework to include an understanding that obesity may require more robust interventions than diet and exercise alone can produce. In fact pharmacological treatments revealed that obesity may be amenable to medical technologies. Finally, chapter two reviewed the development of various surgical interventions for weight loss which have developed over the course of the past half-century. Data were provided from various research studies indicating that surgery for weight loss thus far provides the best long-term outcomes when combined with subsequent lifestyle changes, and that the risks of surgery have been greatly diminished to the point of being considered manageable and similar to those experienced by patients when the gallbladder is removed. In spite of the efficacy of WLS and its manageable risks, this chapter revealed that exceptionalism has been and continues to be erroneously applied to this intervention. It was posited that continued exceptionalism applied to WLS likely has the effect of the intervention being viewed as too radical and hence real discussion of this intervention at a clinical level between patients and physicians may be thwarted.

The third chapter of this dissertation revealed several prominent ways in which obesity is a socially constructed phenomenon which relies on a faulty and fundamentally inadequate epistemology to frame the problem, an understanding of who are obese, and the appropriateness of various solutions to ameliorate the problem for the individual who is burdened, either physically, socially or both by their obesity. This chapter argued, that the dominant understandings of obesity neglect or discount important perspectives which must be considered in order to provide a more complete view both of the problem and the solutions. This chapter shed light on several social norms which inhibit the evolution of a more nuanced and enlightened understanding of obesity, as well as a wider acceptance and promotion of WLS. By utilizing feminist epistemological frameworks, current flaws in the construction of the obese identity, injustices present in the treatment of obese people, and the impediments to a wider acceptance and promotion of WLS were identified.

Chapter four argued that it is inappropriate to dismiss WLS as a valid individuallevel clinical technology based on the erroneous application of public health goals to what is, fundamentally, also an issue of clinical medicine. To conflate the goals of *public health initiatives* with the goals of *clinical medicine* was shown to be unacceptable in light of the availability of WLS which carries with it both acceptable levels of known risk, and an empirically substantiated ability to meet several of the goals of medicine and reduce co-morbid disease. This conflation was shown to further diminish the relevance of a trusting and caring physician patient relationship in addressing obesity. In light of a clearer understanding of the standards by which WLS should be evaluated, along with substantial empirical evidence of the clinical usefulness of this intervention further

supported by patient narratives which expounded on the personal utility of this individual-level intervention, it was argued that more should be done to assist clinicians and patients in understanding surgical weight loss technologies as a valid choice along a continuum of care. This chapter argued in support of adopting a proposed continuum of care which includes consideration of surgical interventions in response to appropriate clinical indicators which do not rely solely on physician discretion.

This dissertation's chapter five argued that the present system for the treatment of obesity fails to meet the goals of medicine, violates commonly accepted ethical principles and obligations, and is unjust. The current approach to treating obesity was shown to have serious material implications for the welfare of those who are obese including delayed access to WLS or the withholding of WLS as a viable option. The current approach was revealed to violate the principle of formal justice by failing to afford patients with obesity the same care and access to efficacious treatment that is routinely provided to similarly situated patients with other chronic, complex, debilitating, and lifethreatening conditions. This disparate treatment was revealed to be attributed, in part, to unhelpful ascriptions of blame. It was posited that these ascriptions may also lead physicians, imbued with the dominant social construction of obesity, to act in ways that are not truly in their patients' interests though they misguidedly believe that they are acting paternalistically in doing so. The chapter further argued that physicians' failure to address patient obesity is a form of abandonment, and moreover that the healthcare system abandons obese patients. Physician failure to address patient obesity, and to do so with respect and compassion, was shown to effectively re-victimize obese patients and cause them additional harms. This was shown to be particularly ethically problematic

because the healthcare system is obligated to protect and promote the welfare of the vulnerable, not participate or perpetuate patient victimization. These attitudes and failures were shown to reduce the opportunity for patient self-determination and access to effective treatment. This chapter revealed how the current system should be amended by establishing a foundation in an ethic of care. The proposed system was shown to require abandoning the concepts of merited and unmerited suffering, facilitating a more comprehensive system based in an ethic of care, and adopting the proposed continuum of treatment for those who are obese. It was argued that these changes would improve upon an unjust system by providing one which is more caring, responsive, and ethically sound.

This dissertation has provided a heretofore absent ethical analysis of obesity, the obese identity, and various technologies for its treatment. This dissertation has concluded that the use of WLS in the treatment of an individual's obesity is not only clinically appropriate but should be more fully supported in healthcare by reducing bias and employing just practices in keeping with accepted ethical standards for other multi-factorial conditions. Moreover, this dissertation has sought to provide a voice for those marginalized by the erroneous and partial construction of the obese identity which has until now served to silence those who are so afflicted and impede access to efficacious WLS. Ultimately, this dissertation has argued for the ethical and compassionate care and treatment of those who are obese.

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