Dissertation

Discovering the Root of Obesity through the Symbology of Food: a Historical and Cultural Exploration

Nadine Jacobs

Student Number: 212269259

Submitted in fulfilment of the requirements for the Degree of

Masters of Arts (Psychology)

In the

Faculty of Health Sciences

At the

Nelson Mandela University

September 2017

Supervisor: Mrs. Lisa Currin

Co-Supervisor: Prof. Annelie Gresse

Acknowledgements

The author would like to thank the following people who assisted with the completion of this dissertation:

- Ms. Lisa Currin (Supervisor) and Prof. Annelie Gresse (co-supervisor) for their constructive criticism and guidance to prepare this dissertation.
- Ms. Phumeza Kota-Nyathi for her assistance with writing and assimilating ideas for the proposal of this dissertation.
- Mr. Craig Luckman for editing and offering valuable input to finalise the dissertation.
- Ms. Meike Wetsch for her valuable contribution, editing, motivation and support.
- My mother, Mrs. Engela Jacobs and friends for their constant understanding and support.

Table of Contents

Abstract ix

Chapter 1: Introduction 1

Overview of the Chapter 1

Rationale for Undertaking the Research Project 1

Outline of the Study 3

Concept definitions 5

Chapter 2: Obesity 7

Overview of the Chapter 7

Literature and Psychological Approaches to Obesity 7

Sustainability and successful long-term weight loss: Limited successful results 7

Dissonance in the holistic approach to combat obesity 7

The association of High Density Lipoprotein Cholesterol (HDLC) escalation and reduced visceral abdominal fat after weight loss intervention 8

Counselling on eating behaviour as a lifestyle intervention 8

Traditional Models of Obesity 11

Overriding internal food cues: The boundary and dysregulation models 11

The externality theory 14

Learning theory 16

Psycho-symptomatic theory 18

Chapter Conclusion: The Importance of the Traditional Models of Obesity Explained 19

Chapter 3: Psychoanalytic Theories of Freud and Jung 21

Overview of the Chapter 21
The psychoanalytic theory and its importance explained 21
The psychoanalytic theory: Freud 23
The id, ego and superego 23
The conscious, pre-conscious and unconscious 24
Developmental stages 25
The unconscious and neuroscience 28
The unconscious, neuroscience and obesity 29
The psychoanalytic theory: Jung 30
The theory of the transcendent function 30
Jung's perceptions of the conscious & unconscious 32
The concept of Jung's complexes explained. 33
The collective unconscious and archetypes 34
Archetype: anima & animus 34
Jung's theory of the archetypical anima & animus applied to obesity 35
Archetype: the shadow 35
The Relationship between Archetypes and complexes explained 35
Freud and Jung's perceptions of dreams 38
Chapter Conclusion 39
Chapter 4: Research Methodology 40
Overview of the Chapter 40
Context of the Research 40
Problem Formulation and Motivation 42
Method 43
Formulate and defining the research question 46

Describe clear aim and objectives....47
Research objectives....47
Determine the implications of the study....48
Find and assess research articles....48
Identify sources of information....49
Determine selection criteria, search terms and delineate information....49
Contextualise the information....51
Analyse the data....51
Disseminate the results....51
Determine reliability and validity....51
Ensure that all Ethical Considerations are taken into account....53
Concluding Remarks....54
Chapter 5: Results and Discussion....55
Overview of the Chapter....55
Concept One: Symbols....60
What is a symbol?....60
Myths communicated through symbols in cultures....61
The symbol: mediator between the mind and survival needs.
The Asmat tribe as example....61
Analogy between symbols in mythology and the collective unconscious....62
How symbols are formed....63
The symbology of food as an element of the collective unconscious interacting with the personal unconscious....64
On the Symbolism and Value of Dreams....65
Concept Two: Food....67

The history of food: When food was a blessing and fat was fabulous; fat deities united with the divine through food 67
Food: The gift of the gods 69
The symbology of nectar and ambrosia; honey, manna and milk in different cultures 70
The symbology of herbs in different cultures 72
The symbology of grapes in different cultures 72
The symbology of bananas in different cultures 73
The symbology of figs in different cultures 74
The symbology of apples in different cultures 75
The symbology of pomegranates in different cultures 76
Rituals in different cultures 77
Blessings of the gods becomes punishment of unruly people: The symbology of food 78
Early physicians on obesity 79
Historical and cultural aspect: Achieving communion with the gods – by not eating at all 80
A psycho-dynamic view of the holy anorexics 81
Food and body image as symbols of wealth and power 82
Concept Three: Obesity 86
Early theoretical response to obesity 86
The public condemnation of obesity 91
Obesity in the context of the social construct and people's relationships with food in the unconscious 96
Narratives' influence on the human psyche. The story of Hansel and Gretel:

an example of the rich symbolic meaning of food conveyed over generations.......97

Concept Four: The Collective Unconscious (The Jungian Perspective) 106

The validity of Jung's contribution illustrated by quantum theory........................107

From quantum physics to bioelectronics: Marion Wood's cellular theory of obesity in a Jungian context of the collective unconscious 111

Jungian analysis: The cellular phenomenon of obesity 112

Connecting the cells to the archetypes and the complexes...................................115

The anima..115

The archetypes 120

Jungian reading of the Alice text: Going into the rabbit hole and through the looking glass – a tale of a young woman's journey into the personal unconscious..124

Food and power in the Alice texts: The class dynamic illustrated in psychoanalytic terms...131

Jung and gender 144

Concept Five: The Personal Unconscious (The Freudian Perspective).....................147

The contribution of Freud to the subsequent development of analytical psychology..148

Differences between Freud and Jung..150

The Freudian reading of the Alice texts...151

The gender dynamic with particular reference to Freud's Eros/Thanatos archetypes 159

Chapter Conclusion: Synthesis of the Major Recurring Themes..............................171

Chapter 6: Conclusion, Limitations and Recommendations...179

Overview: The study's Response to the Stated Research Purpose 179

Concluding Remarks on the Five Concepts and the themes that emerged 179
Implications 187
Recommendations for Further Research 187
Limitations of the Present Study..188
The Study's Response to the Original Research Question and Aim 189
References..194
Appendix A 217
Appendix B 218
Appendix C 241

Abstract

Obesity is fast becoming a worldwide issue with detrimental health consequences. The increasing availability of effective nutritional strategies, physical exercise regimes and behaviour modification approaches to weight loss do not offer a satisfactory explanation as to why only two to five percent of people who have lost weight successfully manage to retain the weight loss over the long term. By referring to several concepts on how the symbols of food originate in the unconscious and end up becoming the unconscious impetus for conscious thought and dietary behaviours relating to food, the complexity of food pathologies, with specific reference to obesity is explored. The study presents a narrative review of the available literature on symbols in a variety of cultural-historical contexts through the theoretical lens of the psychoanalytic framework. The study contributed to the current treatment approaches to obesity, by highlighting how the unconscious content of the psyche serve to compromise conscious efforts to address the problem of obesity. Also, the need for further research into the development of a model that, by incorporating the psychoanalytic approach to obesity, will support the long-term success of weight loss intervention by addressing the underlying issues, is emphasised.

Keywords: collective unconscious, food, obesity, personal unconscious, symbols

Chapter 1: Introduction

Overview of the Chapter

The chapter following describes the rationale for the study as a gap in the prevailing approaches to obesity; all of these lead to successful weight loss and the validity of the prevailing dietary, nutritional, exercise and behaviour modification approaches to treatment of obesity are not questioned. However, despite the significant weight loss achieved by means of these approaches, the statistics show that in the majority of cases, the weight loss is not sustained over the long run (Goodrick & Foreyt, 1991). Consequently, turning to the unconscious and specifically the symbolic meaning the unconscious attaches to food and eating behaviour as a possible explanation for the failure to sustain long-term weight loss.

The chapter presents the aim and objectives of the study, followed by the outline of the overall dissertation. The definitions of the concepts that are used throughout the dissertation are also explained at the end of the chapter.

Rationale for Undertaking the Research Project

Obesity has captured global attention as public health systems are coming increasingly under pressure due to the costs of caring for people with lifestyle diseases typically associated with obesity, including diabetes, hypertension and heart problems (WHO, 2015). Worldwide, the World Health Organisation reported in 2015 that more than 1.9 billion adults were overweight, including 600 million people that were obese (WHO, 2015).

Statistics show that only two to five percent of people who have lost weight successfully manage to retain the weight loss over the long term (Goodrick & Foreyt, 1991; Field, Austen, Taylor, Malspeis, Rosner, Rockett, Gillman & Colditz, 2003; Coulston, 1998). Despite the increasing availability of effective nutritional strategies, physical exercise regimes and behaviour modification approaches to weight loss; none of these offer a satisfactory

explanation as to why such low numbers of people who have successfully lost weight, manage to keep it off or why obesity continues to rise (Goodrick & Foreyt, 1991).

By referring to several concepts on how the symbols of food originate in the unconscious and end up becoming the unconscious impetus for conscious thought and dietary behaviours relating to food, the author seeks to understand the complexity of food pathologies, especially obesity.

The aim of the study was to explore the symbolic meaning of food, its influence on conscious behaviour and how it developed through history and across cultures in order to discover the root of obesity as seen through a psychoanalytic lens.

In order to complete the study, the following objectives were used to guide the study:

a. To explore the narratives that have been conveyed through traditions relating to food, in search of the symbolic meaning that are the unconscious root of people's dietary behaviour.
b. To compare food narratives that have emerged over time in order to explore the origins of symbolic meaning that people attach to food.
c. To identify cultural symbols that have become part of the unconscious narrative and how these symbols affect people's food consumption patterns.
d. To explore the possible linkage between the symbolic meaning of food and obesity.
e. To explore the unconscious influence of food symbols on conscious dietary behaviour.

By discovering the link between unconscious symbols of food and food pathologies, it is hoped that food pathologies, especially obesity, can be treated more effectively over the long term.

The research study intends to answer the following research question:

What is the linkage between food symbols and dietary behaviour of obesity?

Outline of the Study

Chapter two will start with a review of literature and psychological approaches to obesity that are offered. The boundary and dysregulation model of obesity, as well as different theories of obesity will be explained. The importance of traditional models of obesity will also be highlighted in this chapter.

Chapter three discusses the theoretical framework on which the study is grounded, namely the psychoanalytic approach that will be based on the contributions of Sigmund Freud (1949) and Carl Gustav Jung (1948).

Thereafter, the work of Freud related to obesity will be explored, also discussing the literature contributions of Hilde Bruch as an example of applying the Freudian theory. It is followed by the Jungian approach to obesity, explaining the fundamental role that complexes and archetypes have on the unconscious. Comparisons and differences between the two theories will be highlighted throughout the chapter, in order to explain the significance of the psychoanalytic theory on food pathology. In this context, reference is made to the work of Marion Woodman.

In Chapter four, the methodological approach of the research is explained. It will discuss the motivation for using a narrative literature research technique, the aim and objectives, the data collection and selection process, as well as ethical considerations and limitations of the study.

In Chapter five, the narrative literature review discusses the five concepts on which the narrative review is based, namely symbols, food, obesity, collective unconscious and personal unconscious. The chapter begins with an exploration of symbols and the significance that symbols have, how symbols manifest in the unconscious and influence conscious behaviour. The second concept of food, discusses the food symbols and myths of ancient time, and how these changed through history. The power dynamics associated with food and its consumption

are also extensively explored, as well as the prevailing medical opinion of obesity at different times in history. Similarly, food and the current sharp focus on obesity in particular in the current period of history are illustrated with reference to body image and socio-economic class.

A further analysis of Jungian dynamics is explored during the fourth part of the narrative literature review. Its starting point is to consider the impacts of recent advances in other fields including quantum physics and bio-electronics on the validity of Jung's concept of the collective unconscious and the interconnectedness between the physical and mental worlds and the unconscious. The insights offered by quantum physics explain Jung's archetypes as wave forms existing in a quantum state of potentiality in the cosmic mind that can and do translate to matter in the empirical world. In particular, the impact of wave forms on the expression of cellular genetics provided by bio-electronics offer support to Marion Woodman who argued that the difference in the size of fat cells between obese and normal weight patients derive from their psyche, in particular the unconscious, which she further illustrates by exploring the complexes through a word association test devised by Jung. The differences between the Freudian and Jungian approaches are further illustrated in more depth and an application to the problem of obesity is offered through a further exploration of the archetypes.

The study selected the Alice texts of Lewis Carroll to further illustrate the application of both approaches, in addition the inherent power dynamic associated with the consumption and distribution of food, seen through the lenses of class and gender. The study included these texts as a proxy for live case studies in view of the author not being a registered psychologist and given the ethical considerations that would preclude the analysis of live subjects. This is the approach taken throughout the study. Given the nature of the Alice texts, the anima / animus is explored in the Jungian reading of the text against the metaphor of the Hero's Journey of transformation toward individuation. In this reading, Alice is analysed as a character in the Jungian tradition of reading the dream as a compensatory act employed by the psyche to

compensate for an imbalance in the psyche; in this case in the anima as represented by the Death Mother archetype.

The Freudian reading of the text focuses the analysis on the author Lewis Carroll and sees the dream as expressing repressed trauma on the part of the author – Lewis Carrol. In particular, the Eros / Thanatos complex is explored. In Carroll's case, according to the highly-sexualised Freudian reading of the text the Eros / Thanatos imbalance translated in the occurrence *vagina dentata* as represented by Carroll's fear of the aggressive feminine represented by adult women and his ideation of little girls.

The final chapter offers a synthesis of the themes explored throughout the course of the narrative literature review before presenting the final concluding arguments, findings, and suggestions for further research. In addition, the chapter offers the author's evaluation of the extent to which the research aim and objectives were met, as well as a consideration of the limitations presented by the scope and methodology employed in support of the study.

Concept Definitions

The following two concepts will be used throughout the dissertation and are defined in this section for clarity and understanding. All other concepts will be explained in the text.

1. **Obesity.**

   Obesity can be defined as the accumulation of excess fat in the human body that may lead to health problems. The body mass index (BMI) which determines a person's weight in relation to height is at 30 or higher for obesity (WHO, 2015).

2. **Pathological Eating Behaviour.**

   Any abnormal feeding habit that is caused by psychological influences, compromise health and can result in conditions such as anorexia nervosa, bulimia nervosa, binge-eating disorder and variants (Segen, 2002).

Pathological eating behaviour and food pathologies will be used interchangeably throughout the dissertation as the meaning is intended to be the same.

Chapter 2: Obesity

Overview of the Chapter

The first section of the chapter presents an exploration of available research on obesity. The results of both successful and unsuccessful studies are summarised and will link the contents of the dissertation to the global issue of obesity.

Studies have proven that the onset of obesity in both children and adults are alike and is a combination of reduced physical activities and bad eating habits (Dietz, 1983), but the psychology of changing these habits is not yet fully understood.

Literature and Psychological Approaches to Obesity

Sustainability and successful long-term weight loss: Limited successful results. With obesity rates that have doubled in less than three decades (between 1980 and 2008), obesity has become a global issue that seeks treatment proposals and more importantly, solutions (Grebitus, Hartmann & Reynolds, 2015; Nurkkala et al., 2015). The World Health organisation (WHO) estimated that approximately 35 % of adults were overweight and a further 12 % were obese (WHO, 2004 as cited in Grebitus et al., 2015).Yet, there are no confirmed records of successful public health interventions that have yielded sustainable long-term weight loss or resulted in the successful reduction in obesity rates in populations (Hafekost, Lawrence, Mitrou, O'Sullivan & Zubrick, 2013).

Dissonance in the holistic approach to combat obesity. Hafekost and his associates (Hafeskost et al, 2013), studied 27 articles that were written in 2011 on weight loss interventions and concluded that there is dissonance between the physiologic rudiments of weight loss/gain and interventions to address the prevalence of obesity in populations. The authors stated that there is a lack of collaboration on multidisciplinary levels and due to a lack of understanding of basic science behind weight loss interventions. The lack of collaboration leads to unfitting research questions being asked, hence no concrete solutions are found to the

pressing issue of increasing rates of obesity. The authors concluded that the approach to weight loss interventions should be multidisciplinary and should be based on biologically credible mechanisms.

The association of High Density Lipoprotein Cholesterol (HDLC) escalation and reduced visceral abdominal fat after weight loss intervention. Many studies have associated weight loss (even short term intervention) with reduced risk of metabolic disorders such as hypertension, cardiovascular disease and irregular levels of lipids or glucose in the blood. With the risk of regaining weight after weight loss in mind, Matsuo and his colleagues concentrated on metabolic risk factors that have an effect on the maintenance of long term weight loss (Matsuo, Kato, Murotake, Kim, Unno & Tanaka, 2010). The results were inconclusive. The study included dietary adaptations, exercise programmes and counselling sessions by qualified dietitians. The results showed an improvement of risk factors during the initial 14 week period, however the risk factors rotated back to the point of departure after 105 weeks, regardless of the participants' maintenance of reduced visceral abdominal fat and mean body weight. Their study also succeeded in maintaining long term weight loss; regardless of the fact that there was a slight increase during week 14 and 105. They established a positive relationship between visceral abdominal fat and HDLC, in that reduced visceral fat accompanies improvements on HDLC, but warned that it might also be influenced by hormone levels, which required further study. They also expressed their need for additional studies in understanding the link between dietary values and variations in metabolic risk factors.

Counselling on eating behaviour as a lifestyle intervention. Regardless of many studies that have been conducted to determine effective methods to weight loss; an unflawed and effective weight loss method has not yet been determined (Nurkkala et al., 2015). Nurkkala et al. (2015) conducted an intensive lifestyle counselling intervention programme over three years, during which they investigated the influence of the eating behaviours of 76 subjects.

The authors compared eating behaviours, (cognitive restraint of eating, unrestrained eating and responsive eating) to motivation to lose weight and tolerance to weight loss difficulties or challenges. The authors found that:

1. Healthy eating habits and regular physical activity, correlated with nutritional counselling, does result in weight loss, weight maintenance and in some cases changes in nutritional habits (Andrade et al., 2010; Dombrowski, Knittle, Avenell, Araujo-Soares & Sniehotta, 2014; Rejeski, Mihalko, Ambrosius, Bearon & McClelland, 2011).
2. Implementing higher cognitive restraints enhances weight loss (Andrade et al., 2010; Keränen, et al., 2009; Svendsen et al., 2008; Westerterp-Plantenga, Kempen & Saris, 1998).
3. Personality types that are associated with binge eating and unrestrained eating, seldom display successful weigh loss results and maintenance (Keränen et al., 2009; Pacanowski, Senso, Oriogun, Crain & Sherwood, 2014; Svendsen et al., 2008; Westerp-Plantenga et al., 1998).
4. Successful dieters are more effective in cognitive restraint from eating, than those who eat uncontrollably and do not stick to their diet (Karhunen et al., 2012; Keränen et al., 2009; Neve, Morgan & Collins, 2012).
5. Also, people with higher body mass were inclined to show decreased levels of cognitive restraint (De Lauzon et al., 2004).

Nurkkala et al. (2015) emphasized that although a significant correlation between eating behaviour and successful weight loss has been established, there were very few studies that highlighted the effects of change in eating behaviour during long term interventions. The authors concluded that self-confidence, motivation, self-efficacy; and the belief that one can change one's eating behaviour, is very important in successful weight loss and is not dependent on short term or long term counselling (Keränen et al., 2009). The authors also concluded that

people with higher self-efficacy were better able to maintain their weight, more successful in weight loss, experienced less weight loss relapses, tended to exercise regularly, and could decline unhealthy food easier (Riebe et al., 2005).

In another study related to self-efficacy the researchers similarly hypothesised that behavioural changes can take place once self-efficacy has improved. The authors explained that people with obesity are confronted with two problems; "(1) Eating often serves as a dysfunctional relaxation technique in the absence of other stress-management skills. (2) Eating and food become individual stressors themselves because of negative consequences in emotion and cognition (frustration, shame, all-or-nothing thinking etc.)" (Teufel et al., 2013, p. 178). A food-specific biofeedback model was developed that examined electro dermal activity of 31 women. Variables such as self-efficacy, stress levels, relaxation abilities, and dietary behaviour were also assessed prior, during and three months after the assessment. Like the first mentioned study, the authors also concluded that improved self-efficacy, stress relieving and relaxation mechanisms were associated with improved behavioural intentions and reduced psychological burden (Teufel et al., 2013). A longitudinal study was necessary to confirm the results, as factors such as blood glucose and satiety were not taken into account.

After researching numerous articles on obesity and treatment of obesity, there are four main issues that were prevalent in the studies:

1. A holistic approach to obesity is inevitable. A successful model will have to include input from different disciplines (Baranowski, et al., 2003; Bea & Lohman, 2010; Drieling, Rosas, Ma & Stufford, 2014; Grebitus et al., 2015; Hafekost et al., 2013; Legenbauer, Petrak, Zwaan & Herpertz, 2011; Martinez et al., 2016; Petek, Kern, Kovač-Blaž, & Kersnik, 2011; Teufel et al., 2013; Yeh, Chu, Hsu, Hsu & Chung, 2015).

2. Behavioural change is necessary in order to attain long term weight loss (Baranowski, Cullen, Nicklas, Thompson & Baranowski, 2003; Martinez et al., 2016; Nurkala et al., 2015; Teufel et al., 2013).
3. Self-efficacy plays an important role in weight loss and obesity, as obesity is linked to low self-efficacy (Baranowski et al., 2003; Grebitus et al., 2015; Martinez et al., 2016; Nurkkala et al., 2015; Teufel et al., 2013).
4. Longitudinal studies and/or larger sample sizes are needed to determine the success of existing models that address obesity (Bea & Lohman, 2010; Drieling et al., 2014; Legenbauer et al., 2011; Martinez et al., 2016; Matsuo et al., 2010; Nurkkala et al., 2015; Petek et al., 2011; Teufel et al., 2013; Yeh et al., 2015).

For many patients, a last resort is to turn to surgical weight reduction treatment, such as bariatric surgery. Unfortunately, the success rate of this radical weight loss measure is not 100%. A failure rate of 20% has been reported, with patients who fail to maintain a healthy BMI or those who regain weight after the surgery and initial weight loss (Legenbauer et al., 2011). The authors concluded that most dieters, in general, return back to the weight they were before they started and explained that in morbidly obese patients with a BMI that is higher than 40 kg/m², non-surgical weight loss proves to be so ineffective that bariatric surgery is becoming a recommended option for these patients to lose weight (Legenbauer et al., 2011).

Given the link between self-efficacy and successful weight loss, the psychological origin of the lack of self-efficacy on moderating eating behaviour is relevant.

Traditional Models of Obesity

Overriding internal food cues: The boundary and dysregulation models. Schlundt et al. (1991) observed that obese people tend to alternate periods of healthy eating habits and strict food intake restraint with periods of uncontrolled eating, and in many cases episodic binge-eating, revealing the complexity of obese and over-weight people’s eating patterns.

The behavioural mechanism underlying these alternating eating patterns is the topic of several theories; with the majority focusing on dysfunctional behaviour. Herman and Polivy (1980) describes the boundary model which seeks to explain patterns of overeating among adults and children by noting that it is impossible to maintain an energy restrictive diet constantly and that attempts to do so over an extended period eventually leads to relapse when the dieter succumbs to episodes of uncontrolled binge-eating.

The model further points out that repeated attempts to stick to energy restrictive dietary regimes produces another consequence: the biological limits of hunger and satiety are moved over time and are replaced with a cognitive limit instead, therefore the chances of failure increases if this self-imposed regulation is put to the test when the dieter is emotional (Herman & Polivy, 1980). The dysregulation model of obesity (O'Reilly, Cook, Spruijt-Metz, & Black, 2014) proposes similarly that as episodes of extreme energy restriction alternates with episodes of uncontrolled and binge-eating, the natural satiety and hunger stimuli are overridden and eventually weakens to the point where these are no longer heeded, fuelling further episodes of overeating.

The inability to recognise hunger and satiety develops through three maladaptive cycles that tend to occur in the binge eater's life (Craighead & Allen 1996) which cause an eventual delay in the response to hunger and satiety cues. The cycles are;

The dieting cycle. As illustrated in figure 1, adapted from Fairburn, Wilson and Schleimer's model (1993), the dieting cycle starts when a person on diet consciously ignores hunger cues. In turn, as the hunger escalates, the person eventually gives in and ends up overeating as they disregard the body's response in the form of moderate internal satiety cues. In response to the binge-eating, the dieter often faces extreme regret about the loss of self-control and tends to engage in negative self-talk, which triggers the *Abstinence Violation Effect (AVE)* - a psychological term for violating personal boundaries that one sets for oneself. The Abstinence

Violation Effect usually is followed by the *Negative Effect Cycle* which tends to lead to the dieter adopting a harsher diet plan to compensate for the binge (Craighead & Allen, 1996).

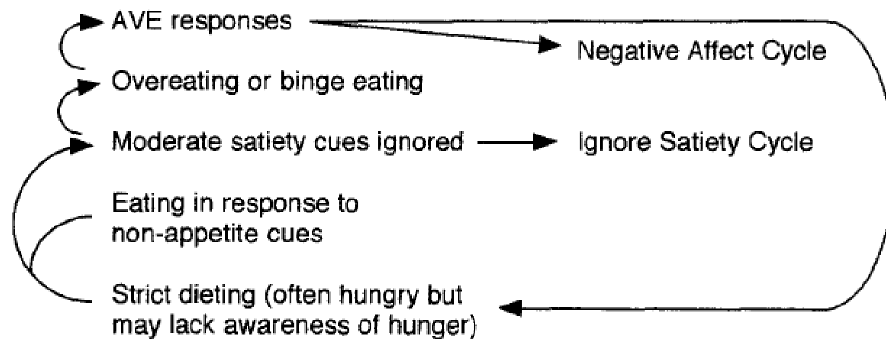

Figure 1: The dieting cycle (Craighead & Allen, 1996, p. 257).

The negative effect cycle. This particular cycle serves as an immediate, but temporary relief and "reinforces food as a coping response for negative affect" *(*Craighead & Allen, 1996, p. 257). This cycle is explained in Figure 2.

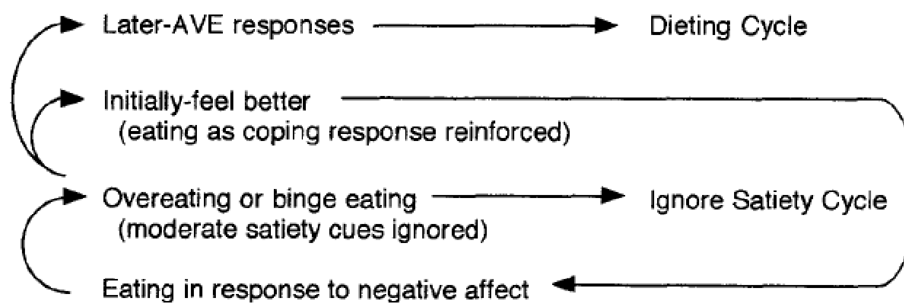

Figure 2: The negative affect cycle. (Craighead & Allen, 1996, p. 257).

Unsurprisingly, as the dieting and negative affect cycles are repeated, the ***ignore satiety cycle*** develops (see Figure 3). Another origin of the ignore satiety cycle arises from environmental cues, such as regimented meal times which may not coincide with hunger, leading to a situation where people are conditioned to eat at certain times irrespective of hunger, and this requires them to ignore satiety.

The ignore satiety cycle. As binge eaters' sensitivity to satiety cues weakens, they arrive at a point where they will only stop eating when these signals become quite strong and manifests as the discomfort associated with overeating. This is the AVE Effect which is when the initial satiety cues are ignored and the binge eater will only stop eating in the presence of an environmental factor (such as an empty plate) or when discomfort sets in as a result of overeating (Craighead & Allen, 1996).

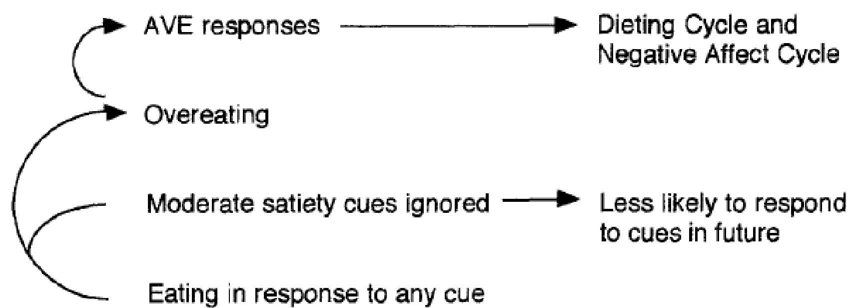

Figure 3: The Ignore Satiety Cycle (Craighead & Allen, 1996, p. 258).

According to Craighead & Allen (1996), these cycles can be broken through appetite awareness training which helps binge eaters to identify satiety cues so that they can prevent binge eating.

While the boundary model and the dysregulation model that followed it, mainly explains Bulimia Nervosa (Fairburn et al. 1993), its explanatory ability falls short in that it does not adequately explain the eating problems of obese people. For instance, approximately half of the obese people quoted in a study by Spurrell, Wilfley, Tanofsky & Brownell (1997) reported that their first episode of binge-eating preceded their first diet. It therefore suggests that it would be prudent to distinguish between the obese people who have repeated episodes of binge-eating and those who do not and similarly; to distinguish between people who have followed energy restrictive diets and those who have not; in order to fully grasp the essence of the problem.

The externality theory. Another theoretical suggestion is that the personality of the obese person may explain the propensity towards obesity; particularly insofar impulse control is

concerned. The externality theory suggests that obese and overweight people are “external eaters” noting that externality is a personality trait (Boutelle et al., 2014). Obese and overweight people tend to exhibit higher trait impulsiveness and consequently are also more likely to engage in other impulsive behavioural patterns including substance abuse (Chalmers Bowyer & Olenick, 1990). Externality theory holds that obese people tend to display an increased responsiveness (i.e. immediate eating) towards food triggered by external cues including taste, smell and appearance, and that these external cues override internal cues such as satiety, but the theory was subject to intense critique in that with respect to obesity the externality theory did not demonstrate causality nor sufficient universality (Boutelle et al., 2014).

While obese people admittedly do show a greater responsiveness to external food cues, the precursor remains unclear insofar as uncertainty remains on whether the heightened response to external food cues determines the onset of obesity or whether the obesity causes the heightened sensitivity to external food cues (Braet & Van Strien, 1997).

Following from the notion that a person’s reaction to external stimuli, such as food, is learned behaviour, it follows that this behaviour can be unlearned through conditioning. Boutelle et al. (2014) seeks to inhibit the response to external sensory stimuli by altering response behaviour to respond more effectively to hunger and satiety, resulting in fewer tendencies to overeat.

To achieve this, the authors developed two different treatments, targeting obese children. Firstly, the “Children’s Appetite Awareness” training sought to strengthen their sensitivity to hunger and satiety cues which would allow them to improve their eating habits. Secondly, the “Cue Exposure Treatment” targeted the eating behaviour of children when they have already reached a moderate level of satiety (Boutelle et al., 2014). In this case the treatment sought to decrease the children’s reaction to hunger cues so that they could reduce their food consumption. The treatments were combined with self-monitoring exercises, parenting assistance, and coping skills training.

Their study showed that children's reaction to hunger and satiety cues could be moderated through effective treatment and education, but more studies need to be done to determine the success rate on adults (Boutelle et al., 2014).

These and similar therapeutic approaches aimed at reducing the responsiveness to external food cues have been successful (Braet & Crombez, 2003). Where hypersensitivity to food cues exist in a patient, it was found that this information bias tends to initiate dysfunctional eating behaviour. Consequently, information processing mechanisms, specifically hypersensitivity to food cues, are now regarded as an alternative explanation for obese children's inability to resist external food cues.

The learning theory. In contrast, learning theories of behaviour posit that the immediate enjoyment and satiety impacts the eating behaviour and tend to override long term; often with the negative consequences of weight gain. In other words, obese people have learned bad eating habits (Ferster, Nurenburger & Levitt, 1962). This theory explains why bad eating habits persist despite the obese person fully appreciating the long term negative consequences. Further, the theory also notes that people tend to eat more, out of habit, when emotionally distressed (as a learned response), and when distracted (e.g. eating while watching television).

One response to absent-minded eating (O'Reilly et al., 2014) is to introduce mindful eating in that mindfulness "as a quality of consciousness that is characterised by optimally attending to one's moment-by-moment experiences, thoughts, and emotions with an open and non-judgmental approach" (O'Reilly et al., 2014, p. 2), can improve emotional and sensory awareness; and as a consequence, could improve self-control. The learning theory goes further to contend that as people eat in different situations, different stimuli become associated with food, forming powerful associations. Hence, the therapeutic approach should seek to reduce the situations as this in turn reduces the associative value of the external stimuli – in other words, unlearning the eating behaviour by unlearning the associations.

Self-regulation exercises, combined with a sharp reduction in the number of eating situations, and focusing on elements such as the development of problem-solving techniques are all elements of weight loss therapy based on the learning approach (Karoly & Kanfer, 1982). While deficiencies in problem-solving ability had been observed in obese children, the learning theory falls short in that it does not distinguish the conditions facilitating the learning of bad eating behaviour from those that do not, and while the learning theory underpins the majority of programmes offered to obese children, the theory itself is still in need of further evaluation and refinement (Wilson, 1994).

The family context is also considered in the onset and development of obesity, particularly in children in that food is often used as a way to reinforce or punish behaviour (Ganley, 1986). Birch (1987) explained that the food used as a reward (typically sweets for children) consequently becomes more attractive in general, (Boakes, Popplewell, & Burton, 1987) whereas the family context also explains other learned eating behaviour such as finishing the food on one's plate, the tolerance of hunger, dealing with frustrations, and resisting food impulses (Johnson & Birch, 1994). In this context, the inability to control eating behaviour is seen as an indicator of a broader behavioural problem, as children who have not learned control over their eating habits may also encounter a general lack of self-control. This in turn implies that any behavioural therapy seeking to overcome this inability to self-regulate may have to address the parenting skills as well. Child obesity can thus be seen as a function of a family pathology (Bruch, 1973).

Additional observations about obese families are that they have weak boundaries between sub-systems and also little autonomy, yet clinical case studies specifically focusing on measuring family interactions are scarce due to the difficulties in observing family interactions (Bruch, 1973). Yet, Banis, Varni, Wallander, & Korsch, (1988) and Mendelson, White & Schlieker, (1995) noted in two spate studies that obese families tend to exhibit less cohesion

and a more authoritarian approach to parenting than non-obese families. Non-obese families tend to favour a more democratic approach to child rearing, while the interactions in obese families are more hostile and parents with obese children are more likely to openly reject them (Bosch, Stradmeijer, & Seidell, 2004). However, these studies are not conclusive as they were mainly cross-sectional. Longitudinal studies are thus required to establish the extent to which a dysfunctional family context (including ineffective parenting) contributes to the onset and development of pathology in the form of eating disorders; particularly obesity (Braet & Van Strien, 1997).

The psycho-symptomatic theory. The psycho-symptomatic theory of obesity suggests that obese people tend to cope with negative feelings, including depressive tendencies, through emotional eating (Wallace, Sheslow & Hassink, 1993), and the reason why obese people eat more than others, is because of the inability to distinguish hunger from emotional arousal. However, Allison & Heshka (1993) found insufficient evidence to sustain this proposition, in that the link between obesity and emotional eating is not strong enough to imply causality.

However, obese people remain exposed to various psychological impacts arising from their obesity given prevailing social attitudes (Braet & Van Strien, 1997; Stunkard & Sobal., 1995) which tend to reject obese people based on their appearance. This, in turn, affects the way obese people relate socially and obese people tend to feel less loved and are more likely to be subjected to teasing and social scorn (Strauss, Smith, Frame & Forehand, 1985). However, research on self-image issues arising from obesity needs further refinement in that these studies do not distinguish between those who are obese and those who are merely overweight; differences attributable to age or gender; and the heterogeneity of samples (Mendelson & White, 1985).

Similarly, the prevailing research is inconclusive as to whether the problems associated with obesity tend to increase linearly or parallel with the increase in weight (Fine, Haley,

Gilbert & Forth, 1993). Also, while the occurrence of childhood and depression is noted (Wallace et al., 1993) this co-morbidity has not been shown to imply causality.

Chapter Conclusion: The Importance of the Traditional Models of Obesity Explained

The four theories that have been discussed, seem to point toward overeating as a result of either the inability to recognise an internal cue (the dieting cycle theory), or responding to the wrong cue (the externality theory), or mistaking the cue for something else and responding inappropriately (the psychosomatic theory) which points to maladaptive responses to mental and physical signals, resulting in problematic eating behaviour. The remedy proposed in all four theories suggests a redirection of the focus of those who are overweight; either through learning to recognise satiety cues, de-emphasizing external stimuli in favor of internal satiety cues, or by recognising the emotional cues and correcting the response. Thus, weight loss, although greatly aided by reduced energy intake and exercise, cannot be sustained in the absence of a psychological intervention that seeks to introduce mindfulness to eating behaviour. Mindfulness is a "quality of consciousness that is characterised by continually attending to one's moment-by-moment experiences, thoughts and emotions with an open, non-judgmental approach (O' Reilly et al., 2014, p. 2). The effective and conscious practice of mindfulness improves emotional and sensory awareness and consequently improves self-control.

Nevertheless, while the introduction of mindfulness in weight loss therapy holds promise, the authors (O'Reilly et al., 2014) point out that it remains a complimentary therapy which needs to be supplemented by those factors that enable an individual to successfully initiate and sustain lifestyle changes. These include self-efficacy, goal oriented behaviour, social support and other motivational factors, incremental and actual goal attainment, and previous behaviour patterns (O'Reilly et al., 2014). Kvalem et al. (2016) identified the ability to self-regulate and control impulsive behaviour, as key factors in maintaining long term weight loss and an

important predictor in the ultimate success of patients who sought bariatric surgery. The author defines self-regulation as having control over the thoughts and focus of attention that ultimately affects one's behaviour. The ability to reflect on one's self, through self-observation and reflection on past behaviour, underpins one's ability to learn from experience and this, with self-efficacy, underpins the self-regulating process. Consistent self-regulation, motivation for change, clear goals and a solid expectation of weight loss, are a few recommendations the authors suggest for making successful lifestyle changes (Kvalem et al., 2016).

Chapter 3: Psychoanalytic Theories of Freud and Jung

Overview of the Chapter

The chapter will focus on psychological theory, and an in-depth discussion of the psychoanalytic approaches as proposed by Freud and Jung will be presented. These two approaches will be contrasted with each other to highlight the differences between Freud and Jung's understanding of the human psyche and how they differed in their view on the manner in which the unconscious translates into conscious behaviour. Both Freud and Jung wrote extensively on the unconscious, yet they differed markedly in their understanding of its function in the psychological process. Where both Freud and Jung agreed on the existence of the personal unconscious, Jung took the concept further by postulating the existence of the collective unconscious. Given the scope of this study, both approaches are relevant in understanding how the complexes, archetypes and symbols of the unconscious contributes to the onset and development of pathology in the form of eating disorders; particularly obesity.

The psychoanalytic theory and its importance explained. On balance, the contemporary theories of obesity converge on the central theme of the importance of self-efficacy in attaining and maintaining weight loss. What the contemporary theories do not explain is why some people, including those facing the disastrous and life threating health consequences of morbid obesity do not respond to the various approaches proposed to enhance self-efficacy. What these theoretical approaches share however, is a focus on conscious behaviour and they all seek to intervene on the conscious level. The psychoanalytic approach presents a departure from the contemporary theories in that these theories suggest that conscious behaviours are largely the product of unconscious drives. Thus, to affect a lasting behavioural change, the roots of the pathological behaviour must be uncovered in the unconscious; a domain in the human psyche that is irrational and symbolic.

The psychoanalytic explanation on why some people do not respond to weight loss therapy, sustainably and in the long term (exceeding one year), would be that there are fundamental issues residing in the unconscious, which if left unaddressed, would consistently result in self-sabotage behaviour despite the best intent of the dieter. Put differently, the self-efficacy, so important in moderating eating behaviour and resulting in healthier lifestyle choices, would not be achieved without an intervention directed at the unconscious. Given the failure of weight loss interventions in achieving long term and sustainable results in the face of very real adverse health consequences for those who do not succeed in losing and keeping the weight off, the theoretical lens adopted by this dissertation is that presented by the psychoanalytic approaches of Freud and Jung; its focus on the unconscious, and given the symbolic nature and expression of the unconscious, the importance of food symbols in uncovering the unconscious drives of pathological eating behaviour.

The process of Freudian psychoanalysis is explained by Spivak (2014), as the excavation of impulses and reactions that were stored as symbols in the unconscious, but connected to an emotion or reaction in the conscious. Psychoanalysis is the tool to translate unconscious symbols back to conscious reactions and emotions, thus reversing the process as the symbol is used to recall or explore the underlying reaction or emotion that resulted in the symbol in the first place (Spivak, 2014).

Through language the patient can put into words what he or she feels. Freud advocated active feeling in the moment to enable the analysis of the impulse to fully understood. The feeling is thus not experienced as an outsider, but it becomes reality for the client and the therapist thus relieves the anxiety of unwillingness to listen to oneself by bringing the unconscious reaction or emotion to the surface (Spivak, 2014).

Spivak (2014) perceives words not only as the carriers of emotion, but also as symbols that are stored for impending reflection or internal exploration. Words thus become the powerful

transferring tool when the client experiences conflicting emotions within. It is as if the symbols overflow, causing unsettling feelings in the unconscious, pushing it through to the conscious, where it can be acknowledged and analysed through psychoanalysis in its active stage. When these emotions have been acknowledged, translated, deconstructed, interpreted, it can be understood. The interpretation of the symbolic meaning in Freudian analysis is aimed at understanding the transference phenomena, the compulsion behind the response as well as the defence reactions that it triggers. The analyst guides the client through exploration of emotions by using countertransference and empathetically tapping into the client's experiences and perceptions of his or her world. Through this, the analyst can experience the event subjectively, but also objectively as the analyst (Spivak, 2014).

The effective result of integration is the reduction of anxiety and the lowering of defences. The fear or negative emotion that has been attached to the symbol is now transformed and once again stored into the unconscious (Spivak 2014).

The psychoanalytic theory: **Freud.**

The Id, ego and superego. Jung's early support of Freud derived from their shared interest in the unconscious. Freud saw the unconscious mind as the epicenter of repressed thoughts and traumatic memories and as the location of hidden sexual desires, which, because they are repressed, leads to neurosis (Freud 1949). Freud proposed that the human psyche comprised three structures; the pleasure principle known as the *id*, which is not bound by morality, but instead seeks to achieve pleasure and forms unconscious energies (mainly sexual); moderated by the *superego* which seeks to moderate the impulses of the *id* into socially acceptable behaviour and the *ego* which comprises our conscious memories and thoughts (Freud, 1949).

Freud argued that the instincts originating in the *id* are the impulses of all behaviour and identified them as Eros (love) and the destructive or death instinct. The purpose of the love instinct is to form connections and to reserve unity through relationships with others. In

contrast, the death instinct seeks to undo connections and unity through destruction. Freud further posited that these two instincts can operate either exclusively from each other, or combine through attraction (Freud, 1949).

The conscious, pre-conscious and unconscious. Freud's view of the human psychological process distinguishes between the conscious, pre-conscious and unconscious (1949). In the conscious domain, one is aware of ideas, but only briefly, while pre-conscious ideas are ideas that are capable of becoming conscious, but are not yet conscious. Unconscious ideas are not easily accessible, but they can be inferred, recognised and explained through analysis (Freud, 1949). Freud held that the unconscious thoughts of the *id* attempted to force their way into consciousness through dreams, which can originate either in the *id* or the *ego.* The dreams are characterised by their strong use of symbolism and are the product of conflict and have the power to either bring up memories the dreamer had forgotten or to bring up impressions which could not have originated from the dreamer's mind. Freud cautioned that what the individual recalls from the dream is only the façade behind which the meaning must be inferred (Freud, 1949).

Freud emphasized that "it is our impulses that are speaking and making us act" (Freud, 1913 p. 73) and discussed the concept of transference as that which "provides the impulse necessary for understanding and translating the language of the unconscious; where it is lacking, the patient does not make the effort or does not listen when we submit our translation to him" (p. 11). Hence, people make meaning of experiences through unconscious translation and transference (Spivak, 2014). Freud perceived the unconscious as a storage mechanism for the frightening and unknown "symptoms of transference" (1913, p. 1064).

Freud noted that the suppression of unconscious thoughts, emotions and memories is the defense mechanism that the ego deploys to protect itself from the real emotions and inner conflict that these events may produce (Meyer, Moore & Viljoen, 2008).

Developmental stages. Freud defined several developmental stages commencing with the oral and anal gratification stages before moving to the more advanced stages (Freud, 1949).

Freud's psychosexual development theory found its early application to the problem of obesity in the work of Hilda Bruch who noted common features in obese children including immaturity, overdependence and a lack of aggressiveness (Bruch, 1939). She suggested that the obese child tends to respond to traumatic experiences such as failure and disappointment by overeating as the "heavy layer of fat is like a wall behind which the child seeks protection against a hostile outside world" (Bruch, 1941, p. 467).

In terms of Freud's developmental stages, childhood obesity was seen as a fixation at the oral stage of psychosexual development as Bychowski (1950) notes: "In surrounding herself with a cushion of fat, she was unconsciously attempting to avoid her mother's wrath-since she was eliminating herself as a rival (Oedipus)-and her father's anger at her potential relations with other men" (p. 327).

Jung rejected Freud's emphasis on the libido as primarily a sexual energy arguing that instead, it was a generalised psychic energy that served as a motivating force for the intellectual development, spirituality and creativity of the individual. In particular, Jung explored the psychic energy as a general life force and motivational source for seeking pleasure and reducing conflict. In this, sexuality is but one manifestation of it, but certainly not the only one. Jung also vehemently disagreed with Freud's Oedipus and Electra theories instead arguing that the early relationship between mother and child was based on the love and protection afforded by the mother to the child, an idea which was later further developed by Bowlby and Ainsworth in attachment theory and internal models (Ainsworth & Bowlby, 1991; Bretherton, 1992).

Skubal (2013) in her presentation of the psychodynamics of food and its consumption notes that the act of eating is essentially an individual act, whether done in solitude or in a social context. Even in a social context most people still eat their individual portions together, but

separately in that they each use their own plates. The fact remains that whether food consumption is done in isolation or in identifying and boding with others in a social context, eating remains a life-affirming act.

Skubal (2013) notes that our first and last Eros remains oral, and in contrast to Freud, quotes psychoanalytic psychologist Karl Abrahams who asserts that the psychological phenomena connected to the genital zone is not as primary as those connected with the oral zone. Skubal takes this concept further by noting that the consideration of orality must confront both the divided nature of eating (isolated or social) in addition to its doubled nature in that the mouth is both a locus of need and a satisfier of desire (Skubal, 2013). In that, the mouth becomes the recurring site of lack (hunger) and loss (the experience of being weaned) as well as the place of pleasurable and sustainable recompense (nurture and nutrition) (Skubal, 2013). The dual nature of the mouth lies in it being both the place of ingestion and utterance. The mouth also becomes bilingual in that it speaks both the language of the father and mother. According to the creation myth of the Bible, in the beginning was the word, while for Freud, the beginning starts with a deed; food nourishes the body, but it also has meaning – and we remain with these mouths that can commit miracles or mayhem in both word and deed (Skubal, 2013).

Skubal (2013) presents an analysis that starts with the trinity of human identity, memory and mother and describes how these are defined by the oral – in particular the oral bond that forms in infancy. Most of human existence starts with a simple script, notes Skubal (2013) as babies are born and take in the universe. She notes that to know biblically is to know sexually, but to know physically is to know orally (Skubal, 2013). Therefore, the first months of an infant's life is defined around its dependence on its mother for nourishment, through its mouth – human life. Skubal notes that nourishment / human life only occurs in the presence of another,which is either the breast or a surrogate. This makes the infant's life conditional upon the presence of the other, even before the infant's sight has developed fully and through its

rooting reflex, the infant instinctively knows which way to turn to find the breast (Skubal, 2013).

In this paradigm, the connection is the breast and the mouth, not only as a condition for physical survival, but upon this biological imperative the basis for all human connectedness is created (Skubal, 2013). Echoing the concept, British psychoanalyst John Bowlby further notes that the body intimacy that develops in the feeding embrace not only elicits a first, radical knowledge, but becomes the basis for the entire psychological and physiological development of the infant. He also describes the range of components, implications and conditions for initiating and maintaining this infant-mother bond in his work on attachment (Skubal, 2013). Bowlby further notes that it is the quality of this bond that is the most crucial for developing and maintaining the psychological health and resilience of the individual throughout life (Skubal, 2013.) This concept is also extensively echoed in the work of Hilde Bruch (1941) who noted that the conditions facilitating the development of obesity in children relate to a disturbance in this primal bond and a consequent lack of nurture (Bruch, 1941).

Skubal (2013) proceeds from the ego-identity and presents the oral in the context of cultural identity and assimilation in eating. She defines disordered eating simply; as eating too much or too little, or to mean idiosyncratic eating habits such as restricting oneself to one food group only. She also notes that the entire range of classification of eating disorders rests on a simple premise; that eating, like other culturally controlled acts, need to be ordered (Skubal, 2013). Skubal is quick to point out that the range of order is subject to changes in culture – what we define as binge eating and *bulimia* today was in fact the very epitome of cultured and polite society in ancient Rome when no civilized household would be found without a *vomitorium* – the place where guests would literally purge themselves after episodes of binge-eating (a common feature of the Roman banquet), only to repeat the cycle again (Allen, 2003).

According to Skubal (2013), the modern obsession with obesity arises from the ideal body weight norms promoted by insurance companies and this obsession with the ideal body presents as a type of hyper-order in that it seeks control of appetite, weight, and ultimately the body itself (Skubal, 2013). However, as can be seen in the work of Bynum (1987), disordered eating is not new with poets and historians of the ancient past noting cases of refusal to eat as aberrant, and gluttony as the first of the seven deadly sins (Skubal, 2013) long before eating disorders became the subject of medical and sociological enquiry. Nonetheless, Skubal (2013) cautions that in this context of cultural change, when writing about eating disorders, one must distinguish between the prevailing cultural cult of thinness – the anorexic ideal as Campos (2004) terms it. Skubal (2013) notes that in terms of pounds and inches, given this anorexic ideal, it is harder now than at any other time in history to be considering eating disorders on the anorexic side of the scale (Skubal, 2013), although the reverse may well be true on the "overweight" or obesity side of the spectrum as Klein (1996) notes. Given the almost universal drive to leanness that dominates popular culture, the ordered dieting, even fasting girl "merely impersonates the pathological" (Skubal, 2013, p. 69). Skubal (2013) notes that several studies have similarities in the origins of both obesity and its opposite; *anorexia nervosa*. For example, women, in particular, are more likely to succumb to eating disorders due to their proximity to food production, preparation and consumption which trace in turn the effects of a patriarchal and objectifying culture that has "shaped and shocked and shamed the female body into girdles and fat farms and frailty" (Skubal, 2013, p. 70). These concepts are explored further in the narrative literature review contained in Chapter 5.

The unconscious and neuroscience. Insofar as the contribution of the psychoanalytic approach to the treatment of obesity is concerned, Bruch (1961) noted some limitations in that the approach is built on the theory of drives, particularly as far as Freud is concerned and while "psychoanalytic concepts has helped to clarify the psychodynamics of disturbed eating

behaviour and the symbolic significance of food and body size, they were not effective in therapeutic applications" (Bruch, 1961, p. 53)

Despite these misgivings, the idea of the unconscious has found support in neuroscience which confirmed the existence of unconscious mental processing (Phelps & Le Doux, 2005) and unconscious memory processing following brain injury (Bryant, 2001). Similarly, it was found that irrational fear responses and other abnormal behavioural patterns are based in the bypassing of the hippocampus, which contains conscious memory (Phillips and Le Doux, 1992). As the hippocampus is bypassed, the conscious cortex is connected to the primitive brain structures thus triggering unconscious memories of early trauma (Phillips and Le Doux, 1992), thus supporting Freud's contention that neurosis originate in the traumas of childhood.

The unconscious, neuroscience and obesity. Applied to the problem of obesity, Gunstadt et al. (2006) showed that the tendency towards obesity originates in the early maladaptive programming of the brain linking to Freud's theory that the *id* is not ruled by the reality principle, but rather the pleasure principle and that this is the factor that renders rational and conscious decisions to make the lifestyle changes necessary to combat obesity ineffective over the long run, for the simple reason that obesity is not seen as a problem by the *id* which is ruled by the pleasure principle. It is this particular instinctual and unconscious pleasure seeking behaviour of the *id,* further supported by the endogenous neurological pathways for addiction including the edocannabinoid system (Kirkham & Tucci, 2006) that conspire to completely overrule the conscious efforts of those seeking to overcome obesity to implement the necessary lifestyle changes consistently. It continues to provoke the wishful thinking, denial and illusions that so often present in obese people as they seek to rationalise their behaviour. While psychoactive medication presents much promise in the treatment of obesity, the moderation of the neurochemical pleasure-seeking systems must be combined with a therapeutic intervention that draws from the lessons of psychoanalysis as these may help in unearthing early trauma,

complexes, fears, anxiety, and unconscious conflicts which determine the specific pathways to seeking pleasure and sustains the pathology underlying obesity.

The research that is available shows that there are a vast number of factors that need to be considered when looking at obesity and addressing the coalescing eating behaviour. The theories of obesity discussed in chapter two, offered different methods that could be implemented to improve lifestyle and reduce obesity, but many if not all of these programmes have to be used in conjunction with other programmes to gain results.

The psychoanalytic theory: Jung.

The theory of the transcendent function. Jung believed that conflict arises when two opposite tensions have equally strong motives. The ego and the unconscious is a battle between two forces, both refusing to surrender. The result of the stagnant situation is the rise of a third force that Jung called the transcendent function. Transcendent function is a tension between the conscious and the unconscious that works towards unification through exploration and integration of new directions to produce a whole new insight, resulting in a deeper sense of self (Miller, 2004).

Jung's transcendent function results through the purposive unconscious. Jung believed that the ultimate achievement of human self-realisation, which he called *individuation,* could only happen through the transcendent function (Jung, 1969, p. 275). Jung marked the activation of the transcendent function as a sign of progression towards maturity and the unity of the self (Miller, 2004).

Jung believed that symbols were created by the "fantasy-producing activity of the psyche" (p. 4) and that it served as a bridge between the conscious and unconscious in order to achieve integration and new direction. The symbol for Jung was not a compromise that was reached between the conscious and the unconscious, or a combination of ideas that has been integrated, but rather a new perspective or as Jung explains it, a "living, third thing…. a living birth that

leads to a new level of being, a new situation" (1960, p. 90), and as such the symbol is the facilitator that reconciles psychological opposites.

These symbols seep through to the conscious through dreams and by recognising these symbols and learning to understand the significance of it in our lives, we achieve differentiation and detachment by treating our thoughts as objects and separating them from the emotion that is triggering the thought. The detachment allows for the reconciliation of opposites and if not achieved, Jung warned that the self was at risk of dissolution into counter partial sets (Drenth, 2016). To remove the tension arising from the two opposing forces, Jung advocated the separation of awareness itself from the contents of awareness. The libido for example, is a form of tension or energy that could be removed to ease the process emerging into the unconsciousness to explore the symbols, images and fantasies that seep through to the conscious. The symbol thus serves as a common channel through which the two opposing forces can flow in order to find common ground to create a new alternative (Drenth, 2016).

Jung proposed active imagination to activate the psyche "through an image or a chain of images and their related associations" (Schaverien, 2005, p. 128) to bring unconscious thoughts or issues to the conscious. According to Schaverien (2005) the activation can only take place if there is a psychological split where the one part of the personality surrenders to and explores the fantasy (irrationality) and experiences the fantasy of the waking dream, whilst the other part of the personality observes the process (rationality) (Schaverien 2005). Jung explains that active imagination evokes archetypical material and relates to the collective unconscious.

Schaverien (2005) suggests methods to generate active imagination, which includes creative expression such as dance movement therapy, sand play and music to initiate the process of active imagination revealed as visualised imagery in both waking and sleeping dreams. In turn, it enables the understanding of both the patient's will to change and their resistance to change. The waking dream differs from a sleeping dream in that the consciousness

is lowered intentionally to allow images to seep through to the consciousness. These events or images then appear in the consciousness as if it is reality. Schaverien (2005) describes this form of active imagination as a "lived experience" in which "the image generates psychological movement whilst the ego is held in a suspended state" (p.131).

Bachelard (1964) explains the concept of active imagination as an integral part of psychoanalysis, because it sets the client in motion, to move from the familiar to the unfamiliar and allows the client to embark on the exploratory road of fantasy by breaking the chains of the self and reality. The initial activation of active imagination is triggered by the therapist and used as a lens to explore the actual and illusory characteristics of the client, as well as certain patterns that manifest and feature in the patient's life. The therapist in turn can recognise presenting archetypal information and also interpret and analyse the relevance of the hidden mythology attached to the client's experience or imagery to help with the process of transference and understanding of the client's complexes (Bachelard, 1964).

Jung's perceptions of the conscious and unconscious. The similarities between Freud and Jung are found in their agreement that the human psyche consists of separate, but interacting systems, the main ones being the ego, the personal unconscious and the collective unconscious, and like Freud, Jung (1971) also emphasized the importance of the personal unconscious in the development of personality. Jung diverted from using Freud's concepts of the id, ego and the superego and also distanced himself from Freud's sexual theory. Jung felt that the deep unconscious forces were revealed through mysticism, dreams and religious beliefs as a means of conscious expression (Jung, 1971).

To Jung, the ego represented the *conscious mind* including the thoughts, memories and emotional content the individual is aware of, and as such, the ego enables identity and continuity. The *unconscious* for Jung consisted of two layers; the first, the *personal unconscious* (Jung, 1936) is essentially similar to Freud's concept of the unconscious which

describes it as consisting of temporarily forgotten information and repressed memories, but Jung added the concept of *complexes* to the personal unconscious. Jung (1936) saw complexes as a collection of thoughts, emotions and memories focused on a single concept, and proposed that the more elements are attached to the complex, the greater its influence on the individual. Jung further argued that the personal unconscious was much nearer to the surface (conscious) than Freud suggested (Jung, 1961).

(The concept of the conscious and unconscious is illustrated in Appendix A.)

The concept of Jung's complexes explained. Sharp (2001) illustrated the concept of complexes using the analogy of a boarding house in which different personalities cohabit, but generally do not interact much – until confrontation arises between them. As the peace and harmony in the boarding house is disturbed, the dynamics between the boarders manifest. Sharp (2001) describes complexes as "the building blocks of the psyche' (p. 9) but sees them as neither negative nor positive forces, but merely existing. Yet, as these complexes activate our emotional responses to any given situation, they have a powerful impact on our lives. The triggered complex causes us to impulsively react out of the ordinary and consequently cloud our rational judgement. The power of complexes can become so intense that it can manifest as physical symptoms, such as heart palpitations, digestive disorders or as respiratory problems.

Sharp (2001) explains that as complexes are engrained in our existence, separation from them is impossible, and consequently they need to be recognised and understood to better control their impact on the human psyche. Jung's complexes echo Freud's theory of memories stored as symbols in the unconscious that triggers responses or reactions in the conscious.

While both Freud and Jung agreed that a person's behaviour is determined largely by past and childhood experiences, Jung included future aspirations as a determinant of behaviour. Jung also posited that the personal unconscious is much nearer to the surface than what Freud

suggested and consequently Jungian therapy is less concerned with repressed childhood memories, and more focused on the present and future, which Jung believed to be the key to both the analysis of neurosis and its subsequent treatment.

The collective unconscious and archetypes. The most marked difference between Jung's unconscious and the version put forward by Freud, was Jung's addition of the concept of *the collective unconscious* or transpersonal unconscious which he described as the level of consciousness shared with other people as it comprised latent memories of our ancestral and evolutionary past. Arguing that "the form of the world into which [a person] is born is already inborn in him, as a virtual image" (Jung, 1953, p. 188) the human mind has innate characteristics such as the fear of spiders or the dark, as a result of our early evolution. This insight led to Jung's development of the archetypes as he argued that some aspects of the collective unconscious developed into separate sub-systems of the human personality. Consequently, these ancestral memories and images (the archetypes) have universal meanings across cultures and evidence of their existence tends to show up in very similar symbols in dreams, literature, art and religion across the world (Jung, 1947).

Given this basis, Jung concluded that humanity's primitive past – as contained by the archetypes - are the basis of the human psyche, which influences and directs human behaviour. Jung identified several archetypes including the *persona (or mask)* as the outward face of conformity we present to the world, but which also conceals those aspects of our real self which are non-conforming and thus not presented publicly (Jung, 1947).

Archetype: anima & animus. The *anima / animus* as the mirror image of the biological gender is the unconscious femininity in males and the unconscious masculinity in females and developed as a result of men and women cohabiting for millennia. Jung particularly focused on the *anima / animus* arguing that as men were discouraged from expressing their feminine tendencies and women their masculine tendencies, the development of both male and female

in Western society was fundamentally undermined. Going further, Jung proposed that the patriarchal nature of Western society devalued the feminine qualities altogether and that in an overly conformist world, the predominance of the persona / mask has elevated insincerity to an unquestioned way of life as people became even more alienated from their instinctual selves (Jung, 1947).

Jung's theory of the archetypical anima & animus applied to obesity. Applied to obesity, Marion Goodman (1980) notes that women in reaction to a male-dominated society and culture sought to fit in by adopting male characteristics including competiveness and goal oriented behaviour – thus emphasizing the masculine *animus*, and failing to feed their unconscious feminine principle, the *anima.* When the forces of the anima and animus are no longer in balance, pathology follows, and in the case of women, the unconscious femininity manifests in somatic form either as the devourer of the anorexic or as the obese using the image of the Great Goddess. Goodman (1980) contends that only by loving the goddess lost within her own rejected body can a woman hear her authentic voice and deal with the symptoms of anorexia and obesity (Goodman, 1980).

Archetype: the shadow. The *shadow* is Jung's iteration of Freud's concept of the *id* in that it represents the animal spirits driving both the creative and destructive energies in the human psyche while the *self* provides the individual with a sense of unity in experience. For Jung, the ultimate aim of development was the achievement of a state of selfhood and argued that many of the societal problems he saw arising from the Cold War era as deriving from "man's progressive alienation from his instinctual foundation," (Jung, 1957, p. 557).

The Relationship between Archetypes and complexes explained. To connect the concept of archetypes with complexes, Sharp (2001) explained that an archetype is at the core of any personal complex. For instance, the archetype of the mother can either symbolise nurturing or security or the archetype of the mother can realise as possessiveness or negligence. With Jung's

discovery of the archetypes, he nullified the theory of people being “born into the world *tabula rasa*, a blank slate waiting to be writ upon by life” (Sharp, 2001, p. 13). As complexes, archetypes cannot manifest as a being or a definite object, but through mythology and many mythical tales and it has been described and presented as a force with many different faces. Sharp (2001) defines an archetype as a “primordial, structural element of the human psyche” (p. 14). Behaviour is a universal phenomenon, to create ideas and images are also a universal phenomenon. Instincts are the physical equivalents of archetypes and complexes are the personal reaction to an archetypal image. Sharp (2001) advocates the personal responsibility of each person to become aware of their complexes and manifestations in everyday life.

When conflict arises, there is a distortion between the conscious and the unconscious. More often than not, a rising conflict is not an external cause, but rather a trigger that activates a complex in the unconscious. Conflict that arises is thus often not external triggers but rather unconscious triggers that can manifest as projection onto the person toward which the conflicting emotions are directed. In other words, a person dislikes a certain personality trait, characteristic or behaviour of another person; it is merely a reaction to one of our own personal complexes of the unconscious which is causing a response in the conscious (Sharp, 2001). Freud believed that these responses could best be dealt with if they are activated in the therapeutic session. This also coincides with Jung’s theory, in that he believes that complexes cannot be brought to the conscious intentionally and can thus only be recognised in a conflict situation. Sharp (2001) brands conflict as the “hallmark of neurosis” (p. 38). He describes it as conflicting poles of obligations and desires and however some conflict can be good, in order to self-explore and to self-realise and can act as force for change. However, conflict becomes neurotic when it overtakes other facets of one’s life or physically and mentally overwhelms the person.

The idea of archetypes was not well received by the Freudian camp with Freud's biographer Ernest Jones noting that Jung "descended into a pseudo-philosophy out of which he never emerged (Evans, 1964), but the recurrence of mythological symbols in both contemporary culture and personal therapy suggests that Jung's archetypes may indeed reflect an innate cultural residue and ideas that once had survival value in the evolutionary context. Jung's work presented important ideas to the development of personality theory in that he was the first to distinguish the two main orientations of personality (introverted and extroverted) and also identified the four basic functions (thinking, feeling, sensing and intuiting) which, in a cross classification, presented the eight major personality types subsequently developed further by Cattell's sixteen factor personality theory (1963), Eysenck (Parish, 1965) and Myers-Briggs Type Indicator (Kaplan and Saccuzzo, 2009).

The public break between the two followed Jung's public criticism of Freud's theory on the Oedipus complex and his emphasis on infantile sexuality (Jung, Freud, & McGuire, 1995). Freud proposed that the main motivational force from which both human behaviour and pathology derived, was repressed and expressed through sexuality, which Freud explained in his theories on psychosexual development, notably as the *Oedipus* and *Electra* complexes. In the case of male children, Freud proposed that they have strong sexual desires for their mothers and resent their fathers; it is also during this developmental stage that the male children develop castration anxiety – the fear that their fathers will remove their penises as punishment for desiring the mother (Jung et al., 1995). The converse, the Electra complex, develops somewhat differently. It starts out with penis envy as the female child desires to have sexual relations with the mother, but realises she cannot do so in the absence of the penis. Consequently, she envies and desires the father's penis, which then progresses toward a sexual desire for the father and a resentment of the mother. Freud argued that these hidden desires would be repressed, but

anxiety and defense mechanisms would later testify to their continued presence in the form of neurosis (Jung et al., 1995).

Freud and Jung's perceptions of dreams. To Freud, dreams were the link to the unconscious; but to Jung, it was rather the phenomenon of the complexes that initiated not only dreams, but also symptoms (Sharp 2001). According to Bachelard (1964) dreams are not a form of active imagination per se, but rather act as a converter to activate the imagination. Freud regarded dreams as a "wish-fulfilling and sleep-preserving function" (Sharp, 2001, P. 76). Freud distinguished between two kinds of dreams, the complex dream which entailed metaphorical dreams which was revealed through symbols (Freud, 1913). This type of dream coincided with Jung's understanding of the dream with "great vision, big, meaningful and of collective importance" which he regarded as extremely symbolic (Jung, 1928, p. 4). The other type of dream was named by Freud as the simple dream that might consist of events that happened during the day and do not carry many symbols. It is thus merely residue of a specific event that took place during the day (Freud, 1913). The simple dream also coincides with Jung's "ordinary small dream" and can be explained as the shallow dream with little or no symbolism (Jung, 1928). Jung regarded dreams self-regulatory signs from the unconscious that acts independently and spontaneously. Dreams are simply live commentary from the unconscious to digest life events. For Jung, the main purpose of dreams was to "compensate conscious attitudes – to call attention to different points of view – in order to produce an adjustment in the ego-personality" (Sharp, 2001, p. 76). Sharp (2001) describes the process of compensation as a harmonising measure between the forces of the unconscious and the conscious, in order to reach accordance and win support from the conscious.

According to Jung (1963), the solution to conflict that the client might be experiencing in his or her life, might be revealed through symbols in the client's dreams. Thus, the dream reveals information to the consciousness in order to restore equilibrium in the psyche.

Unlike Freud, Jung did not attempt to determine the concealed meaning of dreams; he treated dreams as the “facts of the psyche” and rather attempted to associate the dreams with archetypes and personal context (Jung, 1934, p. 404). Schaverien (2005) warned that not every dream can be interpreted as active imagination that seeped through from the unconscious. Material can arise from the unconscious, but it is up to the patient to be willing to investigate or explore the symbols that arise. If the client simply prefers to ignore or dismiss the ascended material, it returns to the unconscious and remains in hibernation. Even in the therapeutic setting, the therapist might show interest in a certain dream, but the client might be unwilling to explore the dream. Without the client’s willingness to relate to the dream, transference is impossible (Schaverien, 2005). When the client refuses to acknowledge the ascended symbols from the unconscious, leaving it to hibernate; the unconscious intensifies the dreams and the dreams become repetitive as if the unconscious wants the material to be acknowledged in the conscious. When dreams are then noted in the conscious, it becomes weaker and less frequent (Jung, 1936).

Chapter Conclusion

By looking at the psychoanalytic theories of Freud and Jung, it became evident that the complexes of the unconscious and the willingness of the conscious to change thus play a vital role in the success of any weight loss or change intervention.

The symbolism and its rich array of information that is hidden in the unconscious will be explored in the following chapters to determine the path from the unconscious complexes to the transcendence of the conscious.

Chapter 4: Research Methodology

Overview of the Chapter

In this chapter, the methodology of the research is explained. The context of the research is elaborated on initially, followed by the problem formulation and reason for undertaking the study. The aim and objectives are clearly defined, as well as the implications of the study. The research method and procedure is discussed and finally, the concluding remarks are presented.

Context of the Research

The study focuses on the core concept of obesity. Obesity is defined as both a state (BMI of +30) and as health risk factor (a precursor to hypertension, diabetes, heart disease etc.). As such, the health approach to obesity is to manage it as a risk factor, and to reduce it as a preventative strategy for the more serious diseases that follow obesity. The dietetics and exercise approaches would fall into this category as would the health research dealing with physical factors which places some people more at risk of obesity than others (such as glucose resistance, and metabolic rate) to address these to alter the health risk profile (tendency to become obese) and the subsequent outcome (obesity).

The behavioural sciences tend to treat obesity similarly as a state, but one that is the outcome of sub-optimal behaviour which needs to be changed (the behaviourist approach), or as a natural outcome of the obese person's unconstrained free will in choosing to persist in sub-optimal eating behaviours (the humanistic approach) or as a lack of understanding between the cause (the eating behaviour) and the effect (obesity and the diseases that follow in its wake) as the cognitive theorists would suggest.

None of these approaches define obesity as a disease and consequently it is not classified in the Diagnostic and Statistical Manual for mental disorders (DSM) as a pathology in itself, but the behaviours leading to the outcome of the obesity is covered.

The remedies suggested by the approaches illustrated above, lead from how they define obesity – as a health risk factor in the physical sense it needs to be reduced, and the exercise and nutritional regimes serve this purpose. If maintained, weight is lost and obesity is reversed, thus reducing the health risks associated with it.

If the behaviour of sub-optimal eating patterns and sedentary lifestyles are changed through behavioural conditioning, the behaviour changes, and therefore the result (obesity) changes. Similarly, if free will is constrained to exclude self-damaging choices, more optimal eating and exercise follow, thus reducing the obesity (consequence of the choice) in the humanist tradition. Similarly, in the cognitive tradition if the causality of the eating and sedentary behaviour is understood, it follows that empowered with this understanding the currently obese person will be cognitively empowered to modify the behaviour leading to obesity and in doing so, the effect (obesity) will reverse.

The literature on obesity presented in chapter two offers these approaches to obesity and concurs that all of them produce the desired weight loss – if sustained. As such the merits of the current approaches to obesity are not questioned insofar they produce the desired results.

The central problem of the research is not the reversal of obesity, but that the results are not sustained over the long run; the literature shows that only 2-5% of obese patients sustain their weight loss which then introduces the question, of why so many – knowing the causes, risks and effects of obesity – relapse into self-defeating patterns of behaviour and the resulting obesity. In seeking to understand the cause of these relapses, the study's second main concept is its theoretical lens, that of psychoanalysis. All of the approaches above focus on conscious behaviour, but the psychoanalytic frameworks specifically focus on the unconscious, which is explored to uncover whether the inability to sustain weight loss over the long term and the tendency to revert to sub-optimal health behaviour despite the known health and social consequences are to be found there. Unconscious content is symbolic – the symbolic meaning

of food in both the individual unconscious as it is informed by the individual psyche, traumas and past experience, and the collective unconscious (introduced by Jung) as it expresses over time in different historical and cultural and religious contexts. This unconscious and symbolic meaning of food is explored through the narrative, in which the participants are stories, given the ethical constraints on the study, which precludes the use of real subjects.

Problem Formulation and Motivation

The aim of the study was to explore the symbolic meaning of food, its influence on conscious behaviour and how it developed through history and across cultures in order to discover the root of obesity as seen through a psychoanalytic lens. As the psychological impact of these symbols become part of the unconscious narrative, it influences consumption patterns and food (and nutritional) choices. If the unconscious meaning of food symbols can be made conscious, we will understand why some become obese and others not.

In seeking to explain the underlying contributors to pathological eating behaviours – specifically obesity, the study sought answers in the contemporary psychological theories including the externality, psychosomatic and dysregulation theories of obesity. The core focus of the study was embedded in the psychoanalytic approaches of Freud and Jung, which sought to understand the human psyche and the influence of the unconscious on conscious behaviour. Both Freud and Jung's approaches were explored to understand how the complexes, archetypes and symbols of the unconscious result in the pathological manifestation of eating disorders, particularly obesity.

The psychoanalytic lens presents an extensive analysis of the unconscious which forms a central part of the theory; the reason for choosing both Freudian and Jungian theories as the original contributions to psychoanalysis lends well to the purpose of the study. Both wrote extensively of symbols of the unconscious, yet they differed markedly in their understanding of their function in the psychological process. However, both approaches remain relevant in

understanding how the complexes, archetypes and symbols of the unconscious contribute to the onset and development of pathology in the form of eating disorders; particularly obesity. No such narrative literature review has been performed up to present and by underlining the symbolic meaning of food and its influence on conscious behaviour, it might result in vital information that could contribute to the solving of the worldwide obesity pandemic. The research may contribute to further studies to find effective solutions of long-term sustained weight loss. Therefore, the research question the review aims to address is: What is the linkage between food symbols and the dietary behaviour leading to obesity? The research explored the symbolic meaning of food, its influence on conscious behaviour and how it developed through history and across cultures in order to discover the root of obesity as seen through a psychoanalytic lens.

Method

The study was conducted by means of a narrative literature review. Reviews, in general provide a synthesis of available literature on a specific topic and is therefore valuable in health and clinical research when new studies are designed (Ferrari, 2015). With literature reviews, there are two broadly distinctive methods available to conduct a review, the first is a systematic review done according to specific guidelines that should be adhered to, which is often referred to as “PRISMA: Preferred Reporting Items of Systematic Reviews and Meta-Analyses” (Ferrari, 2015, p. 230). Schlosser Wendt, & Sigafoos, (2007) also advised the application of clearly formulated procedures during a systematic review, in order to achieve outstanding results and to prevent bias. The strength of a systematic review is that it aims to produce a new or improved conclusion, through clarifying and finding clarity on a particular topic (Ferrari, 2015). The limitations of a systematic literature review is the risk of several biases, such as single study biases where particular studies lack in effective selection processes, assessment or quantity value, or publication biases which determines the publication of research on whether

it was successful or unsuccessful (Ferrari, 2015). Also, the collection method for systematic literature reviews can become complicated, if results are not sufficiently noted (Ferrari, 2015).

With the second type of literature review, which is called the narrative literature review, it critiques and summarises a particular set of literature that is based on a specific topic and draws conclusions on the researched topic (Cronin, Ryan & Coughlan, 2008). The greater part of a narrative literature review consists of knowledge that has been accumulated from relevant studies, concerning the specific topic. Although the selection of information is selective, on the grounds of relevancy the criteria that was used to select the information, is often not disclosed to the reader (Cronin et al., 2008; Ferrari, 2015). A narrative literature review serves a "bridging function" and often "address(es) large and complex areas involving multiple issues—frequently being designed to provide a map of research in the relevant field" (Hammersley, 2001, p. 544). Narrative literature reviews can address more than one question and tends to be subjective. The subjectivity of a narrative literature review is often referred to as the main weakness, as it leads to biases. With the risk of biases and subjectivity in mind, it is important to note that narrative literature research entails an historical aspect for example, contributes a unique feature, in that it is able to track "the development of a scientific principle or clinical concept, as in fact, the narrative thread could be lost in the restrictive rules of a systematic review; some issues require the wider scoping of a narrative review" (Ferrari, 2015, p. 231). These different elements of the narrative was the main motivation for using the narrative review method for this particular dissertation. Narrative reviews are also useful in that they can be used to assemble many pieces of information or a broad perspective of a particular topic, into a readable format (Green, Johnson & Adams, 2006).

In order to present a thorough narrative literature review, certain steps had to be followed to reach the required conclusions. As the stipulated steps of a narrative literature research is limited, the author borrowed some steps from the systematic literature research procedures, in

order to enhance the quality of the dissertation and to reduce bias (Rumrill & Fitzgerald, 2001). Green and associates (2006) as well as Ferrari (2015), advised that narrative literature reviews can benefit from applying some of the methodological steps borrowed from a systematic theory. In order to minimise bias and to improve the quality of a narrative literature review, some of the systematic literature review methodology techniques are utilised, such as using a "specific bibliographic research strategy" (Ferrari, 2015, p. 230). A narrative literature review thus also entails identification, collation and analysis of available research on a specific topic. According to Rumrill & Fitzgerald (2001), the only steps required for a narrative literature study is the following:

a. Identify a research area
b. Identify inclusion criteria for studies,
c. Select studies that meet the inclusion criteria,
d. Identify themes that emerge from the set of studies, and;
e. Draw conclusions (Rumrill & Fitzgerald, 2001, p. 165).

To answer a specific research question, key concepts are used in order to collect and assimilate relevant findings. A narrative literature review allows for discussion and evaluation of key concepts in relation to the research question (Ferrari, 2015). This is an important characteristic of this particular type of research as it can add a different or new dimension of insight or presentation of information that is not available in current literature (Rumrill & Fitzgerald, 2001) and "provoke thought and controversy" (Green et al., 2006, p. 103), that would have otherwise been impossible with a systematic review. For this reason the author decided to include the following steps, which includes all the steps of Rumrill and his associates (2001), with the addition of more detailed steps which were borrowed from a systematic review, in order to enrich the quality of the narrative review:

a. Formulate and define the research question.

b. Describe clear aim and objectives.
c. Determine the implications of the study
d. Find and assess research articles.
e. Identify sources of information
f. Determine selection criteria, search terms and delineate information
g. Contextualise the information.
h. Analyse the data
i. Disseminate results
j. Determine reliability and validity
k. Ensure that all ethical considerations are taken into account.

The research was conducted within the context of the theoretical framework of psychoanalysis and the lenses of the unconscious and symbols which is the language of the unconscious. Consequently, the literature selected for the purposes of the study drew extensively from the contributions of the psychoanalytic school, which allowed the author to present a theoretical construct that was used to evaluate the narrative literature contributions.

The expectation was that the narrative literature review would not only present available research on the subject, but also would highlight faulty and under-researched areas (Petticrew & Roberts, 2006). To unveil all issues regarding the research, it was vital that the research question was clearly formulated, as it would produce the desired articles to acquire the correct research information.

The steps as outlined above were implemented as follows:

Formulate and define the research question. Before any research could be done, it was important to formulate the research question in such a way that it clearly states the objectives of the review. The research question reflects the purpose for conducting the study and why

such research is required (Hemingway & Brereton, 2009). The aim and objectives as discussed previously, thus formed the essence of the research question.

The research therefore aimed to explore the symbolic meaning of food, its influence on conscious behaviour and how it developed through history and across cultures in order to discover the root of obesity as seen through a psychoanalytic lens.

The research question that the review aims to address is: What is the link between food symbols and the dietary behaviour of obesity?

Additional questions asked to further guide the research were:

* What are the specific symbols of food of specific cultures and how does it influence the perception of food?

* Are there universal symbols embedded in the collective unconscious and what are the perceptions of these symbols?

Describe clear aim and objectives. The aim of the study was to explore the symbolic meaning of food, its influence on conscious behaviour and how it developed through history and across cultures in order to discover the root of obesity as seen through a psychoanalytic lens.

Research objectives. The following research objectives were implemented, in order to conduct the research:

a. To explore the narratives that have been conveyed through traditions relating to food, in search of the symbolic meaning that are the unconscious root of people's dietary behaviour.
b. To compare food narratives that have emerged over time in order to explore the origins of symbolic meaning that people attach to food.
c. To identify cultural symbols that have become part of the unconscious narrative and how these symbols affect people's food consumption patterns.

d. To explore the possible linkage between the symbolic meaning of food and obesity.

e. To explore the unconscious influence of food symbols on conscious dietary behaviour.

The five key concepts: collective unconscious, food, obesity, personal unconscious and symbols; as mentioned in the beginning of the dissertation, were used to guide the research in order to answer the above objectives and attain the required results. The five concepts were selected on the basis of their relevance to the title of the dissertation, also to address the specific aims and objectives relating to the collective unconscious and personal unconscious, which are primary sources of symbols.

Determine the implications of the study. A compilation of research that is available on the symbolic meaning of food in the contexts of culture and history may guide further studies to create a weight loss programme that could result in a long lasting and holistic weight loss programme. Instead of addressing the conscious and physical issues of weight loss, the research could aid in understanding what the symbols of food and the role the unconscious contributes to the onset and development of pathology in the form of eating disorders; particularly obesity.

Find and assess research articles. Literature was explored via EBSCOhost, Jstor, Google Scholar and other internet resources that offered access to credible published and unpublished articles, E-books, unpublished dissertations, other information resources and the original works of Freud and Jung. While the preference was for peer reviewed work insofar as recent research and published articles are concerned, unpublished works were also considered as these may have offered valuable insights. Only English articles were used or articles that have been translated and national as well as international articles were considered. The articles were narrowed down by means of specific screening criteria (Appendix B). Irrelevant articles were excluded; however, it was indicated on the screening criteria sheet.

Pre-selected keywords were used to aid and focus the search. Keywords were selected based on the scope of the study and the defined research question. Only information that was applicable to verify the research question was included for the narrative literature review.

To cater for the fact that the predetermined keywords did not deliver all the required information, it was necessary to do external searches, explore references of other articles and expand further on keywords that have not been included in the initial list of keywords. Additional keywords that were added to the initial list are listed in Appendix C.

Once information was sufficiently explored and keywords were exhausted, the list was critically evaluated to determine which articles could be used. Only articles that complied with the predetermined criteria which were designed to ensure the credibility of the articles and sources selected were included for assessment.

This approach prevented publication, researcher and language biases. If an article was found not to comply with the predetermined criteria, it was noted on the criterion list, the omitted information was specified on the list and the article was excluded from the research.

Identify sources of information. The sample of articles and other literary contributions was drawn from databases of journals, articles, books, published and unpublished theses, as well as internet based documents. Different online sources and databases were used as search engines to find the needed articles. Online referencing systems such as EBSCOhost, Jstor and Google Scholar were used to find the needed articles. It included numerous databases such as PsychInfo, E-Journals and eBook Collections. While the recent literature was drawn from databases and journals, the study relied on original theory and for the narrative, folk tales and stories, all of which were written in prior centuries; hence the selection of eBooks.

Determine selection criteria, search terms and delineate information. To determine the suitability of the articles, a criterion sheet was used to approve or disapprove the articles for inclusion (Appendix B). Both South African and international articles were considered as

all cultures were relevant to the study. Both qualitative and quantitative studies were considered, as well as studies from all centuries. Articles were included on relevance to the aim, objectives, as well as the five key concepts. The criterion sheet specifies which articles were included and which were excluded, according to relevance of the aims, objectives and key concepts. If the article bared no relevance to any of the aforementioned, it was excluded, but still noted. The keywords that were used to focus the study and ensure that appropriate data was selected for the research is available in Appendix C. According to Green et al. (2006) the selection of the specific key concepts and search terms is very important, for the sake of feasibility, as it will be impossible to search every source with miniscule relevance to a specific topic. Also for this reason, the narrative literature research method was selected for the research, as the results on the search term 'obesity' for example, produced over a million articles. Therefore, only some the relevant articles could be assessed that had relevance to the key concepts, as it would be impossible to evaluate every article on the subject.

The method used, was thus to keep accessing literature on the specific key concepts until the information became repetitive and until saturation was reached. It is also important to note at this stage, that the author acknowledges that the dissertation does not consist of all information available regarding these key concepts, as it would exceed the scope of this research study. The author feels that the information that was accessed, was sufficient to lead to the findings of the dissertation, but acknowledges that there are many more aspects in the field of these key concepts that could still be explored. Major recurring themes that became evident from the study, will be discussed at the end of chapter 5.

The scope of the narrative literature review drew over several historical periods to illustrate the evolution of food symbols and both local and international contributions were considered. The core evaluation criterion applied to the literature was the extent to which these further explain, support or contradict the theoretical construct.

Contextualise the information. The purpose of the study was to explore supporting evidence and collect available literature that would answer the research question. The information accumulated was compiled and categorised into the five key emerging themes, namely: Freud, food, Jung, obesity, and symbols. The key themes were then critically analysed and contextualised within the theoretical construct.

Through analysing and contextualising the information, the extent to which the literature supported or detracted from the theoretical construct was presented, and the conclusions of the study derived. A summary of the findings was then compiled.

Analyse the data. When information was sufficiently explored and the theoretical construct was satisfied in all its logical iterations, the list of literary contributions was critically evaluated to determine which contributions would be used. The author noted the extent to which the findings presented in the literature detracted or supported the theoretical construct. Literature was excluded that offered no discernible insight into the validity of theoretical construct, or to the aim and objectives of the study.

Disseminate the results. Once the examination of the dissertation has been completed, a copy of the dissertation will be made available in the library of the Nelson Mandela University and other databases linked to the Nelson Mandela University library and should the opportunity arise, presented at a research conference or submitted in article format to an accredited journal.

Determine reliability and validity. The richness of a narrative literature review is unique and also subjective. Therefore, it does not lend well to standard tests of reliability and validity in the statistical sense, but serves to illustrate context and subjective meaning. For this reason, the study would not lend to replication, as it is not a statistical design.

To enhance the reliability and validity of the study, the consistent use of the two clearly described theories, allowed for the consistent evaluation and consideration of the literary contributions sourced in support of the study. To achieve consistency during research, it was

important to use the same criteria to analyse each article. Usually to ensure the reliability of information and prevent bias when assessing articles in a systematic review, a detailed description of the method of data collection is clearly followed and reported. With a narrative review however, as mentioned before, a detailed description is not compulsory (Cronin et al., 2008; Ferrari, 2015). In addition, by following some of the steps of a systematic review, it strengthens the credibility of the narrative review. For this reason a criterion sheet (Appendix B) was used to include or exclude articles. The author attempted to reduce bias, by specifying which articles were included and excluded on the grounds of relevancy. The author acknowledges that the information will not be reproducible as only certain articles and other sources (such as books and websites) were selected to gain information, therefore the information will be regarded as subjective, which is a common risk of narrative research studies (Ferrari, 2015). The author also acknowledges that the reliability of the research could have been improved by including detailed information on which particular keywords were used to find each specific article that was used for the narrative literature review. But as this is not a prerequisite for a narrative review, the author believes that it does not affect the quality of the study in any manner.

To ensure validity during the study, the author compared the findings reported in the literary contributions regarding the original research questions to avoid fallacy of composition in comparing findings that responded to different research questions. These findings either supported or detracted from the theoretical construct and the extent to which they did, was reported, and upon the consideration of the evidence the research question was answered.

To further enhance the validity of the dissertation, the author followed Parahoo’s (2014) guidelines in order to assess the reliability and validity of the review. It included steps such as formulating a specific research question, by establishing inclusion or exclusion criteria,

specifying access methods, by assessing the quality of the literature included in the review, analysis, synthesis, and dissemination of the findings.

As the dissertation is a narrative literature review of available literature that has been published mainly in the form of articles and books, the reliability and validity of the dissertation is based on the reliability and validity of the articles and books that were used in this study. Therefore, the author acknowledges the validity and reliability issues in the articles and books used and that it might influence the quality of the dissertation.

Ensure that all Ethical Considerations are taken into account.

Mouton (2001) explained that the essence of research is to discover truth and that it was the author's moral duty to report knowledge and the discovered truth accurately. Clearly, at minimum the literary contributions were duly referenced and the studies were cited in full to avoid plagiarism. The second consideration was to determine the extent to which the research would offer a further contribution to work already done, and if the research question had already been answered in full; then it would be unethical to do the study again as it would fall short of the requirement to make an original contribution to the existing body of knowledge. Given the theoretical lens and context within which it was employed, this study is not a replication study into a previously answered research question.

As mentioned earlier, because the author can decide which information to include or exclude in order to gain enough information on the key areas of the narrative literature review, it tends to be subjective and subjectivity is labelled as one of the main weakness, as it leads to biases (Ferrari, 2015). However, the value of a narrative literature review of assembling many pieces of information across a broad perspective of a particular topic into a readable format, cannot be discredited (Green et al, 2006).

In order to reduce bias, the author borrowed some steps from the systematic literature research procedures to enhance the quality of the dissertation, as discussed earlier (Rumrill et

al. 2001). Ferrari (2015) did however warn that both narrative and systematic reviews are prone to bias, as both are retrospective research methods.

In order to apply both the theories of Freud and Jung, the study included the fairy tales of Alice and Hansel and Gretel, Catherine of Sienna, as well as the twelve dancing princesses as a proxy for live case studies in view of the author not being a registered psychologist and given the ethical considerations that would preclude the analysis of live subjects.

Concluding Remarks

This chapter discussed the procedures and relevant steps acquired, as well as ethical considerations, to achieve a credible literary contribution to the existing body of knowledge regarding the role of food symbolism and the onset and development of pathology in the form of eating disorders; particularly obesity. The procedure was to analyse the content of selected literature in accordance with the theoretical framework by means of a narrative review that in turn responded to the research question.

Chapter 5: Results and Discussion

Overview of the Chapter

The chapter will discuss the literature of the five concepts that the dissertation is based on, in order to discover what the linkage is between food symbols and dietary behaviour leading to obesity. The five concepts or key focus areas are: collective unconscious, food, obesity, personal unconscious and symbols. These five concepts will be discussed in sequence and examples in the form of tales, such as Alice in Wonderland and Hansel and Gretel, will be used to illustrate the application of the Freudian and Jungian theories to the concept of the symbology of food. Narratives of African folklore, myths and legends were specifically excluded, as the broadness and richness of these possibly will entail of a whole study on its own.

In seeking to explain the underlying contributors of pathological eating behaviours – specifically obesity; the study will explore the cultural and historical narratives of food and the symbolic meaning ascribed to it, as it presents the context of the constructs that a person forms around food, body image and eating behaviour.

The chapter references several concepts in the discussion on how the symbols of food form in the unconscious and ultimately become the unconscious contributors for conscious behaviour relating to food, and in particular the pathologies that manifest in the form of obesity and other eating disorders (Bruce-Mitford, 2008). The main concept that the study will explore, is the meaning of food in the contexts of culture and history, how these contribute to the symbolic meaning ascribed to food, and how the symbolic meaning of food when embedded in the unconscious in turn, is the impetus for pathology in the form of eating disorders; particularly obesity.

The interpretation of the literature selection is presented through the lens of the classic psychoanalytic theory as originally proposed by Freud (1949) and later expanded on by Jung's Analytical Psychology in which symbols is the language of the unconscious (1953).

Consequently, the chapter explores both symbol and myth, for this is the language of the unconscious, and the socio-cultural narratives surrounding it. Following a brief exploration of symbol, myth and narrative (Somers, 1994), the chapter proceeds with exploring the symbols of food in the ancient world, before proceeding to the middle ages, the dawn of the industrial age and finally looking at the debates around obesity and the cultural narratives associated to food and obesity in the modern, post-industrial era.

What emerges from the historical analysis is that the medical opinion of obesity has hardly changed, though it has advanced greatly in modern times. From the ancient healers, such as Galen and Aristotle, who recognised obesity as a health risk; to the Victorian times with Banting's letters on corpulence; to modern scientific research regarding the pathways through which obesity manifests in other life threatening health conditions such as diabetes, hypertension and reduced quality of life and life expectancy. Medicine through the ages seems to have consensus on the health risks associated with obesity (World Health Organisation, 2015).

Until now the social, cultural and mythological narrative appears to be very much a product of human social and cultural evolution through the ages. In ancient times, when agriculture was at its infancy and humans had very little control over the elements of nature and limited understanding of the science of food production, their food sources were anything but secure. Consequently, the narrative was very much one where abundance in food equalled being favoured by the gods, and being well-fed and corpulent, was a sign of divine blessing and material well-being. Food played a central role in myth, religion and ritual; for to prosper, the gods had to be appeased (Roman & Roman, 2010). Unsurprisingly the ancient gods, who, as

divine beings, were not subject to the variability of nature and suffered no famine, were all obese. Retaining a state of obesity implied an absolute control over nature, far removed from the limitations faced by humanity (Roman & Roman, 2010). To commune with the gods, the language of food was spoken.

In contrast during medieval times, characterised by periodic famine, pestilence and war, and not being able to control nature to the extent where reliable food production was possible, the emergence of Christianity in the form of mainly Catholicism resulted. However, for the church to retain power over kingdoms and humanity as a whole, a narrative where abundance of food was evidence of the favour of God, was not entirely sustainable; given that medieval society was far from food secure. Hence, the introduction of the suffering Jesus, gluttony as a cardinal sin, sacrifice and self-denial as a sign of communion with divinity; that promised favoured status and Godly favour. It is in this context that the holy anorexics find their place, along with the self-denial commonly practiced by the holy men and women of the age (Aquino, & McDermott, 1997)

With the dawn of the age of reason, where humanity discovered new worlds, gained colonies, trade routes and technological advances and greater food security; the excessive consumption of food became in vogue again. This time excessive consumption occurred in the context of a material world and became symbols of wealth, prosperity and power where the plump wives of rich men were celebrated again.

Entering the post-industrial age, still a material world, but one in which absolute control and excessive food production has been attained. In this era of mass production, now the distinction between rich and poor had to be redefined. The mass-produced foods of the industrial world, laden with cheap sugar substitutes, starch, preservatives and flavour enhancers became the common man's fare, with obesity as its mark. The rich, educated and powerful shifted to "real" foods; more expensive, never preserved or frozen, always fresh, and less laden

with trans-fats and sugar. Thus, the lean, muscular shaped bodies became the new status symbols which were associated with health, wealth and privilege (Brouwer, 2008).

Much as the figs, bananas and the grapes of antiquity were symbols of the divine in ancient mythology; the whole, fresh and unprocessed foods of the rich combined with a highly-regimented lifestyle of exercise and strict control of eating habits are strong symbols. It is contrasted to the pre-packed television-dinners of the lesser classes, uncontrolled eating and a lack of disciplined exercise of the lower income groups. The medieval ascetics were more holy than the rest of society, while the kings and queens of the era ruled by divine right; they were the ones who enjoyed the ultimate favour bestowed by God and could eat the sweet foods of the time. So too are the modern adherents of healthy lifestyles blessed; they are better educated, have stronger characters and are winners compared to the losers of the lower classes. Where obesity was once a sign of the favour of the gods, it has now become a social stain. For food symbolises social discourse, identity and one's place in the world. In an ancient world, food symbolises the blessings of the gods necessary for survival, while in a modern world it denotes the material success necessary for survival in the world (Brouwer, 2008).

While the apples of the ancient world promised immortality (Garden of Hesperides) and wisdom - the knowledge of good and evil (Garden of Eden) (Roman & Roman, 2010); whole foods, super foods, special supplements and gene editing, today promises the everlasting fountain of youth and immortality. This narrative has not changed and mankind continuously desires overall improvement, consecrations and complete wellbeing; for it displays the evolutionary advantage over others. At the heart is food as a conscious social, political and economic discourse, while in the unconscious the symbolic discourse is equally lively (Klein, 1996).

Lastly, the chapter will offer brief applications of both the Freudian and Jungian approaches to obesity with Hilde Bruch (1973) explaining obesity as a lack of nurture in the Freudian

tradition; while Marion Woodman (1980) offers the Jungian analysis, in this case explaining obesity as an incomplete development of the female psyche. Similar examples of both approaches are briefly given with respect to its opposite: anorexia, which is in this case applied to the holy anorexics in the Freudian case as an example of unresolved sexual tension; while the work of Woodman (1980) and Von Franz offers the Jungian approach as a search for perfection, and the impossible ideal of complete control. As mentioned earlier, the chapter includes an example of how the symbols of food offer insight into the journey of transformation and individuation by offering an analysis of the tale of Hansel and Gretel. The story starts with the problem of famine in the land which leads to the abandonment of the children and their struggle for survival and growth (Dieckman, Bettelheim & Matthews 1986), illustrating the psychodynamic perspectives of both Freud and Jung. Its starting point is to consider the impacts of recent advances in other fields, including quantum physics and bio-electronics on the validity of Jung's concept of the collective unconscious and the interconnectedness between the physical and mental worlds and the unconscious. The insights offered by quantum physics explain Jung's archetypes as wave forms existing in a quantum state of potentiality in the cosmic mind that can and do translate to matter in the empirical world. In particular, the impact of wave forms on the expression of cellular genetics provided by bio-electronics offer support to Marion Woodman who argued that the difference in the number of fat cells between obese and normal weight patients derive from their psyche, in particular the unconscious, which she further illustrates by exploring the complexes through a word association test devised by Jung. The differences between the Freudian and Jungian approaches are further illustrated in more depth and an application to the problem of obesity is offered through a further exploration of the archetypes.

The study selected the Alice texts of Lewis Carroll to further illustrate the application of both approaches, in addition the inherent power dynamic associated with the consumption and

distribution of food, seen through the lenses of class and gender. Given the nature of the Alice texts, the anima / animus is explored in the Jungian reading of the text against the metaphor of the Hero's Journey of transformation toward individuation. In this reading, Alice is analysed as a character in the Jungian tradition of reading the dream as a compensatory act employed by the psyche to compensate for an imbalance in the psyche; in this case in the anima as represented by the Death Mother archetype.

The Freudian reading of the text focuses the analysis on the author Lewis Carroll and sees the dream as expressing repressed trauma. In particular, the Eros/Thanatos complex is explored. In Carroll's case, according to the highly-sexualised Freudian reading of the text the Eros/Thanatos imbalance translated in the occurrence *vagina dentata* as represented by Carroll's fear of the aggressive feminine represented by adult women and his ideation of little girls.

Concept One: Symbols

What is a symbol? In searching for the symbolic meaning underpinning the narratives about food in the cultural-historical context, the study considers several working definitions of symbols in psychological literature starting with Joseph Campbell who defined a symbol as an "energy evoking and directing agent" (Campbell, 2002, p. 153). Campbell later expanded on the definition by explaining that a symbol shows both sense and meaning and thus is a dual concept. A symbol functions on three levels simultaneously; in waking consciousness, in the spiritual realm of the dream and in the domain of the absolutely unknowable or the unconscious (Campbell, 2002). In the first two domains, a symbol has meaning, but in the domain of the unknowable, it can only be sensed.

As an example, Campbell (2002) notes that modern judges serve not only as a sociological purpose (that of keeping order), but also represent a working mythology. If their positions were just another role in society, judges would wear ordinary business suits, but instead they wear

the magisterial black robe, which is the symbol that serves to ritualise and mythologise the power of the judge as a necessary condition for the law to hold a moral power, beyond the mere coercive power of the state (Campbell, 2002).

Myths communicated through symbols in cultures. Moving from symbol to myth, Campbell (2002) noted that myths were designed as a harmonising mediator between mind and body, and serves to put the mind in accord with the body which in turn needs to adopt a way of life in accordance with the dictates of nature. The early myths in particular, serve to enable the psyche to participate without a sense of guilt in the necessary acts of life, which in early society was all about eating and killing. The hunt became a ritual of sacrifice, and in turn the hunters performed acts of atonement to the departed spirits of the animals. In doing so a “magical accord” grew between the hunter and the hunted “as if they were locked in a mystical, timeless cycle of death and resurrection; their art (cave paintings) and oral tradition gave form to the impulse that is now called religion (Campbell, 2002, p. 4).

The symbol: mediator between the mind and survival needs. The Asmat tribe as example. Lyall Watson (1995) provides a powerful illustration of Campbell’s (2002) concept in his description of cannibalistic practices among the Asmat, a tribe numbering approximately 20,000 living in the delta area of Irian on the Casuarina Cost of Indonesian New Guinea who regularly practice cannibalism as a means to sustain ecological balance in an environment characterised by a perpetual shortage of good quality protein, necessitating cannibalism. Upon coming of age, an Asmat requires a canoe and an owom – a special name belonging to the domain of the sacred and mystic. Prior to initiation, Asmat children are given a spirit name by the village seer, but once they have acquired their own personalities, they need a human name – the owom. Often, the problem is that the owom is usually a name that is already given to another Asmat in a neighbouring village and therefore cannot be given again; it must be taken (Watson, 1995).

The Asmat, as part of the initiation ritual then set up a man-hunt, and the end result is the killing and eating of a man from the neighbouring village. The young initiate who has to lead the hunt, and then inherits his name (the owom) and also his responsibilities, including the care of his family. In this manner, the ecological balance is sustained by constraining competition to hunting and fishing sources, population growth by keeping the number of sexually active males under control and the body of the male eaten, serves the much-needed protein to the village to keep them healthy; yet the duty of care is embedded into the very identity: the human name of the initiate (Watson, 1995). Because the whole hunting and cannibalistic practice is cloaked in cultural and religious practice, the symbol serves as the mediator between the minds of men and their survival needs to justify this act: the magical accord between the hunter and the hunted (Campbell, 2002). In this social, cultural and ecological context, cannibalism is acceptable and practiced in an ethical manner. In other contexts, where similar ecological constraints (protein shortage threatening survival) and cultural accommodation of the practice do not present, cannibalism is regarded as pathological.

Analogy between symbols in mythology and the collective unconscious. Jung spoke of these ideas as archetypes of the unconscious. Jung's archetypes of the unconscious were manifestations of the organs of the body and their powers and are biologically grounded and hence, universal – the collective unconscious in which the personal unconscious finds its place. In contrast, Freud's unconscious is a highly personal unconscious as it is a collection of repressed traumatic experiences from the individual's lifetime (Campbell, 2002).

Campbell's definition of symbols not only focuses on the nature and persistence of symbols when he describes symbols as concepts and words, but also as visions, rituals and images. Symbols for Campbell mirror reality, they hold the mind *to* truth but are not *themselves* truth (Campbell, 1969). Bruce-Mitford (2008) sees a symbol as an image that represents an idea – the deeper indicator of a universal truth. As such symbols are the means for complex

communication and often have multiple levels of meaning which is the characteristic that separates it from signs (only one meaning). Symbols are used to express and represent social structures and to represent specific aspects of culture and carry meanings that are culturally learned and not dependent on the symbol itself. Symbols serve as the basis of human understanding of the world around it, serves as the grounds for human judgement, as well as the basis on which humans identify with and cooperate within a community (Goffman, 1959). Jung, von Franz, Henderson, Jacobi & Jaffé (1964) proposed the initial distinction between sign and symbol described by Bruce-Mitford (2008), in that signs stand for something that is known, while symbols represent the unknown and that which cannot be made clear or precise. To this he added the concept of archetype which is the larger concept of symbol, for example Christ would be the symbol of the archetype called *self* (Bruce-Mitford, 2008). The symbol's domain is thus the unconscious where it originates, and from where it is the impetus for conscious behaviour; including food pathology.

As a narrative literary contribution, the chapter presents a review of a selection of literature on symbols in a variety of cultural-historical contexts and presents an exploration of related information that is based on the psychoanalytic framework specifically as it relates to food and eating disorders focusing on obesity.

How symbols are formed. Food is part of everyday life and it becomes a very strong symbol for many facets of our lives. The symbolic power of food is enhanced by the evocation of all the senses and the extent to which it triggers an emotive response, which in turn depends on the mental associations that were created in the individual. These associations also determine how the food is perceived (Kats & Weaver, 2013). Symbols can also develop rationally, spontaneously, over time and through everyday usage, often called "organic symbols" (Kats & Weaver, 2013).

Victor Turner explains three anthropological properties of symbolism; condensation, which is used as an umbrella term for many ideas; unification which are symbols that link different orientations with each other and polarisation of meaning. These symbols attain their meaning through merging beliefs and feelings on the one side of the pole with an object on the other side of the pole. This results in a meaningful sensation or an experience that has meaning. For example, the American symbolism of the apple pie represents not only the loyalty and cultivation Americans feel for their country, but it also represents the emotional strength and power that individuals feel to be part of this united nation (Kats & Weaver, 2013). Interestingly, in the general parlance apple pie is also associated with motherhood. Kats & Weaver (2013) concludes that symbolism plays a prominent role in communication, not only between individuals, but also across generations.

The symbology of food as an element of the collective unconscious interacting with the personal unconscious. The symbology of food is proposed in this literary contribution as a working interaction of the symbols and archetypes of the collective unconscious with those of the personal unconscious. The symbols as they relate to food throughout history are presented and core themes emerge in how they relate to the social order and the representation of the inherent power dynamic underpinning any social order. In this case, the power dynamic is presented through the lenses of class and gender. In keeping with the idea of an interconnected universe (the cosmic mind), it follows that the interaction of form and matter is multidirectional. As we draw archetypical images into our unconscious from the collective unconscious, so too do we draw forms from the environmental and social context within which we exist; which if the logic is applied full circle, means that the social order and the power dynamics we see manifested there is in itself a manifestation of the collective consciousness of the time.

In this sense the impact on the individual psyche of the social forces of the day cannot be ignored. The impact of the social context on the individual psyche is explored in the application of Freud and Jung's theories to the Alice texts. In the case of the Freudian analysis, the focus was on the psyche of the male author, Lewis Carroll in the tradition of Freudian dream analysis. The power dynamic explored was gender; but the interaction was between the social context and the personal unconscious. The Jungian analysis is different in that it adds the collective unconscious as the third element to the interaction, and in that it focuses on the female Alice for the analysis. The power dynamic is explored through the lens of class.

On the Symbolism and Value of Dreams. Jung explained the symbolism in dreams as follows:

> Dreams are impartial, spontaneous products of the unconscious psyche, outside the control of the will. They are pure nature; they show us the unvarnished, natural truth, and are therefore fitted, as nothing else is, to give us back an attitude that accords with our basic human nature when our consciousness has strayed too far from its foundations and run into an impasse (Jung, 1963, Collected Works, Volume 10, paragraph 317).

Jung saw the psyche as consisting of the mind, body and emotions as all working together so that when imbalance occurs in the psyche, negative emotions or symptoms are helpful in drawing attention to it. As a self-regulating system, the psyche with all of its contents including dreams, thoughts and feelings, is what Jung termed "purposive" (Jung, 1963). Consequently, the value of the dream is that Jung saw it as the psyche's attempt to communicate important contents of the unconscious to the individual (Jung, 1963). Dreams are also an important factor in the development of personality – a process termed by Jung as individuation (Jung, 1963).

In contrast to Freud, who posited that dreams are the expression of forbidden and suppressed wishes that had to be disguised in the form of a dream; distinguishing between the openly expressed surface content of the dream and the hidden latent content of it; for Jung,

dreams expressed content openly. Jung wrote “They do not deceive, they do not lie, they do not distort or disguise … They are invariably seeking to express something that the ego does not know and does not understand” (Jung, 1963 Collected Works, volume 17, paragraph. 189). Hence, Jung explained that if dreams appear to be difficult to comprehend, it is because their language of expression is symbol, and to understand the symbol is to understand the dream (Jung, 1963). “A symbol is the best possible formulation of a relatively unknown psychic content,” and that the dream is “a spontaneous self-portrayal, in symbolic form, of the actual situation in the unconscious” (Jung, 1963, Collected Works, volume 8, paragraph. 505).

To interpret dreams, “Jung would identify the symbols in the dream and ask the patient regarding their associations with these symbols. Only then does the meaning of the dream become apparent” (Jung, 1963, Collected Works, volume 7, paragraph 123). However, the meanings of dreams occur both on the objective level – which would treat the dream images as corresponding to objects in the real world, and on the subjective level - these images or symbols correspond to elements in the individual’s own psyche, which is where Jung focused his interpretation, (Jung, 1963).

The amplification of dreams occurs when the personal dream symbol of the individual links with the broader, mythological meaning of the symbol – such amplifications could reference any kind of mythical, religious, fairy-tale or archetypical association (Jung, 1963). It is the amplification aspect of dreams which relates the dream to the archetypical level and accesses the content of the collective unconscious – i.e. those aspects of the psyche which are universal to all of us such as the animus, or masculine nature, for example (Jung, 1963).

However, when confronted consciously with the archetype, such as telling a woman she has a strong masculine nature, she might not agree as her conscious perception differs. Dream images correspond to the elements of the individual psyche, but they can also correspond to people in the real world, including the analyst insofar that the analyst may embody what the

dream image is symbolising. It is in this context that transference between patient and analyst occurs. For this is the essence of the symbol, they can apply across different situations and to different people. By recognising the symbolic meaning of dream images as representation of the elements within the dreamer's own psyche by identifying the dreamer's personal associations with the symbols, and then amplifying symbols in relation to archetypical themes, we are able to understand what the unconscious is communicating to the dreamer by means of the dream – usually by compensating for those aspects that are missing from or incomplete in the dreamer's conscious (Jung, 1959, 1963).

Concept Two: Food

The history of food: When food was a blessing and fat was fabulous; fat deities united with the divine through food. Marion Woodman (1980) notes that fat was once such a happy state of being. To live off the fat of the land was considered a blessing and in the cultures of the Far East the plump bride is still considered worth her weight in gold (Woodman, 1980). In the oriental cultures of China and Japan in particular, the person exhibiting a round belly is both respected and admired as one who is well grounded in himself (Woodman, 1980.) These sentiments are echoed by Richard Klein (1996) who presents the medieval works of Rubens and Renoir featuring voluptuous bodies, that would be considered today as morbidly obese, the epitome of medieval sensuality; while noting that the thinner bodily forms were commonly featured in artworks dealing with episodes of human misery including the plague and wars (Klein, 1996). Viktor Frankl relates how his fellow prisoners in Nazi death camps, immersed in intense misery, would seek temporary escape from their miserable states of mind by discussing their favourite foods when left unobserved by the guards to work within earshot of each other (Frankl, 1984). Throughout most of human history food was seen as a blessing from the gods and as the means to have communion with the gods.

Some of the earliest depictions of human beings' images of their gods are 'fabulously fat' (Dixson & Dixson, 2011). Anthropologists note that only the most important elements of ancient life were immortalised in stone, suggesting that the assumedly obese models who inspired the creation of these figures were either royalty or seen to be embodied with superhuman and divine characteristics (Dixson & Dixson, 2011). The famous Venus figurines carved between 20,000 and 30,000 years ago, feature the sort corpulent thighs, large buttocks, and ample breasts further accentuated by rotund bellies one would associate with a body mass index of well over thirty (Dixson & Dixson, 2011) In Roman mythology, Venus was the goddess of beauty and love, fertility and sex. The association of plumpness with fertility continued throughout antiquity and was seen as desirable in that it indicated well-being. Hence, most of the goddesses of the period are depicted as rather more matronly than nymph (Dixson & Dixson, 2011).

The collection of fat goddesses includes the Celtic pagan goddess Brigantia whose image is thought to be fashioned in the Roman style after the Roman invasion of the British Isles. As many pagan gods were later Christianised and a recycled version of Brigantia (still fat) was found; appearing as St. Brigid featured with round face and comfortably padded hips (Dixson & Dixson, 2011). A reproduction of the 6th century Norse fertility and love goddess Freya also casts a figure well over the 30-body mass index, but unlike the similarly fat Greek goddess of love Aphrodite, Freya was also a war goddess. She rode into battle leading the Valkyries and made such an impression that half of the Norse warriors slain in the battle chose to go into her hall in the afterlife instead of the hall of the Norse god Odin – the ultimate honour to be bestowed on a goddess by warrior men (Littleton, 2005).

The Babylonian goddess Ishtar, although featuring a tiny waist, is shown as having very big thighs, and Hertia, the Greek goddess of the hearth is shown as morbidly obese. Included in the plump goddess collection is Sophia, goddess of wisdom, joined by the rotund Astec

goddess Coatlique and the Anatolian mother goddess Cybele. Also, depicted as obese is Diana of Ephesus and Kuan Yin, the Chinese goddess of mercy; Sekhmet the Egyptian goddess of vengeance and Luna, the Roman Titaness of the moon who sports a rather heavy pear-shape (Littleton, 2005).

The male Silenus, the drunken follower of the Roman wine god Dionysus, was described as the fattest, oldest, wisest and drunkest of all Dionysus's followers and is lauded in the Orphic hymns as the teacher of the young wine god Dionysus and was said to possess the power of prophesy and special knowledge. Legend has it that Silenus once got lost in Phrygia where he was rescued by peasants and taken to King Midas who treated him kindly. As a gift of gratitude Dionysus offered Midas his chosen reward of being able to turn everything he touched into gold (Roman & Roman, 2010).

Food: The gift of the gods. During ancient times, everything was considered a gift from the gods and food production in particular was seen as manifestations by divine intervention (Roman & Roman, 2010). Dionysus features as the god of wine and the one who gave nourishment and strength (Roman & Roman, 2010) while Ninkasi, the Mesopotamian goddess of beer was the one who caused dough to rise and it is believed that she inspired the bakers of the day to add sesame seeds and herbs to their bread. In India, the goddess of food Annapurna rewarded faithful prayer and sincere worship with rice ("anna" meaning food, and "purna" meaning complete) (Littleton, 2005).

The Israelites were kept alive during their forty wandering years in the desert by their God who faithfully supplied manna and quails daily on their way to the Promised Land Canaan, the land of milk and honey (Exodus, 16:6). Manna is still known by the Bedouins who live in the desert of Sin who collect the small white pearls which fall from a plant after the lice have sucked the plant sap and used them as honey to sweeten their food (Barth, Bromiley & Barth, 1991). The manna has to be collected before sunrise; lest the sun melts it and it is eaten by ants.

However, when collected early enough in the day, manna has saved many from perishing in the desert both before and after the Israelites (Barth et al., 1991). Quails, known by the nomadic desert tribes as good runners but poor fliers (Numbers 11:31 and Ps. 78:26) are easy prey and offer a good survival meal to those lost in the desert. To the Israelites, these daily gifts of food confirmed to them that their Lord was indeed their Shepherd at the very time of their displacement on prosecution at a time when the fleeing Israelites could no longer provide for themselves. Without the divine gifts of manna, quails and water from the rocks, they would not have survived as a nation (Barth et al., 1991). Prior to the manna and quails being supplied in the desert, God himself appeared to the Israelites (Exod. 16:6) pointing out that the sustenance would be granted so that the Israelites "shall know that I the Lord am your God (Deut. 29:6 v 12), and "then he gave orders to the skies above and threw open heaven's doors … he sent them food to their heart's desire" (Ps. 78:23).

The symbology of nectar and ambrosia; honey, manna and milk in different cultures. Not so lucky was Tantalus, son of Zeus in Greek mythology who was invited by Zeus to eat dinner with the other Greek Gods on Mount Olympus and then decided to steal the food of the gods, nectar and ambrosia, to share with his mortal friends (Armstrong, 2005).

Going further, Tantalus decided to trick the gods into eating human flesh by serving up his own son Pelops, cut into pieces and presented as a stew. For this Zeus, himself killed Tantalus and banned him for the entire duration of his afterlife to the underworld Hades, kingdom of the dead (Armstrong, 2005). Tantalus's torture was that he had to stand forever waist deep in a pool of water under a fruit tree's branches dangling with ripe fruit. But no matter how hungry or thirsty Tantalus became, there was no relief, for if he bent down to drink the water, it would magically drain away, and if he reached up for the fruit, the branches would lift out of his reach. Displeased gods do not bestow the gifts of food. As Tantalus was already dead, he could not die again of hunger and thirst, but being conscious his punishment was that he had to endure

his hunger and thirst for all eternity. Incidentally the English word tantalise comes from Tantalus (Armstrong, 2005).

The nectar and ambrosia, food of the gods is often seen to be produced from the *axis mundi* or what is known as the "Tree of Life," a recurring mythological symbol which finds expression across the world, as well as the mystical connotations of honey (nectar), manna and milk (ambrosia). In some cultures, nectar was a drink while ambrosia was food, but in other instances the roles reverse (Andrews, 2000, p. 157). The ambrosia tree of India is known as the tree of Buddha and is also referred to as the tree of wisdom, while the *amrita* (ambrosia) featuring in the Hindu tale recounting the birth of the mood god Chandra drips down from the night skies during a full golden moon as a magical substance onto our plane of existence (Andrews, 2000 p. 158).

The gods of antiquity were generally generous when it came to food. What is known today as vanilla is said to have originated from the Mesoamerican Aztecs and their goddess Xanath in particular (Armstrong, 2005). Xanath had the misfortune to fall in love with a mortal, but was forbidden to take it further than that with him by the other gods. Remembering her love for him, she nevertheless continued to provide his people with vanilla flavouring – which requires no less than two species of bees and hummingbirds for their pollination - for their favourite chocolate drinks and as a consequence, brought them great happiness (Andrews, 2000). Unsurprisingly chocolate is still associated with love today (Andrews, 2000).

The Native American tribes of the Ojibwa, Cree, Iroquois and Algonquin who settled the area now known as New England had been harvesting maple syrup for thousands of years, and it was seen as the "blood of nature and the symbol of the up-surging life-force of spring" (Andrews, 2000, p. 141) while the Druids and ancient Egyptians chose to swear their oaths by leeks and onions. Each of the layers of these plants' roots was seen as representing a layer of

the known worlds, and these multi-layered plants was considered a token of eternity (Andrews, 2000, p. 164).

Hazelnuts were associated by the early Europeans with immortality and fertility, and still are far more likely to feature in candies as symbols of romantic love, birth and lightning - all of which are aspects of fertility and served as the symbolic image of the Teutonic god Thor (Andrews, 2000, p. 113).

The symbology of herbs in different cultures. Another romantic ingredient, ginger, was seen as the herb of paradise in the Far East where it was cultivated as flavouring to oils, wine and teas since antiquity as something that brought one closer to the gods. Ginger is often linked to cinnamon with both being associated with the “solar fire” (the solar fire refers to the divine awakening of the spirit within – similar to the awakening of the *kundalini* in India) and still featuring prominently as key ingredients in magic practices – including love rituals (Andrews, 2000, p. 100).

Not all herbs enjoyed this status. Garlic and its onion relatives were not treated kindly by mythology. The Zoroastrian god of light Ahura Mazda smelled pleasantly while his evil counterpart Ahriman smelled “putrid and rotten” like a garlic bulb (Andrews, 2000, p. 99).

The symbology of grapes in different cultures. Across history, there is no food that rivals the symbolic significance of grapes, and the wine made from it. Known to the Greeks as Dionysus and to the Romans as Bacchus, this god’s beauty was second only to Apollo and he discovered wine when he saw animals sucking at grapes to get the juice (Roman & Roman, 2010). Dionysus lost no time in fermenting the grapes in a vat to become wine and used the intoxicating effects to recruit a wide range of followers, including the nymphs, the satyrs and humans who thought that the pleasure they felt when they were drunk gave them a glimpse of what it might be like to be a god (Roman & Roman, 2010). Dionysus was the last of the Olympian gods and also the closest to humans; in that he had a human mother (Roman &

Roman, 2010). His gift of wine and the pleasures it brings is still seen as the last and greatest gift from the gods to humanity (Roman & Roman, 2010).

Dionysus was not the only deity with a human mother, amongst the gods. In Christianity wine has become associated with Jesus on two accounts, his turning of water into wine at a wedding so that the guests may continue in joyful celebration at the request of his human mother (John 2:1-11, The New King James Version). Also, wine was symbol of sacrifice at the Last Supper where he told his disciples to drink wine in remembrance of him as a symbol of his blood and path to eternal salvation (Luke 22: 7-23, The New King James Version).

The symbology of bananas in different cultures. The banana features in many cultures' mythology; starting with Thailand where *Nang Tani*, a female spirit guards both her favourite wild banana trees and women. According to the legend, *Nang Tani* would place a curse on the banana trees by haunting the banana groves if men do not treat their wives properly. The banana trees belonged to the men and were the source of their wealth and power. But if they abused this power by oppressing the women, *Nang Tani* would strike at the very source of their power – the banana trees. By guarding the interests of the women, *Nang Tani* in this sense maintained the balance between the duality of nature, the feminine and the masculine principle (McKenna, 1993). In China, the spectral banana maiden is more kind-hearted as she seeks to save lovers who are separated due to non-consenting parents or demonic influences (McKenna, 1993). When she expends too much of her life force, the banana maiden is said to turn into a banana tree (McKenna, 1993). The Burmese myths say one of the very first foods man ate when he was just created were bananas (McKenna, 1993). As he wandered around the forest in search of food, the first man came upon a flock of birds eating the fruit, and took some home which gave the banana its name *hnget pyaw* which literary translates into “the birds told” (McKenna, 1993).

The West Africans instead said man was born of the banana tree and it is not unusual for West Africans to bury the placenta of a new-born under a banana tree, which is also a symbolic representation of fertility. Yet the fruits are forbidden to eat as these are connected to the souls of the children they are connected to, but the leaves are used to help women conceive (McKenna, 1993).

The symbology of figs in different cultures. Because fig trees can grow in almost any soil type and climate they quickly dispersed throughout the ancient world where figs became a central feature in many mythologies (McKenna, 1993). Starting with the Far East, the Buddha found enlightenment under the branches of the bhodi tree, also known as the holy fig, and consequently the tree itself became enlightened (Andrews, 2000).

In Christianity Adam and Eve covered their nakedness in the face of God with fig leaves while in Greek mythology the tale of Apollo who sent a crow to collect water in a golden goblet is told. On its way to the water, the crow – a fond lover of figs, saw a fig tree and decided to wait until the fruits ripened (Roman & Roman, 2010). Having eaten her fill, she collected the water, which by now was late. On her way back, the crow caught a snake and presented both the snake and the water to the sun god, and claimed the snake was the reason for the delay in getting the water. But the angry Apollo was having none of that and gathered the snake, the crow and the water and threw them into the sky, thus forming the constellations of Corvus, Crater and Hydra, and since, the Greeks took to offering figs to their gods (Roman & Roman 2010).

The Romans saw the fig as a source of fertility and named it after the goddess of breastfeeding and fertility, Rumina due to the fig's milky sap resembling breast milk and the many seeds indicating fertility. The Hindus say that Vishnu was born under a fig tree and that the fig tree was also the mother of Krishna, while in Egypt figs were said to be the favourite

food of the gods and are often found in burial tombs as gift to the gods and also to ensure a tasty afterlife to the one entombed (Andrews, 2000).

The symbology of apples in different cultures. Like ambrosia and nectar, apples are strictly reserved in mythology as the food of the gods, and they tend not to view those who attempt to steal it kindly. While apples are seen as a gift from the gods to man as the symbol of wisdom, fertility, and courage they also serve as the symbol of immortality, and it is this characteristic that renders them strictly into the domain of the deities. The tale of the golden apples in the Garden of the Hesperides starts with the Greek goddess Hera, who received the tree that grew the golden apples as a wedding gift from Zeus. She planted it in the middle of the Garden of the Hesperides which was magically hidden and guarded by Ladon, the hundred-headed dragon. The eleventh labour of Hercules was to retrieve the golden apples at the instruction of Eurystheus; the apples once eaten would bestow the gift of immortality on the eater. After much effort to locate the garden, Hercules eventually found it in Illyria where he tricked the titan Atlas to slay the dragon and to retrieve the apples for him, but Hercules' efforts were in vain – the golden apples only worked their magic in Hera's garden (Roman & Roman, 2010).

Similarly, the biblical creation tale told in Genesis features a garden where God communed with Adam and Eve on the condition that they not eat of the fruit of the two trees God planted in the middle of the garden, one representing the knowledge of good and evil and the other eternal life. When Eve, seduced by the serpent eats of the fruit of the tree of the knowledge of good and evil (wisdom) God reacts in wrath, expelling them from the garden which henceforth was to be hidden from men and guarded by angels armed with flaming swords, lest they eat of the tree of eternal life and attain the immortality that would make gods of mere men (Roman & Roman, 2010).

A similar myth is found in the Epic of Gilgamesh, one of the world's earliest recorded myths that tells the tale of Gilgamesh wanting to consume a magic plant said to bestow immortality. But Gilgamesh's efforts to bring the plant back home was frustrated by the intervention of a serpent who after smelling its sweet fragrance stole it from Gilgamesh and disappeared with the magic plant into the reeds (Ferry, 1992).

Returning to the Greeks, the tale of the Apples of Discord features as its central character Eris, the goddess of discord and strife who brought golden apples to a dinner with the gods of Olympus but said they could only be eaten by the fairest goddess of all. Aphrodite, Hera and Athena all laid claim to the apples and to prevent further strife, Zeus appointed Paris to declare the winner. Eager to receive his consideration, the striving goddesses showered Paris with gifts, but the day belonged to Aphrodite who presented Paris with Helen who was so beautiful that her face could launch a thousand ships in the later to be held battle of Troy, to become his wife (Roman & Roman, 2010).

In Norse mythology, the goddess *Idun* guarded the apples which were the source of the gods' immortality, but the trickster Loki started stealing the apples one by one. As the gods began to wither away they forced *Loki* to return the apples. Loki turned into a falcon and flew *Idun* to her apples where she retrieved them before returning to Asgard where she revived the gods with her apples (Armstrong, 2005).

The symbology of Pomegranates in different cultures. Similarly guarded by the gods were the pomegranate, a fruit with a sordid history and jealously coveted by the gods and their followers as a symbol of transformation, seduction, family and death, and of course – due to its many seeds, fertility. The membrane containing the seeds symbolised marriage and the crown shaped flower became the symbol of both gods and kings. In Greek mythology, the pomegranate started life as a nymph who fell hopelessly in love with Dionysus, the god of wine, theatre and ecstasy. After hearing from an oracle that one day she would wear a crown,

the nymph assumed she would become the wife of Dionysus and in her joy hastened to him, only to be brutally rejected and turned into a tree by the indignant god who had a further insult to offer. To make sure that the oracle's prophesy came true, Dionysus made her flowers into small crowns (Roman & Roman, 2010).

Hera, the goddess of marriage and childbearing, was associated with the pomegranate by her cult who planted pomegranate orchards around all of her temples where those who wished children would come to seek the pomegranates as a blessing. As a symbol of seduction, the pomegranate features in the tale of Persephone and Hades. Hades, god of the underworld fell madly in love with Persephone, and tempted her to the underworld with a pomegranate. Persephone's mother, Demeter was so distressed over the loss of Persephone that her sadness caused the earth to grow cold and all the plants to die. The other gods, unwilling to let earth die demanded that Hades return Persephone, but there was a problem (Roman & Roman, 2010).

The Fates had decreed that anyone who eats or drinks anything in the underworld was condemned to remain there forever, even in the case of someone who was still alive such as Persephone, but a reprieve was found. Hades had only managed to tempt Persephone enough to eat six pomegranate seeds, and that allowed the gods to reach an agreement with the Fates. Going forward, Persephone would be required to spend six months of each year in the underworld with Hades, while her mother Demeter would mourn her absence, and as before the earth would grow cold and plants would die. These became the six months of autumn and winter. But when Persephone was returned at the end of the six months, spring would announce the return of life to the earth. Here, the pomegranate became simultaneously the symbol of the underworld and that for the cycles of nature (Roman & Roman, 2010).

Rituals with Food in Different cultures. Because of its association with the gods, food remained central to religious practice through the ages as its mediating function in the relations between humanity and their gods endows food with both mysticism and sacred qualities

(Roman & Roman, 2010). Consuming a ritual meal means consuming some element of divinity with the obvious example being the Eucharist where the body and blood of Christ is transubstantiated into bread and wine and then consumed by the community of the holy to their eternal salvation (Armstrong, 2005). Similarly, food offerings to deities is common practice in religious observance and in order to prevent the wrath of the gods, the faithful were required to provide food for the sanctuaries and temples (Armstrong, 2005). But the gods have very definite food preferences; in Christianity and Judaism the distinct preference is for the first fruits and lamb without blemish, which had to be consumed in the presence of God by the faithful as thanks offering to show their joy; while the fat and intestines were to be presented on the altar as burnt offering. The Egyptian god, Set, wanted lettuce while the lord Krishna prefers gifts of butter. But the gods of the Mediterranean wanted stronger substances with the Mesopotamian gods demanding beer while the Greek, Roman, Egyptian (and Scandinavian) gods all had a distinct liking for wine (Andrews, 2000).

Ambrosia was the food of the gods on Olympia and in India where the Hindu gods' version of ambrosia was called *amrita,* said to be nectar found at the bottom of the ocean, a heavenly elixir of immortality. The Hindu goddess Annapurna is shown in Hindu mythology as holding a bowl of porridge and a golden ladle, and would not start eating until all the devotees in her temple had been fed (Andrews, 2000).

Blessings of the gods becomes punishment of unruly people: The symbology of food. But as much as the gods of antiquity liked to bless their human followers with food, when humans sought to exceed their bounds in search of immortality, whether stealing golden apples, ambrosia or eating from a forbidden tree of wisdom, the results were catastrophic. Armstrong (2005), reflecting on the biblical Adam and Eve puts it thus: "the loss of the primordial paradise state is experienced as a falling into agriculture. That is, Adam will actually have to work for his food now" as it was no longer an unconditional gift granted by the gods (Armstrong, 2005).

But the gods did not exit the affairs of mankind completely during the agrarian age as the universal occurrence of harvest festivals and the continued appeasement and food offerings to deities by cultures across the world wishing to be blessed with abundant harvests attests. Similarly, when these harvests were meagre, and famine ensued, up to quite recently in human history, mankind believed that it was the result of an offended god who needed to be appeased by repentance so that the plentiful harvests may return (Armstrong, 2005).

Early physicians on obesity. It would be amiss to present the impression that the ancient world's adulation of obesity and excess was uniform. The early ancient physicians recognised that obesity was dangerous, with some early connections being made between obesity and diabetes. Around 1550 BC Egyptian physicians came to associate excessive urination with overweight while the symptoms of diabetes is described in early Hindu writings as extreme thirst, high urine output and the eventual wasting away of the body, but the occurrence of diabetes was only explicitly associated with obesity in the late 1800's (Wells, 2010).

Similarly, obesity did not escape the notice of the Greek physicians with Hippocrates noting the increased mortality associated with obesity, and that "it is very injurious to health to take more food than the constitution will bear, when at the same time one uses no exercise to carry off this excess" (Hippocrates as quoted in Wells, 2010). His remedy? Exercising before meals, consuming a high fat diet which would increase feelings of satiety but restricting food intake to one meal a day and to stay naked each day for as long as possible, all principles which have since been borne out by modern research on thermodynamics and the principles of appetite regulation and ketosis (Wells, 2010). Similarly, Herodotus noted the Egyptians' practice of inducing vomiting and to regularly purge themselves believing that such practices aided health, while Galen and Pythagoras recommended restrictions of food intake to control weight gain (Wells, 2010).

The societal condemnation of obesity was not far behind, with the playwright Aristophanes writing in the fifth century BC that obese men were “bloated, gross, and pre-senile fat rogues with big bellies and dropsical legs which by the gout were tormented” (Wells, 2010, p. 78).

Historical and cultural aspect: Achieving communion with the gods – by not eating at all. The early Christians, having defined gluttony as one of the seven deadly sins also looked at obesity with scorn, starting with Thomas Aquinas’ publication of the *Summa Theologiae* in which he describes gluttony as an “inordinate desire … leaving the order of reason, wherein in the good of moral virtue consists” (Aquino & McDermott, 1997, p. 148). Soon, abstinence, the counter-virtue opposing the sin of gluttony came to be seen by the holy anorexics as a way to get close to God; the *anorexia mirabilis* of the Middle Ages referred almost exclusively to a “miraculous lack of appetite” observed mainly in women who would starve themselves in *inedia prodigosa* – the prodigal fast to the point of death in their search for God (Comerci, 1991). Unlike its modern cousin, *anorexia nervosa,* which is mainly rooted in the distortion of the body image (Comerci, 1991), *anorexia mirabilis* was but one of many practices of denial which included regular flagellation, the wearing of hair shirts and celibacy and other practices of penance including sleeping on beds of thorns (Bell, 1987). The holy anorexics included such characters as Catherine of Siena (1347-1380) who thought of fasting as indicative of female sanctity, humility and purity, while Bynum (1987) describes Julian of Norwich’s fasting habits as a legitimate means of fellowship with God (Bynum, 1987).

For these holy anorexics, the denial of food was not only about their devotion to God, but they actively sought the separation of body and the immortal spirit. Unlike ancient times when immortality was to be achieved by stealing the food of the gods, the holy anorexics sought to do so by starving their mortal bodies to release their immortal souls in eternal communion with God (Bynum, 1987). Unsurprisingly, they partook of no food with the exception of the Eucharist, but some had rather exotic preferences with both Angela of Foligno (1248-1309)

and Catherine of Siena (1347-1380) drinking the pus from the open sores of the sick they tended, and Angela declaring that the pus was as "sweet as the Eucharist" (Bynam, 1988). Both were also known to have picked the scabs and lice of the sick which they ate (Comerci, 1991).

A psychoanalytic view of the holy anorexics. Bell (1987) is quick to point out that at least in Catherine's case, not all of her fasting was inspired by holy motives. Catherine's first fast came as a protest to the proposed marriage of her beloved sister Bonaventura who was the one who taught the technique to Catherine in the first place. Bonaventura was known to embark on extended periods of fasting to punish the offensive husband, and would only stop once he showed better manners (Bell, 1987). If, as the anecdote suggests, these women used fasting as a form of controlling behaviour, then their fasting is not entirely dissimilar to some of the motives underpinning *anorexia nervosa*, an observation underscored by Comerci (1991) who notes that the difference between *anorexia mirabilis* and *anorexia nervosa* is not to be found in the motives of those who engage in the behaviour, but rather in that the paradigms for coding the behaviours have changed over time (Comerci, 1991). Bell (1987) argues the case differently. Applying a psychoanalytic lens and placing extensive reliance on Raymond of Capua's biography of Catherine of Siena, originally known as Catherine Benincasa, he concludes that her *anorexia* was less *mirabilis* and more a quest for liberation from patriarchal family and societal dominance and a psychosexual developmental struggle.

Placing great emphasis on her early life and family constellation, Bell (1987) notes that she was the 23rd child who survived at her mother's breast while her twin sister, who was sent out to a wet nurse died, leaving Catherine to be weaned very late and with a strong dose of survivor's guilt. This leaves Bell to conclude that Catherine's frequent reference to maternal imagery was not inspired by the prevailing religious metaphor, but rather an unconscious recounting of her own early childhood trauma. Catherine sought to avoid sexuality as an adolescent and despite the wishes of her parents who wanted to see her married; she joined the

Dominican Sisters of Penance after the death of two further beloved sisters. The anorexia soon followed, as Catherine sought out a life of hard penance and solitude which included episodes of intentional scalding and flagellation as Catherine sought to tame her “unruly flesh” and earnestly sought absolution for the rest of her life (Bell, 1987.)

The holy anorexics claimed that their fasting and penance brought them spiritual enlightenment, that “they sat at the delicious banquet of God” and felt “inebriation” with the holy wine and lived in “hunger” for God’s eternal presence and quite a number of these women were said to possess some level of psychic ability (Bynum, 1987, p. 44). They were said to perform miracles like exuding oil through their fingertips, healing with their saliva and being able to fill empty barrels with wine out of thin air (Bynum, 1987) unlike their Saviour who required a bit of water to work with. By the time the advent of Age of Enlightenment signalled the end of the medieval dark ages, the practice of holy fasting fell out of favour with the church condemning it as heretical, satanically inspired and dangerous to the social order (Bynum, 1987).

Gluttony remained a mortal sin with the early 19th century Russian Bishop Brianchavinov declaring that those who pleased their stomachs were hurling themselves over the “precipice of bodily impurity, into the fire of wrath and fury, you will coarsen and darken your mind and in this way you will ruin your powers of attention and self-control, your sobriety and vigilance” (Schimmel, 1997 p. 112) while Lehner & Lehner (1971), notes that the punishment awaiting those who committed the sin of gluttony was to be forced to eat rats, toads and snakes in hell for all eternity (Lehner & Lehner, 1971).

Food and body image as symbols of wealth and power. To the ‘common folk’, plumpness still carried considerable value as a sign of prosperity (Stearns, 1997). Stearns (1997) notes that thin people were generally regarded with suspicion and seen as ugly. He adds that “to say that Cassius had a lean and hungry look was not a compliment,” (Stearns, p. 12,

1977) and points out that until the beginning of the 20th century, the majority of nutritional interventions were designed to help people gain weight instead of losing it (Stearns, 1997). Similarly, as late as the 1960's thin women in Japan were considered to be unmarriageable while muscular men's prospects were similarly dim as their physique indicated their manual labour occupations (Ogden, 1966).

With the advent of the 20th century came inventions enabling mass production in agriculture which brought a year-round abundance of food, and everyone could live like Mayan royalty (Stearns, 1997), which meant that the plumpness that came with prosperity was democratised. In search of a new status symbol, the elite of the industrial age seized on thinness as a status symbol indicating not only access to better quality food offerings such as unprocessed fruit, vegetables and lean protein that were considerably more expensive than the highly-processed fare of the masses, but also as a symbol of being better educated (Stearns, 1997).

Culture not only focuses on economic security and prosperity; power also takes on socio-cultural dimensions, and in this context the quantity and quality of food one has access to is vested with a socio-cultural meaning and is indicative of one's wealth and whether one is divinely blessed (Brouwer, 2008). Consider the case of Hinduism which is generally thought of as a non-material religion, but still features the goddes Lakshmi whom the Hindus workship for wealth and propserity, and whose special dedicated day *Lakshmi puja* remains an integral part in the most liveliest of Hindu festivals, Diwali (Brouwer, 2008.) Similarly the Bhuddists have their special Bhudda of money featuring the overweight posture and round belly that most Bhuddists associate with material prosperity (Brouwer, 2008).

The rich as a cultural class consistently use social exclusion and social distancing which includes spatial seperation and other more subtle forms of differentiation to distance themselves from the poor and downtrodden. (Brouwer, 2008). In this instance the material as evidenced in the accumulation of property, the ability to afford better education or to fund

above average consumption are much more than just a means to survival; it is a matter of social status and class identity. This, according to Brouwer (2008) illustrates culture's territorial nature; culture is territorial in that it seeks to differentiate itself from others, whether by race, ethnicity, social class, religion or economic status. It is this imperative for differentiation that drives the materially based cultural dichotomy between the rich and the poor and this materiality is embedded in every culture around the world (Brouwer, 2008.) This discourse provides support to Brouwer's observation that the "cultures we produce are the cultures of commodity … for everyday life is the life defined by everyday commodities" (Brouwer, 2008, p. 367) and this defines the materiality of the cultural identity. As being fat was no longer a status symbol of the rich and powerful due to industrial food production, the stigmatisation of obesity began in all earnest as the higher classes sought to differentiate themselves from the rest.

Gilman (2008) notes that "obesity presents itself today in the form of a 'moral panic'--that is, an 'episode, condition, person or group of persons' that has in recent times been 'defined as a threat to societal values and interests'" (Gilman, 2008, p. 9), and further that "we see obesity as a national rather than an individual problem ... not only because of epidemiological evidence, but also because of the meanings now firmly attached to the expansive waistline" (Gilman, 2008, p. 3).

As global obesity is increasing, it is associated with excess weight, ill health; it is regarded morally repugnant and could be socially damaging. Sobal & Stunkard (1989) suggests that the ridicule of obese people remain the last socially accepted form of prejudice. This prejudice begins early in life. Staffieri (1967) conducted a study of prevailing attitudes among 6-year old children towards overweight people and found that they described silhouettes of other overweight children as lazy, dirty, stupid and ugly. These findings were confirmed by Cramer and Steinwert (1998) who found evidence of negative stereotypes of overweight people in

children as young as three years old. Unsurprisingly, these attitudes persist during life, with college students reported to have rated obese people as less suitable marriage partners than embezzlers, cocaine users and shoplifters (Vener, Krupka & Gerard, 1982). Similarly, health care practitioners were also found to hold extremely negative views towards obese patients with physicians and nursing staff reportedly associating obesity with poor hygiene, non-compliance, dishonesty and hostility. They also saw obese people as being more overindulgent, lazier and less successful at life in general than patients with normal body weight (Klein, Najman, Kohrman & Munro, 1982; Maroney & Golub., 1992).

In Cramer and Steinwert's study, overweight children held far stronger negative stereotypes towards overweight people than those of average weight (1998). Among adult cohorts, negative attitudes toward overweight people appear to be unrelated to the weight of the respondent (Crandall, 1994), but overweight respondents tend to rate obese people as negatively as other respondents suggesting that overweight people themselves associate obesity and overweight with unfavourable character attributes – and more so in early childhood as the Cramer and Steinwert. (1998) study shows. These anti-fat attitudes also translate into stigma-by-association as a study by Hebl and Mannix (2003) illustrates. The authors asked individuals to rate an average weight male job applicant who was seen either sitting next to an obese woman, or alternatively sitting next to a woman of average weight and noted that in all cases, the job applicant was rated far more negatively by the majority of the respondents when sitting next to the obese woman (Hebl & Mannix, 2003).

What makes prejudice, when left unchallenged, is dangerous in that it tends to translate into active discriminatory behaviour. The findings of Hebl & Mannix., (2003), illustrate the potential for obese people and those they associate with to be evaluated unfairly in employment settings. Indeed, several studies found such discriminatory treatment of obese people during all stages of employment from the initial selection as well as discriminatory wage, disciplinary

and promotion practices (Pingitore, Dugoni, Tindale & Spring, 1994; Frieze, Olson, Good, 1990; Roehling, 1999). Similarly, overweight people find themselves victim to weight-related discrimination in educational settings as well with Crandall (1991 & 1995) and Puhl and Brownell (2001) noting that parents are less likely to fund the education of their obese children (particularly daughters) and that weight-related discrimination in educational settings tend to particularly target women.

Concept Three: Obesity

Early theoretical response to obesity. The historical context of obesity is further explored by Gilman, (2008) who points to the 19th century origins of society's concern about childhood obesity with Charles Dickens' Pickwick Papers (1994) which describes the morbidly obese servant boy Joe as suffering from "excessive appetite whose corpulent body bore the physical expressions of his monumental stupidity, boundless laziness and moral turpitude" (Dickens, 1994, p. 71). While fat children in Victorian times were seen as character deficient in that they were weak willed, the doctors of the time were more concerned with undernourishment than excess weight and obesity was hardly seen as a disease, until the Viennese clinician Alfred Froehlich described a pubescent boy suffering from a pituitary gland disorder as massively obese and sexually infantile which later became known as Froehlich's syndrome (Gilman, 2008). This allowed the re-imagining of fat boy servant Joe to become the poster boy for all cases of pathological childhood obesity from Hilde Bruch's psychoanalytic approach in *Eating Disorders* (1973) to Claudio Rabec's hormonal approach in *Today's Fat Children* (2006) (Gilman, 2008).

Adult men similarly saw the stigma of obesity starting with William Banting's *Letter on Corpulence to the Public* published in 1863 while an earlier Verdi opera *Falstaff* told the story of fat men in the 19th century seeking a cure for their fatness because they felt socially stigmatised (Gilman, 2008). Similarly, a race connotation was brought to bear on the problem

of obesity with Jews being described as a “diabetic race” owing to their alleged inclination to overeat, become overweight and as a consequence, to develop diabetes leading the doctors at the time to observe a link between the “oriental race” and diabetes (Gilman, 2008, p. 111).

The response to this notion came from German-Jewish physician Hilde Bruch (1973) who made the link between obesity and family dysfunction – especially bad mothering - in proposing her psychodynamic framework. Instead of dispelling the racial connotation to obesity, by the 1970’s the family dysfunction and racial explanations merged in the discourse on obesity pertaining to African American communities (Gilman, 2008). Taking the argument further, Gilman (2008) contends that medial research into the demography of obesity tend to perpetuate the idea that race and ethnicity could be precursors to obesity citing the work of Kenneth Ferraro who found Protestants, in particular Baptists to be the most obese in the United States, followed by other Christian groups including Catholics and Mormons, while non-Christians (including Jews) were reported to be the least likely to suffer from excess weight (Gilman, 2008).

In making the point that early models of obesity were also models of race (Gilman, 2008, p. 125), Gilman (2008) draws on Southern American literature including Mitchell's *Gone with the Wind* (1936) and John Kennedy Toole and Percy's *A Confederacy of Dunces* (1994) to illustrate the racial underpinnings of our understanding of obesity. In *Gone with the Wind* the story of the black Irish is told as they transform to white Irish by rebuilding the South after the Civil War with their supposedly lean bodies, while the tale of ethnic whites’ attempt to become fully white is told in *Confederacy*; in this case the effort fails as the characters sink into obesity and ethnicity instead (Gilman, 2008). In contrast, the rising prevalence of obesity in China is ascribed to the invasion of the West with fast food chains such as McDonalds being seen as the primary culprits in the rapid increase of China’s “fat little emperors” (Gilman, 2008, p. 138).

In this case, modernisation and the consequent cultural invasion as a result of globalisation is seen as the cause of obesity, as rising incomes and access to American fast food conspire to replicate the American experience of obesity. Yet, in response to the World Health Organisation's declaration of a global obesity epidemic in 2001, Gilman (2008) notes that our current anxiety about a global obesity epidemic is but "the most recent iteration of an obsession with control of the body and the promise of universal health" that has characterised modernity (Gilman, 2008, p. 164) and he observes on his final page that, "maybe at the end of the day our desire to control and reform our bodies is what is truly 'modern', and the obesity epidemic is only proof of our desire to undertake this quixotic task of absolute bodily control" (Gilman, 2008, p. 174).

An earlier contribution on the cultural obsession with obesity from a feminist vantage point came from Naomi Wolf (1991) whose premise is that the pressure for women to conform to the impossible societal ideal of beauty and fitness arise from the commercially driven interest portrayed in the mass media as a societal response to the increasing power and social prominence of women (Wolf, 1991). The pre-occupation with appearance of both genders, Wolf (1991) argues, leads to unhealthful dietary behaviour and ultimately compromises women's contributions to and acceptance by society. The argument is powerfully stated in the introduction to the *Beauty Myth* (Wolf, 1991) as follows:

> The more legal and material hindrances women have broken through, the more strictly and heavily and cruelly images of female beauty have come to weigh upon us... During the past decade, women breached the power structure; meanwhile, eating disorders rose exponentially and cosmetic surgery became the fastest-growing specialty... Pornography became the main media category, ahead of legitimate films and records combined, and thirty-three thousand American women told researchers that they would rather lose ten to fifteen pounds than achieve any other goal...More women have more

> money and power and scope and legal recognition than we have ever had before; but in terms of how we feel about ourselves physically, we may actually be worse off than our unliberated grandmothers (Wolf, 1991, p. 10), and argues consequently that women should have the "the choice to do whatever we want with our faces and bodies without being punished by an ideology that is using attitudes, economic pressure, and even legal judgments regarding women's appearance to undermine us psychologically and politically" (Wolf, 1991, p. 17-18).

Weighing in on the debate offering a Jungian perspective on the problem of obesity is Marion Woodman (1980) who argues that modern women have been kept unconscious of their feminine principle as a result of living for centuries in a male-dominated culture, and that this neurosis manifests as obesity. She notes:

> Every woman haunted by obesity knows the agony of looking into a mirror and seeing an owl staring back at her. If she dares to keep looking, she may even see her mermaid's tail. The split between her head and her body is destroying her life and she is powerless to break the spell (Woodman, 1980, p. 9).

In seeking to find her place in this male world, Woodman (1980) contends that women have unknowingly accepted the male values of goal orientation, becoming compulsively driven – but to the feminine soul this is "eating concrete bread which fails to nourish their feminine mystery" (Woodman, 1980, p. 10). This being too much to bear for the feminine essence, the unconscious femininity ends up rebelling by manifesting in a somatic form, and Woodman (1980) explains that "the Great Goddess either materialises in the obese or devours the anorexic" (Woodman, 1980, p. 10).

Woodman (1980) explains this by relating the tale of Ophelia described in *Hamlet* as a father's daughter who grew up without a mother in a court demanding a very specific manner of conduct. In keeping with her social standing, Ophelia fell in love with Prince Hamlet who

was destined to take the throne as king. But the affair worked only as long as it was untouched by reality which soon intruded as their “garden” was destroyed having fallen “to all things rank and gross” and here Hamlet realises that Ophelia was no more than a child. She lacked the inner resources to be true to herself, and as a consequence, to him, but as a daddy’s girl she continued to play out the role as Hamlet’s lover as her father’s puppet, and in so doing played false to the man she believed she loved and more importantly – she betrayed the woman she never found within herself. But when her father dies and her lover left, Ophelia went mad and ends up standing in bedraggled dress and weed-braided hair, empty of everything but the demon who possessed her (which Woodman notes, is obesity) and cries “they say the owl was a Baker’s daughter. Lord, we know what we are, but we know not what we may be” (Woodman, 1980, p. 15) in reference to an old English legend. The legend tells the tale of Jesus passing by the baker’s shop and smelling the bread asked for a piece to eat. The baker, generous of heart, rolled a large piece of dough and put it in the oven to bake bread for Jesus, but his mean-spirited daughter would have none of it. Caught up in the preparations and her own fantasies of the Christmas day to come, she misses the reality presenting as a beggar at the back door. She believed the piece of dough too large, and reduced it to a much smaller size. But after all, it was the Saviour’s dough, and it swells to an enormous size upon which the daughter responds in horror – the mystery rejected at the back door shows up as the monster in the centre of the room. Overcome by the dough, Jesus turns the daughter into an owl as punishment for her stinginess (Woodman, 1980).

Being turned into an owl is not without symbolic meaning. In Greek mythology, the owl was Athena’s bird symbolising Athena’s affinity with darkness. Like Ophelia, Athena was also a daddy’s girl, who sprung from her father’s forehead after he swallowed her pregnant mother. Shakespeare presents the immature Ophelia as a little walking owl, simultaneously bewitched by her unconscious feminine while held captive by her father’s expectations and what “they

say" (Woodman, 1980.) As a result, she misses life and love and the present as she never completed the development work of finding her own voice, her own identify and her own body. As she dies and her body is swept away by the brook, the "waters of the unconscious to which she is native and endued swallow her" (Woodman, 1980, p. 14). Woodman (1980) concludes that "only by discovering and loving the goddess lost within her own rejected body can a woman hear her own authentic voice" (Woodman, 1980, p.10).

Wolf's contribution was not received uncritically with Sommers (1995) pointing out that Wolf's historical analysis was flawed and that her statistics claiming that 150 000 women died of anorexia each year was inaccurate. The critique of statistical overreach was further supported by Schoemaker (2004) who found that the anorexia statistic quoted by Wolf (1991) could likely be divided by eight to arrive at a more realistic estimate.

Yet Klein (1996) offers support to Wolf's main premise regarding the pressure to conform to the societal ideal of beauty in that he argues that the combination utopianism, moralism and modern consumer culture conspire to make it extremely painful for those who do not conform to the prevailing norms of beauty and acceptability to simply be themselves arguing that the beauty and diet industry is so intense that it causes not only material denial as people continue to follow extreme diet and beauty regimes, but the very denial of the soul (Klein, 1996). Klein writes:

> My position is this, even if fat is unhealthy, which it is and it isn't, for the vast majority of people, it's probably healthier than the alternative. The alternative is dieting, compulsive exercise, hyper-vegetarianism, diet pills. My opinions start from the *a priori* premise that administering any powerful drugs to a large population over a long period of time is not good for public health (Klein, 1996, p. 87).

The public condemnation of obesity. As obesity rates is relentlessly on the upsurge; public health systems are coming increasingly under pressure due to the costs of caring for

people who suffer the lifestyle diseases associated with obesity (World Health Organisation, 2015). What gives legitimacy to the public outrage is that it is public health systems that bear the costs, and as such, private lifestyle choices impose public consequences. Globally the World Health Organisation reports that 1.9 billion people were overweight of which 600 million were classified as obese; and obesity is rising (World Health Organisation, 2015). However, the problem is not universal – some countries such as Japan who maintained an obesity rate of around 3% from 2004 to 2014 - have not fallen prey to rising obesity levels (World Health Organisation, 2015).

Where obesity and the public condemnation thereof abounds, the weight loss market is booming. The global weight loss market was estimated to be worth US$ 586.3 billion in 2014 (Markets and Markets, 2016) and had an average compound annual growth rate of 10% from 2009 to 2014. Weight loss is profitable business - statistics show that less than 2.5% of people who manage to regain control of their weight maintain their weight loss over the long term – and these are the repeat customers of the industry. Often, these cases include people who have managed substantial weight loss as a result of prolonged caloric restrictive diets and exercise regimes, and explanations on why they eventually pick up the weight despite showing considerable self-restraint over these prolonged periods are lacking (Goodrick & Foreyt, 1991; Field et al., 2003; Coulston, 1998).

The medical evidence outlining the dire health consequences associated with obesity; which is what much of the public condemnation of obesity is based on; has not gone unchallenged. Campos (2004) argues that the *"*current barrage of claims about the supposedly devastating medical and economic consequences of excess weight is a product of greed, junk science and outright bigotry. It blows the whistle on a witch hunt masquerading as a public health initiative by exposing the invidious cultural forces that encourage us to hate our bodies if they fail to conform to an arbitrary and absurdly restrictive ideal," (Campos, 2004, p. xvii.)

Campos et al. (2006) evaluates four central claims made by medical research on obesity;

(a) That obesity is assuming epidemic proportions in almost all high and middle income countries (World Health Organisation, 2003, p. 61). The authors note that for this to be true an exponential pattern in the growth of obesity must be observed which is not borne out by the available data which instead show that the majority of those classified currently as obese and overweight are currently at weight levels slightly higher than those maintained a generation ago, and further that adult and childhood body mass index may have ceased to increase (Hedley et al., 2004)

(b) The authors (Campos et al., 2006) dismissed the claim that overweight and obesity are major contributors to mortality by citing studies indicating that no increased risk of early mortality is observed until one reaches a body mass index of 30, and that within the US context it was found that those with a body mass index of below 25 in fact faced a higher risk of premature death than those above it (Flegal, Graubard, Williamson & Gail, 2005).

(c) Similarly, the claim that higher than average adiposity is pathological and a primary cause of disease is dismissed by the authors (Campos et al., 2006) claiming that very little evidence show exactly how adiposity causes disease and that to the contrary the claim that adiposity is itself pathological is not supported by interventions aimed at reducing adiposity only (Klein et al., 2004). Where health improvements do occur, the authors claim that these arise from the lifestyle changes associated with weight loss, not the reduction in adiposity itself (Campos et al., 2006).

(d) The claim that long term weight loss is medically beneficial in that it reduces early mortality is dismissed on the basis that it is untested. The authors argue (Campos et

al., 2006) that for such a claim to be established it needs to be tested it would require significant long term weight loss in statistically significant cohorts, a quest rendered impossible by the low number of people who manage to lose weight over the long term. In particular, the authors vehemently criticise the pursuit of an untested long term health goal by the current life-threatening means of weight loss surgery, diet drugs known to induce adverse consequences, fad diets and chronic weight cycling (Campos et al., 2006). Gregg, Gerzoff, Thompson & Williamson (2004) points to data from the US National Health Survey which shows that obese people including those suffering from type 2 diabetes who tried to lose weight and failed; suffered a mortality rate no greater – and in some cases less than those who did succeed in their weight loss efforts. This study also associated weight loss with a mortality risk ratio of 3.36 and weight cycling with a risk ratio of 1.83 (Diaz, Mainous & Everett, 2005) while finding that obese people of stable weight had no increase in mortality.

Concluding his review, Campos et al. (2006) dismisses the notion of an obesity-driven health crisis and suggests that the war on fat is driven more by political factors, profit motive and culture than any legitimate concern about the risks increasing body weight may pose to public health.

Similar to Klein (1996) who claimed that the growing emphasis of dieting and exercise was the root cause of the rapid increase in overall levels of obesity, Campos (2004) argues that the damage wrought by the war on fat "goes far beyond its tendency to expand our waistlines. Historically most attempts to marginalise and shame some disfavoured class of people have focused on some minority group or another. The war on fat in America is unique in that it represents the first concerted attempt to transform the vast majority of the nation's citizens into social pariahs to be pitied and scorned until weapons of mass destruction can be found that will

rid them of their shameful condition. As we shall see, this is a phony war, fought against an enemy that cannot be defeated, because he does not exist." (Campos, 2004, p. xvii).

So, pervasive is the notion of the ideal body weight that Campos (2004) notes that the majority of dietitians in the US were victims of eating disorders and consequently prone to the very thinking patterns that motivates it. He ascribes this to the prevalence of what he terms the "anorexic lens" and claims that the proposed ideal body mass index of 21.9 – a definition that would make a woman of average height weighing 128 pound "fat" - and the emulation of ultra-lean models and movie stars in contemporary culture as a form of anorexic ideation (Campos, 2004). The consequence of this anorexic ideation for Campos (2004) is an eating disordered culture, one that obsesses about obesity and is characterised by an intense loathing of body diversity and neurotically oscillating between "guilt-ridden bingeing and anorexic starvation" – a culture that has become pathological in its fearful loathing of food, pleasure and life itself and further describes the culture of diet as one of perpetual dissatisfaction (Campos, 2004) and he concludes that:

> "The rejection of the war on fat is based on a simple principle: that tolerance toward an almost wholly benign for of human diversity is the least we should expect of ourselves, if we wish to lay claim to living in a civilised culture. The war on fat is an outrage to values – of equality, of tolerance, of fairness, and indeed of fundamental decency towards those who are different" (Campos, 2004, p. xvii).

Nonetheless, Campos's critique of the science of obesity has not gone unchallenged. Kim and Popkin (2006) published a comprehensive critique of Campos' argument by offering an extensive overview on the epidemiology of overweight and obesity. The authors' first argument is that Campos cited the literature supporting his assertions rather selectively and point out that data from around the world suggest radical increases in obesity levels in contrast to Campos's

argument that these increases were subtle at best (Kim & Popkin, 2006). Similarly, the authors point out that the adverse health effects of obesity are real.

While Campos (2004) is correct in describing the relationships between the degree of obesity and the consequent health effects as complex, Stevens et al. (1998) amongst others made these links quite clear and explicit. Kim and Popkin (2006) points out that at the heart of the debate raised by Campos (2014) is the issue of how obesity fits into the pathway linking weight with health outcomes. He notes that considerable progress was made in research on the pathways, risk factors and mechanisms linking obesity to adverse health and that Campos ignored this pathway (Kim & Popkin., 2006). The authors conclude their analysis by noting that recent research has yielded strong evidence supporting the prevailing medical view that obesity and overweight is indeed linked to certain cancers, increased hypertension, diabetes, stroke and coronary heart disease (Kim & Popkin, 2006).

Obesity in the context of the social construct and people's relationships with food in the unconscious. What is fascinating about this debate is not so much the merits of conventional medical research regarding the adverse health impacts arising from overweight and obesity, but the very shrillness of this raging debate. Obesity, in the social mind is more than just the physical outcome of an unhealthy eating pattern; it has become a social construct indicative of socio-economic class and educational attainment, and on an individual level, the quality of one's character.

The relationship with food is core to the problem; both biologically and evolutionary as a survival issue, and due to cultures habits, which turn food into social discourse and medium for sustaining relationships. Therefore, the relationship with food is an unconscious matter. Eating behaviour and reactions to food are functions both of cultural conditioning, exposure to food, socio-economic class and personal experiences – and these tend to be embedded in the unconscious, often laden with emotional content (Bruce-Mitford, 2008).

Jung described the collective or transpersonal unconscious as a level of unconscious shared collectively with other humans and which comprises latent memories of our evolutionary, cultural and historical (or ancestral) past. He concluded that "the form of the world into which a person is born is already inborn in him as a virtual image" (Jung, 1953, p. 188). Jung referred to these ancestral images as archetypes (Jung, 1947) which are images and thoughts that have universal meanings across cultures. Archetypes express in dreams, literature, art or religion and Jung explained that the reason why some symbols have the same meaning across different cultures was because they derive from archetypes shared by the whole of humanity (Jung, 1947). Hence, Jung believed that the basis for human behaviour lies in our primitive past which directs the human psyche (Jung, 1947).

Narratives' influence on the human psyche. The story of Hansel and Gretel: an example of the rich symbolic meaning of food conveyed over generations. To illustrate the above mentioned concept, consider the rich symbolism in the Germanic tale of Hansel and Gretel, the children of a woodcutter (Grimm & Pacovska, 1812). The tale goes that the children's stepmother demanded of their father to leave them in the woods. There was famine in the land and according to the stepmother the children ate too much and she wanted to ensure that she and the husband did not starve to death. The woodcutter initially opposed the plan, but eventually relented. However, their discussions were overheard by the children, and Hansel prepared for the inevitable by going out that night to collect white pebbles. The next day, as planned, the stepmother and father took the children into the woods. Hansel left a trail of white pebbles which became luminous in the moonlight to help the children find their way home, much to the consternation of the stepmother (Grimm & Pacovska, 1812).

Food was scarce, and the parents decided to take the children to the woods again, but this time, they locked the door and Hansel could not gather pebbles to guide them home. Instead, on his way out, Hansel grabbed a piece of bread and left a trail of breadcrumbs to guide them

home. Despite Hansel's plan, the children could not find the trail for it was eaten by the birds, and they were lost in the woods. After hopelessly wandering around for days, they eventually spotted a white bird in a clearing who lead them to that ultimate children's paradise and sensual temptation – the witch's cottage that was made of gingerbread (in earlier versions sweet bread) and all kinds of sweets imaginable. The windows were made of translucent sugar, the door handle was a sugar cane, and everywhere they looked, sweets were abounded. In their hunger, the children started eating the roof. The door opened to reveal a hideous old hag who lured them inside with promises of soft beds and delicious food (Grimm & Pacovska, 1812). This seduction is echoed in other children's stories starting with the nursery rhyme by Mary Howitt published in 1829 and later parodied by Lewis Carol's "Lobster Quadrille" in Alice's Adventures in Wonderland (Gardner, 1998).

> "Will you walk into my parlour?" said the Spider to the Fly,
> 'Tis the prettiest little parlour that ever you did spy;
> the way into my parlour is up a winding stair,
> and I've a many curious things to show when you are there" (Howitt & DiTerlizzi, 2002, p.2).

The witch was a bloodthirsty hag who locked Hansel in a cage the next morning and Gretel became her house slave (Grimm & Pacovska, 1812). In planning to eat Hansel, she started fattening him up. Hansel in turn fooled the blind witch, by offering a bone instead of his finger every time she checked up on his weight gain. Eventually the witch lost patience and decided to eat him anyway. The witch prepared the oven for Hansel, and decided to eat Gretel as well. To lure Gretel into the oven, she coaxed her to lean over and open the oven so that she could feel whether it was hot enough for cooking. But Gretel was no fool; she sensed the witch's intent and feigned ignorance. The exasperated witch was forced to demonstrate how to check the oven, upon which Gretel pushed her into the oven and freed Hansel. Together, the pair

discovered a vase full of precious stones in the witch's house and put the jewels into their clothing. They set off on their way home, assisted this time by a white swan who ferried them across the lake. Upon their arrival at home they discovered that the evil stepmother had died and that their father spent his days in mourning the loss of his children. Happiness returned to the house, and thanks to the witch's treasure they were rich and lived happily ever after (Grimm & Pacovska, 1812).

The story is said to have originated during the Great Famine of 1315-1321 (Ashliman, 1998). In this time, it was common practice for desperate people to abandon young children or to resort to cannibalism (Tatar, 1987). In the Grimm's version of the tale, the mother was the children's biological mother (Grimm & Grimm, 1884).

The tale offers richness in symbolism and food in particular serves the central symbolic role. It was the lack of food that served as the justification for abandoning the children. It was the lack of food and the children's hunger that kept them awake at night so that they overheard the parents' plans. However, their hunger saved them – having overheard the plans; they knew to collect stones and bread so that they could return to their home. But then food became the dangerous seducer as the children were attracted to the witch's edible house – the baited trap that lead them into captivity and slavery. Their hungers rendered them vulnerable to the witch's promises and lead them into the house. Food became the tormentor as the witch sadistically used it as a means to fatten Hansel up, so that he could become her next meal. But food is also the decoy as Hansel, surrounded by a feast of plenty had a bone to offer instead of his finger to deceive the witch and put off his inevitable demise. In this story food is a catalyst, a protector, seducer and abuser – it divided a family leading to the abandonment of the children, it led the children into a trap, but it also sustained them. And herein one finds summarised the very essence of our deeply conflicted relationship with food (Tartar, 1987).

The rich symbolism of the tale does not end with the food – for it is also a tale of transformation, of coming of age. The forest is a recurring image in European folklore; it is a supernatural world where the unexpected and magical can happen. In Jungian psychology, the forest is a representation of the feminine principle which represents the unconscious. As the leaves block the sun's rays (the sun representing the masculine principle), the forest world is often darkened, and symbolising the dangerous side of the unconscious – that place where reason is destroyed (Cirlot, 1971; Matthews, 1986).

By identifying the father as a woodcutter, a class element enters the story. The woodcutter is the lowest paid occupation, and as the family eventually triumphs over the witch and the poverty, the tale – according to Zipes (1997) – represents a triumph of the poor over the richer classes represented by the witch. Because she is richer, she has food in store which she uses to lure the children and a vase full of jewels. Zipes (1997) notes that the killing of the witch is indicative of the hatred the peasantry felt for the aristocracy who they saw as hoarders and oppressors; and by relieving the witch of her jewels, the family could live happily ever after.

The names of the children carry no special significance, as Hansel and Gretel were very common names representing everyman at the time. The famine, added by the Brothers Grimm in the 5th edition of the tale is used as a justification for the parents abandoning the children (Rölleke, 1988). The bread in the story is used as a symbol of transformation in that it illustrates the children's journey from childhood to adulthood (Dieckman et al., 1986) but the symbolism extends to several levels. Firstly, bread is the food of the poor, but it is also seen as the basis of daily substance (Matthews, 1986), and as such the struggle to provide bread for the children illustrates the family's struggle for survival and their extreme poverty.

The abandonment of the children in the tale introduces the distinctly Freudian concepts of fear of abandonment and oral greed (Hoyme, 1988). Freudian analyst Bruno Bettelheim (1976) notes that children fear abandonment by their parents, but simultaneously they are also orally

greedy and fear starvation by their parents if they are overly greedy – this tale to an extent addresses these fears, but the opposite themes of parental abuse and poverty also present. Similarly, being left alone in the woods represents both the loss of security for the children and the abandonment of previously held truths (Heuscher, 1974). In Hansel and Gretel's world, women are depicted as dangerous; the stepmother who agitated for their eventual abandonment and a witch who seduced them and ultimately wanted to consume them. The image of the evil stepmother is associated with images of jealousy, selfishness and cruelty in fairy tales (Olderr, 1986). And as Von Franz and Crossen (1970) notes, in masculine psychology the evil stepmother represents the unconscious in a destructive role.

As destructive as the stepmother figure is, it was her actions that drove the protagonist into the situations that allowed him/her to discover their strengths and showcase their best qualities – for in the battle with the stepmother; the protagonist prevails in fairy tales (Von Franz & Crossen, 1970). In contrast, the father figure ranged from being the voice of mercy in that he opposed the stepmother's calls to lead the children into the woods initially, but ineffectively only to return later as the weeping father who mourned the loss of his children, and as such, the tale carried strong patriarchal overtones. This is also reflected in Hansel's role at the beginning of the story where he was the one to collect the pebbles that allowed them to find their way home, and he was the one protecting his sister. But then he landed in captivity, and Gretel ended up slaying the witch, and setting her brother free.

The moon of course, represents light, while the white pebbles symbolise justice; the ancient Greeks saw a vote using a white pebble as an indication that the voter felt the accused was not guilty while white pebbles were often placed at gravesites to ensure the rebirth of the spirit of the one entombed there (Olderr, 1986). Dieckman et al. (1986) has a different interpretation; the white pebbles symbolised the children's rigidity to change. In the second instance, Hansel relied on bread crumbs to point the way home. As Bettelheim (1976) notes from the Freudian

perspective, starvation anxiety was the driving force for Hansel to want to go back home, and overcome by starvation anxiety he can only think of food as his solution to find his way out from the predicament abandonment presents (Bettelheim, 1976).

The pigeons in the tale represent both a death omen as a pigeon – especially a white pigeon flying towards a house; indicates death (Opie & Tatem, 1989) and as the story revealed, the white pigeon indeed led the children to the house they were supposed to die in. Pigeons can also be associated with a desire to return home, as they are often trained to find their way home. Birds in general are dominant in the tale – the birds ate their crumbs, it was a bird that led them to the witch's house, and it was a bird that provided the children's final escape by ferrying them across the water (Tatar, 2002). According to Olderr (1986), birds are often used as symbols for air, wind, time, immortality, the feminine principle, spirit, love, freedom, aspiration and prophesy (Olderr, 1986.) Von Franz and Crossen (1970) noted that following an animal into a forest represents being led to a confrontation in the unconscious. In this case the bird is white, which according to Dieckman et al. (1986) signifies that a positive outcome will result.

The witch's cottage was made of gingerbread – cake is a symbol of the rich, a symbol of feasting and plenty (Olderr, 1986) and the sugar signifies excess in the midst of the famine which lead to the children's abandonment in the first place. But the witch is a universal symbol across cultures (Leach, 1949) and in Jungian psychology the witch is the physical manifestation of evil which eventually consumes itself; as such the witch also symbolise the destructive power of the unconscious (Luthi, 1976). Zipes (1997) notes with interest that the children never blame their parents for their abandonment in that in returning with their riches have every intention of sharing it with them; the witch in contrast, with her greed and treasures, represents the feudal system which the children overthrow (Zipes, 1997). She is also a cannibal, guilty of one transgressing one of the most universal taboos in the world, which makes her especially

hideous and evil and the demonic fury that possesses her is evidenced in her red eyes that cannot see far.

Eyesight is associated with mental clarity, suggesting the witch was so depraved that she no longer possessed control of her faculties and so enraptured was she at the thought of eating both children that she lost sight of the child in front of her who would push her into the oven which Jungian analysts perceive as both a symbol of birth and transformation (the oven as a womb) (Dieckman et al., 1986) as it is an ally in the form of destruction, and as a trap as seen as a symbol of the witch / mother's womb. By going back into the womb, the womb becomes a tomb in that it prevents the growth of the individual who remains in it, or returns to it as an act of regression (Brewer, 1988).

The finger is the force of the unconscious that can emerge despite the efforts of the conscious (Olderr, 1986), but Hansel was careful not to show it to the witch using a bone to deceive her instead. The bone itself is fraught with symbolic meaning as it represents the indestructible part of man (Olderr, 1986). At this point in the story Hansel's life is in grave danger, but the trickery and symbolism of the bone suggests that he will survive. Thomas (1989) similarly notes the trickery associated with the bone which represents starvation and deprivation – the central themes of the tale. Trickery is the means by which one slays witches and dragons and evade ogres in fairy tales, but to do so the trickster must experience and accept evil within him / herself (Jung's shadow), because by embracing evil (Hansel becoming a dishonest trickster, Gretel becoming a murderess) the witch can be overcome (Mario, Kast & Riedel, 1992).

Burning often occurs in fairy tales as a symbol of purification, and the witch's burning in the oven is no exception (Luthi, 1976). Similarly, Mueller (as cited in Bottigheimer, 2014) noted that the punishment of witchcraft in Medieval Europe was to burn them alive. Napoli (1995) retells the tale of Hansel and Gretel from the witch's perspective which also illustrates

the purification by burning motif. According to Napoli's iteration, the witch started out as a wise old hag who was skilled in the healing arts. Her skills as a midwife in particular were in high demand and she worked tirelessly to serve God, and to benefit her beloved daughter Asa – often preferring as payment things of beauty Asa would desire such as the perfect hair bow and other trinkets. But then her neighbour, Bala (a reincarnation of the God Baal) convinces her that she would be able to better serve Asa by working for the rich, and at this point the wise old hag becomes the evil sorceress (note the class motif here). Eventually the demons trick the Sorceress by presenting her with a beautiful ring for the now grown Asa, and the Sorceress succumbs. Now fallen she flees to a foreign land where she becomes the witch of Hansel and Gretel's story, condemned to demonic possession manifesting as cannibalism. She builds her beautiful sweet encrusted gingerbread cottage in the woods that would have delighted her beloved daughter Asa in remembrance of her. The sweet encrusted house which literally encases the witch in all of the temptations of the flesh serves as a testament of the witch's ability to resist temptation, and this temperance renders the sweets sacred by virtue of not being eaten (Napoli, 1995).

The witch must live alone so that she can resist the temptation given by the demons to all witches – the compulsion to devour young children; and at this point Hansel and Gretel enters the magic circle. This tale too, is rich with symbolism; the intelligent, self-reliant women who chooses a path of piety and resists vanity and pride until she is seduced by material longing, not for herself, but for her daughter. Once succumbed to the demons that lured her, she continues to resist them by isolating herself in the woods and leaving her daughter so that she might not commit that ghastly sin of all witches – eating a child. In Napoli's version (1995), the desire for salvation is made manifest by the witch willfully allowing Gretel to push her into the oven, and finds redemption in again offering her own life for the child's – first Asha and then Gretel. In the flames, the witch can at last know that she is saved at last (Napoli, 1995).

In the obvious overtones of denial and penance that was such a central feature in the holy anorexics' search for redemption that echoes in this tale, the anorexic manifests as a witch, damned by demonic possession; her compulsion to devour the lives of children (as metaphor for the future and purity), being at the root of her isolation. But for her strength, intelligence and piety, she finds her final redemption in sacrifice. The circle drawn around the witch's house holds the demons at bay – as long as both witch and children do not cross its bounds, and the circumference of circle represents the limits of self-denial. When these limits are breached, the demons regain their power of the witch, and in this rendition of the tale it is the ability to resist the profane (eating of children) that sets apart the profound (the eventual self-sacrifice of the witch by allowing Gretel to push her into the oven so that the witch may find salvation and Gretel be saved.) (Napoli, 1995).

Returning to the original version of the story, the children are justified in their taking of the witch's treasure because she wanted to kill them and proceed to cross the lake. Bettelheim (1976) relates the crossing of a body of water to the baptism rite, indicative of the transcendence of the children's consciousness into a higher level of existence (Bettelheim, 1976). In psychoanalysis, water is the symbol of the feminine and the unconscious (Matthews, 1986). The children cross the water carried across separately on the back of a white swan. Rusch-Feja (1995) relates the swan to a symbol of maternal replacement since swans; along with geese and ducks represent the feminine in Germanic tradition. The swan takes the children home after their stepmother abandoned them (Rusch-Feja, 1995).

The children being carried across separately also illustrates their newfound maturity as individuals, Gretel no longer needs Hansel to hold her hand and can cross the lake separately from him. Similarly, Hansel, having been saved by Gretel crosses separately a he transcends his captivity and enters maturity (Bettleheim, 1976). Upon their return home, the children hear the stepmother died and the coincidence of her death with that of the witch who dies in the

oven gives rise to the suggestion that the stepmother and witch is metaphorically the same woman (Brewer, 1988).

The motif is echoed in a Slavic folk tale which tells of an evil stepmother (also the wife of a wood cutter) who sends her daughter into the woods on the pretext to go borrow a light. The evil stepmother turns out to be *Baba Yaga* – a deformed witch commonly depicted as standing on chicken legs, who similarly has a taste for children. But she is also ambivalent, sometime evil, sometimes helpful, and mostly ambivalent and as is the case with Napoli's (1995) witch, Baba Yaga is not a singularly evil figure; in both cases, evil and good are not mutually exclusive, but rather co-existing concepts. This duality references the third archetype identified by Jung (1961) referred to as the shadow (similar to Freud's id) which is the animal side of the human psyche and the source of both humanity's creative and destructive energies (evil). In contrast, the persona presents as the socially conformant, acceptable face of the personality (good). The self was identified by Jung as the final archetype and is the source of unity in experience. The ultimate developmental aim, according to Jung, is for every individual to achieve a unified state of selfhood or put differently, the embrace of the shadow which requires the acceptance of the co-existent duality of good and evil (Jung, 1961). For Jung (1961) pathology derives from individual's progressive alienation from his instinctual foundation and the path to healing requires the individual to reconnect with that foundation.

Concept Four: The Collective Unconscious (The Jungian Perspective)

Both Freud and Jung's work focused extensively on the unconscious and the extent to which it drives pathological behaviour. For Freud (1949), the unconscious was personal and for Jung (1947) it was both personal and collective. Nevertheless, the language of the unconscious is symbols, expressed through dreams, embodied in myths, and both authors identified the archetypes. Like Freud, Jung (1953) also believed that the healing task was to make the unconscious conscious. Freud (1949) perceived the unconscious as the seat of

unresolved personal trauma; by bringing the unconscious trauma to the conscious, personal trauma could be resolved. Jung believed that by making conscious of the unconscious, not only as the resolution of trauma, but as a broader developmental task through the processes of transformation and individuation, for while the unconscious is collective, the conscious was entirely personal for Jung (1953).

The validity of Jung's contribution illustrated by quantum theory. Jung's ideas of the collective unconscious, the archetypes, synchronicity and individuation were presented in a world dominated by Newtonian physics; the material universe of classical physics. As a result, it never found mainstream favour at the time and was vehemently criticised to the point of dismissal (Ponte & Schäfer, 2013).

Yet these ideas were not entirely new; in the 19th century Hegel taught that the primary structure of the universe was "absolute spirit"; the spirit that *is* everything, in that it creates everything including thinking and being, the real and ideal, the human and divine, all of which are one (Ponte & Schäfer, 2013). Similarly, the ancient Indian Sages taught that while one could find consciousness in a thousand human minds, there is only once consciousness which they termed the cosmic consciousness (Ponte & Schäfer, 2013). The Indian Sages termed this *Santana Dharma* and the 16th century philosopher Agostino Steuco introduced the concept to western philosophy as perennial philosophy. The history of human thinking is characterised by recurring truths that are so fundamental that they keep reappearing (Kafatos & Nadeau, 1990). In the worlds of quantum physics and Jungian psychology, it reappears as synchronicity and suggests that the human mind is a mystical mind in that it is connected with a cosmic background that has mind-like properties, in other words, a cosmic mind (Kafatos & Nadeau, 1990).

The contribution of quantum physics was that of discovering a non-empirical realm of the universe that was shown to consist of form*s*, not matter as classical physics suggested. These

invisible forms are real because they have the potential to appear in the physical world and act in it; and it is this property of forms that give rise to the central thesis of quantum physics; the empirical world emanates out of a cosmic realm of potentiality. The forms of the cosmic realm appear either as physical structures or things in the external world or as archetypical concept in our mind (Ponte & Schäfer, 2013). Similarly, in a quantum world the evolution of life is not the process of adaptation of species to their external and physical environment as the material universe proposed by Newton, Darwin and others would suggest, but rather the adaptation of our minds to the increasingly complex forms that exist in the cosmic potentiality (Eddington, 1939).

Seen in this context, Jung's proposition that our psyche is guided by archetypes, a system of forms in the quantum sense, which while they do not carry any mass or energy are nevertheless powerful and which are invisible but nonetheless real, does not seem that far-fetched anymore.

Jung described the archetypes as existing in a "psychic system of a collective, universal, and impersonal in nature," (Jung, 1969, p. 43-44). It is out of this system that Jung wrote "the invisible can appear in our mind and guide our imagination, perception and thinking", Jung, 1969, p. 44). Jung's views found substantial support in the discoveries of quantum physics which in itself came as a shock to the prevailing world view in western science, as it exposed the fundamental errors of classical physics; what was thought of as the material world was in fact non-material, consisting of non-material forms, but real for they have the potential to appear in the physical world and to act on it (Eddington, 1939).

This is what forms the realm of potentiality in the physical reality and all empirical "things" have their origin in this realm of potentiality. More so, the forms of the cosmic potentiality are patterns of information representing as waves, thought-like in nature and they converge much like the thoughts in a person's consciousness (Ponte & Schäfer, 2013). The implication is that

the universe appears to be an undivided wholeness in which all matter and life are interconnected which means that consciousness is a cosmic property and because it is an interconnected universe, all individual minds are connected to the cosmic mind. This coincides exactly with the central premise of analytical psychology proposed by Jung. The discovery of a realm of non-material forms which exist in the interconnected cosmic reality as the basis of what we perceive in the physical world supports the acceptance of Jung's archetypes. The archetypes are indeed real *forms* which appear in our unconscious out of the cosmic realm or as Jung termed it, the collective unconscious where they are stored and manifest as matter in the physical world.

Quantum physics confirmed Jung's view "that it is not only possible, but fairly probable even, that psyche and matter are two different aspects of the same thing," (Jung, 1969, p. 57). Schäfer (2013) describes the concept in quantum physics as follows: at the foundation of the visible world, are entities which appear as elementary things when we interact with them. Left alone, these elementary things revert to their natural state which is not matter, but waves. As waves, they have no mass as matter does, and they become pure forms – patterns of information; something more "thought" like than "thing" like (Schäfer, 2013).

Since waves are extended in space, it has no specific position in space, but many potential positions, and thus, the elementary thing in its wave state is in a state of potentiality. Since material particles appear with a specific mass in a specific point in space, when these particles revert to their wave state they leave the empirical world and exist again as a state of potentiality in the non-empirical universe. The implications are profound; this means instead of thinking of the empirical world as the primary reality, it is in fact the non-empirical cosmic background from which it emanates that is the primary reality, with the physical world is the secondary reality (Ponte & Schäfer, 2013). The nature of reality, quantum physics has shown, is that it is indivisible (Kafatos & Nadeau, 1990).

The wholeness of reality is further underscored by the following consideration; if the elementary things in their wave state of potentiality were not coherent, the empirical world that emanates from it would be in a state of perpetual chaos. Yet it is not chaotic; the physical world appears to us as a logical and coherent system. As patterns of information, elementary things in their wave state of potentiality are thought like and thoughts appear in the conscious mind; hence the concept of a conscious universe. In this conscious universe, our thinking is the realised potentiality of the cosmic mind which finds consciousness in us (Ponte & Schäfer, 2013). It is in this discovery of quantum physics that Jung's most seminal concept, the archetypical idea of the Unus Mundus developed with Marie-Louise von Franz finds vindication (Von Franz, 1992).

> Undoubtedly the idea of the Unus Mundus is founded on the assumption that the multiplicity of the empirical world rests on an underlying unity, and that not two or more fundamentally different worlds exist side by side or are mingled with one another. Rather, everything divided and different belongs to one and the same world, which is not the world of sense (Jung, 1970, p. 767).

The Unus Mundus archetype implies that that there is a reality that must be united, and that reality beyond the illusions of matter, division and opposites, is one. This is the concept that underlies the process of individuation which Forman (1998) describes as the innate capacity of the individual to become aware of the Self. The imperative of transformation is the impulse to unite what is divided (Forman, 1998).

Jung wrote that "I use the term 'individuation' to denote the process by which a person becomes a psychological 'individual,' that is, a separate, indivisible unity or 'whole," (Jung, 1969, p. 275). The Newtonian world of the Material Universe, consisting of matter and separate material things were unable to accept Jung's propositions, and as a consequence, Jung's contribution was not well received (Jaffé, 1998). Searching for wholeness in the Material

Universe would be meaningless. But in the quantum world, Jung's contribution has found an empirical basis.

This search for wholeness is Jung's opus and is what underpins all of his work which found support in quantum physics where the meaning and purpose of humanity's existence in anchored in a unified, continuous reality. As Jung puts it: "The main interest of my work is not concerned with the treatment of neurosis, but rather with the approach to the numinous. But the fact is that the approach to the numinous is the real therapy, and inasmuch as you attain to the numinous experience, you are released from the curse of pathology. Even the very disease takes on a numinous character," (Jaffé, 1998, p. 16).

From quantum physics to bioelectronics: Marion Wood's cellular theory of obesity in a Jungian context of the collective unconscious. As a natural extension of the idea of an interconnected universe, the central thesis of bioelectronics that living matter is able to process environmental cues and manifest these into physical form followed. Adamski (2011) puts it as follows: Living matter has its own sense of conscious connectedness to the earth and it is through this connection that information transfers between the two. Consequently, living matters grows by storing electronic impulses from the earth's electromagnetic field in order to create what Adamski (2011) refers to as "permanent psychological structures" (Adamski, 2011, p. 568). Similarly, Popp & Beloussoy (2003) proposed the phenomenon of "bio-photons emissions" which describes the ability of the photons on biological cells' DNA to release and transfer information between cells by means of electromagnetic waves in a range of frequencies (Popp & Beloussoy, 2003). As a healthy physical body possesses more photons, it is better able to control luminescence; the strength of the electromagnetic signal as it were (Popp & Beloussoy, 2003). The photons work in harmony with each other and operate on electro-magnetic vibrations which continually transmits information to other photons and structures external to the biosystem in which they exist, making photons the "universal

medium of information and electromagnetic processes" (Popp & Beloussoy, 200, p. 568). These processes affect the entire genetic code of an organism, including the electrical activity taking place in the human brain and interlocks "light and the dynamic processes of life" (Popp & Beloussoy, 2003, p. 568).

These interactions in the bioelectronics structure determine not only physical health or illness but also human behaviour. In addition, molecular biochemical reactions link the electronic processes in living matter with chemical systems to create living bio-systems, and here is the link with quantum physics. Quantum theory suggests that all molecules in the cosmos are interconnected and that matter operates on two fundamentals; chemical and electric processes. Going further, quantum theory has shown that matter originates from waves existing in a state of potentiality in the cosmic mind, a state to which matter reverts when not interacted with; hence the empirical and non-empirical worlds are interconnected and the difference between them is less a matter of substance and more a matter of state.

Adamski sums it up in his conclusion:

> Bioelectric models show that the biological system not only saves information about the life of the individual in its ontogeny, but also saves lives in the process of generational dimension, which is connected to the phylo-genesis. This means that thanks to electronic properties, a biological system has various opportunities for recording information about the experiences of individuals, the environment in which they live, but also has the ability to transfer this information from generation to generation (2011, p. 569).

The context created by the contribution of bioelectronics to quantum theory in how it relates to Jung's iteration of the collective unconscious lead to the conclusion that information, in particular archetypical information, is transferred to through the DNA of cells.

Jungian analysis: The cellular phenomenon of obesity. In her contribution to the obesity debate, Jungian analyst Marion Woodman (1980) explored the intra-cellular dynamics of the human body and concluded that the psychology of obesity translates into a cellular issue for cells, like molecules are interconnected (Woodman, 1980). Woodman (1980) argued that, with the exception of the periods during which the quantum of cells increase occurring in early childhood and puberty, the number of cells inside the human body remains constant, but their size increases. People who suffered obesity in childhood tend to have up to three times more cells than those who maintained average body weight. The implication is then that when obese people lose weight they never lose the fat cells although they can change the size of these cells as they become empty of the fat previously stored in them. However, nature abhors a vacuum; the cells demand to be replenished and does it by triggering the relapse cycle.

The cells send emergency signals to the brain to increase food consumption, overriding conscious willpower and the dieter succumbs. Food consumption increases and the cells return to their "normal state" at which point they become stagnant again. For Woodman (1980), this hyper-cellularity is the driving force behind excessive food intake. As the fat cells rebel the disturbance of the "homeostatic equilibrium" when these cells start emptying as a result of weight loss, it also overrides the human conscious willpower as it seeks to regain adiposity (Woodman, 1980).

This is the process behind the onset of dieters' depression and highly variable mood states as they progress along their journey of weight loss. But as the complexes and psychic content of each individual differs, the manner in which the hyper-cellularity will manifest will similarly differ. Jung (1969) and Woodman (1980) however acknowledged that it would not be practical to develop an infinite series of highly customised weight loss and therapeutic interventions to individual requirements. Instead, the general point of departure is offered by the complexes – the contents of what Jung referred to as constellations (Woodman, 1980).

Jung described constellations as external forces that are beyond one's control, but as Woodman (1980) explains the constellations navigates one to take action when faced with an unacceptable situation (Woodman, 1980). The active complexes trigger reactions to the forces emanating from the constellation which in turn derives the active thinking required for the person to move to the transcendent function and embark on the hero's journey.

To test this thinking Woodman (1980) conducted Jung's word association tests on 20 women to gain insight into their complexes; the sample consisted of both obese and non-obese women. Her findings were that there were elements particularly prevalent in the obese group that did not exist at all or were of very low incidence in the normal weight group. These elements included a negative mother complex and negative animus, feelings of being caged in, aggression and the tendency to eat for comfort in stressful situations in the obese women (Woodman, 1980) echoing to some extent the findings of Freudian analyst, Hilde Bruch, in her observation that childhood obesity is associated by a lack of nurturing, particularly from the mother figure in early childhood (Bruch & Touraine, 1940).

Women with a high BMI do not only have different complexes than normal BMI women, high BMI women think very differently about food. Woodman (1980) found that obese women scored very high in the food category of the word association tests, while the others scored zero.

This finding emphasises high BMI women's obsession with food, as well as their tendency to use food as a method of self-punishment through starvation, as self-nurture when feeling emotionally vulnerable and as scapegoat instead of acknowledging the feelings that sit behind over-eating. Food, Woodman (1980) found; literally rules the existence, lives and complexes of obese people. High BMI people indeed think very differently about food than normal BMI people, and this explains why obese people are far more sensitive to food cues than those of normal weight, as shown in the literature study.

In addition, obese people tend to vastly underestimate the grip that food has over their lives (Woodman, 1980). Associated with that is the higher incidence of poor body image, fear of rejection, tendencies towards perfectionism and hypersensitivity revealed in the obese women's scores on the word association tests. Where the normal body weight and the obese women's scores did converge in the test scores, were around issues such as the presence of a negative father figure, an overweight father, the fear of taking responsibility for the consequences of personal actions, growing up to believe one was unwanted as a child, and having feelings of rejection as a result. While these complexes tend to overlap between the two groups, they seem to lie dormant in the unconscious insofar as weight is concerned, and therefore is not an influencing factor (Woodman, 1980).

The inseparability between mind and body follows from the continuum between wave forms and matter established by the quantum physics discussion earlier in the chapter, and success that for the somatic dynamics of obesity to be understood, both mind and matter must be studied. Woodman (1980) concludes that regardless of any medical, nutritional or physical solution proposed in the treatment of obesity, ultimately it is only the individual who can instinctively know how to deal with it by getting back in touch with the body and not regarding the body as the enemy and by reintegrating the self by exploring and solving the complexes through the hero's journey of transformation (Woodman, 1980).

Connecting the cells to the archetypes and the complexes.

The anima. Jung described the anima as the female energy present in all of us; in men, the anima is the "syzygy" which is a man's instinctual and sensitive side, or put differently, his sixth sense of perception (Jung, 1953-1983). The power of the anima in men presents in his mood and gut feeling and the energy in which the anima influences the man's life is largely a function of his relationship with his mother (Luna, 2014). A negative or complexly troublesome mother-son relationship tends to lead to a negative anima in the son (which in Freudian terms

would play out as the Eros/Thanatos archetype) which he would experience as a negative energy translating into an over sensitive and defensive nature, petulance, apprehension and in some cases, depression. For the male energy of the animus to be strengthened in men, they have to overcome the challenges of the negative anima, for if not dealt with, the anima can be incredibly destructive and in some instances of severe depression lead to suicide (Jung, 1963).

The Death Mother archetype is a “cold, fierce, violent and corrosive power” according to Sieff (2009, p. 178) and is a representation of the force of the negative anima. The Death Mother paints a dim picture of hopelessness, turmoil and interprets the unknown in the grimmest of ways possible (Sieff, 2009); this Death Mother prefers death over life as an outcome, and when faced with the Death Mother, trauma and destruction follows. The Death Mother’s energy is drawn from the psyche; it originates in the self where she lies dormant, but the Death Mother energy can be triggered by someone close, often a person to whom one has dedicated faith and devotion to (such as one’s mother or life partner) (Sieff, 2009). Sieff (2009) illustrated the power of the Death Mother with reference to the initial rejection of a child by its mother which can be profound in its implications for the child. The child feels the mother no longer accepted him and this leads to overwhelming feelings of being rejected. This memory of rejection is then stored into the unconscious where it also became a fear of abandonment; not only bedevilling the person’s relationships later in life but also translating into physical consequences such as cardiac arrhythmia and other physical symptoms which signal the presence of the Death Mother energy as it becomes part of one’s physical cell structure and result in the body becoming self-destructive (Sieff, 2009).

It is important to note that the energy of the Death Mother is self-generated and inflicted; she is “born out of despair…incubated by the crushed hope of an unlived life…the shadow side of disappointment…and hopelessness” (Sieff, 2009, p. 190-191) and only when acknowledging her presence in our lives can we prevent the destruction of it (Sieff, 2009).

When the Death Mother is present but not acknowledged, the unconscious in striving to regain balance in the psyche tends to develop defence mechanisms against the harsh lashings of the Death Mother. In the case of presenting as eating disorders, these defence mechanisms include “an armour of fat, oedema, vomiting; *anything* to keep the poison out” (Sieff, 2009, p. 179.) Sieff (2009) notes that it is the Death Mother’s energy within us that convinces us that we are not good enough or worthy enough of love and admiration, and this could in extreme cases translate into not allowing oneself to be loved or to experience love in any form (Sieff, 2009). The Death Mother is cunning; she prohibits access to the other unconscious archetypes and thus the means to defeat her by limiting abstract and imaginative thinking through concretisation. By inhibiting the psyche’s ability for imagination, she replaces the imaginative power of abstract thinking which allows the psyche to grasp the symbolic and metaphorical meanings emanating from the unconscious, the psyche’s access to the unconscious is hindered. Once the symbolic and metaphorical content of the unconscious is interpreted literally, it loses its meaning; for example, unconscious content directed at producing growth along the Ego/Self axis interpreted literally by the psyche and the person becomes fat as they grow literally obese; but this growth is obviously destructive.

Sieff (2009) explains that the alcoholic, drug addict or in this instance, the overeater knows that they have to sacrifice the addictive substance if they want change in their lives, but the addiction is the coping mechanism they have established over the years to protect them from the Death Mother energy. To deal with it requires the hero’s journey; for the person, would have to unearth the trauma, access the unconscious by moving past the ego and embark on the perilous journey of transformation resulting in individuation, for the Death Mother does not loosen her grip lightly (Sieff, 2009). In some cases, the impulse for embarking on this journey of transformation requires that the person needs to be facing the final stage of their instilled illness, be it obesity, addiction, depression or something else. For the threat of facing the

physical death is sometimes the strength of stimulus required to garner the strength of the Death Mother and Sieff (2009) duly warns that this journey is not for the fainthearted and that seeking guidance is imperative.

Sieff (2009) describes the process following the "turning point" in one's life as one in which the death energy is harnessed "in the service of life" (Sieff, 2009, p. 193) for the unknown is revealed and brought to consciousness as the rebirth takes place; the midwife being another archetype, the Apocalyptic Mother (Sieff, 2009). It is during an apocalypse when everything which has been hidden from view is revealed as the Apocalyptic Mother engages the Death Mother in what Sieff (2009) describes as an epic struggle between life and death, for the Death Mother wants to destroy and "turns life into stone," but the Apocalyptic Mother "shatters the stone" (Sieff, 2009 p. 194). This is the violent struggle of birth that walks parallel with the agonising pain of birth which is the necessary requirement for the personal transformation process needed for the person to begin a new phase of life (Sieff, 2009). The two archetypical Mothers are differentiated by their intentions; the Death Mother aims to destruct and kill so as to fulfil the ego's primitive urges while the Apocalyptic Mother's energy is imbedded in sacrifice and "the ego's surrender to the guidance of the self in order to transform destructive…. into the creative flow of life" (p. 194-195).

But the Apocalyptic Mother dispenses strong medicine; through her harsh penetration into the soul and breaking down the perceptions that derive from the concretised symbols the Death Mother favours (the ego), the patient finally regains access to the unconscious through which the true Self can be made whole as individuation is achieved (Sieff, 2009).

The implication of the connected universe is that as we change, so the environment in which we find ourselves will also appear to be changing; Sieff (2009) notes that we may find that the situations or relationships in which we find ourselves no longer serve us as the transformative process progresses, and that during this time the advice is to remain open to the symbols that

will keep rising from the unconscious whilst surrendering the ego's desire to resist change (Sieff, 2009). Sieff (2009) further notes that the Apocalyptic Mother is ever present, but that the choice to engage her remains that of the individual concerned; however, the choice is between the illusionary comfort offered by the respectively destructive cycle of the death mother and the vastly disruptive, but ultimately freeing prospect offered by the Apocalyptic Mother (Sieff, 2009). For, writes Sieff "In the heart of death, I found the gift of life" (2009, p. 198).

Jung's second major archetype, the animus represents the powers of reason, mental acuity, intelligence, and physical life and is the masculine opposite of the intuitive, female anima (Luna, 2014). The animus energy derives from the father figure, and like the anima, when negative, can become "a demon of death" and operate in very similar ways to the Death Mother of the anima (Jung et al., 1964, p. 199). While both sexes can suffer the impact of both the anima and the animus as both are present in males and females alike, it is often the negative animus; the Demon of Death that impact women.

Luna (2014) explains that the function of the animus when in its positive state is what drives the empowerment of people, in particular women, the development of confidence and their quality of reason; but when in its negative state, the animus energy is often manifested in aggressiveness, impulsivity and insensitivity (Luna, 2014). Martin (2016) observes that women mostly experience their animus as negative; a positive animus is quite rare among women. For Martin (2016) the animus and anima are contra-sexual images that are the most useful stepping-stones in the transformation process towards individuation; they are embedded in the unconscious and are the "most opposite to the ego" (p. 30).

To illustrate her point, Martin (2016) cites the example of the female crime fiction writer Dorothy Sayers and how the character of her lead detective, one Peter Whimsey presents as the imaginary figure of Sayers' psyche and her conscious and unconscious experience of Whimsey

as her animus. Sayers describes her Whimsey as a “largely unconscious figure that mediates between her conscious and unconscious, unlocking her creativity” (Martin, 2016, p. 28) and clearly illustrates Jung’s concept of the syzygy. Whimsey is rich and casually indulges in the type of luxuries Sayers at the time, as a struggling intellectual could only dream of. She invented a character that was intellectual, witty, sensible, superior and perfect in every sense of the word; all the qualities that she thought she did not have, and in so doing unconsciously attempted to restore balance by bestowing her fictional character with all the qualities she saw herself lacking.

The archetypes. Jung’s archetypes are repetitive constructions of innate instincts that are used by the psyche to deal with physical life challenges (birth and death) and life role experiences (e.g. becoming a mother or father); these cannot be observed directly but must be interpreted through the perceptions of the person experiencing it (Martin, 2016). The archetypes offer the ego with a degree of flexibility and operate inferior to, in contrast to and external to the ego (Martin, 2016). It is in this that Jung’s archetypes differ from those of Freud; for Freud saw the ego as stagnant and concrete and therefor unable to change. Jung’s archetypes allow the ego to change through the individuation process (Martin, 2016.)

For Martin (2016) the psyche goes out of balance when the female energy, the anima, in both men and women is suppressed. The unconscious battle that ensues can lead to physical disease and causes the persona – the “mask or outward face of the ego” (Martin, 2016, p. 31) to distort to the extent that the persona is no longer sustainable as an outward projection. The man who displays the outward persona of power and masculinity in the stereotypical sense and supresses what he perceives as his weak side – the female energy of sensitivity and emotion, risks being overcome by it in the worst possible moment as the anima reacts to the persona (Jung, 1957).

Martin (2016) explains the difference between the complexes and the archetypes as follows: “An archetype may be said to constellate when it has a strongly felt significance to an individual or a group; in other words, when someone or some people have a complex related to the archetype” (p. 33). Archetypes then exist in the collective unconscious and are experienced universally, but the manner in which they impact on the individual psyche depends on the individual’s personal perception of the archetypes, and it is around the – perceptions that the complexes are developed (Martin, 2016).

Jung’s iteration found some support among the cognitive school of psychology. Cognitive theorist Pyysiäinen (2009) describes a model very similar to Jung’s noting that:

> The architecture of the mind...shapes beliefs, thus creating cross-culturally recurrent patterns. This implies that not all concepts and beliefs have an equal potential for becoming widespread. The most successful representations in cultural selection are those that ‘match’ people’s mental architecture, in that an existing ‘slot’ corresponds to the form of the representation in question (p. 3-4).

According to Goodwyn (2013), cognitive scientists agree with Jung’s theory that there is a deeper meaning in cultural stories and it is linked to universal psychological functions, as the same golden thread of a story can be observed in many different cultures. However, the cognitive school stops short of accepting the archetypes. Goodwyn (2013) argues that these “universal commonalities in human cognition, emotion and memory” (p. 395) that are typical of folk tales and legends endure as it is passed on from one person to the next, but that in the passing along, the stories evolve and change to reflect the cultural changes that may occur over time (Goodwyn, 2013).

To evaluate these, Goodwyn (2013) proposed what he termed the “attractor state model” to enable the structured study of recurring motifs and how these relate to archetypes beyond mere theoretical speculation. The criteria of the model to be applied when evaluating folk tales

and legends were that they had to be minimally counter-intuitive, rhythmic, and emotionally sharp narratives that deployed middle level objects and characters, and occur in an indistinct time and place setting. The plot had to be a simple conflict-oriented plot with dramatic reversals and a sense of interconnectedness should be more resonant (that is, more memorable and 'sticky') than a story without these qualities' (p. 403). He stated that through his model, one will be able to distinguish "more clearly which clinical narratives and dreams are more resonant (due to the) empirically derived set of criteria" (p. 404). He also advises that self-narratives of a client can have similarities to resonant narratives and through facilitated therapy; narratives can be explored in order to facilitate individuation.

Faber and Mayer described an archetype as "internal mental model of a typical, generic story character to which an observer might resonate emotionally" (p. 307). Archetypes often represent the main characters in narratives and holds conversant and repetitive traits that is related to life lessons or life stages (Faber & Mayer, 2009). Lindenfeld (2009) explained that archetypes portray different facets of personality, which is moulded by a person's environment and culture. He noted that archetypes are a symbolic manifestation of that what represents a person's beliefs and disbeliefs, needs and doubts.

***The hero's journey: An illustration of the hero archetype*.** To illustrate the relevance of the archetypal influence on an individual's everyday life, the example of the hero archetype and the concept of the Hero's Journey as explained by Joseph Campbell & Kudler (2004), will be discussed. Shadraconis (2013) associates the hero with danger, trials and tribulations, nobility, strength and triumph. The hero figure is conqueror of evil and the main storyline always illustrates the challenges the hero must overcome during his or her quest, while the ending is always "happily ever after" as the hero triumphs (Shadraconis, 2013). As an archetype, the hero is the sense maker as it rationalises the events in a person's life, to understand what it is happening and why. As such, the hero re-establishes order in a chaotic psyche (Shadraconis,

2013). The Hero's Journey is one of discovering knowledge and understanding, and as the process of transformation requires the sacrifice of the ego to achieve the wholeness of the Self, individuation is not for the fainthearted; for the Hero's Journey requires not only sacrifice (of the ego) on the part of the hero, but also supernatural powers in metaphor. In some tales, the hero enthusiastically embarks on his journey, but in others, a reticent hero must be convinced by others or forced by circumstance to embark on the journey.

Campbell & Kudler, (2004) described the hero's journey as consisting of different stages; the starting point finds the hero living a mundane everyday life, followed by the onset of the journey in the second phase triggered by an extreme situation or personal crisis. In modern fiction, this trigger point is often presented as an existential threat that is presented along the lines of the end of the world / America, but one man could save it … Stage three is where the hero recognises the challenge but overwhelmed by the extent of the threat and reluctant in his abilities to prevail, the hero is initially is reluctant. But as the threat compounds and becomes ever more pressing, the hero becomes motivated to act. Stage four offers further inducements to action in some tales are represented as the wise council of significant people in the hero's life who offer motivation and encouragement, or alternatively the appearance of a resource that would make the quest possible.

In stage five, the hero passes the contemplation stages and sets off in action and is now determined to embark on the adventurous journey into the unknown. Stage six sees the hero facing the trials and tribulations of his quest, but these serve to make him stronger so that when he reaches the most challenging part of his journey in stage seven; usually presented in the form of a test of courage, in that the hero has to pass through the underground cave where danger lurks, climb the mountain or otherwise pass through the Valley of the Shadow of Death, he is strong enough to complete the journey. It is on this part of the journey that the hero acquires his final piece of equipment or insight he needs for the final battle, be it a magic sword

or a ring. The perils of passage deepen in stage eight to the point where the hero is no longer certain of survival. The hero hits rock-bottom at this stage and there is a significant change in the scene, usually the death or illness of a key ally or the loss of a critical resource that makes the passages possible.

Faced with such an amplified challenge set, the hero has to find new strength or have an epiphany that brings to light a new realisation, and a rebirth takes place. Emerging from stage eight, the hero enters stage nine stronger and wiser than ever before and ready to fight the final battle and prevails over his adversary, at which point in the story he gets the girl, but before he can set the captives free, be crowned king and is triumphantly received in jubilation which comes in stage eleven, the hero is not out of danger yet in stage ten; for having rescued the proverbial damsel in distress, the hero has to make his escape and in this is faced with the final, and often most vivid battle of the journey.

Stage eleven sees the hero emerging as a wiser and stronger person, for now the transformation is complete and is followed by the final stage in which the hero returns to his former mundane life as a changed person. While the circumstances and environment is as before, the hero appreciates his or her situation more and experiences it differently as a result of the wisdom and strength acquired on the journey.

The Hero's Journey is a metaphor illustrating the journey of transcendence and is quite evident in the Freudian and Jungian interpretations of Lewis Carroll's Alice texts, which will be discussed later in the dissertation.

Jungian reading of the Alice text: Going into the rabbit hole and through the looking glass – a tale of a young woman's journey into the personal unconscious. Lewis' Carroll's books on the adventures of *Alice in Wonderland (Carroll, 1999)*, and its follow-up *Through the Looking Glass* (Carroll, 1962) provides ample material for psychodynamic analysis in that we see the development of Alice in two phases; the first – depicted in *Alice in Wonderland* is

a coming of age tale; while in the later *Into the Looking Glass,* Alice returns as an adult facing a life crisis in the Victorian version of the hero's journey.

Alice in Wonderland is a coming-of-age tale which starts off with a nightmare about following a white rabbit and falling into a dark hole (Carroll, 1999). From a Jungian perspective, the image and story of the rabbit hole is the starting point for Alice's journey into her unconscious, featuring perils to overcome and animal guides representing different aspects of her unconscious providing insights along the way. As she progresses on her journey, Alice experiences the increase in consciousness which is at the core of the individuation process described by Jung required for the development of the individual personality (Edinger, 1963 as cited in Elder & Cordic, 2009). When she arrives at the other end of the rabbit hole, Alice enters Wonderland – a place of strange logic and exotic creatures featuring a dodo bird, the white rabbit, the Cheshire cat, and a blue caterpillar, a Mad Hatter and a Queen of Hearts. Upon waking up, she shares the nightmare with her father and expresses her fear that she may have gone mad, upon which her father replies that all the best people are mad (Carroll, 1999), illustrating Campbell's (2004) reluctant hero uncertain of whether to make the journey.

Alice starts her journey betrothed to a young man of "good stock" whom it would be very sensible to marry and finds herself faced with a life decision of enormous consequence; for the decision to marry Hamish or not will impact the rest of her life. At this point, Alice notices the white rabbit who she intuits she must follow (Carroll, 1999). Her journey into Wonderland starts with a fall – illustrative of the archetypical fall which precedes the journey into the unconscious (Goldschmidt, 1933).

At the beginning of the journey, Alice is confused – she is unsure whether this great adventure is real or whether she has not plainly lost her mind. In her attempt to make sense of Wonderland she questions everything, but gets frustrated by the twisted logic of Wonderland at every turn. One of the key themes that emerges in Wonderland (the unconscious) is that it

appears to the conscious mind as a meaningless puzzle – Alice encounters a series of puzzles that seem to have no solutions, imitating the manner in which life tends to frustrate expectations (Greenacre, 1955). Alice expects that her encounters with the characters in Wonderland will help her make meaning and sense of it, but is frustrated at every turn, from attempting to solve the Mad Hatter's riddle, to the Caucus race, failing to understand the Red Queen's croquet game – and in each instance the riddles and challenges presented to Alice in Wonderland appear to have no purpose or have no logical answer. This describes how unfathomable the unconscious is to the logical approach of the conscious (Goldschmidt, 1933). Alice soon learns that the riddles of Wonderland cannot be solved by reason nor logic, and in this Carroll (1999) illustrates how the unconscious frustrate rational expectations and resists logical interpretation, even when the content seems familiar or the challenges solvable on the surface (Goldschmidt, 1933).

All the creatures of the story are waiting for *the* Alice (the individuated *Self* that emerges after transformation) as it was prophesied that *the* Alice will slay the dragon that is oppressing all in Wonderland and in the process, reclaim the land for the White Queen. The only problem is that they are not sure whether this Alice is "the right Alice" or the "wrong Alice" – for to overcome the dragon, Alice has to be the right Alice (Jung, 1963). Wonderland (the unconscious) is a place where danger lurks and as Edinger (1999, as cited in Elder & Cordic, 2009) notes, Jung was fond of quoting Holderlin who said where danger is, grows also the rescuing power.

Upon arriving in Wonderland, Alice thinks that it is she (her ego) that consciously directs her path in life, but in the story, she befriends a dog (often represented in dreams as instinct) (Carroll, 1999). The dog gives her a warning not to diverge from the path, to which Alice – in the ego state is naïve insofar the operations of the unconscious is concerned – replies that she makes her own path. She speaks as if she is truly convinced that it is in her best interest to

allow the “rational” ego to direct her path, which is exactly what the dog (her instinct), warns her not to do, for to survive in Wonderland, rationality won’t serve Alice (Greenacre, 1955).

Another aspect of Alice’s unconscious manifests as the blue caterpillar (the symbol of transformation) who says to her “you are almost Alice”, to a more receptive Alice who seems to have learned by this point in the story that it is not the ego that creates the path, and as such she understands that the animals – representing the different aspects of her unconscious, can be trusted to serve as guides. As she progresses on her journey into the unconscious, the aberrant logic of the creatures in Wonderland that so irritated her in the beginning when she was still trying to assert her ego, starts making sense to Alice as she sees that the irrational, “mad” creatures actually have much to offer her on her journey towards greater consciousness (Greenacre, 1955). This is seen in Alice’s encounter with the Cheshire cat who, like the other creatures, uses the irrational logic of Wonderland – to prove that he is mad by drawing flawed conclusions from faulty assumptions. When Alice confronts him, he changes the subject, leaving her frustrated.

> And how do you know that you're mad?"
>
> "To begin with," said the Cat, "a dog's not mad. You grant that?"
>
> "I suppose so," said Alice.
>
> "Well, then," the Cat went on, "you see a dog growls when it's angry, and wags its tail when it's pleased. Now I growl when I'm pleased, and wag my tail when I'm angry. Therefore, I'm mad (Carroll, 2008, p. 65).

The Cheshire cat maintains calm, grinning outsider status throughout. He reveals to Alice an insight into the workings of Wonderland that did not occur to her. Firstly, Wonderland as a place (the unconscious) is indeed mad and has a stronger cumulative effect than any of its citizens (the creatures, symbolising different aspects of Alice’s unconscious). Because Wonderland is ruled by nonsense, Alice’s rationality is inconsistent with Wonderland’s

operating principles and therefore she becomes frustrated, and the other creatures in Wonderland experience Alice as mad and rude in turn. But, reveals Cheshire cat, if Alice had to embrace the madness of Wonderland she will understand it and the creatures will engage her (Carroll, 1999).

In Jungian terms, the Cheshire cat act as guide to Alice and it is through him that we learn that the unconscious is not rational, and cannot be accessed through the reason of the conscious but rather through the symbolism (Jung, 1959, 1963). It is the cat that leads Alice to the March Hare's house – the scene of the mad tea party and later he leads her to the garden, her final destination. The cat seems to have privileged knowledge of Wonderland, and combined with his ability to manifest and disappear at will – in disembodied form, the cat also represents an element of the supernatural (Edinger, 1999 as cited in Elder & Cordic, 2009). Later the cat appears again, this time on the Queen of Hearts' croquet court, and Alice is quite pleased to see him again.

> "How are you getting on?" said the Cat, as soon as there was mouth enough for it to speak with….Alice put down her flamingo, and began an account of the game, feeling very glad she had someone to listen to her... (Carroll, 2008, p.80).

In contrast, the Queen of Hearts (Death Mother) is not as concerned with nonsense and the perversions of logic that characterise life in Wonderland, but this is the character Alice must face to figure out the puzzle of Wonderland (Edinger, 1999 as cited in Elder & Cordic, 2009). She is literally at the heart of Alice's conflict, for this is the ruler who usurped Wonderland that Alice must depose so that the land - now withered and out of balance, can be restored to the White Queen. The Queen of Hearts as a symbol of Alice's Death Mother Archetype is obsessed with absolute rule and execution; she is a singular source of fear who dominates even the King of Hearts (Goldschmidt, 1933).

Even though Alice understands that the Queen of Hearts is merely a playing card (deriving from her own psyche), and after the Gryphon assured her that although the Queen regularly yells “off with their heads” nobody actually gets executed, and that the Queen’s power lies in her rhetoric, to face her, Alice has to face her true fear of the Queen (Edinger, 1999 as cited in Elder & Cordic, 2009). It is the Queen’s dismissive attitude Wonderland that leads to the impression that Wonderland (the unconscious) is without substance, as it is devoid of logic. And to overcome this lack of logic, Alice repeatedly returns to analysis as seen in her approach to the chess game – her aim is to become sovereign, a queen rather than a pawn and to do so she seeks to make meaning and test them against common reality (Edinger, 1999 as cited in Elder & Cordic, 2009).

> “I’m sure I didn’t mean . . .’ Alice was beginning, when the Red Queen interrupted. ‘That’s just what I complain of! You should have meant! What do you suppose is the use of a child without any meaning? Even a joke should have some meaning and a child is much more important than a joke, I hope. You couldn’t deny that, even if you tried with both hands” (Carroll, 1962, p. 110).

Lloyd as cited by Irwin & Davis (2009) describes Alice as the “unruly Alice;” quite the departure from the pliable Cinderella and the passive Snow White who required male aid to bring them to life and consciousness again. Alice is the courageous heroine who was prepared to go into the unknown, not knowing whether she will emerge again and Lloyd reminds us that Alice, in doing so, rejected the stereotypical female submissive role (Irwin & Davis 2009). Just prior to the closing scene of the Walt Disney version of Alice in Wonderland, in which Alice takes up her sword to fight the dragon with the help of her creature friends, she finds the blue caterpillar who is turning into a cocoon, and laments “you are going to die” to which the caterpillar replies “no, I am going to be transformed.” In this, Alice projects onto the caterpillar and illustrates the Jungian concept of synchronicity as in seeing his change she immediately

fears her own death as likely outcome of her fight with the dragon, as her inner psychological process is reflected back to her through her – like the caterpillar, Alice's own transformation will be achieved by overcoming the dragon, but to achieve it, she must face the risk of death (Woolverton & Burton, 2010).

The transcendence occurs for Alice as she overcomes the mighty dragon that is the champion of the Queen of Hearts (Death Mother) and restores Wonderland to the White Queen. She found a source of power she did not know she had and she used this power for the greater good. Order is restored in the land (balance achieved again in the psyche) and the White Queen rules again and Alice proves to herself and the other inhabitants of Wonderland that she is in fact *the* right Alice – she became herself as he individuation is achieved (Jung, 1963). Having done so, Alice knows that she must leave her unconscious Wonderland as she found her purpose and now there "are questions I must answer, things I have to do". Alice climbs out of the rabbit hole to return "home" and finds her intended groom waiting for her where she left him, and pronounces simply and boldly to the astonished Hamish that she will not marry him as he is not the right man for her (Carroll, 1999).

Alice entered Wonderland as a confused child and exited it as a woman; a woman who has found the inner courage to cast aside societal expectations – not as a trite act of meaningless rebellion, but as she was called to something greater. The story ends with Alice on deck of the ship who has accepted her as an apprentice. At the beginning of the story a large part of the pressure on Alice to marry Hamish was that Hamish was wealthy and would provide for Alice; after the transformation in Wonderland, Alice is able to provide for herself and therefore no longer needs to marry Hamish. At this point the blue butterfly lands on her shoulder. Alice recognises it as her friend, the transformed caterpillar and realises her own transformation is validated by the appearance of this symbol (Edinger, 1999 as cited in Elder & Cordic, 2009). By answering the call and following the white rabbit into the unknown, Alice transformed from

a dependent child who needed to secure her future through marriage to one who has embraced a path of wholeness and a personal meaning that cannot be found simply by trying to fit into others' expectations at the cost of the true self (Irwin & Davis 2009).

Central to Jung's psychology is the achievement of individuation which requires the discovery of unconscious content to make this conscious so that we can become what we are at the essence of our being. Individuation is achieved by exploring the interplay between and transcending the opposites (Jung, 1959, 1963). This process is poignantly illustrated in Alice in Wonderland as she faces the Jabberwocky – the Red Queen's dragon. The Jabberwocky when seeing Alice, says that it is a long time since they have done battle and that it was good to see her on the battlefield again; to which Alice replied that it was the first time she met the Jabberwocky. The Jabberwocky replied that it is not you, insignificant sword bearer that I am speaking to. The sword Alice was carrying, according to Absalom the blue caterpillar, knew what it needed to do. In preparing her for the battle the caterpillar cautions Alice to let the sword do what it wants to as it knows what it is doing and will defeat the Jabberwocky (Carroll, 1999). In this instance, in facing the demons of the unconscious (the Jabberwocky), the insignificant sword bearer is the conscious, who needs to let the far more powerful and knowing unconscious do what it must to defeat and overcome what ails the psyche.

Food and power in the Alice texts: The class dynamic illustrated in psychoanalytic terms. Shortly after her fall into the rabbit hole, Alice remarks "I know something interesting is sure to happen … whenever I eat or drink something" (Carroll, 1998, p. 32) and this remains true throughout both the tales of Alice in Wonderland and Through the Looking Glass. The prevalence of eating in the Alice tales were extensively explored by Sarah Guyer (2004) in "*The Girl with the Open Mouth" and Carina Garland's "Curious Appetites: Food Desire, Gender and Subjectivity on Lewis Carroll's Alice Texts*.' An analysis of the combination of social class with the symbolic significance of eating offers some understanding of the often-

senseless violence in the Alice tales and offer some comment on the social power structure of Victorian England.

Consider the poem about the Walrus and the Carpenter which ends in the eating of the oysters; the poem illustrates that in the Alice tales eating is never solely about survival, rather it is the outcome of a social order predicated on inequality and deception (Jylkka, 2010). The contrast between the upper and lower social classes in the Alice texts is defined by the opposing representations of language and eating, making the mouth the symbolic center of social identity. The characters representing the upper classes in the Alice texts tend to use abstract and aesthetically pleasing speech to soften and conceal injustices or cruelty. Similarly, the consumption of jams, plums, treacle and other sweet things performs the same function; sweetness throughout the text is associated with pleasing "sweet" language meant to appease the victims of injustice. This is contrasted by the concrete and literal language used by the characters in the books identified with the lower classes, representing the unsweetened view of society also reflected in the foods they eat such as bread and cabbage (Cody, 2002). The bland and displeasing flavours the lower classes were forced to endure similarly reflect the social adversities the lower classes were forced to "swallow" and the integral connection between food and social class is thereby established (Jylkka, 2010). Through the formative power of calls on the self, the symbolic connection between food and identity is further underscored. (Jylkka, 2010).

Alice's physical changes in size always results from eating and drinking; the pool of tears begins with Alice eating a small cake carrying the instruction "eat me," which causes her body to transform into a nine-foot illustration of the Victorian social spectrum; her head representing the upper class being far removed from her feet, representing the lower strata of Victorian society. Given the enormous distance between hear head and feet, Alice begins to question her ability to look after and care for her feet – the lowly servants of her body, and her ability to see

them given her enormous height (Cody, 2002). This relationship illustrates the invisibility of the working-class poor in Victorian times, but to keep her lowly feet happy Alice resolves to "give them a new pair of boots every Christmas" (Carroll, 1998, p. 16). The consumption of a sweet food, the cake, has caused Alice to experience the class divide within herself and her continued change in size throughout Alice in Wonderland continues to grant her a range of physical and social perspectives on her experiences (Jylkka, 2010).

Alice sees Wonderland from an upper-class perspective when she is large, as in this state she is physically more powerful than the creatures of Wonderland. But this metaphorical (and physical) distance between her and the creatures tend to isolate Alice from appreciating their lower-class plight and consequently she tends to become dismissive and abusive towards them (Jylkka, 2010). For example, when Alice grows too big inside the White Rabbit's house to be able to get out again she rather callously kicks Bill the Lizard up the chimney and threatens to set Dinah at the animals gathered outside the house (Carrol, 1998, p. 36). But Alice also shrinks as a result of consuming other foods and drinks, and when she does she is not only closer to the ground, but more exposed to disadvantages such as nearly drowning in her own pool of tears of fearing being eaten by a puppy.

It is when she is this small, that the White Rabbit mistakes Alice for his servant Mary Ann clearly linking her physical size with social standing and power (Jylkka, 2010). When Alice grasps the connection between size and social standing she seeks out the contents of a bottle labelled "drink me" to "stop being such a tiny little thing" (Carroll, 1998, p. 32) and her discomfort with how food has the power to define her social standing underscores the link between the mouth as the symbolic centre of identity and appropriate social behaviour. Alice demonstrates some difficulty in understand how eating relates to social class as illustrated in her eating of the caterpillar's mushrooms. She grows so tall that she frightens a pigeon, seeing her towering above the trees of Wonderland, who promptly accuses Alice of stealing her eggs.

The pigeon here speaks from a position of victimisation of the lower classes who fear and resent Alice's higher social standing represented by her size and her power to exploit het production (Carroll, 1998 p. 47). Alice's response that "I have tasted eggs certainly … but little girls eat eggs quite as much as serpents do, you know" represents the aesthetic language pretensions of the upper class in masking injustices, but the pigeon would have none of it exclaiming "I don't believe it … but if they do, why, then they are a kind of serpent, that's all I can say" (Carroll, 1998, p. 48) and with this statement strips the egg eating of any attractive meaning suggesting there is no difference between the serpents and little girls in eating eggs, for it is the eating of the eggs that caused the injustice (Jylkka, 2010). Shocked by the revelation of her own cruelty, the only way Alice can respond is to be "quite silent for a minute or two" (Carroll, 1998, p. 48)

It is these types of interactions that allows Alice to see beyond the sweet confines of her social class and she increasingly develops an understanding of the embittered view of society the lower classes have, as in Wonderland her curiosity is answered honestly with the bitter truth rather than the concealed platitudes she would likely receive in her real upper class Victorian world. During the Mad Tea Party, the Dormouse tells Alice of two little girls who live at the bottom of the well and Alice immediately asked what they lived on, because according to the narrator "she always took a great interest in eating and drinking" (Carrol, 1998, pp.65). She asks the same question in Into the Looking Glass when she wants to know what the Bread-and-butter fly lives on. The question links the consumption of certain foods to class status and identity. In the case of the Dormouse's little girls, they lived on treacle, which answer Alice dismisses because she reasoned that if they only lived on treacle they would become sick. The Bread-and-butter-fly is of lower social class, as the Gnat informs Alice he lives on "weak tea with cream in it" (Carrol, 1998, p. 154).

"A new difficulty came into Alice's head. 'Supposing it couldn't find any?' she suggested,

"Then it would die, of course."

"But that must happen very often," Alice remarked thoughtfully,

"it always happens," said the Gnat" (Carroll, 1998, p. 154).

The unfortunate circumstances of the Bread-and-butter fly that is seen crawling at Alice's feet (Carroll, 1998) is indicative of the lower-class status of creatures who are literally closer to the ground as Alice also established in her own relationship with her feet in Alice in Wonderland and illustrates Bread-and-butter fly position of abject poverty. The Victorian workhouse diet of the 1840 illustrates the historical accuracy of the Bread-and-butter fly's situation. Breakfast consisted of:

> 31bs 80z of bread and 10.5 pints of gruel to last the week, women 140z less bread, for dinner, on two days they would have 80z bacon, 21bs of potatoes, for another two days 3 pints of soup, l lb 60z of bread and for the remaining three days 1lb 50z of bread and 60z of cheese and for supper, for the week there was 21bs 10z of bread and 10.50z of cheese. The women had the same food as the men just less of it. Old persons may have been given 10z of tea, 50z of butter and 70z of sugar a week instead of their gruel for breakfast (Greene, 2003, p. 1).

In contrast to the poverty stricken Bread-and-butter fly, the Snap-dragon-fly whose body is "made of plum pudding, its wings of holly leaves and its head is a raisin burning in brandy" and who lives on "frumenty and mince pie" (Carrol, 1998, p. 153-4) clearly represents the upper class. Plum and brandy pudding regularly featured in the parlors of the upper-class houses of Victorian families, but the plum, aside from it being a fruit; is especially rich in symbolic significance. Plum also means the sum of one hundred thousand pounds of the person who owns such an amount; thus, identifying the exact amount of money one had to have to be considered as part of polite society. Modern English still uses "plum" to describe a much-

wanted prize or anything else that is desirable, and those who employ the mannered speech associated with Britain's upper classes are said to have a mouth full of plums (Jylkka, 2010).

Upon Alice's second arrival in Wonderland in the Looking Glass, she is confronted with the Gnat who alters her conception of social reality, jarring her conscience. The Gnat is "extremely unhappy" and relays the tragic circumstances of the Bread-and-butter fly in "an extremely small voice" (Carroll, 1998, p. 150-1) illustrating how fearful of retribution the lower classes are in relaying their experiences of misery from the upper classes who would rather maintain the sweet illusion of camouflaging language (Jylkka, 2010).

In contrast to the literal reality of the Bread-and-butter fly, the White Queen – representative of the upper class, attempts to placate her offer to exploit Alice's labour as servant with sweet foods and words, by attempting to lure Alice into acceptance of the offer with the assurance of jam, but there is a catch "the rule is, jam to-morrow and jam yesterday, but never jam to-day" (Carroll, 1998, p. 178). In addition to the literal meaning ascribed to jam as a preserve of fruit, the Oxford English Dictionary (Hawker, Soanes & Waite, 2001) also defines "jam" as "something good or sweet, especially with the allusion of sweets to hide the disagreeable taste of medicine, something pleasant promised for the future, which one never receives" (p.542). The class dichotomy is immediately evident; the "jam" Victorian society found itself in was that the upper classes had access to the sweeter and tasteful foods absent from lower class diets which were typically dominated by bland flavours, very little protein and mostly starch, but the upper classes could not be seen eating their sweet foods for risk of conflict. More abstractly, the upper classes tend to use sweetened or figurative language to mask unease and conflict, but should they consume their jam they reduce this sweetness to a literal meaning through the concrete act of eating. This eating represents a more literal expression of reality which the upper classes fastidiously tends to avoid giving rise to actions

such as Dinah's cleaning the signs of mouse-hunting from her kittens' faces to hide their carnivorous tendency and preserve their sweet kitten images. (Jylkka, 2010).

Similarly, the White Queen's offer of jam is intended to soften and hide the disagreeable part of the proposal, that of reducing Alice to the status of lady's maid – but Alice, who now finds herself the target of the illusionary language typical of her own class and is treated by the White Queen as a subjugated member of the working class. Confronted by the irreconcilable versions of jam as her own figurative language as member of the upper class in her life above the rabbit hole, and being the target of it as a member of the working class, the jam becomes problematic as an irresolvable conflict and consequently Alice, who increasingly fears the stability of her own social position is frustrated (Joyce, 1980) and "dreadfully confused" (Carroll, 1998, p. 175).

However, the White Queen does not relent; she illustrates the rule of jam again in a later chapter; this time with the promise of an egg. In this scene, the Queen has transformed into a sheep which is a shop keeper, and as Alice buys an egg from the sheep, the sheep accepts payment but says "I never put things into people's hands – that would never do – you must get it for yourself." But as Alice tries to retrieve the egg, "the egg seems to get further away the more I walk towards it." (Carroll, 1998, p. 184). Here Alice is seen as the upper-class self or persona who admitted to eating eggs to the pigeon, but the egg in this context takes on another meaning; egg, when used as a verb in the sense of "egg-on" (Hawker et al., 2001), carries the meaning of provocation and temptation, and this is what the fleeing egg does to Alice (Tompkins, 2012). The egg Alice has bought, transforms into the character of the children's rhyme, Humpty Dumpty who acts as the embodiment of proper language insisting that "when I use a word … it means just what I choose it to mean – neither more nor less." (Carroll, 1998, p. 190). But Humpty Dumpty's rigid adherence to his sense of propriety ultimately leads to his fragility, and his end, for Humpty Dumpty's belief that he can master the meaning of words

also reflects a conviction that he can mask reality, including the bitter undertones of his own reality eventually leads to his fall (Joyce, 1980). This fall illustrates the danger of repression and ignoring the unconscious, for when “improper” meanings are ignored too successfully, it can blind the self to the dangers that can lead to the shattering of the structure of the self (Jylkka, 2010).

The rule of jam applies equally to those rare occasions when the symbolically lower classes of animals in Wonderland have the chance to eat the sweet foods of the upper classes; in the Caucus race the Dodo insists that Alice must hand out prizes to all the animals in her role as prize giver. Alice assumes the upper-class role of noblesse oblige in that she is responsible for consoling and rewarding the competing animals in the loser-less race with sweetness, for the only prizes in her possession is a box of comfits, and she awards one of these to each of the animals present (Jylkka, 2010). A comfit is described as a sweetmeat made of fruit or roots (Hawker et al., 2001), and the phonetic similarity between comfit and comfort implies that in awarding the prizes Alice is comforting the birds (Tompkins, 2012).

Not unlike the White Queen’s offer of jam to Alice in sweetening her proposition for Alice to serve as her lad’s maid, the dispensation of comfits has a distinctly economic undertone (Cody, 2009) as the comfits / comforts are meant to placate the animals who find themselves trapped in an exploitative economic system that has no regard for the manner in which the race is conducted or who won in the competition between the animals (Cody, 2002).

The Dormouse in relating a story about three girls living on treacle at the bottom of a well during the Mad Hatter’s tea party offers more insight onto the consequences of flouting the rule of jam. Treacle is the syrup that drains from raw sugar, or molasses, in the sugar refining process and Alice takes issue with the notion that the girls could survive on treacle alone responding that “They couldn’t have done that, you know … They’d have been ill” (Carroll, 1998, p. 68), for in this case the treacle represents an artificially sweetened version of reality,

and consuming such would make the psyche ill (Jylkka, 2010). While the promise of treacle can indeed sweeten one's version of reality, the girls eating it display, according to Victorian standards, an improper level of rapaciousness.

And in this, the Dormouse's tale illustrates just how far sweet metaphorical language can remove the speaker and eater from reality, for when little girls are fed only treacle, they can only survive at the bottom of a well isolated from the rest of society and oblivious to reality (Jylkka, 2010). Treacle appears again in the Looking Glass (Carroll, 1998) – where Alice meets a Wasp in a Wig identified by his vernacular as a lower-class figure, who at the time of meeting Alice finds himself in a downtrodden state. Alice, in attempting to comfort the aged and ailing Wasp, reads it a story from a newspaper telling the tale of the findings of an exploration party who on their return finds a lake of treacle. While tasting the treacle, two of their party drowned in it – they were engulfed by the treacle (Carroll, 1999). The two who lost their lives consuming treacle teaches the same lesson as the three girls living at the bottom of the well; eating treacle represents a breach in propriety.

The Hatter and the March Hare are middle class figures in that they represent the skilled labouring class that are above the truly poor; as illustrated by their conflicting use of figurative and literal speech and eating problems that require a combination of both rules of jam. The Hare laments his broken watch at the Hatter's tea party while the Hatter responds by scolding him for putting butter into the mechanism and in the process getting crumbs in there as well. Both Hatter and March Hare are on unfriendly terms with time, and the use of butter to get the mechanism in the March Hare's watch unstuck is indicative of the Hatter and Hare's attempt to use a physical foodstuff in a metaphorical context by "buttering up" time in its physical manifestation as the watch, in an effort to get time to cooperate with them again. While using the butter in a literal manner, the pair hoped it would have only a figurative effect. This cognitive dissonance caused by the Hatter and Hare's social position – having some of the

comforts of the upper classes, but understanding the world's violence and injustice and the lower classes would express as madness; therefore, as the cause of the pair's madness the middle class appears not as the resolution of the conflict between the lower and upper classes, but as a class who will experience the problems of both the other two classes (Cody, 2002).

In Looking-Glass, the White Knight tells Alice of a pudding he created which will reconcile both the upper and lower classes; he has thought of a pudding that will be sweet and therefore anchor the upper class figurative sweet language in the literal language of the lower class, and as such the sweetness could finally be consumed. The pudding is sweet (upper class language) but also contains decidedly lower class ingredients such as "blotting paper, gunpowder and sealing wax" – none of which are sweet and thus more closely resemble the lower-class experience of the food / language spectrum (Carroll, 1998, p. 217-8). In this sense, unlike the unattainable promise offered by jam, this pudding is intended to be eaten – it has substance and accessibility to sweetness which is why the White Knight included the latter ingredients in the pudding which are not sweet. The effort fails; when Alice asks when such a pudding could be eaten the Knight answers:

> Well, not the next day … not the next day. In fact …I don't believe the pudding ever was cooked! In fact, I don't believe the pudding ever will be cooked! And yet, it was a very clever pudding to invent (Carroll, 1998, p. 217).

This tale illustrates the impossibility of merging a realistic awareness of suffering (a state of imbalance in the psyche) with the metaphorical language needed to mask it (the ego state of denial).

Alice's progress from the young girl who fell down the rabbit hole is marked in her becoming a queen in the last chapter Queen Alice (Carroll, 1998). But, despite becoming a queen, Alice cannot subvert the rules of propriety. Late for her own coronation, Alice misses the soup and fish and enters when the meat course is served. The scene demonstrates the

culmination of Alice's experiences of class, language and power and demonstrates the problems of eating and class in that Alice as queen may be presented the meat, but cannot eat it according to the rule of jam (Jylkka, 2010). The Red Queen says to Alice "You look a little shy; let me introduce you to that leg of mutton … Alice – Mutton: Mutton – Alice" (Carroll, 1998, p. 234). According to the rule of jam, if she wants to retain her upper crust status as queen, Alice cannot indulge in the lower-class habit of literal consumption, but she is hungry and tries to bypass the rule of jam by refusing to be introduced to the pudding for otherwise she "shall get no dinner at all" (Carroll, 1998, p. 235). During the feast, Alice realises that becoming queen does not give her unconditional power; her status is dependent on her abiding by the rules of upper-class propriety and this is made abundantly clear when she attempts to serve the pudding against the Red Queen's wishes. It is the pudding itself that reprimands her to adhere to societal norms; "What impertinence! I wonder how you would like it, if I were to cut a slice out of you, you creature!" (Carroll, 1998, p. 235).

The conflict is further illustrated by the presence of both upper and lower class figures at the feast, and while the Queens and Alice continue to abstain from eating and drinking, the animal guests consume the food "like pigs in a trough," some drinking "the wine as it ran off the edges of the table," while others "scramble into the dish of roast mutton eagerly lapping up the gravy" (Carroll, 1998, p. 236). This rigid distinction between the classes could not hold, for the very rigidity with which the upper class enforced its propriety causes it to crumble; forks fly around the ceiling, a soup-ladle almost dislodges Alice from her throne and the White Queen appears in the soup tureen as the mutton has taken the place at Alice's side and "several of the guests were lying down in the dishes" (Carroll, 1998 p. 239).

In final exasperation as the societal order (representing the persona in Jungian terms) collapses, Alice pulls on the table cloth to bring everything crashing to the floor for she is "too much excited to be surprised at anything now!" (Carroll, 1998, p. 239). Rigidity brings collapse

of the order that the persona seeks to maintain, as Humpty Dumpty's insistence on proper language led to his fall on the forest floor so that "all the King's horses and all the King's men could not put Humpty Dumpty together again" (Carroll, 1962, p. 83). This rigidity is illustrated in the discourse between Humpty Dumpty and Alice as follows:

"When I use a word,' Humpty Dumpty said in a rather scornful tone,' it means just what I choose it to mean – neither more nor less."

"The question is,' said Alice, 'whether you can make words mean different things."

'The question is,' said Humpty Dumpty, 'which is to be Master – that's all." (Carroll, 1962, p. 75).

The meanings people make for themselves, helps them to relate better to the world, but who has the power to say what a word means. Alice and Humpty Dumpty, like the other characters are aspects of the collective unconscious, and class as a construct, as part of the collective conscious; the agreed upon conscious reality. As such, Humpty Dumpty in psychodynamic terms would be the ego. But if the ego falls off the wall, or if it descends into chaos as seen in Alice's coronation feast, then it cannot be put together again for an ego, unlike an egg, is not a thing. For Jung, the ego would represent a complex, as a psychological pattern which has a function; and the ego's function is reality testing against the commonly agreed construct of which class is an example (Goldschmidt, 1933).

Humpty Dumpty continues, talking about words:

"They've a temper, some of them – particularly verbs, they're the proudest – adjectives you can do anything with, but not verbs – however I can manage the whole lot! Impenetrability! That's what I say!" When Alice asks Humpty what impenetrability means, he replies "that we've had enough of that subject…' (Carroll, 1962, p. 76). Humpty Dumpty, being an egoist cannot tolerate contradiction.

Nonetheless, if the ego is a complex used to test reality, then it follows that the ego does not create reality. Reality requires orientation in time in the sense of being appropriately aware of past and possible futures while being grounded in the present; an awareness of the space behind and before, i.e. orientation in space, and an awareness of the self in that one understands who one is and what one might become. These are the qualities lost in dementia and any or all of them could be lost in cases of mental illness. A well-functioning ego-complex serves to locate the multi-faceted self as seen in Alice locating herself on the chess board in the Looking Glass (Carroll, 1999) as the White Queen's pawn and meets Humpty Dumpty, a self-inflated ego who assumes he has nominative power: the power to name and therefore create reality (Goldschmidt, 1933).

At the beginning of Alice in Wonderland (Carroll, 1998), an unaware and naïve Alice bumbles around, frustrated by the lack of logic in the Wonderland of her unconscious. Even so at the beginning of Looking Glass (Carroll, 1998) she is in a similarly unaware state, believing that she only had to become Queen for in doing so all of her problems would be solved and everything would be "feasting and fun" (Carroll, 1998, p. 146). But over the course of the two texts, Alice becomes exposed to the content of her unconscious through the "improper voices" of the lower-class animals and the concealed improprieties of the upper classes; the class dichotomy itself representing the conflict between Alice's conscious behaviour and her unconscious (Carroll, 1998, p. 146). This introduces her to a world where her own psyche is torn between the two worlds and conflicting identities and values of her conscious and unconscious represented by the upper and lower classes respectively.

As she transcends this dichotomy, Alice is able to reject being the Queen, so that she may maintain her ability to question the nature of her experiences unfettered by class, and the individuation is shown in her ability to wonder "who dreamed it all," (Carroll, 1998, p. 244),

rather than to allow her ego to attempt to moderate the experiences of the other aspects of her psyche as represented by the animals.

Jung and gender. Susan Rowland (2002) points out that “a defining feature of Jung’s treatment of gender is his placing of the feminine at the centre of his psychology while at the same time displacing women as social, material and historical beings” (Rowland, 2002, p. 44). Though, as Rowland’s work illustrates, masculine bias in Jungian thinking can be mitigated by a more deconstructive reading, nevertheless Jungian psychology often appears to fit women with what we might call the anima’s glass slipper (Rowland, 2002). Some of Jung’s pronouncements, when taken at face value, seem to suggest that woman whose “consciousness is characterised more by the connective quality of Eros and who are by definition a more primitive, relational, and instinctual being. In women, Jung states in his essay on anima and animus, “Eros is an expression of their true nature, while their Logos is often only a regrettable accident” (Jung, 1982, p. 171). In the tale of the twelve dancing princesses, the feminist contribution to Jungian interpretation sought to revise and extend these limiting assumptions. Little Grace emerges in this interpretation of the tale as an individuating force to embody the story’s transformative consciousness, and she must differentiate herself from her sisters and emerge from her immersion in the collective anima. The subterranean world the princesses enter every night can be seen as a dream from which they find it impossible to wake. The King (ego, consciousness) has, in effect, buried them alive. But it is the combined force of their own addictive pleasures (the compulsive repetitive patterns Freud spoke of) and their collective insistence on conformity that makes it impossible to consider escape (the Death Mother archetype). Thus, unless subjected to outside intervention (the crisis of the psyche), they are doomed to move back and forth between morning and night, between upper- and underworlds in an endlessly repetitive cycle of descent and return, without ever being able to reap their journey’s potential rewards. But it is possible to escape from the subterranean world for it has

another side in which hidden things can be nurtured until they reach the light of day (the Apocalypse Mother).

The book Little Grace has secured under her mattress is such a secret thing, the first of several hidden stories whose collective power will eventually combat the King's dominant narrative. Little Grace signals a growing resistance to her sisters" imprisonment in unthinking conformity. Though she too dances in the subterranean depths, the feminine does not simply happen to her as a kind of fate. Instead, she has begun to read her woman's life, a skill that allows her a separate psychic space where she can trust, and follow, her own intuitions. Her skill also permits her to look beyond personal concerns to read the signs of the culture. In these readings, she has the added support of the trees of silver, gold and diamonds. The World Tree, frequently associated with the Mother archetype, often appears in goddess-centered stories as a source of abundance, its fruit offered generously to any human supplicant (Campbell, 1968). The fruit produced by the trees in the underworld provide a valuable light, by means of which Little Grace is able to foresee the individuation process beckoning just ahead.

The transition to Jungian feminism introduces the realm of the matriarchate specifically that of the mythical figure known as the Kore (Neumann, 1955) who finds expression in the Demeter / Persephone story where the Kore figure, after descending to the underworld, experiences a subsequent rebirth. Persephone, as the seed that has been buried in the earth for the winter months, comes to life again in the spring; she has been initiated, through her sufferings, into the mysteries of transformation.

Jungian feminism further defines the transformative process as it occurs for women by suggesting that the shadow should be taken as a cultural as well as personal phenomenon. De Castillejo (1973) includes, as a necessary part of female individuation, the task of making conscious the shadow elements that have collected around women as participants in patriarchy. The collective female shadow first materialised when various god-centered nomadic tribes

began to conquer and control settled goddess-centered communities around 2500 BCE. Eventually, the mother / daughter configuration that had originally characterised the Great Mother became split into distinct entities. Aspects of the Great Mother were differentiated into individualised figures and subsumed under patriarchy as the wives and daughters of the father gods, the mother aspect, as a representative of the old chthonic order, was forgotten or relegated to the underworld. Here she took up residence as Hecate, Medusa or Ereshkigal, powerful female figures associated with the earth, with darkness and, in some cases, with evil (Wolkstein & Kramer, 1983).

This mythological development has its psychological counterpart. The archetype of the Great Mother carries a negative underside. This dark aspect of the Mother, has found its way into masculine mythology and psychology as the female dragon, the Stone Mother, the castrating terror, whose powers must be destroyed once and for all to enable the male hero to attain maturity. From a female perspective, the witch can now be seen as a cultural shadow-construction that embodies male fears of female power (the vagina dentata.) Instead of either destroying or disavowing this shadow, however, Jungian feminism suggests that it be brought to consciousness where its energies can be affirmed and utilised (Woolf, 1957).

Thus, in the story of the dancing princesses, instead of running away from what she has been taught to despise, Little Grace stands her ground. An enormous challenge faces her: to see these women not as a monolithic evil presence but as interesting and powerful aspects of herself. To break the spell, this is the mirror she must confront, accept, and eventually step through. What has been disguised by the dominant patriarchal narrative as ugly, dangerous, and life destroying, becomes something else as Little Grace faces the looking glass. Suddenly feminine self-assertion, including all those parts of the self which are considered unacceptable by conventional culture, is no longer something that must be hidden away, repressed or denied. Instead it can now be seen as a source of personal power that allows body and spirit to inhabit

the world freely, without shame or apology. The looking glass stands as a door between two worlds. On one side is the timeless realm of fairy tale, characterised by unreflective repetition, in which women are expected to adhere to narrowly defined domestic roles. On the other side is a world marked by time and history in which strong women are increasingly able to act as self-defining agents of change.

But, the tale does not end with a simplistic, one-dimensional happily ever after. The castle Grace returns to is in disarray and she resists enclosure within marriage (conjunctionis) offered by Jungian theory as the goal of individuation, and thus, construction of the integrated self is not achieved. Yet, this “failure” is consistent with the deconstructive insight that such a union with the unconscious is impossible to maintain beyond brief moments (Rowland, 2002).

Concept Five: The Personal Unconscious (The Freudian Perspective)

Freud’s focus was on the individual. Therefore he believed that all issues manifested within the individual. When the story of Alice is analysed in this section, it becomes evident that Freud looked at Alice as the dream of the author, Lewis Carroll. Thus Alice, is not analysed as the character in her own right (as in the Jungian discussion of Alice) but rather as a dream of the author and what it tells us about the author. The Freudian perspective will be discussed briefly, as it have been extensively discussed and compared throughout the previous concepts.

In brief, Freud proposed a psychoanalytic framework that identified the three forces of the psyche as the id, ego and superego (1949).

The id is unconscious and comprises everything that was present in the human psyche at birth, everything that is inherited and the instincts. The ego, being the conscious that fulfils the role of internal moderator between the animal instincts of the id and the social context of the external world; it is the link between the id and the external world and is aware of the stimuli

it presents. The ego responds to these stimuli by adapting to the external world in a manner that would maximise pleasure and avoid displeasure (Freud, 1949).

The superego represents the influence of authority figures including parents, teachers and role models and also embodies the cultural values, customs and behaviours; its function is to constrain satisfactions sought by the id and ego within the cultural context of external authority (Freud, 1949). Freud argued that the instincts originating in the id are the driving forces of all behaviour and identified them as Eros (love) and the destructive or death instinct; the purpose of the love instinct is to form connections and to reserve unity through its relationships with others. In contrast the death instinct seeks to undo connections and unity through destruction. Freud further posited that these two instincts can operate either exclusively from each other, or combine through attraction (Freud, 1949, p. 19).

Freud's view of the human psychological process distinguishes between the conscious, pre-conscious and unconscious (p. 31). In the conscious domain one is aware of ideas, but only briefly, while pre-conscious ideas are ideas that are capable of becoming conscious, but are not yet conscious. Unconscious ideas are not easily accessible, but they can be inferred, recognised and explained through analysis (Freud, 1949, p. 32). Freud held that the unconscious thoughts of the id attempted to force their way into consciousness through dreams which can originate either in the id or the ego. The dreams are characterised by their strong use of symbolism and are the product of conflict and have the power to either bring up memories the dreamer had forgotten or to bring up impressions which cannot have originated from the dreamer's mind – and Freud cautioned that what the individual recalls from the dream is only the façade behind which the meaning must be inferred (Freud, 1949, p. 45).

Freud noted that the suppression of unconscious thoughts, emotions and memories is the defense mechanism the ego deploys to protect itself from the real emotions and inner conflict that these events may produce (Meyer et al., 2008).

The contribution of Freud to the subsequent development of analytical psychology. By presenting the concept of the collective unconscious, Jung's departure from the basis created by Freud is most clearly seen. Freud argued for the personal unconscious as a place where unresolved trauma hides, but made no provision for an interconnected, collective consciousness. The Freudian archetypes are metaphors describing recurring patterns in the individual; not the archetypes of Jung, which tend to more describe an underlying cosmic reality.

Where Freud enabled Jung's contribution, is in recognising the existence of the unconscious and providing one of the early descriptions of its functioning, including the apparent irrationality of the unconscious and its modality of symbols, as well as the introduction of the first archetypes. Jung took these ideas much further, but as the Freudian vs. Jungian interpretations of the Alice texts shows in the discussion, instead of reading Freud and Jung as differing and separate theories, they should be read together as a continuum for there is value in both.

For Freud, the journey to wholeness is about reintegrating the broken pieces of a scattered psyche into a whole self, one which is in balance, and one in which the unconscious had been made conscious. The implication that follows is that once the underlying trauma feeding the behavioural pathology is resolved and made whole, the pathological behaviour, deprived of the trauma that feeds it, will no longer sustain itself. Thus, the obese person who overeats in response to trauma will no longer need to do so in compensation of a damaged psyche; for the pathological behaviour is an attempt to restore balance to a psyche that is out of balance. If this is the case then, obesity is the physical manifestation of a pathological behaviour pattern generated in the unconscious as a coping mechanism to compensate and deal with the underlying trauma.

Jung similarly held the view that the psyche has a natural and innate urge toward wholeness but goes further in introducing the concept of transcendence; as Henderson writes:

> A sense of completeness is achieved through a union of the consciousness with the unconscious contents of the mind. Out of this union arises what Jung called 'the transcendent function of the psyche', by which a man can achieve his highest goal: the full realisation of the potential of his individual Self (Jung et al., 1964, p. 149).

Jung was fascinated by alchemy and specifically with the Philosopher's Stone which he saw as a metaphor of the process of individuation; the transformational journey into the wholeness in which the invisible is brought into the visible, matter is spiritualised and where the spiritual becomes materialised; for Jung's wholeness derives from a personal and a collective unconscious, yet his consciousness achieved through individuation is decidedly personal (Jung, 1953). This path however requires the existence of a non-empirical domain of reality which Jung referred to as the collective unconscious. It is the collective unconscious which provides the infinite field for the progress of the Ego-Self axis relation. It is also the collective unconscious which nurtures the development of consciousness as the phenomena of the personal unconscious collapse (for example the transformation of the archetype of the Death Mother into the Apocalypse Mother).

Differences between Freud and Jung. The difference between Jung's analytical psychology and Freud's psychoanalysis is evident in Jung's assumptions which reflect his theoretical differences with Freud. Jung agreed with Freud on the influences of childhood and past experiences on later behaviour, but unlike Freud, posited that behaviour is also shaped by future aspirations (Jung, 1948). Where Freud limited the libido to sexual energy, Jung saw it as a generalised psychic energy, but like Freud, Jung saw the psyche as being made up of a number of separate but interacting systems. For Jung, these systems were the ego, the personal

unconscious and went further than Freud in introducing the concept of the collective unconscious (Jung, 1948).

Jung saw the ego as representing the conscious mind and as being largely responsible for identity and continuity and like Freud, Jung (1961) emphasised the importance of the conscious in the forming of personality, but departed from Freud in proposing that the unconscious consisted of two layers which he defined as the personal unconscious (similar to Freud's version of the unconscious), and the collective or transparent unconscious as the second layer. Jung (1961) also added the feature of complexes to the personal unconscious which he defined as a collection of thoughts, feelings, attitudes and memories that form a single concept.

The influence of the complex on the individual increases as more elements attach to the complex, and Jung argued that the personal unconscious was much nearer to the surface (conscious) than Freud suggested (Jung, 1961).

By far the most notable difference between Freud and Jung was Jung's introduction of the collective or transpersonal unconscious which he saw as a level of unconscious shared collectively with other humans and which comprises latent memories of our evolutionary, cultural and historical (or ancestral) past and concluded that "the form of the world into which a person is born is already inborn in him as a virtual image" (Jung, 1953, p. 188). Jung referred to these ancestral images as archetypes (Jung, 1947) which are images and thoughts that have universal meanings across cultures. Archetypes express in dreams, literature, art or religion and Jung explained that the reason why some symbols have the same meaning across different cultures was because they derive from archetypes shared by the whole of humanity (Jung, 1947). Hence, Jung believed that the basis for human behaviour lies in our primitive past which directs the human psyche (Jung, 1947).

The Freudian reading of the Alice texts. The psychoanalytic interpretation of Alice in Wonderland starts from the Freudian premise that the unconscious self is the repository of

painful experience and repressed emotions and that our daily lives are spent moderating between the impulses and demands of the id, ego and superego (Empson, 1971). The psychoanalytic school of literary criticism holds that one can better appreciate literary works by applying the techniques of Freudian psychoanalysis to both literary characters and their authors, and to do so the literary work is treated as a dream in which the hidden meaning is found by means of a detailed analysis of both the language and symbolism featured in the literary work (Empson, 1971). In the case of *Alice,* the story begs for psychoanalysis because it is a dream. According to Empson, (1971) "to make the dream story from which *Alice in Wonderland* was elaborated seem Freudian, one only has to tell it" (Empson, 1971, p. 357).

Unsurprisingly the first wave of Freudian analysis applied to Alice, focused on the sexual symbolism, which according to Freudian theory reveals the repressed sexuality of the author, Lewis Carroll (Goldschmidt, 1933). Goldschmidt (1933) interprets Alice's ordeal in the hallway of doors as follows;

> the common symbolism of lock and key representing coitus, while the doors of normal size represent adult women which are disregarded by the author whose interest is centered on the little door which clearly symbolises little girls while the curtain in front of the little door represent the female child's clothes, thus, revealing an undertone of paedophilia on the part of the author (Goldschmidt, 1933, p. 281).

From this perspective, Alice, becomes a study in repressed male sexuality that Goldschmidt (1933) describes as an "unmarried clergyman of the strictest virtue with a well-documented penchant for making child-friends" and notes that it "does not require a great interpretative leap" to believe that such a man might unconsciously relive this tension through his writing (Goldschmidt, 1933, p. 281). For the Freudians, Alice provides for a highly-sexualised reading. Goldschmidt notes events such as *Alice's* "penetrating" the rabbit hole, the keys and the locks and the small door as colorful symbols of sexual intercourse which he interprets as proof of the

“presence in (Lewis Carroll’s) subconscious of an abnormal emotion of considerable strength” (Goldschmidt, 1933, p. 281). Goldschmidt’s sentiments are echoed by Schilder (1971) who interprets the extreme violence of Wonderland and its creatures as a representative of Carroll’s frustrated sexual urges and notes that Carroll’s fascination with Alice reveals the complexities of Carroll’s frustrated sexual urges, for Alice was not only his love interest but also acts as substitute for mother and sister, (Skinner, 1971) thus revealing Carroll’s repressed desire to reject his adult masculinity and to become a little girl (Schilder, 1971, p. 291). Alice was in fact Alice Liddell, Carroll’s favourite among the daughters of his friends and thought to be the person for whom he wrote the stories.

Later Freudian analysis focused more on the child and identity in interpreting Alice’s experiences in Wonderland as a developmental allegory for the developing ego as the child mind learns how to understand the world and the self (Stowell, 1983). Stowell (1983) notes that like all children, Alice must separate herself from the identification with others, develop an ego and become aware of her own and others’ aggression, and learn to tolerate adversity without succumbing to self-pity. In other words, Alice has to grow up (Stowell, 1983). Identify is a recurring theme in Alice in Wonderland, where the creatures constantly ask her to identify herself, but often she finds herself unable to do so.

> "Who are you?" said the caterpillar.
>
> This was not an encouraging opening for a conversation. Alice replied, rather shyly, "I--I hardly know, Sir, just at present--at least I know who I was when I got up this morning, but I think I must have been changed several times since that” (Carroll, 2008, p.50).

Throughout the story, Alice is either too small, too big, or she feels like she is another person altogether in her reference to Mabel, another girl she knows. Once Alice forms a clearer view of her, she is less susceptible to the erratic and uncontrollable unknown that presents in

Wonderland; she gains the power to deal with the absurdity that surrounds her (Stowell, 1983). Greenacre (1955) traces the developmental aspects of Alice back much further to the age around fifteen to thirty months which is the age when verbal language emerges as dominant over bodily activity. Alice is "about as close a portrayal as can be accomplished in language of that realm in childhood's development when the child is emerging from its primitive state of unreason to the dawning conception of consciousness, order and reason" (Greenacre, 1955, p. 418).

In treating social class as an aspect of identity (ego), Alice's reaction to Wonderland and the development of her identify as she transforms is seen more completely. Entering Wonderland as a sensible prepubescent girl from an upper middle class English family, Alice initially approaches Wonderland with her ego comfortably intact; her view of her environment is comprised of clear, consistent and rational rules, and as she experiences Wonderland Alice seeks to fit these experiences into her world view (Cody, 2002). She almost approaches Wonderland as an anthropologist, but maintains the strong sense of *noblesse oblige* characteristic of the Victorian upper middle-class families of the day towards the creatures she encounters. Her attitude of entitlement is clearly seen when comparing herself to the less fortunate Mabel whom she describes as living in a "poky little house" and having no toys. A key feature of her outlook is the Victorian obsession with good manners which she becomes increasingly obsessed with as she deals with the rude creatures of Wonderland (Cody, 2002).

Yet, she maintains her superior attitude and reacts with solicitous indulgence towards those creatures (aspects of her unconscious) she believes to be less privileged (Cody, 2002). But when Alice is confronted with the mad illogical world of Wonderland her sense of order clashes with its irrationality, and her class identity is threatened (ego) when the White Rabbit mistakes her for a servant, and as Wonderland's creatures continually assaults her with what Alice perceives as dismissive rudeness. Alice's ego is challenged at every turn; the Mad Hatter,

Pigeon and the March Hare challenged her view of intelligence by engaging her in the unfamiliar logic of Wonderland which only makes sense in that context, for example (Cody, 2002). Consequently, Alice suffers an identity (ego) crisis, and as much as Alice attempts to cling to her notions of order, she realises that she needs to assimilate into Wonderland's illogical schema to make sense of it (surrender the ego to achieve the integration of the self).

In this, we see the theme of loss of childhood innocence, as Alice is not only forced to revisit her outlook on life, but further undergoes a series of physical changes leaving her either too small or too big, and struggling to maintain a comfortable body size throughout the story. Alice's adventures take place in her dreams in which the events and characters of the real-world mixes with Alice's unconscious state; the narrative follows the dreamer as she attempts to interpret her experiences in relationship to herself and her world, and while these dreams, like experiences lend to meaningful interpretation, they do resist a singular and coherent interpretation (Goldschmidt, 1933).

When Alice first arrives in Wonderland she consumes a cake that says "eat me" and grows nine feet tall. Distressed by her size and her inability to fit through the door, she cries giant tears which form a pool at her feet. At this point the White Rabbit reappears, and mutters that the Duchess cannot be kept waiting, but when Alice speaks to him, he runs away leaving his fan and gloves behind. At this point, Alice starts questioning her identity and starts reciting her lessons which she gets wrong, and at that point Alice starts wondering if she is not perhaps Mabel a girl Alice knows and whom she considers dim-witted as Mabel does not know much (Carroll, 1999). In her confusion, Alice thinks that her inability to recall her lessons must indicate that she has somehow become Mabel, and if she is Mabel then there is no need to find her way out of the well to re-join society. However, Alice somehow realises that she must find a way out of the well. As a distressed Alice starts fanning herself using the rabbit's fan, she realises that the fan makes her smaller, and continues until she is small enough to fit through

the door – but, she has forgotten the key again. The much smaller Alice is engulfed by the pool of tears at her feet, which now resembles a small ocean and as she is swimming in it, she comes across the Mouse (Carroll, 1999). The mouse initially does not understand Alice's plea for help, and Alice reverts to French and starts chattering about her cat, which causes the mouse to flee in fright. Alice quickly apologises but then resumes talk of her cat Dinah, which offends the mouse. Alice changes the topic to dogs, which only offends the mouse more that starts swimming away. Alice eventually promises to stop talking about cats and dogs if the mouse would help her. The mouse tells Alice to follow it to the shore and promises to tell her his history and explain his hatred for cats and dogs (Carroll, 1999).

This episode clearly shows Alice's ego crisis, and at first, she attempts to deal with it reasonably, but the episode in the pool of tears illustrate how the unconscious distracts from reason and causes her to react emotionally. As Alice vacillates between crying and scolding herself she also vacillates between emotion and reason; and does not notice that the environment has changed around her. The hall has become an ocean, while the floor has become the dry shore. Instead of reacting to these changes, an overwhelmed Alice attempts to distract herself from the problem at hand by attempting to figure out how to address the mouse, reflecting a total detachment from the situation in which she finds herself. This detachment becomes a recurring theme throughout the story, for when Alice finds herself confronted with situations that cause her to react in the extremes of either reason or emotion, she tends to detach by allowing herself to become distracted so that she can ignore the real problem at hand (Gordon, 1971).

Combined with the dream motive is the motif of subversion as Alice quickly learns that Wonderland will reliably frustrate her expectations and consistently challenge her understanding of the natural order in her world. She botches her multiplication tables, incorrectly recites poems she had learned in Wonderland, and finds that her lessons learned in

real life no longer means what she thought they did; in short Wonderland frustrates Alice's attempts to make meaning of her experiences logically where she can establish a relationship of cause and effect. When Alice uses the phrase *"curious and curiouser"* this suggests that both her experience of Wonderland and the language she uses to make meaning of it extends beyond convention and in this, her language reflects her newly discovered sense of limitless possibility (Dunn, 2010).

Alice suffers the final assault on her reasoned view of the world (ego) during the trial held in Wonderland, convened by the King of Hearts to find out who stole the Queen of Hearts' tarts (Goldschmidt, 1933). She arrives in the courtroom to find both King and Queen on their thrones and the accused knave lies chained before them. The King and Queen are surrounded by the whole deck of cards and all the creatures of Wonderland. As she surveys the room Alice finds relief in seeing familiar symbols of order in that Wonderland's courtroom has all the features of a court of law that she has read about. But this notion is soon to be shattered. Alice notices that all the jurors write down their names which the Gryphon explains is needed in case they forget who they are by the time the trial ends; Alice immediately calls the jurors "stupid things" a comment which they also write down (Carroll, 1999).

She snatches the pencil out of one of the juror's hands and he begins writing with his finger. The White Rabbit serving as the herald of the court reads out the charge that the Knave of Hearts has stolen the Queen's tarts and the Mad Hatter is brought as first witness bearing a cup of tea and a piece of buttered bread. The Hatter's evidence is frustratingly vague, and he refuses to remove his hat at the King's command, explaining that he does not own the hats; he merely makes them and nervously suggested that the March hare said something, which the March Hare promptly denies. As Alice watches, she finds that she has started growing again which frightens the Dormouse who storms to the other side of the building to avoid being crushed by

Alice (Carroll, 1999). The Hatter then suggested that the Dormouse said something, to which no reply came for the Dormouse had fallen asleep.

A juror then asks the Hatter what the Dormouse said, but the hatter cannot remember, which prompts the guinea pig to start cheering. The guinea pig is forcefully suppressed by being tied in a bag and sat on, after which the King commands the Hatter to stand down (Carroll, 1999). The Hatter replies he can stand no lower, and the King commands him to sit down – which prompts another guinea pig to start cheering and to be similarly suppressed by being tied in a bag and sat on. The second witness was the cook, who testified that the tarts are made of pepper, but the dormouse sleepily contradicts her by shouting "treacle" which caused the courtroom to erupt in chaos and amidst the frenzy the cook disappears. The King demands the next witness to be called, and the White Rabbit calls Alice (Carroll, 1999).

Upon appearing in the courtroom Alice, who has failed to find meaning in Wonderland up to this point, enters hopeful that she will find logic and order at last in the trial (restore the ego state). She views the Wonderland courtroom, as the institution of law as a refuge of sanity, order and reason in which Alice expects an objective and undeniable truth to prevail. Her need for coherence, order and rationality is such that the trial becomes her last opportunity to meet it; but she is disappointed (Goldschmidt, 1933). The trial mocks the legal process in that the King repeatedly demands a verdict but none is reached; the importance attached to trivial points supersedes the core issues of judgment, and the pointless arguments serve as a means to arrive at conclusions that has nothing to do with the issue before the court. In this Alice realises that in a world without meaning the search for truth and order remains elusive (Goldschmidt, 1933).

The other characters in Alice in Wonderland were also subject to Freudian analysis; the Dormouse's tendency to fall asleep is seen by Roheim (1971) as a symptom of psychological withdrawal, while Empson (1971) sees the Queen of Hearts as a symbol of uncontrolled animal passion.

Almost everything in Alice lends to symbolic interpretation; yet nothing clearly represents something specific. The garden for example, on which Alice focuses much of her attention and effort to enter, could either be a symbolic reference to the Garden of Eden and its connotation to a desire to return to innocence (the pre-awakened state of the unconscious) as Alice attempts to hold onto the very childlike notions she must relinquish in order to mature or alternatively in a more sexual reading of the tale could merely indicate unmet desire as she focuses much effort on her attempts to enter the garden, but is denied its pleasures (Goldschmidt, 1933).

A similarly sexual connotation was ascribed by some critics to the caterpillar's mushroom; some view the caterpillar's phallic shape as a symbol of sexual virility and see him as a sexual threat. The mushrooms have magic properties which Alice must consume to gain control over her fluctuating size which represent the frustrations that accompany body image in puberty (Goldschmidt, 1933).

In the Looking Glass, Lewis Carroll explores the themes of reversal, reflection and opposition. A looking glass is a mirror which offers a reflection as a reproduction, but with a difference of the real world. They reflect the opposite of backwards version of things, a theme consistently seen in Looking Glass; the White Queen's finger bleeds before she pricks it, for Alice to get away from the looking glass house she must walk towards it and the Alice and the Queen of Hearts have to run in order to stand still as the order of cause and effect is reversed (Carroll, 1998).

The gender dynamic with particular reference to Freud's Eros/Thanatos archetypes. Insofar the gender aspects in the Alice texts are concerned, Garland (2008) suggests that they are malicious to the extent that they are spiteful attempts of the male author to suppress and control Alice as a result of his frustrated sexual desire for her (Garland, 2008). Carroll's anxieties regarding female sexuality and independence as well as his efforts to control these are expressed through the representations of food and appetite and the relationship of these to

the feminine (Garland, 2008). Sigler (1997) that notes that as enjoyable it is to walk with Alice through Wonderland, every now and then something disturbing almost awakens one from the dream (Sigler, 1997).

She further notes that the Alice books have commonly been read as coming-of-age tales to do with the construction of identity and independence (Sigler, 1997). Knoepflmacher (1998) saw Alice as the subversive, active heroine and in his analysis in the gendered power struggle between Alice and the author, Alice wins (Knoepflmacher, 1998). Garland (2008), in citing the various instances surrounding food and hunger in the texts argues that this analysis is flawed in that Knoepflmacher (1998) fails to recognise the male repression and hatred of the power female sexuality represents in Carroll's attempts to quell the sexuality of his child heroine, Alice (Garland, 2008.) Both Knoepflmacher (1998) and Sigler (1997) noted the difference in how Alice is portrayed between Wonderland and its sequel, the Looking Glass, but Garland (2008) argues that these authors failed to fully appreciate the significance of the shift in how female sexuality is portrayed through Carroll's eyes.

Garland (2008) sees Carroll's portrayal of female sexuality as a destructive and frightening force but notes the differences in how the anxieties surrounding female sexuality is presented in that Wonderland is about possession, whereas Looking Glass is about loss (Garland, 2008). Leach (1999), in her biography of Carroll argues in line with Freudian analysis (Goldschmidt, 1933) that the male author is preoccupied sexually with his child heroine and that the difference in the portrayals of Alice in the two texts suggests that there is something the child heroine can offer that the adult Alice cannot; the girl represents the border between two states, and is presented as having a desire to transgress her embodied limit (Leach, 1999).

In support, Leach sheds light on Carroll's friendships with women; with Carroll, an unmarried clergyman at times asserting a sexual, scandalous (for Victorian times) element to these relationships (Leach, 1999). But in her attempts to rescue Carroll from the overtones of

pedophilia, she instead portrays him as a lecherous old man who hides his sexual desires and improprieties behind the veneer of an eccentric adult who preferred the company of children over that of adults (Garland, 2008). Garland (2008) asserts that the Alice texts, insofar as desire and sexuality is concerned, can best be understood through revisiting Carroll's portrayal of female figures as they relate to food, in particular with reference to Barbara Creed's (1993) notion of the vagina dentata (the vagina with teeth) (Garland, 2008). The term, according to Creed' (1993) is indicative of the male fear of aggressive female sexuality and refers to a bestial, aggressive, destructive female sexuality (or with lesser emphasis on the sexual, in Jungian terms as the Death Mother), and reclaims Freud's theories around the phallus (Creed, 1993).

In the Alice texts, both animal and human male characters are found and greatly outnumber the female characters that are exclusive human and are presented in similar ways; all of them, with the exception of Alice, are adults. Compared to the child Alice, who is adored by the author, the adult females are uniformly reviled and portrayed as frightening in Carroll's presentation of them (Garland, 2008), and these adult women are presented as the natural enemy of the girl. Food is one of the most important features in the Alice tales, and interesting things happen when she consumes it. Often following instructions such as "eat me" or "drink me" her size changes mysteriously, either becoming too big or too small. Incidentally Carroll's own eating habits were exceptionally frugal with Cohen & Carroll (1995) noting in that Carroll often consumed for his main meal of the day a single biscuit and some sherry and foregoing the other meals of the day "surviving himself on simple food and small portions" (Cohen & Carroll, 1995, p. 291) "while meticulously planning the times and quantity of his child guests' food consumption including treats like cocoa, jam and sweets when entertaining children" (Cohen & Carroll, 1995, p. 25). Cohen & Carroll (1995) notes that Carroll was extremely controlling insofar food was concerned, and often declined lunch invitation claiming he had no

appetite at that time and did not wish to watch others eat and drink, and at other times bringing his own food when invited for dinner at friends (Cohen, 1989). Similarly, Carroll was often disgusted at the appetites of his female friends and was known to have written letters admonishing them for being greedy and encouraging them to eat less (Cohen, 1989.)

Similarly, Carroll once sent a gift of a small knife to one of the little girls he befriended, Kathleen Tidy, instructing her to use it "to cut her dinner as this way you will be safe from eating too much, and so making yourself ill. If you find that when the others have finished you have only had one mouthful, do not be vexed about it" (Carroll, Cohen, & Green, 1979, p. 49.) The Freudian implication is that through the use of a knife (a phallic object) the aggressive and repulsive female appetite as represented by the vagina dentata (Creed, 1993) can be controlled (Greenacre, 1995).

Food and appetite for Carroll are corrupting and aggressive forces; he idealised little girls but was disgusted by appetites and eating and thus the female child and appetites were opposites in Carroll's unconscious; the one being idealised while the other being quite horrified. For Carroll, hunger as the representative of desire expressed by young girls made them impure as they were corrupted by their appetites and as such they were no longer desirable to him (Garland, 2008) In the Alice texts, Carroll expressed his own desire through Alice's hunger, but consistently controls her eating. In Wonderland Carroll has Alice eat without appetite; this being his attempt to maintain her purity by separating appetite from consumption and not acknowledging her hunger (Garland, 2008). Alice eats and drinks several things marked "eat me" and "drink me" not because she is hungry, but because she is following an instruction.

In Looking Glass, Carroll actively starves the now more mature Alice who voices her hunger several times during the tale, but is ever denied the opportunity to satisfy it; one example being the Alice's coronation feast during which she is hungry to the point of ravenous but is

denied the opportunity to eat by the Red and White Queens (Carroll, 1999). While Alice's size increases in the text, she never grows from a child to an adult as seen in the positioning of the child (Alice) and the adult figures (the two Queens). In Carroll's consistent control of Alice's food consumption and denial of her appetite, he acknowledges his anxieties regarding the appetites of female sexuality (Garland, 2008).

The grotesque portrayal of the Queen of Hearts and by strongly associating her with food in that as a result of the theft of her tarts she becomes even more murderous than usual, demanding the decapitation of the thief and landing Alice in the courtroom being accused of the theft, directly in harm's way is placed in direct opposition to the idealised and innocent girl (Garland, 2008). Carroll himself admitted as much in an article he wrote about Alice, describing the Queen of Hearts as "an embodiment of an ungovernable passion, a blind and aimless Fury" (Gardner, 1960, p. 109) thus identifying the Queen of Hearts as the horrifying, uncontrollable feminine. In many ways, the Queen of Hearts resemble Queen Victoria corresponding to a statement made by Jacques Lacan and quoted by Creed (1993) in her argument for the notion of vagina dentata. Lacan said that "Queen Victoria, there's a woman when one encounters a toothed vagina of such exceptional size" (Creed, 1993, p. 106); for Queen Victoria was not only an exceptionally obese woman in her later years, but also the Regent of British Empire at the peak of its colonial era.

In Freudian terms the Queen of Hearts' favourite cry "Off with their heads" represent a castration desire which serves to emasculate Wonderland's mostly male population and serves to understand the underlying vagina dentata in the text (Garland, 2008). In contrast the King of Hearts is frightened of his wife; he is portrayed as a weak figure, subject to her whims and in terms of the traditional gender roles, in this relationship the King of Hearts seems to occupy the feminine space traditionally associated with submissiveness while the Queen takes on the masculine role of dominance.

In reversing these roles, Carroll presents a masculine and dominant queen, associated with a predatory and aggressive sexuality which not only presents a threat to all the male creatures of Wonderland, including the King of Hearts, but also presents a threat to Alice; yet, in Carroll's portrayal this female sexuality is still inferior to the phallus for as Alice grows during the trial she represents a growing phallus. It is at this point that the Queen becomes submissive to Alice (Garland, 2008). Knoepflmacher (1998) argues that the gender and power dynamic shifts between the two Alice texts in a manner that the second book Looking Glass presents Alice in her interactions with the characters of Wonderland and the environment presented in Wonderland as dominant and superior in that she is able to exert control over it. Knoepfmacher (1998) motivates the argument by contrasting the weak male characters of Looking Glass to the relatively stronger male characters of Wonderland (Knoepflmacher, 1998).

In this, Carroll "rather than indulge sentimental longing or an aggressive desire for domination, can mock the manifestation of such emotional excesses in a new set of male personages" (Knoepflmacher, 1998, p. 195). These include the White King, the White Knight and the gnat. If this is the case then Knoepflmacher's (1998) argument suggests that Alice has the power and control, and if so, then Carroll is idealising female sexual power. However, Garland (2008) regards the argument as wanting in the sense that by isolating the few weak male characters as testimony to Alice's dominance in the Looking Glass, when these characters are largely similar in Wonderland, where Alice equally dominates them. In Wonderland, the White Rabbit is frightened of Alice, the King of Hearts is portrayed as similarly emasculated in his relationship with the Queen of Hearts, and the Mock Turtle is as oppressed as his Looking Glass counterpart the Gnat (Garland, 2008). Garland (2008) therefore concludes that Carroll's weak male characters are all threated by the vagina dentata; the monstrous feminine, but this does not automatically translate into the valorising of feminine power.

Instead Carroll weakens the male characters of both texts for they cannot compete with the frightening and predatory sexuality that threatens them and Carroll's dream child, Alice (Garland, 2008). The Queen of Hearts is not alone in being identified with excess by Carroll; the Duchess is also a "bad" woman. Neglectful of her children, she is constantly associated with food, and presented as brash and crude (Garland, 2008). Alice meets the Duchess in her kitchen, where she diverts all conversation Alice tries to have with her to food in diverting attention from the subject at hand. "He might bite,' Alice cautiously replied, not feeling anxious to have the experiment tried. 'Very true" said the Duchess: 'flamingoes and mustard both bite" (Carroll, 1998, p. 121). Similarly, the Duchess proposes the theory that food determines people's personalities which support the suggestion that hunger represents a desire for sexual satisfaction (Garland, 2008). Continues the Duchess:

> maybe it's pepper that makes people hot tempered,' she went on, very much pleased at having found a new kind of rule, 'and vinegar that makes them sour – and chamomile that makes them bitter – and – barley sugar and such things that make children sweet-tempered (Carroll, 1998 p. 119-20).

Considering Carroll's own ideas (Carroll et al., 1979) regarding little girls and their appetite, the Duchess' further ideas on how to use food to manipulate personality comes as no surprise when she suggests that if fed more sugar, children would become more sweet-tempered. "I only wish people knew that: then they wouldn't be so stingy about it, you know" said the Duchess (Carroll, 1998, p. 120.) Given that this recommendation for generosity with sweets comes from one of the adult females so reviled by Carroll in the text, this could be read as Carroll's criticism of adult women, who have control over what children eat, for overindulging them (Garland, 2008).

In the case of Alice in Wonderland, what links women and the threat they represent is food, for example in the case of the Queen of Hearts' stolen tarts. Her insane lust for castration and

power “Off with their heads” is justified when her tarts are stolen. In this sense, her lack of food and hunger as a result is the necessary precursor for turning the Queen into a murderous monster (Garland, 2008). Similarly, when the hungry adult Alice desires and attacks the pudding during the coronation feast she enters the final moment of her adventure and the child becomes a woman with adult appetites (Garland, 2008)

“I won’t be introduced to the pudding, please,’ Alice said rather hastily, ‘or we shall get no dinner at all. May I give you some?’ But the Red Queen looked rather sulky and growled ‘Pudding – Alice: Alice – Pudding.’ Remove the pudding!’ And the waiters took it away so quickly that Alice couldn’t return its bow. However, she didn’t see why the Red Queen should be the only one to give orders; so, as an experiment she called out:

> ‘Waiter! Bring back the pudding!’ And there it was again in a moment, like a conjuring trick. It was so large that she couldn’t help feeling a little shy with it, as she had been with the mutton: however, she conquered her shyness by a great effort, and cut a slice and handed it to the Red Queen (Carroll, 1998, p. 331-2).

In this, Carroll (1998) clearly displays he anxiety and disgust insofar women, their appetites, food and power is concerned; vagina dentata and while these are evident in Wonderland, his anxieties around vagina dentata are much more complex in Looking Glass, for it is here that the much loved, idealised female child becomes the disgusting adult female in Carroll’s world (Garland, 2008).

By the time, Carroll published his Alice texts, the relationship between him the Alice Liddell, the child who inspired the Alice tales had changed; no more the much loved and idealised little girl she was when Carroll wrote Wonderland, Alice Pleasance Liddell at the time of publication of both text had become a sexually mature woman and her mother had withdrawn contact between Carroll and her family for reasons unknown (Garland, 2008). Looking Glass is a book of loss; of longing and of impossible desire, and it is in Looking Glass

that the Eros/Thanatos, the pleasure/death principle, present throughout the book (Garland, 2008). In Looking Glass hunger combined with the absence of eating to satisfy it is in stark contrast to hunger and eating in Wonderland. In Looking Glass, Alice as a construct of male sexual desire is made explicit in that she is the product of the Red King's dream, where Carroll (1998) expresses his mournful desire of Alice in the terminal acrostic poem:

"Still she haunts me phantomwise,

Alice moving under skies

Never seen by waking eyes … (Carroll, 1998, p. 345)

For at this stage the real Alice Liddell's mother banned contact between Carroll and the now mature Alice, with this very sexual maturity rendering her undesirable to Carroll (Goldschmidt, 1933). These feelings of impossible desire expressed through the poem echo through the entire text of Looking Glass. In Wonderland food is eaten constantly and without desire, mainly as a result of following instruction "eat me." Doing so results in Alice either growing or shrinking in a series of bodily changes. In this case Alice continually follows the male author's instructions; the eating is a pretext, something will happen when Alice eats although she does not know what; in Wonderland, Alice is consciously excluded from knowing by Carroll.

She is given only vague information on food, for example the Caterpillar tells her that one side of the mushroom would make her grow taller, while the other will make her shorter, but, no indication as to which side would cause what effect (Carroll, 1988, p. 71). This ambiguity in the instructions can be read as the male author's attempts to control Alice as she is completely denied the specific information she would need to exert control over what she consumes and how it would affect her body (Garland, 2008). Without this knowledge, Alice eats in Wonderland because her male author instructs her to do so. She consumes innocently

and ignorantly without desire on instruction; and therefore, without giving consent (Garland, 2008).

The only time Alice does express hunger is during the trial scene, but she is denied the opportunity to eat. "In the very middle of the court there was a table, with a large dish of tarts upon it: they looked so good that it made Alice quite hungry to look at them – 'I wish they'd get the trial done,' she thought 'and hand around the refreshments!' But there seemed to be no chance of this; so she began looking at everything about her to pass the time" (Carroll, 1998, p. 43).

In this scene, the hungry Alice is denied the chance of eating by her author and realising that she will not be allowed to eat the tarts has to focus on other things to distract her from her hunger. It is in this final scene of Wonderland that the stage is set for Looking Glass' hungry, and repeatedly denied Alice. In Looking Glass, Alice is hungry; she shows an aspect of agency and control and here enters the Alice that would become the active, sexually mature woman, representing the violent and hungry sexuality evidenced by the Queen of Hearts and the Duchess in Carroll's text. Alice's increased independence and agency in Looking Glass forewarns of her imminent maturation from childhood to the adult woman and this is the theme that becomes Carroll's cause for anxiety in Looking Glass in which Eros/ Thanatos is continually present in almost exclusive relation to food, hunger and eating (Garland, 2008).

The notable exception is the Jabberwocky poem which represents the destruction of vagina dentata, the aggressive female sexuality, for as Carroll gave a knife (phallic symbol) to Kathleen Tidy as a means to control her appetite, he gives Alice a similarly phallic sword to kill the dragon which in this case, as the Red Queen's champion, is the very epitome of representation of aggressive, predatory female sexual desire. The significance of this scene is that only by slaying the dragon with the phallic sword granted Alice by her author, can she figuratively kill the mature and awakened sexuality that will become part of her as she

approaches adulthood, and therefore stay the idealised child Carroll wants her to be in Wonderland (Goldschmidt, 1933). Here the victory of the sword (recall, Alice was told to let the sword do what it wants for it knows what it is doing by the Caterpillar) represents the victory of male desire over the mature female sexuality that was so repulsive to Carroll; the phallus overcame the vagina dentata (Garland, 2008).

But in Looking Glass, the phallus fails, for this is a tale about loss of the female child to womanhood, expressed by Carroll as follows: “About nine or ten of my child’s friendships get shipwrecked at the critical point where the stream and the river meet; the child friends once so affectionate become uninteresting acquaintances whom I have no wish to set eyes on again” (Goldschmidt, 1933, p. 331). Insofar as food is concerned, it is worth noting that all instances of Eros/Thanatos in Looking Glass present as sado-masochistic as illustrated in how food is personified in the poem about the Walrus and the Carpenter, where the male Walrus befriends the female child oysters and then eats them in Looking Glass.

> “It seems a shame’ the Walrus said,
>
> “To play them such a trick.
>
> After we brought them out so far,
>
> And made them trot so quick!’
>
> The Carpenter said nothing but
>
> ‘The butter’s spread too thick!’
>
> ‘I weep for you,’ the Walrus said:
>
> ‘I deeply sympathize.’
>
> With sobs and tears he sorted out
>
> Those of the largest size,
>
> Holding in his pocket-handkerchief
>
> Before his streaming eyes…

'Oh Oysters,' said the Carpenter

'You've had a pleasant run!

Shall we be trotting home again?'

But answer there came none –

And this was scarcely odd, because

They'd eaten everyone." (Carroll, 1998, p. 235-36)

Here is a Walrus who all the while mourns the oysters he plans to eats, and as he does so, he "weeps for them" (Carroll, 1998, p. 236) and a little girl Alice who remarks that she "likes the Walrus best … because he was a little sorry for the poor oysters" (Carroll, 1998, p. 236) and this theme of desiring while destroying continues throughout Looking Glass. The rule of jam is the key philosophy of Looking Glass; "Jam to-morrow, Jam yesterday, but never Jam to-day" (Carroll, 1998, p. 247) and uses food to demonstrate the impossibility of achieving satisfaction on the other side of the mirror, as illustrated by the character of the White Knight said to be a caricature of Carroll himself (Gardner, 1960).

It is the While Knight that introduces a pudding that he desires but admits can never exist in emphasis of the Eros/Thanatos ever present in the text. Alice upon entering the final chess square to become a queen (adult woman) has to leave the White Knight; he mourns her departure by singing a song of melancholy "The Aged, Aged Man" which saddens Alice, but she finds she cannot she cannot cry, for at this point something in the exchange is irrevocably lost. So food connects the themes of loss, denial and desire in the Looking Glass; in the same way the impossible pudding represents impossible desire and longing for the White Knight, so the talking pudding Alice encounters at the coronation feats becomes the final connection between Eros/Thanatos and vagina dentata for the newly matured Alice who now aggressively insist to eat the pudding at the feast despite being told it is impolite to eat food one has been introduced to and being reprimanded by the pudding itself. Her hunger, consistently denied

through the text now overwhelms her to the point where she is prepared to kill the talking pudding so that she can eat, and in this she becomes aligned to the fearsome adult women; the Red and White Queens, the Queen of Hearts and the Duchess and reaches the full queendom of vagina dentata, for she will have her hunger satisfied and be denied no more.

Chapter Conclusion: Synthesis of the Major Recurring Themes

By examining the five concepts, there were themes that became evident throughout the research, which will be summarised shortly.

Pre-agrarian humanity was food insecure. Unable to control the forces of nature and with agriculture in its very early phases of development, humanity looked to their gods to mediate their interaction with nature; much as the pre-conscious Ego relates to the Superego as an external locus of control in Freudian terms. Food was seen as a blessing from the gods and to access it, one had to be in communion with divinity. The depictions of the famously fat ancient goddesses described in the narrative literature review is indicative of their divinity; for goddesses were not subject to the ravages of famine in a world of food insecurity. A special sign of provenance were the themes of nectar and ambrosia, (or manna and quails) – for not only was this the food of the gods, but they would bestow it on humanity as a special favour. Nectar and ambrosia represents what was particularly scarce in ancient times; energy dense foods, such as proteins (hence the hunting rituals and blood sacrifices) and sweet foods. These particular foods were reserved for special occasions, religious significance and the well to do. To be fat was indicative of enjoying the favour of the gods more so than others; for the Ego in its unified state with the Self wants to be favoured above others.

Similarly, the role of the gods was extended to mitigate other aspects humans felt themselves unable to control as seen in the tales of the banana goddess who mediated between husbands and their wives in compromising the imbalance in power relations characteristic of early patriarchal societies and that of the gods' solution to the problem of Persephone who

through their compromise could alternate between the realms of the dead and the living. In Jungian terms, the story of Persephone is about the gods and the fates (the collective unconscious) mediating the interaction between the unconscious and the conscious that occurs in the human psyche, whereas the banana goddess is similar in that here the goddess (unconscious) maintains the balance between the anima and the animus through compensation. The ancient myths and symbols also illustrate imbalance in the psyche is compensated as neurosis or pathology; to cure the neurosis or the pathology, the imbalance must be restored.

Ancient society can also be read as a metaphor; during this time, much of the scientific discoveries that enable humanity to control their environment in the present day did not exist as they were still buried in the domain of the unknown (a metaphor for the unconscious). Hence the proliferation of gods in the ancient world and superstition that prevailed both in ancient times and during the Dark Ages before the dawn of the Age of Reason brought about by the increase in scientific discoveries. The ancient civilizations differed from the Dark Ages in that this was the period of the feminine divine; the sacred female alongside the male divine. The Gods of Olympus were both male and female, and so were the ancient Norse Gods and Gods in other cultures of the time. In several temples the High Priestess reigned in positions of supreme spiritual authority; during this era, there was a general balance of the male and female forces represented by the anima and animus.

Then came the Dark Ages; the period in which the patriarchal monotheistic religions dominated. In the western world, the early Catholic Church started finding its place and the pagan gods were displaced, along with the feminine divine; for spirituality was now male dominated and the balance between the anima and animus was disturbed. The period is characterised by witch hunts, plague and war as the animus dominated. It was during this period that the holy anorexics found their place, and in Jungian terms, it can broadly be seen as a physical manifestation of an unconscious balancing, by compensation. The Freudian reading

is different, in that Catherine of Sienna's anorexia is seen more as a controlling behaviour and a reaction to the personal trauma in response to the loss of her siblings, but the theme of female reaction to male dominance, i.e. the imbalance between the anima and animus, remains.

While the gods of ancient times bestowed food as blessings onto humanity, there were limits; some foods were reserved for the gods. The golden apples in the garden of Hesperides, the fruit of the tree of life in the Garden of Eden were forbidden to man, and to seek it would invoke the anger of the Gods. This illustrates another theme in the preconscious state; if the gods derived their ability to mediate between man and nature from the possession of privileged knowledge in the unconscious domain. This knowledge is represented by the forbidden fruits, and should humanity steal it; i.e. by entering the unconscious to decode its hidden contents and make it conscious, the journey of transformation follows. Once individuation is completed in Jungian terms, or the trauma buried in the psyche is made conscious in Freudian terms, the unconscious ceases to be unknown and can be controlled going forward, and the need for the gods to mediate between the conscious and unconscious worlds disappear. The gods then lose their standing.

Broadly speaking, the scientific discoveries that came with the Age of Reason also birthed the Material Universe, and religion and spirituality retreated into the background; for able to control his world, man had no further need for the gods. The motif continues in the various stories painting dire consequences for those who dare to eat the food reserved for the gods anyway, for the gods will not go quietly and without resistance; this resistance must be overcome, and it is here where the Hero's Journey finds its place. Similarly, religious food taboos and dietary rules demonstrate adherence and unity with the gods; food is still consumed in communion with the gods. Many of which persist to the present day in the form of Kosher, Halal and Hindu vegetarianism, amongst others. To break these rules is to break one's communion with the Divine. Here emerges another theme illustrated by metaphor; ritual

encourages conformity, compliance, replicability and discourages the disruptive and innovative thinking that leads to the exploration of the unknown.

Metaphorically these serve to contain the psyche in its conscious Ego state. It is only when the psyche is traumatised and disrupted that this paradigm is overwhelmed and the Hero's Journey into the unconscious begins. The threat of Tantalus who was condemned to suffer to eternity for stealing the food of the gods, was meant to discourage Odysseus from entering the Garden of Hesperides in search of the golden apples. Christians are still reminded that eating from the forbidden tree is still the original sin that led to the fall of mankind, henceforth doomed to be born in sin. But by participating in the ritual of the Sacrament, or communion in which the bread represents the body of Christ and the wine his blood, eternal salvation could be found.

Eating the food of the gods had consequences beyond the ire of the gods; as a metaphor for the journey into the unconscious, the Hero returns from his/her journey irrevocably changed. After Adam and Eve ate the fruit, they were banished from the Garden of Eden (the symbol of their naïveté or pre-conscious state), and they could never return. For in the Garden they did not realise they were naked, they subsisted on food provided by God, and both were created by God. They had dominion over the entire creation, but not over themselves. This illustrates the pre-conscious stage where the Ego thinks it is in control and does not understand how the unknown in the unconscious is influencing the conscious behaviour.

Following the fall of mankind (similar to the fall of Alice into the Rabbit Hole) into the unconscious, Adam and Eve realise they are naked and to cover their nakedness, required the spilling of blood, the first sacrifice to God (now representing the unconscious) by killing animals (representing the Ego which Adam and Eve had dominion over) to get the skin to cover them. Alice (Carroll, 1998) had to slay the Jabberwockey (Ego, also representative of the Death Mother Archetype as the Queen of Hearts 'champion), but was cautioned by the caterpillar (symbol of transformation) to let the sword (the unconscious) do what it wants as it knows

what to do. It is the sword the Jabberwockey greets when meeting Alice (the hero) in the battle, not the insignificant sword bearer (the ego acting in the conscious). For the Hero's Journey (Campbell & Kudler, 2004) demands that the infinitely more powerful unconscious be recognised and honoured; but doing so places the Ego in great danger. To achieve the unified and conscious self requires growth and sacrifice; the slaying of dragons and Jabberwockeys and the burning of witches as we face the Shadow and transform the archetype of the Death Mother; for the Hero's Journey into the unconscious is not without consequence.

Adam and Eve now had the power of death and life, but that power meant they had to leave the Garden, the symbol of their preconscious state, as now they were able to control their destiny. Adam and Eve would now have to work the land to produce their own food on the sweat of their brow and bear children in sorrow (give life). This is the transformed state of individuation. In Freudian terms, to unearth the trauma from the unconscious means one has to live with it in the conscious.

Anniela Jaffé pointed out that *"*in religious language an image of a God who seeks man just as much He is sought by man. God seeks the individual in order to realise himself in his soul and his life. Expressed psychologically; the Self requires the ego-personality in order to manifest itself; the ego-personality requires the Self as the origin of its life and its fate. In religious language, this means 'God needs man, just as man needs God," (Jaffé, 1989, p. 17-18). These sentiments were echoed by Jung in writing to Erich Neumann "God is a contradiction in terms, therefore he needs man to be made One … God is an ailment man has to cure" (Jaffé, 1989, p. 99).

During Victorian times food production was more successful and trade became entrenched, allowing for relative food security. But the economic inequality of the day also excluded the masses from this bounty, and the overriding concern of the age was malnutrition and hunger. In this world where scientific discoveries were the order of the day and as the first industrial

revolution took hold, divine favour as a symbol of what is uncontrollable to the Ego started being replaced by socio-economic class, for this was the height of Newton's Material Universe. In this world of matter there were no place for form, and class was the dynamic that explained why the majority had very little control over the quality of their lives.

As the problem of class remained unresolved through much of this era, God and religion still provided the imperative to restore balance; the abolition of slavery and the early works of charity were inspired by not only the noblesse oblige of the upper classes, but by their sense of piety. For the underclasses, the remedy was revolution to overthrow the social order which they perceived as oppressive. The popularity of religion waned in popularity as a concept associated with the upper classes; for the masses, divinity failed in its mediating role and as a balancing force in the social order. This is the Ego's response to imbalance; the struggle to achieve the outward balance rooted in a conscious of separateness. This theme was echoed in the motif of gender in which the body shaming of women in the industrial age as explained by Naomi Wolf (1991). The motif served to illustrate the imbalance between the male animus and the female anima on a societal level as it presents as the battle of the sexes. When women entered the workforce, their reliance on men diminished and they became financially independent; diminishing the traditional male power base, and further threatening the male dominated social order by women demanding rights and access to roles in society traditionally reserved for men. In many ways, the feminist movement came as a conscious and Ego-based response to imbalance, for patriarchy, unmitigated by a benign banana god, resulted in the repression of women and as such existed in a state of imbalance.

As this imbalance still persists and cannot be resolved in the Ego state; the conscious balancing act of feminism is met with the counter-responses of responses of discrimination and body shaming of women, as Wolf (1991) argue. Similarly, the development of agriculture and food production on industrial scale overcame the scarcity of the Victorian times, and alongside

the introduction of public welfare systems which provides income support to the poor, removed the obvious difference between rich and poor – now everyone can eat in abundance. But this came at a cost; industrial food production while plentiful is not nutritionally equal to the whole foods consumed in moderation by the well-heeled, and consequently it is consumed in abundance by the poor. In this context obesity became the outward manifestation of imbalance and because those better off are uncomfortable with what it represents and fear the consequences to their own class, the obese are shamed into submission as Klein and Campos argue (Klein, 1996; Campos, 2004).

The understanding arising from advances in quantum physics allow for the collective unconscious from which the conscious world emanates, is the non-personal part of the psyche. It is a realm of archetypes which appear spontaneously in our consciousness, influencing not only our perception, thinking and imagination, but also manifesting as physical matter as illustrated by contributions in the field of bio-electronics. In this context, Marion Woodman's theory of obesity, cellular behaviour and genetic determinants finds its place; as Woodman (1980) illustrates in applying Jung's word association tests. High BMI people think very differently from others and these unconscious thoughts as wave forms exist in a state of potentiality where they can manifest in the physical world as matter – in this case genes and fat cells.

Woodman's (1980) contribution provided an illustration of how molecules are guided in their actions by the wave forms of their quantum states; and these quantum states are inner images – symbols, metaphors and archetypes. These inner images control (as evidenced by quantum theory) all the processes in the universe, and as such translate in evolutionary terms. Biological evolution appears in the quantum world not as an adaptation of species to their environment, but at the adaptation of minds to increasingly complex forms – archetypes –

which exist as wave states in cosmic potentiality. The same is true for the evolution of social systems and its structures of coherence and power including class, gender, religion and the like.

It is when we reach into the collective unconsciousness to the archetypes that exist in their wave state as complex forms in the cosmic realm and actualie their virtual forms, that we are able to sustain life and give meaning to it. Ancient concepts embedded in these archetypes constantly re-emerge in our thinking; but they do so in an evolving manner. For example, Plato claimed that true reality resides in a realm of ideas which is outside of the visible world. The concept is similar to the idea postulated by quantum theory that the empirical world actualises out of quantum forms existing in a state of potentiality in a cosmic realm, or as Jung's collective unconscious and archetypes. Jung wrote that the collective unconsciousness is:

> "a boundless expanse full of unprecedented uncertainty, with apparently no inside and no outside, no above and no below, no here and no there, no mine and no thine, no good and no bad…where I am indivisibly this and that; where I experience the other in myself and the other-than-myself experiences me…There I am utterly one with the world, so much a part of it that I forget all too easily who I really am" (Jung, 1960, p. 21).

Because "they have never been in consciousness before," (Jung, 1960, p. 42) the archetypes exist in a state of potentiality in the non-empirical realm of the collective unconscious. Therefore, the birth of a conscious self comes from this realm of non-empirical forms through transcendence and individuation in the same way as the birth of the empirical, visible world of matter comes from a non-empirical realm of virtual states.

Chapter 6: Conclusion, Limitations and Recommendations

Overview: The Study's Response to the Stated Research Purpose

The aim of the study was to explore the symbolic meaning of food, its influence on conscious behaviour and how it developed through history and across cultures in order to discover the root of obesity as seen through a psychoanalytic lens.

By conducting a narrative review of the available literature on the symbolic meaning of food and its influence on conscious behaviour, specifically literature that discusses psychological influences on human beings across history and cultures; the study explored the narratives that have been conveyed through traditions relating to food, and identified recurring themes and symbolic meaning that were used to identify the unconscious contributor to people's dietary behaviour. The origins of the meaning of food symbols that people attach were illustrated by examining how this narrative changed over time, and the link with eating disorders, with emphasis on obesity, was explored.

Concluding Remarks on the Five Concepts and the themes that emerged

In presenting the psychoanalytic framework, the association between obesity and the psychological structure of the person suffering, was constructed. The recurrent themes occurring in both the Freudian and Jungian approaches suggest a relationship between personal traumas, depression (melancholia in Freudian terms) and loss and suggest that obesity represents the attempt to fill a void that goes beyond food. This observation goes some way toward explaining why people who lose substantial amounts of weight, tend to relapse in 98% of the reported cases.

Obesity is a symptom of repetitive destructive eating patterns and the addiction to the repetitive cycle of weight gain and loss. The starting point for the design of a treatment model which integrates the insights offered by the psychoanalytic school would have to be based on the recognition of the mental suffering and the underlying trauma that gives rise to it. This

requires a therapy that would focus on ways of dealing with the emptiness of one's existence – that void which the obese person is attempting to fill with food. The themes emerging from the literature suggests the possibility of a correlation between obesity and psychological suffering; in most cases, these two factors coexist.

When obese patients fail to adhere to the current treatment range of disorders of orality, it is an indication to involve them in their own symptomology; the very term obesity constitutes a structured phenomenon in language. However, on another level, it is also an enjoyment/ jouissance that captures the patient and leaves him/her in a state of suspension, for it is the state of complete suffering, both physical and mental that enslaves the obese patient. In this context, obesity is more than a mere somatisation, a psychosomatic disorder or a disease. Seen from the psychoanalytic perspective, obesity is a complex and unique disposition of the patient to become human (the individuated and reintegrated Self). The journey of individuation is dependent on the psychological structure of the person as it exists prior to, and during the individuation process. One of the recurring responses to episodes of binge-eating noted in the second chapter of this dissertation is depression, and similarly as Campos (2004), Klein (1996) and Wolf (1991) notes – prejudice against obesity is one of the most socially validated forms of prejudice. Obesity is often associated with moral weakness, lack of willpower and a general sense of shamelessness on the part of the obese person; and frequently a total detachment between the patient as a human being and the symptom in the care environment occurs.

The body is treated only as a living organism and as part of the empirical reality of nature, medicine, dietetics and biokinetics takes care of it, requiring an imposed silence on the deepest meanings of the patient as if they are living in a body without a narrative. When combined with the behavioural and cognitive type approaches, a further layer of disembodied intellect is added. This result in the patient's subjectivity being progressively excluded from carrying any implication in relation to the process of getting sick, for the differentiation between the

representation of the body in its physical form and the instinctual body which is the *real* body, which is situated beyond the representational body is lost, and the real body is left untreated. This theme emerges when considering the Jungian contribution through the lens offered by quantum physics.

The instinctual body – as a category – distinguishes itself from the symbolic and biological bodies without excluding them; thus, the process of body transformation cannot be decoupled from the narrative of the body, and consequently the body investigated by psychoanalysis is very different from the body investigated by medicine, for this is a body that as a living organism, a collection of flesh, organs and adipose tissue is also a body that speaks.

Medicine is called upon to cure obesity as a disease; a disease that has psychological causes originating in the unconscious. The emergent theme illustrated by the literature, calls attention to the necessity to articulate each one of the symptoms in the context of the narrative discourse produced by the body and the meaning of the different subjective experiences of the patient.

The given research suggests that the continued denial of the transcendent aspects of people's nature is what gives rise to the serious problems that are experienced in physical and mental health, of which the rising obesity epidemic is one such an example. Therefore, the author concludes that to attempt to treat the incidence of obesity on the level of the conscious (as the behavioural and cognitive approaches suggest) and the physical (the dietetic, medical and exercise approaches) will not yield satisfactory long term results and this is what explains the almost universal relapse of 98% of obese patients who have achieved substantive weight loss, with the long-term success rate being less than two percent.

A core theme that emerges in the literature pertaining to the underlying contributors of obesity, are those of trauma and loss. Psychoanalysis has focused extensively on the occurrence of psychic traumas at the source of neurosis. In the Freudian treatment of these themes, the theory of seduction (neurotica) presents a model that starts with excessive excitement which,

if not relieved, becomes associated with an event, what Freud (1949) described as “apres coup”; a belated attribution of traumatic memories which will become repressed. Traumatic events become connected to the original ghosts in the individual psyche and the afferent repressed anxiety. Applied to Freud’s theory of infant sexuality, these would become the fears of castration, seduction, the primal scene and the Oedipus / Electra complexes. In this context, trauma associates with the strength of the sexual drive or libido in the psychological structure of the individual at which point trauma becomes a breach in excitement resulting in a situation in which the ego is aggressively confronted with a reality of which it cannot make meaning and to which it cannot attribute qualities.

This is the theme that was illustrated in the reading of the holy anorexic Catherine of Sienna and in the Freudian reading of Lewis Carroll in the Alice texts. As the psyche receives an excessive influx of detached excitations without representation (meaning and attribute), the characteristic excess of trauma is always sexual in nature in Freudian theory and abandonment is the prototypical traumatic situation.

The concept of abandonment relates to the infant, who is incapable of satisfying internal functions, is totally dependent on the care of others to initiate instinctual life and is evident as an underlying concept in Hilde Bruch’s contribution on obesity in childhood, which she associated with a lack of maternal nurture. Trauma in a broader context is also associated with commotion; a reaction to endogenous or exogenous excitation which modifies the Self (autoplastic) while trauma is alloplastic in that it changes excitation. For this composition of the Self to be possible, it would require a previous partial or complete destruction of the preceding Self as illustrated in the analysis of the Freudian reading of Alice in Wonderland which takes the concept of trauma further than that of originating in seduction as Freud initially proposed to the broader interpretation of trauma originating from a violation of thought and

affection. This could come either as a result of disqualification or by way of denying the affection any recognition.

This requires the development of a therapeutic approach in which the early traumas are placed among negative experiences with the other for these traumas are connected with several non-responses of the environment (including those originating from stereotype and relating to gender and class as shown in the text) to the affective needs of the obese patient. It is these situations that conspire to have the obese patient experience the asphyxiation of their psychic lives as a kind of paralysis of thought and the ego that are secondary to the open wounds. The result of this process in the psyche is that of an egotisic rupture which once established, brutally changes the relationship with the object (in this case the physical obese body and food).

If the relationship with the object becomes impossible, it becomes a narcissistic relationship in which the repressed unconscious is associated with the existence of affective states that are not integrated by subjectivity. This emptiness that results from the subjective fragmentation is the prerequisite for wanting something inside of oneself and as such becomes the basis for the obese person's eating and learning. If the emptiness took hold during an early life stage during which the obese patient was not mature enough to assign meaning to it, the patient unconsciously fears the horror of emptiness and will unconsciously defend against it at all costs, for example by organising controlled emptiness (not eating) or binge eating in an uncontrolled, compulsive manner.

It is the ego that organises the defence against the collapse of the organisation of the ego itself, and by making the unconscious conscious as the psychoanalytic frameworks suggests, the ego is always the structure being threatened and its defence will be established against a specific type of primal underlying agony – hence the often-absorbed inability of obese people to stick to the programme. For what is seen as a lack of willpower and self-discipline, may well be a primal ego defence, a key aspect to be considered in the development of a therapeutic

model for obesity based on the psychoanalytic approach. For the ego's fear of collapse is the fear of a collapse that has already been experienced in some earlier stage of development and was not integrated satisfactorily into the structure of the ego.

The search for the feeling of fullness replaces the unbearable feelings of loss. The current approaches to the treatment of obesity all present the alternative to dependence achieved through the detachment of the object (food), but, as the repetitive patterns of binge eating in obese patients suggest, such an approach could lead to the unleashing of compulsive behaviour through which the patient tries to control the object (food). Faced with an unconscious trigger (such as a symbol), the patient will eat more and more, feeling fuller and fuller, but never quite full enough, and will eat again as the ego desperately tries to fill all the empty voids without fail. Obese patients are devoured by their own enjoyment / jouissance and in the end, despite repeated attempts to lose the weight, relapse as they resume their uncontrolled eating rituals. Feelings of self-condemnation and a sense of imprisonment inside their own obese bodies, as well as an emotion of powerlessness to break the destructive cycle of their uncontrolled eating, often follow these maniac-like rituals (Vilhena, Novaes & Rosa, 2012).

Freud (1949) postulated the existence of an even more primal element than the psyche; the compulsion for repetition which precedes the principle of pleasure and its aim is to return to an inanimate stage which precedes life and stems from external disturbances. This compulsion to repetition is seen in the suicidal tendencies typical of severe depression, and in melancholia in the general sense - the lack of desire, poverty of imaginative thought and the repetitive and empty speech often observed in such patients. These are all manifestations of the strong presence of the death drive in the psychic life of the people concerned. (Freud, 1949). Similarly, Freud described melancholia as the primitive stage of the anal-sadistic phase in which the patient abandons psychosexual reactions (jouissance) to the object (food), destroys it and expels it; and this relationship is similar to that between the obese person and their food. In

this, Freud established a direct relationship between melancholia and disorders of orality, including obesity. Seen differently, melancholia is the result of a shadow of the ideal self (which is different from Jung's interpretation of the ideal self in that it is a construct created by the ego in this context). The ideal self is overvalued in the imagination and turns itself against the person, who is defenceless in their psychological structure.

In the design of the recommended therapeutic model for the treatment of obesity, the question that arises is then how it would be possible to help the obese patient to elaborate the emptiness that results from the shadow of the ideal body. The ideal body is a social construct, created by the collective imagination and imposed on, and internalised by obese people as a natural law of life, rather than something they can choose to pursue. While anorexia and bulimia are the incessant and pathological search for the ideal body (in the case of the holy anorexics, it was the pathological search for control over their lives and union with the divine), obesity represents a relinquishment of this search in much the same way as the melancholic patient relinquishes the search for the ideal self. The most consistent manifestation of depressive mental disorders has a direct relation to the oral stage; a refusal to eat and the fear of starving to death (Vilhena, Novaes & Rosa, 2012). Here eating replaces loving, and the depressed patient loses the ability to love while fearing death from love.

The Freudian conclusion is that in obese patients, libido had regressed to a more primitive stage of development; the oral stage, and that the more the genitals are replaced as the source of pleasure, the more people turn to oral eroticism, for unconsciously the melancholic patient will want to incorporate the object of his/her desire by either devouring it or destroying it.

The recognition of the underlying trauma provides the obese patient with the initial trigger to commence the hero's journey for the question the obese person to ask is "in which mirror did I lose my face?" For existing is to present one's image to another; when something is not seen, it does not exist and is to be perceived and being, is being something to someone.

This first moment of critical reflection is explored in the fairy tale as an expression of the human psyche in Jungian analysis. While the archetypes have been subjected to conscious elaboration by the time they appear as fairy tales (Jung, 1959), the external events and characters of both myth and fairy tale can be seen as valid expressions of internal psychological dynamics. "In myths and fairy tales, as in dreams, the psyche tells its own story" (Jung, 1959, p. 40). If fairy tales reveal the psyche, then arises as both an emotional crisis and an opportunity. The resource of consciousness is limited; life as the ego intended it is not working out and an impasse, a crisis arises either in the individual psyche or as the carriers of the collective consciousness. Von Franz (1972) notes that consciousness is rarely capable of staying attuned to "all that is going on within and always tends to be too narrow, or to stay too long on one track …In mythology, there are so often impotent or sickly or helpless and aged, rather than brilliant kings, for these represent the unadapted collective attitude," (Von Franz, 1972, p. 80.)

The failure to remain in touch with the unconscious can precipitate the crisis that, for Jung, occurs when the sense of entitlement assumed by consciousness must give way to necessity. These crises become the catalysts for the development of a larger psychic center, one that incorporates both consciousness and the unconscious that Jung calls the self (Jung, 1959, p. 315). Recent post-modern and particularly feminist critiques question the desire for wholeness central to traditional Jungian interpretation that the integrated self would represent. A traditional Jungian approach to fairy tales often defines masculine consciousness as the hero and feminine anima as the hero's counterpart (Jung, 1959). When the central figure of a fairy tale is female, Von Franz (1972) points out that she continues to represent the anima in masculine psychology, but female figures can also reflect the psyches of real women.

Implications

The implication is that the successful treatment of obesity would require extensive psychological analysis, which in its current therapeutic form requires long term commitment from both the analyst and extensive commitment from the patient.

The financial and time commitments arising from this implication extend beyond the available resource envelope available to public health care systems, and particularly so in the fiscal constraints faced by health care systems in South Africa.

Recommendations for Further Research

Given the limitation imposed by the fiscal constraint in South Africa, for the finding of the study to be implemented, it would be necessary to develop a therapeutic model for the treatment of obesity that combines the required dietary, medical and physical interventions with a psychological intervention derived from the analytical and psychoanalytic approaches. However, the model would have to be developed in a manner that not only integrates the physical and psychological elements into the model into a coherent therapeutic intervention, but also as one that is designed to overcome the excessive costs and time requirements associated with the psychoanalytic and analytical therapeutic models in their current form of delivery.

The development of such a model would require extensive empirical research and experimentation, the extent and form of which must be pursued within the confines of generally accepted research ethics standards, and will require the participation and informed consent of a significant number of research participants selected from a demographically representative sample to generate the data and therapeutic experience required to develop the therapeutic model. Similarly, the model's development will be reliant on a multidisciplinary approach if its development is to result in a holistic, but coherent model for the treatment of obesity.

The design task for an integrated model for the treatment of obesity may be thus articulated; to conceive of a clinical model which investigates a superposition of a symbolic discourse as it appears in the socio-cultural context, psychic and physical (somatic and environmental) objects. In building the model, the integration of the medical approach to obesity and the psychoanalytic approach must be achieved, but in addition the insights of the Freudian and Jungian schools of psychoanalysis must be integrated into a coherent continuum in a manner that reconciles the dialectic between the personal and collective unconscious. It is likely that such an eventual model will draw from the framework of intersectionality to allow for a coherent interpretation of an unlimited range of interaction of multiple variables.

Limitations of the Present Study

The present study, intended as a narrative literary contribution out of necessity had to be limited in scope. The review of the psychoanalytic approach was limited to the original texts, and those contributions of each school of thought, namely Freud and Jung immediately following. The limitation that arises is that the literary contributions surveyed were made in a societal and medical context that has changed substantially; while the original contributions and conclusions retain their value as they are not time bound, the manner in which the ideas can be applied has changed. A further study would have to revisit the original texts with specific reference to the contextual applicability, in view of the later contributions, not only in the psychodynamic field, but also with reference to developments impacting on the psychodynamic arising from advances in the medical, dietetic and bio-kinetic fields. The current study is not an adequate basis for further development of an integrated and re-designed therapeutic model; it was not the intent of this study.

Similarly, the scope definition of this contribution did not allow for the detailed review of the physical causes and approaches to the treatment of obesity. The focus on the symbology of food also by implication confined the study to those psychological approaches that focus on

the unconscious. By implication the psychological approaches based on the conscious, such as those based on classical behaviourism and the cognitive schools were excluded from the review. The failure of these approaches to yield the long-term success in the treatment of obesity as illustrated by the relapse rate motivated the choice to exclude them. The author recognises that this exclusion amounts to a selection bias which is accepted based on the scoping constraint, for to violate the scoping constraint by broadening the scope of the narrative literature review to include the other schools of thought would have otherwise led to a cursive review of the literature and the logical error of fallacy of composition in the discussion and conclusion.

The review would have benefited from the inclusion of case studies. Due to patient-therapist confidentiality ethics, case files of individual patients benefitting from psychoanalysis in seeking to overcome obesity are not available for academic review. Similarly, not being a registered psychologist, the author would be precluded from generating such case studies; which in any event, were they generated, would be reportable only at the aggregate level within the confines of acceptable ethics. To compensate for this, the application of the Jungian and Freudian models in literature (in the form of fairy tales) were explored and presented. The author acknowledges that these examples allow for only a very general theoretical interpretation, and by no means constitute an exhaustive or concrete interpretation of the contributions made by Freud and Jung.

The Study's Response to the Original Research Question and Aim

The research question was to explore the historical and cultural symbols of food and to determine how these unconscious symbols contribute to the onset and development of pathology in the form of eating disorders – in particular obesity. The question asked, was: what is the linkage between food symbols and dietary behaviour of obesity? Additional questions

that were asked to guide the research was: What are the specific symbols of food of specific cultures and how does it influence the perception of food?

The aim of the study was to explore the symbolic meaning of food, its influence on conscious behaviour and how it developed through history and across cultures in order to discover the root of obesity as seen through a psychoanalytic lens.

The following research objectives were implemented, in order to conduct the research:

a. To explore the narratives that have been conveyed through traditions relating to food, in search of the symbolic meaning that are the unconscious root of people's dietary behaviour.
b. To compare food narratives that have emerged over time in order to explore the origins of symbolic meaning that people attach to food.
c. To identify cultural symbols that have become part of the unconscious narrative and how these symbols affect people's food consumption patterns.
d. To explore the possible linkage between the symbolic meaning of food and obesity.
e. To explore the unconscious influence of food symbols on conscious dietary behaviour.

The text that follows will summarise how the five objectives were reached in the study. The narrative literature review looked at both the original contributions of Freud and Jung to the psychoanalytic school and their further iterations particularly relating to obesity; in the case of the Freudian school, that of Hilde Bruch and in the case of the Jungian school, the contribution of Marion Woodman. The themes of the review emerged as the symbols of food over time and across culture – which is dealt with in the section of the narrative literature review dealing with specific food symbols. These were then explored through the lenses of class, gender and historical context as the food symbols and the archetypes that arise from them emerge in both the personal and collective unconscious.

The differences in how the two schools deal with the symbols, archetypes, gender and class themes were explored throughout by applying the two theoretical lenses at different points in the text, starting with the Freudian analysis of Catherine of Sienna (the holy anorexics), the folk tale of Hansel and Gretel (both Jungian and Freudian as an illustration of Joseph Campbell's hero's journey) as examples of the meta-narrative. The discussion introduces the workings of the collective unconscious proposed by Jung and Von Franz as the unus mundus, through the lens of quantum physics.

The Alice texts provided a particularly rich example where these themes could integrate the Jungian and Freudian lenses, the hero's journey, and the lenses of class and gender, the archetypes, and the individual food symbols. As such, it illustrates how food and eating behaviour becomes the medium through which the personal and collective unconscious presents through the medium of the archetypes, and how, if left unresolved, obesity becomes the symptom of unresolved issues in the unconscious. The folk tales and myths cited and applied throughout the text, from Marion Woodman's Othello to the twelve dancing princesses, Alice, Persephone, the original hero's journey told in the Epic of Gilgamesh and later echoed in Odysseus' twelve labours are representations of the unconscious where the locus of psychoanalytical inquiry resides and where, given the point of departure of the study, must lead and presents a simple logical flow in the original thinking namely:

a. Obesity seems to have an underlying basis not addressed by the cognitive and behavioural approaches;
b. This basis of obesity is likely to originate in the unconscious;
c. The language of the unconscious is symbol and dream, and the unconscious is accessed through the archetypes;
d. Therefore, to understand the unconscious contribution of pathological behaviour leading to obesity, the symbolic language of food must be understood, and similarly

how these food symbols interact with the archetypes inherent in the individual psyche as well as the collective unconscious;

e. As the unconscious is accessed through the archetypes, both symbol and archetype express through culture, the collective unconscious and are represented in myth and folk tale (as products of the collective unconscious);
f. The way the archetypes manifest in the psyche help to identify the underlying trauma;
g. Therefore, the obesity is the physical manifestation of an underlying trauma and is therefore not the disease, but the symptom, which then leads to the conclusion that:
h. To resolve the obesity, the underlying trauma must be addressed.
i. A particular theme explored with specific relation to Jung's collective unconscious and Woodman's cellular theory was the recent advances in quantum physics and bio-electronics, which lends empirical support to Jung's notion of the collective unconscious and the manner in which it interacts with the personal unconscious. This provides some clarity and a framework within which to interpret one of the foundational tenets of the Jungian school.

The theoretical framework presented in Chapter Two and Three presented a review of contemporary theories explaining obesity and aberrant eating behaviour, followed by a more in-depth review of the psychoanalytic contributions of Freud and Jung. The psychoanalytic contribution was further illustrated through a selection of literature of folk tales and fairy tales and discussed in the five concepts, as well as through the analysis of the Alice texts. These not only illustrate the insights offered by the psychoanalytic theorists to the problem of obesity, but also the symbology of food and the dynamics through which it operates in the unconscious. In addition to the exploration of the symbolic meanings and associations with food throughout history explored through the lens of societal perceptions on body image, the study also considered the power dynamic presented by food as a social construct and considered such

through the lenses of class and gender. The study further specifically focused on the symbolic meaning of food, how it manifests as eating disorders in general and in particular obesity.

The author submits that the research objectives as stated were met in full in that the research explored the unconscious in relation to food and eating behaviour; in a manner that allowed for the contents of collective unconscious to be inferred through exploring the historical and cultural symbolic meaning attached to food and found that in addition to the unconscious contribution of eating disorders (obesity), food as a social construct is embedded with a power and class dynamic, and continues to exert a powerful influence not only in how people become obese, but also in how obesity is treated and viewed in the treatment context.

By making the unconscious content surrounding food and its related dynamics explicit, the author submits that the study succeeded in contributing to the current treatment approaches to obesity by highlighting how the unconscious content of the psyche serve to compromise conscious efforts to address the problem of obesity. In doing so, the study highlights the need for further research into the development of a model that by incorporating the psychoanalytic approach to obesity will support the long-term success of weight loss intervention by addressing the underlying issues.

However, a key challenge remains for the development of such a model; psychoanalysis is an expensive, long term process and produces unpredictable results as a key variable impacting on its success is the willingness and ability of the patient to complete the transformation process. In its current form, psychoanalysis does not lend well for application in a resource constrained health care system. For any such model to be adopted broadly, it would have to overcome the cost and time constraints.

References

Adamski, A. (2011). Archetypes and the collective unconscious of Carl G. Jung in the light of quantum psychology. *NeuroQuantology, 9*(3), 563-571.

Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American psychologist, 46*(4), 333.

Allen, S.L. (2003). *In the devil's garden: A sinful history of forbidden food.* Edinburgh, United Kingdom: Canongate Books.

Allison, D., & Heshka, S. (1993). Emotion and eating in obesity? A critical analysis. *International Journal of Eating Disorders, 13*(3), 289-295.

Andrade, A. M., Coutinho, S. R., Silva, M. N., Mata, J., Vieira, P. N., Minderico, C. S., Minderico, C.S., Melanson, K.J., Baptista, F., Sardinha, L.B., & Teixeira, P. (2010). The effect of physical activity on weight loss is mediated by eating self-regulation. *Patient Education and Counseling*, *79*(3), 320-326.

Andrews, T. (2000). *Nectar and Ambrosia: An Encyclopaedia of Food in World Mythology*. Retrieved September 24, 2016, from http: foodtimeline.org/foodfaq2html

Aquino, T., & McDermott, T. (1997). *Summa Theologiae: A concise translation*. London, United Kingdom: Eyre and Spottiswoode.

Armstrong, K. (2005*). A short history of myth.* Toronto, Canada: A.A. Knopf.

Ashliman, D. L. (1998*). The Grimm brothers' children's and household tales (Fairy tales).* Retrieved September 24, 2017, from http://www.pitt.edu/~dash/grimmtales.html.

Bachelard, G. (1964). *The poetics of space.* Boston, MA: Beacon Press.

Banis, H.T., Varni, J.W., Wallander, J.L., & Korsch, B. (1988). Psychological and social adjustment of obese children and their families. *Child Care Health and Development, 14*,157–173.

Baranowski, T., Cullen, K.W., Nicklas, T., Thompson, D., & Baranowski, J. (2003). Are current health behavioural change models helpful in guiding prevention of weight gain efforts? *Obesity, 11*(S10), 24 – 43.

Barth, C., Bromiley, G. W., & Barth, M. C. (1991). *God with us: A theological introduction to the Old Testament*. Detroit, MI: Wm. B. Eerdmans Publishing.

Bea, J. W., & Lohman, T. G. (2010). Long-term weight loss and chronic disease. *International Journal of Body Composition Research 2010*(8), 21-28.

Bell, R. M. (1987). *Holy Anorexia.* Chicago, IL: University of Chicago Press.

Bettelheim, B. (1976). *The uses of enchantment: The meaning and importance of fairy tales.* New York, NY: Vintage Books.

Birch, L. L. (1987). *The acquisition of food acceptance patterns in children.* London, United Kingdom: Wiley.

Boakes, R. A., Popplewell, D.A., & Burton, M.J. (1987). *Eating habits: Food, physiology and learned behaviour.* New York, NY: John Wiley.

Bosch, J., Stradmeijer, M., & Seidell, J. (2004). Psychosocial characteristics of obese children/youngsters and their families: implications for preventive and curative interventions. *Patient Education and Counselling, 55*(3), 353-362.

Bottigheimer, R. B. (2014). *Fairy tales and society: Illusion, allusion, and paradigm*. Philadelphia, PA: University of Pennsylvania Press.

Boutelle, K. N., Zucker, N., Peterson, C. B., Rydell, S., Carlson, J., & Harnack, L. J. (2014). An intervention based on Schachter's externality theory for overweight children: The Regulation of Cues pilot. *Journal of Paediatric Psychology, 39*(4), 405-417.

Braet, C., & Crombez, G. (2003). Cognitive interference due to food cues in childhood obesity. *Journal of Clinical Child and Adolescent Psychology, 32*, 33–40.

Braet, C., & Van Strien, T. (1997). The DEBQ parent version. Assessment of emotional, external and restrained eating behaviour in nine to 12-year-old children. *Behaviour Research and Therapy, 35*, 863–873.

Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental psychology, 28*(5), 759.

Brewer, D. (1988). *Symbolic stories: Traditional narratives of family drama in English literature.* Cambridge, United Kingdom: Addison-Wesley Longman.

Brouwer, A. E. (2008). Globalization's contradictions: Geographies of discipline, destruction and transformation - Edited by Dennis Conway & Nik Heynen. *Tijdschrift voor Economische en Sociale Geografie, 99*, 366–368.

Bruce-Mitford, M. (2008). *Signs and symbols: An illustrated guide to their origins and meanings.* London, United Kingdom: Dorling Kindersley Publishers.

Bruch, H. (1939). Obesity in childhood: Physical growth and development of obese children. *American Journal of Diseases of Children*, *58*(3), 457-484.

Bruch, H. (1941). Obesity in childhood and personality development. *American Journal of Orthopsychiatry, 11*, 467-474.

Bruch, H. (1961). Conceptual confusion in eating disorders. *Journal of Nervous and Mental Disease, 133*, 46-54.

Bruch, H. (1973). *Eating disorders: Obesity, anorexia nervosa and the person within.* United States, NY: Basic Books.

Bruch, H., & Touraine, G. (1940). Obesity in childhood: The family frame of obese children. *Psychosomatic Medicine*, *2*(2), 141-206.

Bryant, R.A. (2001). Posttraumatic stress disorder and traumatic brain injury: can they co-exist? *Clinical Psychology Review, 21*, 931–948.

Bychowski, G. (1950). On neurotic obesity. *American Journal of Psychoanalysis, 37*, 301-31.

Bynum, C.W. (1987). *Holy fest, holy fast: The religious significance of food to medieval women.* Berkeley, CA: University of California Press.

Campbell, J. (1968). *The masks of God: Creative mythology*. New York, NY: Viking Press.

Campbell, H.Z. (1969). *Philosophies of India.* Princeton, NJ: Princeton University Press.

Campbell, J. (2002). *Flight of the wild gander: Explorations in the mythological dimension: Select essays, 1944 – 1968* (3rd ed.). Novato, CA: New World Library.

Campbell, J., & Kudler, D. (2004). *Pathways to bliss: Mythology and personal transformation* (Vol. 16). Novato, CA: New World Library

Campos, P. (2004). *The Obesity myth: Why America's obsession with weight is hazardous to your health*. New York, NY: Gotham Books.

Campos, J.D., Saguy, A., Ernsberger, P., Oliver, E., & Gaesser, G. (2006). The epidemiology of overweight and obesity: Public health crisis or moral panic? *International Journal of Epidemiology, 2006*(35), 55–60.

Carroll, L. (1962). *Through the looking glass.* London, United Kingdom: Folio editions.

Carroll, L. (1998). *Alice's adventures in Wonderland and through the looking-glass and what Alice found there.* New York, NY: Oxford University Press.

Carroll, L. (1999). *The annotated Alice: The definitive edition.* New York, NY: W.W. Norton & Company.

Carroll, L. (2008). *The complete illustrated Lewis Carroll*. London, United Kingdom: Wordsworth.

Carroll, L., Cohen, M. N., & Green, R. L. (1979). *The letters of Lewis Carroll* (Vol. 1). New York, NY: Oxford University Press.

Cattell, R. B. (1963). Theory of fluid and crystallized intelligence: A critical experiment. *Journal of Educational Psychology*, *54*(1), 1.

Chalmers, D.K., Bowyer, C.A., & Olenick, N.L. (1990). Problem drinking and obesity: A comparison in personality patterns and life-style. *International Journal of the Addictions, 25*(7), 803–817.

Cirlot, J. E. (1971*). A Dictionary of symbols* (2nd ed.). New York, NY: Philosophical Library.

Cody, D. (2002). *Social class. The Victorian web: Hartwick College.* Retrieved September 29, 2016 from http://www.victorianweb.org/history/Class. html

Cohen, M.N. (1989). *Lewis Carroll: interviews and recollections.* London, United Kingdom: Palgrave MacMillan.

Cohen, M. N., & Carroll, L. (1995). *A biography.* New York, NY: AA Knopf.

Comerci, J.J. (1991). *Fasting girls: The history of anorexia nervosa*. New York, NY: New American Library.

Cronin, P., Ryan, F., & Coughlan, M. (2008). Undertaking a literature review: A step by step approach. *British Journal of Nursing, 17*(1), 38-43.

Coulston, A.M. (1998). Obesity as an epidemic: Facing the challenge*. Journal of the Dietetic Association, 98*(10), S6-S8.

Craighead, L.W., & Allen, H.N. (1996). Appetite awareness training: A cognitive behavioural intervention for binge eating. *Cognitive and Behavioural Practice, 1996*(2), 249–270.

Cramer, P., & Steinwert, T. (1998). Thin is good, fat is bad: How early does it begin? *Journal of Applied Developmental Psychology, 19*(3), 429-451.

Crandall, C. S. (1991). Do heavy-weight students have more difficulty paying for college. *Personality and Social Psychology Bulletin, 17*(6), 606-611.

Crandall, C. S. (1994). Prejudice against fat people: ideology and self-interest. *Journal of Personality and Social Psychology, 66*(5), 882.

Crandall, C. S. (1995). Do parents discriminate against their heavyweight daughters? *Personality and Social Psychology Bulletin, 21*, 724-724.

Creed, B. (1993). *The monstrous-feminine: Film, feminism, psychoanalysis.* New York, NY: Routledge.

De Castillejo, I.C. (1973). *Knowing woman: A feminine psychology.* New York, NY: Harper and Row.

De Lauzon, B., Romon, M., Deschamps, V., Lafay, L., Borys, J. M., Karlsson, J., & Charles, M. A. (2004). The Three-Factor Eating Questionnaire-R18 is able to distinguish among different eating patterns in a general population. *The Journal of Nutrition, 134*(9), 2372-2380.

Diaz, V. A., Mainous, A. G., & Everett, C. J. (2005). The association between weight fluctuation and mortality: Results from a population-based cohort study. *Journal of Community Health, 30*(3), 153-165.

Dickens, C. (1994). *The Pickwick papers. 1837*. London, United Kingdom: Hazell, Watson and Viney.

Dieckman, H., Bettelheim, B., & Matthews, B. (1986). *Twice-told tales: The psychological use of fairy tales.* Asheville, NC: Chiron Publications.

Dietz, W.H. (1983). Childhood obesity: susceptibility, cause and management. *Journal of Pediatrics, 103*, 676–686.

Dixson, A. F., & Dixson, B. J. (2011). Venus figurines of the European Palaeolithic: Symbols of fertility or attractiveness? *Journal of Anthropology, 2011*.

Dombrowski, S. U., Knittle, K., Avenell, A., Araujo-Soares, V., & Sniehotta, F. F. (2014). Long term maintenance of weight loss with non-surgical interventions in obese adults: systematic review and meta-analyses of randomised controlled trials. *British Medical Journal*, *348*, g2646.

Drenth, A., J. (2016). *Jung's transcendent function: Detachment, symbols, & the type problem.* Retrieved August 14, 2016, from http://personalityjunky.com

Drieling, R.L., Rosas, L.G., Ma, J., & Stafford, R.S. (2014). Community resource utilization, psychosocial health, and sociodemographic factors associated with diet and physical activity among low-income obese Latino immigrants. *Journal of the Academy of Nutrition and Dietetics, 114*(2), 257 – 265.

Dunn, G. A., & McDonald, B. (2010). *Six impossible things before breakfast. Alice in wonderland in philosophy: Curiouser and curiouser.* Hoboken, NJ: John Wiley.

Eddington, A.S. (1939). *The Philosophy of physical science*. New York, NY: Macmillan.

Elder, G.R., & Cordic, D.D. (2009). *An american Jungian: In honor of Edward F. Edinger.* Toronto, Canada: Inner City Books.

Ember, C.R. & Ember, M. (1980). *Anthropology.* Upper Saddle River, NJ: Prentice Hall.

Empson, W. (1971). *The Child as swain. 1935. Aspects of Alice.* New York, NY: The Vanguard Press.

Evans, R.I., Jung, C.G. & Jones, E. (1964). *Conversations with Carl Jung and reactions from Ernest Jones*. Princeton, NJ: D. Van Nostrand Company.

Faber, M.A., & Mayer, J.D. (2009). Resonance to archetypes in media: There's some accounting for taste. *Journal of Research in Personality, 43*(3), 307-322.

Fairburn, C. G., Wilson, G. T., & Schleimer, K. (1993). *Binge eating: Nature, assessment, and treatment*. New York, NY: Guilford Press.

Ferrari, R. (2015). Writing narrative style literature reviews. *Medical Writing, 24*(4) 230-235.

Ferry, D. (1992). *Gilgamesh: A new rendering in English verse*. New York, NY: Macmillan.

Ferster, C.B., Nurenberger, J.I., & Levitt, E.B. (1962). The control of eating. *Journal of Mathematics, 1*, 87 – 109.

Field, A.E., Austin, S.B., Taylor, C.B., Malspeis, S., Rockett, H.R., Gillman, M.W., & Colditz, G.A. (2003). Relation between dieting and weight change among preadolescents and adolescents. *Pedriatics, 112*, 900-906.

Fine, S., Haley. G., Gilbert, M., & Forth, A. (1993). Self-image as a predictor of outcome in adolescent major depressive disorder. *Journal of Child Psychology and Psychiatry, 34*, 1399–1407.

Flegal, K.M., Graubard, B.I., Williamson, D.F., & Gail. M.H. (2005). Excess deaths associated with underweight, overweight, and obesity. *Journal of American Medical Association, 2005*(293), 1861–67.

Forman, R.K.C. (1998). *The innate capacity: Mysticism, psychology, and philosophy.* Oxford, United Kingdom: Oxford University Press.

Frankl, V. E. (1984). *Man's search for meaning: An introduction to logotherapy.* New York, NY: Simon & Schuster.

Freud, S. (1913). *The interpretation of dreams.* New York, NY: The Macmillan Company.

Freud, S. (1949). *An outline of psychoanalysis.* New York, NY: Norton.

Frieze, I. H., Olson, J. E., & Good, D. C. (1990). Perceived and actual discrimination in the salaries of male and female managers. *Journal of Applied Social Psychology, 20*(1), 46-67.

Ganley, R.M. (1986). Epistemology, family patterns and psychosomatics: The case of obesity. *Family Process, 25*, 437–445.

Gardner, M. (1960). *The annotated Alice: Alice's adventures in Wonderland & Through the looking glass*. New York, NY: C.N. Potter.

Gardner, M. (1998). *The annotated Alice*. New York, NY: Random House.

Garland, C. (2008). Curious appetites: Food, desire, gender and subjectivity in Lewis Carroll's Alice texts. *The Lion and the Unicorn, 32*(1), 22-39.

Gilman, S.L. (2008). *Fat: A cultural history of obesity*. United Kingdom, Cambridge: Wiley.

Goffman, E. (1959). *The presentation of self in everyday life.* New York, NY: Anchor Books.

Goldschmidt, A. M. (1933). *"Alice in Wonderland" Psycho-analysed* (1865-1971). Oxford, United Kingdom: Basil Blackwell Publishers.

Goodman, M. (1980). *The owl was a baker's daughter: Obesity, anorexia nervosa, and the repressed feminine.* Toronto, Canada: Inner City Books.

Goodrick, G.K. & Foreyt, J.P. (1991). Why treatments for obesity don't last. *Journal of the American Dietetic Association, 91*, 1243-1247.

Goodwyn, E. (2013). Recurrent motifs as resonant attractor states in the narrative field: A testable model of archetype. *Journal of Analytical Psychology, 58*(3), 387-408.

Gordon, J.B. (1971). *The Alice books and the metaphors of Victorian childhood. Aspects of Alice.* New York, NY: The Vanguard Press.

Grebitus, C., Hartmann, M., & Reynolds, N. (2015). Global obesity study on drivers for weight reduction strategies. *Obesity Facts*, *8*(1), 77-86.

Green, B. N., Johnson, C. D., & Adams, A. (2006). Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. *Journal of Chiropractic Medicine*, *5*(3), 101-117.

Greenacre, P. (1955). *Swift and Carroll: A psychoanalytic study of two lives*. Madison, CT: International Universities Press.

Greene, M. (2003). *The workhouse diet.* Retrieved October 10, 2016, from htt.herefordshire.gov.uk

Gregg, E. W., Gerzoff, R. B., Thompson, T. J., & Williamson, D. F. (2004). Trying to lose weight, losing weight, and 9-year mortality in overweight US adults with diabetes. *Diabetes Care, 27*(3), 657-662.

Grimm, J., & Grimm, W. (1884). *Household tales.* London, United Kingdom: George Bell.

Grimm, W., & Pacovska, K. (1812). *Hansel and Gretel.* Bristol, United Kingdom: Pook Press.

Gunstad, J., Paul, R.H., Spitznagel, M.B., Cohen, R.A., Williams, L.M., & Kohn, M. (2006). Exposure to early life trauma is associated with adult obesity. *Psychiatry Research, 142*, 31–37.

Guyer, S. (2004). The girl with the open mouth: Through the looking glass. *Journal of the Theoretical Humanities, 9*(1), 159-163.

Hafekost, K., Lawrence, D., Mitrou, F., O'Sullivan, T. A., & Zubrick, S. R. (2013). Tackling overweight and obesity: Does the public health message match the science? *BMC Medical Research Methodology, 11*(1), 41.

Hammersley, M. (2001). On systematic reviews of research literatures: A narrative response to Evans & Benefield. *British Educational Research Journal*, *27*(5), 543-554.

Hawker, S., Soanes, C., & Waite, M. (2001). *The Oxford dictionary, thesaurus, and word power guide.* Oxford, United Kingdom: Oxford University Press.

Hebl, M. R., & Mannix, L. M. (2003). The weight of obesity in evaluating others: A mere proximity effect. *Personality and Social Psychology Bulletin, 29*(1), 28-38.

Hedley, A.A., Ogden, C.L., Johnson, C.L., Carroll, M.D., Curtin, L.R., & Flegal, K.M. (2004). Prevalence of overweight and obesity among US children, adolescents, and adults, 1999–2002. *Journal of the American Medical Association, 2004*(291), 2847–50.

Hemingway, P., & Brereton, N. (2009). What is a systematic review? *European Journal of Oral Implantology, 1*(April), 174–175.

Herman, C. P, & Polivy, J. (1980). Restrained eating. *Obesity*, 208-225.

Heuscher, J. E. (1974). *A psychiatric study of myths and fairy tales: Their origin, meaning, and usefulness* (2nd ed.). Springfield, IL: Thomas Publishing.

Howitt, M. B., & DiTerlizzi, T. (2002). *The spider and the fly.* New York, NY: Simon & Schuster Publishing.

Hoyme, J. B. (1988). The" Abandoning Impulse" in Human Parents. *The Lion and the Unicorn*, *12*(2), 32-46.

Irwin, W., & Davis, R. B. (2009). *Alice in Wonderland and philosophy: Curiouser and curiouser* (Vol. 20). Hoboken, NJ: John Wiley & Sons.

Jaffé, A. (1998). *Was C. G. Jung a mystic? And other essays*. Einsiedeln, Switzerland: Daimon Verlag.

Johnson, S.L., & Birch, L.L. (1994). Parents' and children's adiposity and eating style. *Pediatrics, 94*, 653–661.

Joyce, P. (1980). *Work, society and politics: The culture of the factory in later Victorian England* (Vol. 767). Oxford, United Kingdom: Taylor & Francis.

Jung, C.G. (1928). *Dream analysis.* Part 1. London, United Kingdom: Routledge.

Jung, C.G. (1934). The structure and dynamics of the psyche. London, United Kingdom: Routledge.

Jung, C. G. (1936). The concept of the collective unconscious. *Collected Works*, *9*(1), 42.

Jung, C. G. (1947). *On the nature of the psyche*. London, United Kingdom: Ark Paperbacks.

Jung, C. G. (1948). The phenomenology of the spirit in fairy tales. *The Archetypes and the Collective Unconscious, 9*(Part 1): 207-254.

Jung, C. G. (1953). *Collected works of C.G. Jung: Psychology and alchemy.* Princeton, NJ: Princeton University Press.

Jung, C.G. (1953-1983). *Collected works of C.G. Jung* (Vol. 2). London, United Kingdom: Routledge.

Jung, C. G. (1959). *The archetypes and the collective unconscious, collected works* (Vol.9). Princeton, NJ: Princeton University Press.

Jung, C.G. (1960). *The transcendent function.* Kusnacht, Zurich: Jung Insitiute.

Jung, C. G. (1961). *Modern man in search of the soul.* London, United Kingdom: Routledge & Kegan Paul.

Jung, C.G. (1963) *Collected Works of C.G. Jung: Memories, dreams and reflections* (Vol.7). New York, NY: Pantheon Books.

Jung, C. G., von Franz, M.-L., Henderson, J.L., Jacobi, J.& Jaffé, A. (1964). *Man and his symbols*. London, United Kingdom: Aldus Books.

Jung, C.G. (1969). *The Archetypes and the collective unconscious* (Vol. 9). Princeton, NJ: Princeton University Press.

Jung, C.G. (1970). *Mysterium coniunctionis.* (Vol. 14). Princeton, NJ: Princeton University Press.

Jung, C. G. (1971). *Collected Works of CG Jung: Psychological types* (Vol. 6). London, United Kingdom: Routledge.

Jung, C. G. (1982). *Aspects of the feminine*. Princeton, NJ: Princeton University Press.

Jung, C.G., Freud, S., & McGuire, W. (1995). *The Freud/Jung letters: Correspondence between Sigmund Freud and C.G Jung*. London, United Kingdom: Routledge.

Jung, E. (1957). *Animus and anima: Two papers*. New York, NY: Putnam.

Jylkka, K. (2010). How little girls are like serphents, for, food and power in Lewis Caroll's Alice book. *The Carrollian: The Lewis Carroll Journal, Issue 26, Autumn 2010*.

Kafatos M., & Nadeau R. (1990). *The conscious universe.* New York, NY: Springer.

Kaplan, R. M., & Saccuzzo, D. P. (2009). *Psychological testing: Principles, applications and issues* (7th ed.). Belmont, CA: Wadsworth.

Karhunen, L., Lyly, M., Lapveteläinen, A., Kolehmainen, M., Laaksonen, D. E., Lähteenmäki, L., & Poutanen, K. (2012). Psychobehavioural factors are more strongly associated with successful weight management than predetermined satiety effect or other characteristics of diet. *Journal of Obesity*, *2012*.

Karoly, P., & Kanfer, F. H. (1982). *Self-management and behaviour change: From theory to practice* (Vol. 106). United Kingdom, Oxford: Pergamon.

Kats, S.H., & Weaver, W.W. (2013). *Encyclopedia of food culture*. New York, NY: Scribner.

Keränen, A. M., Savolainen, M. J., Reponen, A. H., Kujari, M. L., Lindeman, S. M., Bloigu, R. S., & Laitinen, J. H. (2009). The effect of eating behaviour on weight loss and maintenance during a lifestyle intervention. *Preventive Medicine*, *49*(1), 32-38

Kim, S., & Popkin, B. M. (2006). Commentary: Understanding the epidemiology of overweight and obesity—a real global public health concern. *International Journal of Epidemiology, 35*(1), 60-67.

Kirkham, T.C., & Tucci, S.A. (2006). Endocannabinoids in appetite control and the treatment of obesity. *CNS Neurological Disorders Drug Targets, 5,* 272–292.

Klein, D., Najman, J., Kohrman, A. F., & Munro, C. (1982). Patient characteristics that elicit negative responses from family physicians. *The Journal of Family Practice, 14*(5), 881-888.

Klein, R. (1996). *Eat Fat.* New York, NY: Pantheon Publishers.

Klein, S., Fontana, L., Young, V. L., Coggan, A. R., Kilo, C., Patterson, B. W., & Mohammed, B. S. (2004). Absence of an effect of liposuction on insulin action and

risk factors for coronary heart disease. *New England Journal of Medicine, 350*(25), 2549-2557.

Knoepflmacher, U.C., (1998). *Ventures into childland: Victorians, fairy tales, and femininity.* Chicago, IL: University of Chicago.

Kvalem, I.I., Bergh, I., von Soest, T., Rosenvinge, J. H., Avantis Johnsen, T., Mala, T., &. Martinsen, E. W. (2016). A comparison of behavioural and psychological characteristics of patients opting for surgical and conservative treatment for morbid obesity. *BMC Obesity, 3*(1), 6.

Landrigan, M. (2014). The bread rises like a voice: The intersection of food, gender, and place in the writing of Sheryl St. Germain. *ISLE: Interdisciplinary Studies in Literature & Environment, 21*(2), 298-314.

Leach, K. (1999). *In the shadow of the dreamchild: A new understanding of Lewis Carroll.* London, United Kingdom: Peter Owen Publishers.

Leach, M. (1949). *Funk & Wagnalls standard dictionary of folklore mythology and legend.* New York, NY: Funk & Wagnalls.

Legenbauer, T., Petrak, F., de Zwaan, M., & Herpertz, S. (2011). Influence of depressive and eating disorders on short-and long-term course of weight after surgical and nonsurgical weight loss treatment. *Comprehensive psychiatry*, *52*(3), 301-311.

Lehner, E., & Lehner, J. (1971). *Devils, demons, and witchcraft: 244 Illustrations for artists.* North Chelmsford, MA: Courier Corporation.

Lindenfeld, D. (2009). Jungian archetypes and the discourse of history. *Rethinking History, 13*(2), 217-23.

Littleton, C. S. (2005). *Gods, goddesses, and mythology* (Vol. 11). Singapore, South East Asia: Marshall Cavendish.

Luna, A. (2014). *Anima and animus: How to harmonise your masculine and feminine energies.* Retrieved October 12, 2016, from https;//lonerwolf.com/the-anima-and-animus/

Luthi, M. (1976). *Once upon a time: On the nature of fairy tales*. Bloomington, IN: Indiana University Press.

Mario, J., Kast, V., & Riedel, M. (1992). *Witches, ogres, and the devil's daughter: Encounters with evil in fairy tales.* Boston, Massachusetts: Shambhala Publications.

Markets and Markets. (2016). *Market research reports, marketing research company, business research by Markets and Markets.* Retrieved October 1, 2016, from http://www.marketsandmarkets.com

Maroney, D., & Golub, S. (1992). Nurses' attitudes toward obese persons and certain ethnic groups. *Perceptual and Motor Skills, 75*(2), 387-39.

Martin, L. (2016). Fantastical conversations with the other in the self: Dorothy L. Sayers (1893-1957) and her Peter Wimsey as animus. *University of Toronto Quarterly, 85*(2), 25-46.

Martinez, D., Turner, M., Pratt-Chapman, M., Kashima, K., Hargreaves, M., Dignan, M., & Hébert, J. (2016). The effect of changes in health beliefs among African-American and rural white church congregants enrolled in an obesity intervention: A qualitative evaluation. *Journal of Community Health*, *41*(3), 518-525

Matsuo, T., Kato, Y., Murotake, Y., Kim, M. K., Unno, H., & Tanaka, K. (2010). An increase in high-density lipoprotein cholesterol after weight loss intervention is associated with long-term maintenance of reduced visceral abdominal fat. *International Journal of Obesity*, *34*(12), 1742-1751.

Matthews, B. (1986). *The Herder dictionary of symbols: Symbols from art, archaeology, mythology, literature, and religion.* Asheville, NC: Chiron Publications.

McKenna, T. K. (1993). *Food of the gods: The search for the original tree of knowledge: A radical history of plants, drugs, and human evolution.* New York, NY: Bantam Books.

Mendelson, B.K., & White D.R. (1985). Development of self-body-esteem in overweight youngsters. *Developmental Psychology, 21*, 90–96.

Mendelson, B.K., White, D.R., & Schlieker, E. (1995). Adolescents' weight, sex and family functioning. *Developmental Psychology, 21*, 90–96.

Meyer, W., Moore, C., & Viljoen, H. (2008). *Personology: From individual to ecosystem*. Sandton, South Africa: Heinemann Publishers.

Miller, J.C. (2004). *The transcendent function: Jung's model of psychological growth through dialogue with the unconscious.* New York, NY: State University of New York Press.

Mitchell, M. (1936*). Gone with the wind.* New York, NY: Simon & Schuster Adult Publishing Group.

Mouton, J. (2001). *How to succeed in your master's and doctoral studies: A South African guide and resource book.* Pretoria, South Africa: Van Schaik Publishers.

Napoli, D. J. (1995). *The magic circle*. London, United Kingdom: Penguin Books.

Neumann, E. (1955). *The great mother: An analysis of the archetype.* Princeton, NJ: Princeton University Press.

Neve, M. J., Morgan, P. J., & Collins, C. E. (2012). Behavioural factors related with successful weight loss 15 months post-enrolment in a commercial web-based weight-loss programme. *Public Health Nutrition*, *15*(07), 1299-1309.

Nurkkala, M., Kaikkonen, K., Vanhala, M. L., Karhunen, L., Keränen, A. M., & Korpelainen, R. (2015). Lifestyle intervention has a beneficial effect on eating behaviour and long-term weight loss in obese adults. *Eating Behaviours*, *18*, 179-185.

Ogden, J. (1966). *The psychology of eating: From healthy to disordered behaviour.* Hoboken, NJ: John Wiley & Sons.

Olderr, S. (1986). *Symbolism: A comprehensive dictionary.* New York, NY: McFarland & Company.

Opie, I., & Tatem, M. (1989*). A dictionary of superstitions.* Oxford, United Kingdom: Oxford University Press.

O'Reilly, G. A., Cook, L., Spruijt-Metz, D., & Black, D. S. (2014). Mindfulness-based interventions for obesity-related eating behaviours: a literature review. *Obesity Reviews, 15*(6), 453-461.

Pacanowski, C. R., Senso, M. M., Oriogun, K., Crain, A. L., & Sherwood, N. E. (2014). Binge eating behaviour and weight loss maintenance over a 2-year period. *Journal of Obesity*, *2014*.

Parahoo, K. (2014). *Nursing research: principles, process and issues*. London, United Kingdom: Palgrave Macmillan.

Parish, L. (1965). The Eysenck personality inventory by H. J. Eysenck. S. G. B. Eysenck. *British Journal of Educational Studies. 14*(1), 140.

Petek, D., Kern, N., Kovač-Blaž, M., & Kersnik, J. (2011). Efficiency of community based intervention programme on keeping lowered weight. *Slovenian Journal of Public Health*, *50*(3), 160-168.

Petticrew, M., & Roberts, H. (2006). *Systematic reviews in social sciences: A practical guide*. Malden, MA: Blackwell.

Phelps, E.A., & Le Doux, J.E. (2005). Contributions of the amygdala to emotion processing: From animal models to human behaviour. *Neuron, 48,* 175 -187.

Phillips, R.G., & Le Doux, J.E. (1992). Differential contribution of amygdala and hippocampus to cued and contextual fear conditioning. *Behavioural Neuroscience, 106*, 274 - 285.

Pingitore, R., Dugoni, B. L., Tindale, R. S., & Spring, B. (1994). Bias against overweight job applicants in a simulated employment interview. *Journal of Applied Psychology, 79*(6), 909.

Ponte, D.V., & Schäfer, L. (2013). Carl Gustav Jung, quantum physics and the spiritual mind: A mystical vision of the twenty-first century. *Behavioural Sciences, 3*(4), 601–618.

Popp, F.A., & Beloussoy, L. (2003). *Biophotonics*. Dordrecht, Netherlands: Kluwer Academic Publishers.

Puhl, R., & Brownell, K. D. (2001). Bias, discrimination, and obesity. *Obesity Research, 9*(12), 788-805.

Pyysiäinen, I. (2009). *Supernatural agents*. Oxford, United Kingdom: Oxford University Press.

Rejeski, W. J., Mihalko, S. L., Ambrosius, W. T., Bearon, L. B., & McClelland, J. W. (2011). Weight loss and self-regulatory eating efficacy in older adults: the cooperative lifestyle intervention program. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *66*(3), 279-286.

Riebe, D., Blissmer, B., Greene, G., Caldwell, M., Ruggiero, L., Stillwell, K. M., & Nigg, C. R. (2005). Long-term maintenance of exercise and healthy eating behaviours in overweight adults. *Preventive Medicine*, *40*(6), 769-778.

Roehling, M. V. (1999). Weight-based discrimination in employment: Psychological and legal aspects. *Personnel Psychology, 52*(4), 969-1016.

Roheim, G. (1971). *From further insights. Aspects of Alice*. New York, NY: The Vanguard Press.

Rölleke, H. (1988). New results of research on Grimms' fairy tales. *The Brothers Grimm and Folktale, 1988,* 101-11.

Roman, L., & Roman, M. (2010). *Encyclopedia of Greek and Roman mythology.* New York, NY: Infobase Publishing.

Rowland, S. (2002). *Jung: A Feminist revision*. Cambridge, United Kingdom: Polity Press.

Rumrill Jr, P. D., & Fitzgerald, S. M. (2001). Using narrative literature reviews to build a scientific knowledge base. *Work*, *16*(2), 165-170.

Rusch-Feja, D. D. (1995). The portrayal of the maturation process of girl figures in selected tales of the Brothers Grimm. P. Lang. *Journal of European Studies*, *26*(4), 492-492.

Schäfer L. (2013). *Infinite potential: What quantum physics reveals about how we should live*. New York, NY: Random House.

Schaverien, J. (2005). Art, dreams and active imagination: A post-Jungian approach to transference and the image. *The Journal of Analytical Psychology, 50*(2), 127-153.

Schilder, P. (1971). *Psychoanalytic remarks on Alice in Wonderland and Lewis Caroll. Aspects of Alice.* New York, NY: The Vanguard Press.

Schimmel, S. (1997). *The seven deadly sins: Jewish, Christian, and classical reflections on human psychology.* New York, NY: Oxford University Press.

Schlosser, R. W., Wendt, O., & Sigafoos, J. (2007). Not all systematic reviews are created equal: Considerations for appraisal. *Evidence-Based Communication Assessment & Intervention, 1*(3), 138-150.

Schlundt, D.G., Taylor D., Hill J.O., Sbrocco T., Pope-Cordle J., Kasser, T., & Arnold D. (1991). A behavioural taxonnomy of obese female participants in a weight loss program. *American Journal of Clinical Nutrition 1991*(109), 1151–1158.

Schoemaker, C. (2004). A critical appraisal of the anorexia statistics in The beauty myth: Introducing Wolf's Overdo and Lie Factor (WOLF). *Eating Disorders*, *12*(2), 97-102.

Segen, J.C. (2002). *McGraw-Hill concise dictionary of modern medicine.* New York, NY: McGraw-Hill.

Shadraconis, S. (2013). Leaders and Heroes: Modern Day Archetypes. *LUX: A Journal of Transdisciplinary Writing and Research from Claremont Graduate University*, *3*(1), 15.

Sharp, D. (2001). *Digesting Jung: Food for the journey.* Toronto, Canada: Inner City Books.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information. 22,* 63–75.

Sieff, D. (2009). Confronting death mother: an interview with Marion Woodman. *Spring: A Journal of Archetype and Culture*, *81*, 177-199.

Sigler, C. (1997). *Alternative Alices: Visions and revisions of Lewis Carroll's Alice books: An anthology.* Lexington, KY: University Press of Kentucky.

Skinner, J. (1971). *From Lewis Carroll's adventures in Wonderland. Aspects of Alice.* New York, NY: The Vanguard Press.

Skubal, S.M. (2013). *Word of mouth: food and fiction after Freud (Literary Criticism and Cultural Theory) 1st edition*. London, United Kingdom: Routledge.

Sobal, J., & Stunkard, A. J. (1989). Socioeconomic status and obesity: a review of the literature. *Psychological Bulletin, 105*(2), 260.

Somers, M. (1994). The narrative constitution of identity. *Theory and Society, 23*, 605-649.

Spivak, A. P. (2014). The interpretive process: The power of 'mere' words. *Journal of the American Psychoanalytic Association, 62*(6), 1063-1073.

Spurrell, E.B., Wilfley, D.E., Tanofsky M.B., & Brownell, K.D. (1997). Age of onset for binge eating: Are there different pathways to binge eating? *International Journal of Eating Disorders, 21*, 55-65.

Staffieri, J. R. (1967). A study of social stereotype of body image in children. *Journal of Personality and Social Psychology, 7*(1p1), 101.

Stearns, P. N. (1997). *Fat history: Bodies and beauty in the modern West.* New York, NY: New York University Press.

Stevens, J., Cai, J., Pamuk, E. R., Williamson, D. F., Thun, M. J., & Wood, J. L. (1998). The effect of age on the association between body-mass index and mortality. *New England Journal of Medicine, 338*(1), 1-7.

Stowell, P. (1983). We're all mad here. *Children's Literature Association Quarterly, 8*(2), 5-8.

Strauss, C.C., Smith, K., Frame, C., & Forehand, R. (1985). Personal and interpersonal characteristics associate with childhood obesity. *Journal of Paediatric Psychology, 10,* 337–343.

Stunkard, A. J., & Sobal, J. (1995). Psychosocial consequences of obesity. *Eating disorders and obesity: A comprehensive Handbook, 1995*, 417-421.

Svendsen, M., Rissanen, A., Richelsen, B., Rössner, S., Hansson, F., & Tonstad, S. (2008). Effect of Orlistat on eating behaviour among participants in a 3-year weight maintenance trial. *Obesity*, *16*(2), 327-333.

Tatar, M. (1987). *The hard facts of the Grimms' fairy tales.* Princeton, NJ: Princeton University Press.

Tatar, M. (2002). *The annotated classic fairy tales.* New York, NY: Norton, W. W. & Company.

Teufel, M., Stephan, K., Kowalski, A., Kasberger, S., Enck, P., Zipfel, S., & Giel, K.E. (2013). Impact of biofeedback on self-efficacy and stress reduction in obesity: A randomised controlled pilot study. *Applied Psychophysiology and Biofeedback, 38*(3), 177 – 184.

Thomas, J. (1989). *Inside the wolf's belly: Aspects of the fairy tale.* Sheffield, United Kingdom: Sheffield Academic Press.

Tompkins, K. W. (2012). *Racial indigestion: Eating bodies in the 19th century.* New York, NY: New York University Press.

Toole, J.K., & Percy, W. (1994). *A confederacy of Dunces.* New York, NY: Grove Press.

Vener, A. M., Krupka, L. R., & Gerard, R. J. (1982). Overweight/obese patients: An overview. *The Practitioner, 226*(1368), 1102.

Vilhena, J. D., Novaes, J. D. V., & Rosa, C. M. (2012). Obesity: Listening beyond the fat cells. *Revista Latinoamericana de Psicopatologia Fundamental, 15*(3), 718-731.

Von Franz, M.-L. (1972). *The Feminine in fairytales*. Irving, TX: Spring Publications.

Von Franz M.-L. (1992). *Psyche and matter*. Boston, MA: Shambhala Publications.

Von Franz, M.-L., & Crossen, K. (1970). *The interpretation of fairy tales.* Boston, MA: Shambhala Publications.

Wallace, W. J., Sheslow, D., & Hassink, S. (1993). Obesity in children: a risk for depression. *Annals of the New York Academy of Sciences*, *699*(1), 301-303.

Watson, L. (1995). *Dark nature: Natural history of evil.* London, United Kingdom: Hodder & Stoughton.

Wells, J. C. (2010). *The evolutionary biology of human body fatness: Thrift and control* (Vol. 58). Cambridge, United Kingdom: Cambridge University Press.

Westerterp-Plantenga, M. S., Kempen, K. P. G., & Saris, W. H. M. (1998). Determinants of weight maintenance in women after diet-induced weight reduction. *International Journal of Obesity & Related Metabolic Disorders*, *22*(1).

Wilson, G.T. (1994). Behavioural treatment of obesity: Thirty years and counting. *Advances in Behaviour Research and Therapy, 16,* 31–75.

Wolf, N. (1991). *The beauty myth: How images of beauty are used against women.* New York, NY: Morrow.

Wolkstein, D. & Kramer, S.N. (1983). *Inanna, queen of heaven and earth: Her stories and hymns from summer*. New York, NY: Harper and Row.

Woodman, M. (1980). *The owl was a baker's daughter: Obesity, Anorexia Nervosa and the repressed feminine: A psychological study* (Vol. 4). Toronto, Canada: Inner City Books.

Woolf, V. A. (1957). *Room of one's own*. New York, NY: Harcourt, Brace and World.

Woolverton, L., & Burton, T. (2010). *Alice in Wonderland, the movie*. Burbank, CA, Walt Disney Pictures.

World Health Organisation (2003). *Joint WHO/FAO Expert consultation on diet, nutrition and the prevention of chronic diseases, diet, nutrition and the prevention of chronic diseases. Report of a joint WHO/FAO expert consultation.* Geneva, Switzerland: World Health Organisation.

World Health Organisation (2015). *Strategy on diet, physical activity and health (Fact sheet No. 312).* Retrieved August 23, 2016, from http://www.who.int/mediacentre/factsheets/fs311/en/

Yeh, M., Chu, N., Hsu, M. F., Hsu, C., & Chung, Y. (2015). Acupoint stimulation on weight reduction for obesity: A randomized sham-controlled study. *Western Journal of Nursing Research*, *37*(12), 1517-1530.

Zipes, J. (1997). *Happily, ever after: Fairy tales, children and the culture industry.* New York, NY: Routledge.

Appendix A

The concept of the conscious and unconscious illustrated in table form:

Appendix B

Criterion Sheet

Title of the article	Author	Date Published	Published/ unpublised article or book	Peer Reviewed Yes/No	Relevant to topic yes/no	Include/ Exclude Article
Archetypes and the collective unconscious of Carl G. Jung in the light of quantum paychology.	Adamski, A.	2011	Published	Yes	Yes	Include
Book reviews.	Alister, I., & Matthews, B.	1998	Published	No	No	Exclude
In the devil’s garden: A sinful history of forbidden food.	Allen, S.L.	2003	Published	Yes	Yes	Include
Emotion and eating in obesity? A critical analysis.	Allison, D., & Heshka, S.	1993	Published	Yes	Yes	Include
Tales, Then and Now: More Folktales As Literary Fictions for Young Adults.	Altman, A. E., & de Vos, G.	2000	Published	No	No	Exclude
Fairytale in the Ancient World.	Anderson, G.	1992	Published	No	No	Exclude
Nectar and Ambrosia: An Encyclopedia of Food in World Mythology.	Andrews, T.	2000	Unpublished	Yes	Yes	Include
A short history of myth.	Armstrong, K.	2005	Published	Yes	Yes	Include
The Grimm Brothers' Children's and Household Tales.	Ashliman, D. L.	1998	Unpublished	Yes	Yes	Include
A Guide to Folktales in the English Language.	Ashliman, D.L.	1987	Published	No	No	Exclude
The poetics of space.	Bachelard, G.	1964	Published	Yes	Yes	Include
Psychological and social adjustment of obese children and their families.	Banis, H.T., Varni,J.W., Wallander, J.L. & Korsch, B.	1988	Published	Yes	Yes	Include
Are current health behavioural change models helpful in guiding prevention of weight gain efforts?	Baranowski, T., Cullen, K.W., Nicklas, T., Thompson, D., & Baranowski, J.	2003	Published	Yes	Yes	Include

God with us: a theological introduction to the old testament.	Barth, C., Bromiley, G. W., & Barth, M. C.	1991	Published	Yes	No	Exclude
Long-term weight loss and chronic disease.	Bea, J. W., & Lohman, T. G.	2010	Published	Yes	Yes	Include
Psychological Types in Freud and Jung.	Beebe, J.	2012	Published	No	No	Exclude
Holy Anorexia.	Bell, R. M.	1987	Published	Yes	Yes	Include
Mirror, Mirror On The Wall: Women Explore Their Favorite Fairy Tales.	Bernheimer, K.	1998	Published	No	No	Exclude
The Uses of Enchantment: The Meaning and Importance of Fairy tales.	Bettelheim, B.	1976	Published	Yes	Yes	Include
The acquisition of food acceptance patterns in children.	Birch, L.L.	1987	Published	Yes	Yes	Include
Alice the Child-Imperialist and the Games of Wonderland.	Bivona, D.	1986	Published	No	No	Exclude
Play, Games, and Sport: The Literary Works of Lewis Carroll.	Blake, K.	1974	Published	No	No	Exclude
An intervention based on Schachter's externality theory for overweight children: The Regulation of Cues Pilot.	Boutelle, K. N., Zucker, N., Peterson, C. B., Rydell, S., Carlson, J., & Harnack, L. J.	2014	Published	Yes	Yes	Include
Psychosocial characteristics of obese children/youngsters and their families: implications for preventive and curative interventions.	Bosch, J., Stradmeijer, M., & Seidell, J.	2004	Published	Yes	No	Exclude
Attachment and loss. Vol. 1. Attachment.	Bowlby, J.	1969	Published	Yes	No	Exclude
Cognitive interference due to food cues in childhood obesity.	Braet, C., & Crombez, G.	2003	Published	Yes	Yes	Include
The DEBQ parent version. Assessment of emotional, external and restrained eating behaviour in nine to 12-year-old children.	Braet, C., & Van Strien, T.	1997	Published	Yes	Yes	Include
Psychological aspects of childhood obesity: a controlled study in a clinical and nonclinical sample.	Braet, C., Mervielde, I., & Vandereycken, W.	1997	Published	Yes	Yes	Include
The origins of attachment theory: John Bowlby and Mary Ainsworth.	Bretherton, I.	1992	Published	Yes	Yes	Include

Symbolic Stories: Traditional Narratives of Family Drama in English literature.	Brewer, D.	1980	Published	Yes	Yes	Include
A Dictionary of British Folk-Tales in the English Language.	Briggs, K.M.	1970	Published	No	No	Exclude
Alice's Adventures: Lewis Carroll in Popular Culture.	Brooker, W.	2004	Published	No	No	Exclude
Globalization's Contradictions: Geographies of Discipline, Destruction and Transformation.	Brouwer, A. E.	2008	Published	Yes	Yes	Include
Signs and Symbols: An illustrated guide to their origins and meanings.	Bruce-Mitford, M.	2008	Published	Yes	Yes	Include
Obesity in childhood and personality development.	Bruch, H.	1941	Published	Yes	Yes	Include
Conceptual confusion in eating disorders.	Bruch, H.	1961	Published	Yes	Yes	Include
Transformation of oral impulses in eating disorders: A conceptual approach.	Bruch, H.	1961	Published	Yes	No	Exclude
Hunger awareness and individuation. Eating Disorders. Obesity, Anorexia Nervosa, and the person within.	Bruch, H.	1961	Published	Yes	Yes	Include
Eating Disorders: Obesity, Anorexia Nervosa and the Person Within.	Bruch, H.	1973	Published	Yes	Yes	Include
Fasting Girls: The Emergence of Anorexia Nervosa as a Modern Disease.	Brumberg, J. J.	1988	Published	No	No	Exclude
Fasting girls: The history of Anorexia Nervosa.	Brumberg, J.J.	1989	Published	Yes	Yes	Include
Posttraumatic stress disorder and traumatic brain injury: can they co-exist?	Bryant, R.A.	2005	Published	Yes	Yes	Include
On neurotic obesity.	Bychowski, G.	1950	Published	Yes	Yes	Include
Holy feast and holy fast: The religious significance of food to medieval women.	Bynum, C. W.	1988	Published	Yes	Yes	Include
Holy fest, holy fast: The religious significance of food to medieval women.	Bynum, C.W.	1987	Published	Yes	Yes	Include
A Biography.	Cohen, M. N., & Carroll, L.	1995	Published	Yes	Yes	Include
The masks of God: Creative mythology.	Campbell, J.	1968	Published	Yes	Yes	Include
Philosophies of India.	Campbell, H. Z.	1969	Published	Yes	Yes	Include

Flight of the wild gander: Explorations in the mythological dimension: Select essays.	Campbell, J.	2002	Published	Yes	Yes	Include
Pathways to bliss. Mythology and Personal Transformation.	Campbell, J.	2004	Published	Yes	Yes	Include
The Hero with a Thousand Faces.	Campbell, J.	1949	Published	Yes	Yes	Include
The epidemiology of overweight and obesity: Public health crisis or moral panic.	Campos, J.D., Saguy, A., Ernsberger, P., Oliver, E., & Gaesser, G.	2006	Published	Yes	Yes	Include
The epidemiology of overweight and obesity: Public health crisis or moral panic?	Campos, J.D., Saguy, A., Ernsberger, P., Oliver, E., & Gaesser, G.	2006	Published	Yes	Yes	Include
The Obesity Myth: Why America's Obsession with Weight is Hazardous to your health.	Campos, P.	2004	Published	Yes	Yes	Include
From Court to Forest: Giambattista Basile's Lo Cunto De Li Cunti and the Birth of the Literary Fairy Tale.	Canepa, N.	1999	Published	No	No	Exclude
Out of the Woods: The Origins of the Literary Fairy Tale in Italy and France.	Canepa, N.	1997	Published	No	No	Exclude
Secret Gardens: A Study of the Golden Age of Children's Literature.	Carpenter, H.	1985	Published	No	No	Exclude
The Annotated Alice: The Definitive Edition.	Carroll, L.	1999	Published	Yes	Yes	Include
Alice's Adventures in Wonderland and Through the Looking-Glass and What Alice Found There.	Carroll, L.	1998	Published	Yes	Yes	Include
Through the Looking Glass.	Carroll, L.	1962	Published	Yes	Yes	Include
The Letters of Lewis Carroll. Vol. 1	Carroll, L., Cohen, M. N., & Green, R. L.	1979	Published	Yes	Yes	Include
The complete illustrated Lewis Carroll.	Carroll, L.	2008	Published	Yes	Yes	Include
The Letters of Lewis Carroll. Vol. 2.	Carroll, L., Cohen, M. N., & Green, R. L.	1979	Published	Yes	Yes	Include
The Witch Must Die. The hidden meaning of fairy tales.	Cashdan, S.	1999	Published	Yes	Yes	Include

Problem drinking and obesity: a comparison in personality patterns and life-style.	Chalmers, D.K., Bowyer, C.A., & Olenick, N.L.	1990	Published	Yes	Yes	Include
A Dictionary of Symbols, Second Edition.	Chevalier, J., & Alain G.	1982	Published	No	No	Exclude
Visions of Life on the Border: Wonderland Women, Imperial Travelers, and Bourgeois Womanhood in the Nineteenth Century.	Ciolkowski, L. E.	1998	Published	No	No	Exclude
A Dictionary of Symbols, 2nd ed.	Cirlot, J. E.	1971	Published	Yes	Yes	Include
Popular Tales and Fictions.	Clouston, W.A.	1885	Published	No	No	Exclude
Social Class. The Victorian Web.	Cody, D.	2002	Unpublished	Yes	Yes	Include
Lewis Carroll: interviews and recollections.	Cohen, M. N.	1989	Published	Yes	Yes	Include
The Life and Letters of Lewis Carroll.on Meaning – Analysis through the Looking Glass.	Collingwood, S. D., & Carroll, L.	1898	Published	Yes	Yes	Include
Fasting Girls: The History of Anorexia Nervosa.	Comerci, G.	1991	Published	Yes	Yes	Include
Obesity as an epidemic: facing the challenge.	Coulston, A.M.	1998	Published	Yes	Yes	Include
Obesity as an Epidemic: Facing the Challenge.	Coulston, A.M.	1998	Published	Yes	Yes	Include
Appetite awareness training: a cognitive behavioural intervention for binge eating.	Craighead L.W., & Allen, H.N.	1996	Published	Yes	Yes	Include
Thin is good, fat is bad: How early does it begin?	Cramer, P., & Steinwert, T.	1998	Published	Yes	Yes	Include
Do heavy-weight students have more difficulty paying for college?	Crandall, C. S.	1991	Published	Yes	Yes	Include
Prejudice against fat people: ideology and self-interest.	Crandall, C. S.	1994	Published	Yes	Yes	Include
Do parents discriminate against their heavyweight daughters?	Crandall, C. S.	1995	Published	Yes	Yes	Include
The monstrous-feminine: Film, feminism, psychoanalysis.	Creed, B.	1993	Published	Yes	Yes	Include
New Tales for Old: Folktales As Literary Fictions for Young Adults.	de Vos, G., & Altmann, A.E.	2002	Published	No	No	Exclude
Race /ethnic and sex differentials in body mass among US adults.	Denney, J.T., Krueger, P.M., Rogers, R.G., & Boardman, J.D.	2004	Published	No	No	Exclude

Knowing woman: A feminine psychology.	De Castillejo, I.C	1973	Published	Yes	Yes	Include
Psychology: An introduction.	Dewey, E.A.	2007	Unpublished	Yes	Yes	Include
The association between weight fluctuation and mortality: results from a population-based cohort study.	Diaz, V. A., Mainous, A. G., & Everett, C. J.	2005	Published	Yes	Yes	Include
The Pickwick Papers.	Dickens, C.	1836	Published	Yes	Yes	Include
Twice - Told Tales: The Psychological Use of Fairy Tales.	Dieckmann, H., Bettelheim, B., Matthews, B., & translated by Matthews, B.	1986	Published	Yes	No	Exclude
Childhood obesity: susceptibility, cause and management.	Dietz, W.H.	1983	Published	Yes	Yes	Include
Venus Figurines of the European Paleolithic: Symbols of Fertility or Attractiveness.	Dixson, A. F., & Dixson, B. J.	2011	Published	Yes	Yes	Include
Jung's "Transcendent Function": Detachment, Symbols, & the Type Problem.	Drenth, A.J.	2016	Unpublished	Yes	Yes	Include
Community resource utilization, psychosocial health, and sociodemographic factors associated with diet and physical activity among low-income obese Latino immigrants.	Drieling, R.L., Rosas, L.G., Ma, J., & Stafford, R.S.	2014	Published	Yes	yes	Include
Rapid income growth adversely affects diet quality in China—particularly for the poor.	Du, S., Mroz, T.A., Zhai, F., & Popkin, B.M.	2004	Published	No	No	Exclude
Six Impossible Things before Breakfast. Alice in Wonderland in Philosophy: Curiouser and Curiouser.	Dunn, G. A., & McDonald, B.	2010	Published	Yes	Yes	Include
The Philosophy of Physical Science.	Eddington, A.S.	1939	Published	Yes	Yes	Include
The Nature of the Physical World	Eddington, A.S.	1929	Published	Yes	Yes	Include
Review of C.G. Jung, Mysterium Coniunctionis: An Inquiry into the Separation and Synthesis of Psychic Opposites in Alchemy, volume 14 of The Collected Works of C.G. Jung, Trans. R.F.C. Hull.	Edinger, E.F.	1963	Published	Yes	Yes	Include
Individuation: A Myth for Modern Man.	Edinger, E.F.	1999	Published	Yes	Yes	Include

Fairy Tales.	Einfield, J.	2001	Published	No	No	Exclude
One Fairy Story Too Many: The Brothers Grimm and Their Tales.	Ellis, J. M.	1983	Published	No	No	Exclude
Anthropology.	Ember, C.R., & Ember, M.	1980	Published	Yes	Yes	Include
The Child as Swain. 1935. Aspects of Alice. Ed. Robert Phillips.	Empson, W.	1971	Published	Yes	Yes	Include
Conversations with Carl Jung and reactions from Ernest Jones.	Evans, R.I., Jung, C.G.,& Jones, E.	1964	Published	Yes	Yes	Include
Resonance to archetypes in media: there's some accounting for taste.	Faber, M.A,, & Mayer, J.D.	2009	Published	No	No	Exclude
The eating disorder examination.	Fairburn, C.G., & Cooper, Z.	1993	Published	Yes	Yes	Include
Cognitive-behavioural therapy for binge eating and bulimia nervosa: a comprehensive treatment manual.	Fairburn, C.G., Marcus, M.D., & Wilson, G.T.	1993	Published	Yes	Yes	Include
Lewis Carroll--The First Acidhead.	Fensch, T.	1968	Published	No	No	Exclude
The control of eating.	Ferster, C.B., Nurenberger, J.I., & Levitt, E.B.	1962	Published	Yes	Yes	Include
Relation Between Dieting and Weight Change Among Preadolescents.	Field, A.E., Austin, S.B., Taylor, C.B., Malspeis, S., Rockett, H.R., & Gillman, M.W., Colditz,		Published	Yes	Yes	Include
Self-image as a predictor of outcome in adolescent major depressive disorder.	Fine, S., Haley. G., Gilbert, M., & Forth, A.	1993	Published	Yes	Yes	Include
Excess deaths associated with underweight, overweight, and obesity.	Flegal, K.M., Graubard, B.I., Williamson, D.F., & Gail,M.H.	2005	Published	Yes	Yes	Include
The Innate Capacity: Mysticism, Psychology, and Philosophy.	Forman, R.K.C.	1998	Published	Yes	Yes	Include
Aubrey Beardsley 'Embroiders' the Text.	Frankel, N.	2002	Published	No	No	Exclude
Man's search for meaning: An introduction to logotherapy.	Frankl, V. E.	1984	Published	Yes	Yes	Include
The interpretation of dreams.	Freud, S.	1913	Published	Yes	Yes	Include
An outline of psychoanalysis.	Freud, S.	1949	Published	Yes	Yes	Include

An outline of psychoanalysis.	Freud, S.	1949	Published	Yes	Yes	Include
Perceived and Actual Discrimination in the Salaries of Male and Female Managers.	Frieze, I. H., Olson, J. E., & Good, D. C.	1990	Published	Yes	Yes	Include
Epistemology, family patterns and psychosomatics: the case of obesity.	Ganley, R.M.	1986	Published	Yes	Yes	Include
The Annotated Alice: Alice's Adventures in Wonderland & Through the Looking Glass.	Gardner, M.	1960	Published	Yes	Yes	Include
The Annotated Alice.	Gardner, M.	1998	Published	Yes	Yes	Include
Curious Appetites: Food, Desire, Gender and Subjectivity in Lewis Carroll's Alice Texts.	Garland, C.	2008	Published	Yes	Yes	Include
Fat: A Cultural History of Obesity.	Gilman, S.L. & Gilman, L.	2008	Published	Yes	Yes	Include
What the dog saw: And other adventures.	Gladwell, M.	2009	Published	Yes	No	Exclude
What the Dog Saw: And Other Adventures.	Gladwell, M.	2009	Published	Yes	No	Exclude
Alice in Wonderland.	Gleiberman, O.	2010	Published	No	No	Exclude
The presentation of self in everyday life.	Goffman, E.	1959	Published	Yes	Yes	Include
Alice in Wonderland Psychoanalysed.1933. Aspects of Alice: Lewis Carroll's Dreamchild as Seen Through the Critics' Looking Glasses 1865–1971.	Goldschmidt, A. M. E.	1933	Published	Yes	Yes	Include
The Owl Was a Baker's Daughter: Obesity, Anorexia Nervosa, and the Repressed Feminine.	Goodman, M.	1980	Published	Yes	Yes	Include
Why treatments for obesity don't last.	Goodrick, G.K., & Foreyt, J.P.	1991	Published	Yes	Yes	Include
Why Treatments for Obesity Don't Last.	Goodrick, G.K., & Foreyt, J.P.	1991	Published	Yes	Yes	Include
Recurrent motifs as resonant attractor states in the narrative field: A testable model of archetype.	Goodwyn, E.	2013	Published	Yes	Yes	Include
The Alice books and the metaphors of Victorian childhood.	Gordon, J. B.	1971	Published	Yes	Yes	Include
The Alice Books and the Metaphors of Victorian Childhood.	Gordon, J.B.	1971	Published	Yes	Yes	Include

Swift and Carroll: A Psycho-analytic Study of Two Lives.	Greenacre, P.	1955	Published	Yes	Yes	Include
The Workhouse Diet'. Life in a Hereford Workhouse.	Greene, M.	2016	Unpublished	Yes	Yes	Include
Invited commentary: ecologic studies—biases, misconceptions, and counterexamples.	Greenland, S., & Robin,s J.	1994	Published	No	No	Exclude
Trying to lose weight, losing weight, and 9-year mortality in overweight US adults with diabetes.	Gregg, E. W., Gerzoff, R. B., Thompson, T. J., & Williamson, D. F.	2004	Published	Yes	Yes	Include
Household tales.	Grimm, J., & Grimm, W.	1884	Published	Yes	Yes	Include
Hansel and Gretel.	Grimm, W., & Pacovska, K.	1812	Published	Yes	Yes	Include
Exposure to early life trauma is associated with adult obesity.	Gunstad, J., Paul, R.H., Spitznagel, M.B., Cohen, R.A., Williams, L.M., & Kohn, M.	2006	Published	Yes	Yes	Include
The girl with the open mouth: through the looking glass.	Guyer, S.	2004	Published	Yes	Yes	Include
A developmental perspective on some parameters of self-regulation in children.	Harter, S.	1982	Published	Yes	Yes	Include
Down the Rabbit Hole: Alice's Adventures in Wonderland and Image-Text Inquiry. On Verbal/Visual Representation: Word and Image Interactions.	Haskell, E. T.	2005	Published	No	No	Exclude
The weight of obesity in evaluating others: A mere proximity effect.	Hebl, M. R., & Mannix, L. M.	2003	Published	Yes	Yes	Include
Prevalence of overweight and obesity among US children, adolescents, and adults.	Hedley, A.A., Ogden, C.L., Johnson, C.L., Carroll, M.D., Curtin, L.R., & Flegal, K.M.	2004	Published	Yes	Yes	Include
Restrained eating.	Herman, C.P., & Polivy J.,	1980	Published	Yes	Yes	Include

A Psychiatric Study of Myths and Fairy Tales: Their Origin, Meaning, and Usefulness (2d ed.)	Heuscher, J. E.	1974	Published	Yes	Yes	Include
Review of The Jung reader.	Hill, J.	2013	Published	No	No	Exclude
Breaking the angelic image: woman power in Victorian children's fantasy.	Honig, E. L.	1988	Published	Yes	Yes	Include
The spider and the fly.	Howitt, M. B., & DiTerlizzi, T.	2002	Published	Yes	Yes	Include
The 'Abandoning Impulse' in Human Parents. The Lion and the unicorn.	Hoyme, J.B.	1988	Published	Yes	Yes	Include
The Raven and the Writing Desk.	Huxley, F.	1976	Published	No	No	Exclude
Was C. G. Jung a Mystic? And Other Essays.	Jaffé, A.	1989	Published	Yes	Yes	Include
Environmental influences on eating and physical activity.	Jeffery, R.W.	2001	Published	No	No	Exclude
Dictionary of Mythology, Folklore and Symbols.	Jobes, G.	1962	Published	No	No	Exclude
Parents' and children's adiposity and eating style.	Johnson, S.L., & Birch, L.L.	1994	Published	Yes	Yes	Include
Work, society and politics: the culture of the factory in later Victorian England.	Joyce, P.	1980	Published	Yes	Yes	Include
The transcendent function.	Jung, C.G.	1916/1960	Published	Yes	Yes	Include
Psychological types.The collected works of CG Jung, Vol.6.	Jung, C. G.	1921	Published	Yes	Yes	Include
Psychological types. The collected works of CG Jung, Vol. 6.	Jung, C. G.	1921	Published	No	No	Exclude
Dream analysis. Part 1.	Jung, C.G.	1928/1965	Published	Yes	Yes	Include
The structure and dynamics of the psyche. CW 8.	Jung, C.G.	1934	Published	Yes	Yes	Include
The concept of the collective unconscious.	Jung, C.G.	1936/37	Published	Yes	Yes	Include
On the nature of the psyche.	Jung, C. G.	1947	Published	Yes	Yes	Include
On the Nature of the Psyche.	Jung, C. G.	1947	Published	Yes	Yes	Include
The phenomenology of the spirit in fairy tales. The Archetypes and the Collective Unconscious.	Jung, C. G.	1948	Published	Yes	Yes	Include
Collected Works of C.G. Jung.	Jung, C.G.	1953-83	Published	Yes	Yes	Include
Collected works. Vol. 12. Psychology and alchemy.	Jung, C. G.	1953	Published	Yes	Yes	Include

The archetypes and the collective unconscious, collected works.	Jung, C. G.	1959	Published	Yes	Yes	Include
The archetypes and the collective unconscious, collected works.	Jung, C. G.	1959	Published	Yes	Yes	Include
The Structure and Dynamics of the Psyche. Volume 8.	Jung, C.G.	1960	Published	Yes	Yes	Include
Modern man in search of the soul.	Jung, C. G.	1961	Published	Yes	Yes	Include
Modern man in search of the soul.	Jung, C. G.	1961	Published	Yes	Yes	Include
Man and his symbols.	Jung, C. G., von Franz, M.-L., Henderson, J.L., Jacobi, J., & Jaffe, A.	1964	Published	Yes	Yes	Include
Psychology and Alchemy. Volume 12.	Jung, C.G.	1968	Published	Yes	Yes	Include
Psychology and Alchemy. Volume 12.	Jung, C.G.	1968	Published	Yes	Yes	Include
The Archetypes and the Collective Unconscious.	Jung, C.G.	1969	Published	Yes	Yes	Include
Mysterium Coniunctionis. Volume 14.	Jung, C.G.	1970	Published	Yes	Yes	Include
Aspects of the feminine.	Jung, C. G.	1982	Published	Yes	Yes	Include
The Red Book.	Jung, C.G.	2009	Published	No	No	Exclude
The Freud/Jung Letters: Correspondence Between Sigmund Freud and C.G Jung.	Jung, C.G., Freud, S., & McGuire, W.	1995	Published	Yes	Yes	Include
Animus and Anima: Two Papers.	Jung, E.	1957	Published	No	No	Exclude
How little girls are like serpents, or, food and power in Lewis Caroll's Alice book.	Jylkka, K.	2010	Published	Yes	Yes	Include
The Conscious Universe.	Kafatos, M., & Nadeau, R.	1990	Published	Yes	Yes	Include
The Conscious Universe.	Kafatos, M., & Nadeau, R.	1990	Published	Yes	Yes	Include
Encyclopedia of food culture.	Kats, S.H., Weaver, W.W., & Charles Schribners and Sons Publishing.	2013	Published	Yes	Yes	Include

Commentary: Understanding the epidemiology of overweight and obesity.	Kim, S., & Popkin, B. M.	2006	Published	Yes	Yes	Include
Erotic innocence: The culture of child molesting. Duke University Press.	Kincaid, J.R.	1998	Published	Yes	Yes	Include
Endocannabinoids in appetite control and the treatment of obesity.	Kirkham, T.C., & Tucci, S.A.	2006	Published	Yes	Yes	Include
Patient characteristics that elicit negative responses from family physicians.	Klein, D., Najman, J., Kohrman, A. F., & Munro, C.	1982	Published	Yes	Yes	Include
Eat Fat.	Klein, R.	1996	Published	Yes	Yes	Include
Absence of an effect of liposuction on insulin action and risk factors for coronary heart disease.	Klein, S., Fontana, L., Young, V. L., Coggan, A. R., Kilo, C., & Patterson, B. W.,	2004	Published	Yes	Yes	Include
Ventures into Childland: Victorians, Fairy Tales, and Femininity.	Knoepflmacher, U. C.,	1998	Published	Yes	Yes	Include
The Bread Rises Like a Voice: The Intersection of Food, Gender, and Place in the Writing of Sheryl St. Germain	Landrigan, M.	2014	Published	Yes	No	Exclude
Alice in Wonderland in Perspective.	Leach, E.	1964	Published	No	No	Exclude
In the shadow of the dreamchild: A new understanding of Lewis Carroll.	Leach, K.	1999	Published	Yes	Yes	Include
Funk & Wagnalls Standard Dictionary of Folklore Mythology and legend.	Leach, M.	1949	Published	Yes	Yes	Include
Philosophy of Nonsense: The Institutions of Victorian Nonsense Literature.	Lecercle, Js.	1994	Published	No	No	Exclude
Devils, Demons, and Witchcraft: 244 Illustrations for artists.	Lehner, E., & Lehner, J.	1971	Published	Yes	Yes	Include
Naturalistic inquiry.	Lincoln, Y. S., & Guba, E. G.	1985	Published	Yes	Yes	Include

Jungian archetypes and the discourse of history.	Lindenfeld, D.	2009	Published	Yes	Yes	Include
Liberated Alice: Dodgson's female hero as domestic rebel.	Little, J.	1976	Published	No	No	Exclude
Gods, goddesses, and mythology.	Littleton, C. S.	2005	Published	Yes	Yes	Include
Unruly Alice: A Feminist View of Some Adventures in Wonderland. In R.B. Davis (Ed., Alice in Wonderland and Philosophy: Curiouser and Curiouser.	Lloyd, M.S.	2010	Published	Yes	Yes	Include
Preface. Alice's Adventures in Wonderland by Lewis Carroll, illustrated by John Vernon Lord.	Lord, John V.	2009	Published	No	No	Exclude
Eggs and Serpents: Natural History Reference in Lewis Carroll's Scene of Alice and the Pigeon.	Lovell-Smith, R.	2007	Published	No	No	Exclude
Anima and animus: How to harmonise your masculine and feminine energies.	Luna, A.	2014	Unpublished	Yes	Yes	Include
A comparison of behavioural and psychological characteristics of patients opting for surgical and conservative treatment for morbid obesity.	Lundin Kvalem, I., Bergh, I., von Soest, T., Rosenvinge, J. H., Avantis Johnsen, T., Mala, T., &. Martinsen, E. W.	2016	Published	Yes	Yes	Include
Don't Tell the Grown-ups: Subversive Children's Literature.	Lurie, A.	1990	Published	No	No	Exclude
Once Upon a Time: On the Nature of Fairy Tales.	Luthi, M.	1976	Published	Yes	Yes	Include
The classic changes: A new translation of the ‘I Ching’ as interpreted by Wang bi.	Lynn, R.J.	1994	Published	Yes	No	Exclude
Witches, Ogres, and the Devil's Daughter: Encounters with Evil in Fairy Tales.	Mario, J., Kast, V., & Riedel, M.	1992	Published	Yes	Yes	Include

Market research reports, marketing research company, business research by Markets and Markets.	Markets and Markets.	2016, July 25	Unpublished	Yes	Yes	Include
Nurses' attitudes toward obese persons and certain ethnic groups.	Maroney, D., & Golub, S.	1992	Published	Yes	Yes	Include
Fantastical Conversations with the Other in the Self: Dorothy L. Sayers.	Martin, L.	2016	Published	Yes	Yes	Include
The effect of changes in health beliefs among African-American and rural white church congregants enrolled in an obesity intervention: A qualitative evaluation	Martinez, D., Turner, M., Pratt-Chapman, M., Kashima, K., Hébert, J. Hargreaves, M., Dignan, M.	2016	Published	Yes	Yes	Include
The Herder Dictionary of symbols: Symbols from art, Archaeology, mythology, literature, and religion.	Matthews, B.	1986	Published	Yes	Yes	Include
Introduction. The Victorian Illustrated Book. Ed Richard Maxwell.	Maxwell, R.	2002	Published	No	No	Exclude
Ying-Yang dynamics: explaining Jung’s anima animus.	McGee, G.Z.,	2016	Unpublished	No	No	Exclude
Humour and the body in children's literature. The Cambridge Companion to Children's Literature. ed. M. O. Greneby and Andrea Immel.	McGillis, R.	2009	Published	No	No	Exclude
Food of the gods: The search for the original tree of knowledge: a radical history of plants, drugs, and human evolution.	McKenna, T. K.	1993	Published	Yes	Yes	Include
Creating visual narrative art for decoding stories that consumers and brands tell.	Megehee, C. M., & Woodside, A. G.	2010	Published	Yes	No	Exclude
Development of self-body-esteem in overweight youngsters.	Mendelson, B.K., & White D.R.	1985	Published	Yes	Yes	Include

Adolescents’ weight, sex and family functioning.	Mendelson, B.K., White, D.R., & Schlieker, E.	1995	Published	Yes	Yes	Include
Overweight now exceeds underweight among women in most developing countries.	Mendez, M.A., Monteiro, C.A., & Popkin, B.M.	2005	Published	No	No	Exclude
A reappraisal of classical archetype theory and its implications for theory and practice.	Merchant, J.	2009	Published	No	No	Exclude
Personology: From individual to ecosystem.	Meyer, W., Moore, C., & Viljoen, H.	2008	Published	Yes	Yes	Include
The transcendent function: Jung's model of psychological growth through dialogue with the unconscious.	Miller, J.C.	2004	Published	Yes	Yes	Include
Gone with the wind. New York.: Simon & Schuster Adult	Mitchell, M.	1936	Published	Yes	Yes	Include
Correction: actual causes of death in the United States.	Mokdad, A.H., Mark,s J.S., Stroup, D.F., & Geberding, J.L.	2005	Published	No	No	Exclude
Actual causes of death in the United States.	Mokdad, A.H., Marks, J.S., Stroup, D.F., & Gerberding, J.L.	2004	Published	No	No	Exclude
Intercoder reliability for qualitative research.	Mouter, N., & Vonk Noordegraaf, D.	2012	Published	No	No	Exclude
The Criminological Significance of the Grimms' Fairy Tales. In Bottigheimer, R.	Mueller, G.	1986	Published	Yes	Yes	Include
Benet's Reader's Encyclopedia, Fourth Edition.	Murphy, B.	1996	Published	No	No	Exclude
The magic circle.	Napoli, D. J.	1995	Published	Yes	Yes	Include
Culture and Weight Consciousness.	Nasser, M.	1997	Published	No	No	Exclude
Boys Will Be Girls The Feminine Ethic and British Children's Fiction, 1857-1917.	Nelson, C.	1991	Published	Yes	Yes	Include

The great mother: An analysis of the archetype.	Neumann, E	1955	Published	Yes	Yes	Include
Processes of Meta study: a study of psychosocial adaptation to childhood chronic health conditions.	Nichola, D.B., Globerman, J., Antle, B, J., McNeil, T., & Lach, L.M.	2006	Published	Yes	Yes	Include
The psychology of eating: From healthy to disordered behaviour.	Ogden, J.	1966	Published	Yes	Yes	Include
Symbolism: A Comprehensive Dictionary.	Olderr, S.	1986	Published	Yes	Yes	Include
The Classic Fairy Tales.	Opie, I., & Opie, P.	1974	Published	No	No	Exclude
A Dictionary of Superstitions.	Opie, I., & Tatem, M.	1989	Published	Yes	Yes	Include
Mindfulness-based interventions for obesity-related eating behaviours: a literature review.	O'Reilly, G. A., Cook, L., Spruijt-Metz, D., & Black, D. S.	2014	Published	Yes	Yes	Include
The Eysenck Personality Inventory by H. J. Eysenck. S. G. B. Eysenck.	Parish, L.	1965	Published	Yes	Yes	Include
How Deep Does the Rabbit-Hole Go? Drugs and Dreams, Perception and Reality. Alice in Wonderland in Philosophy: Curiouser and Curiouser. Ed. Richard Brian Davis.	Parker, S. F.	2010	Published	No	No	Exclude
Efficiency of community based intervention programme on keeping lowered weight.	Petek, D., Kern, N., Kovač-Blaž, M., & Kersnik, J.	2011	Published	Yes	Yes	Include
Contributions of the amygdala to emotion processing: from animal models to human behaviour.	Phelps, E.A., & Le Doux, J.E.	2005	Published	Yes	Yes	Include
The Illustrated Book of Fairy Tales.	Philip, N.	1997	Published	No	No	Exclude
Aspects of Alice. ed Robert Phillips.	Phillips, R.	1971	Published	No	No	Exclude

Differential contribution of amygdala and hippocampus to cued and contextual fear conditioning.	Phillips, R.G., & Le Doux, J.E.	1992	Published	Yes	Yes	Include
Archetypes as symbolic forms.	Pietikainen, P.	1998	Published	No	No	Exclude
Body as Wonderland: Alice's Graphic Iteration in Lost Girls. Alice beyond Wonderland: essays for the twenty-first century.	Pilinovsky, H.	2009	Published	No	No	Exclude
Bias against overweight job applicants in a simulated employment interview.	Pingitore, R., Dugoni, B. L., Tindale, R. S., & Spring, B.	1994	Published	Yes	Yes	Include
Wittgenstein, Nonsense, and Lewis Carroll. Alice in Wonderland.	Pitcher, G.	1971	Published	No	No	Exclude
Carl Gustav Jung, quantum physics and the spiritual mind: A mystical vision of the twenty-first century.	Ponte, D.V., & Schäfer, L	2013	Published	Yes	Yes	Include
The nutrition transition in the developing world. Development Policy review.	Popkin, B. M.	2003	Published	Yes	Yes	Include
An overview on the nutrition transition and its health implications: the Bellagio meeting.	Popkin, B.M.	2002	Published	No	No	Exclude
The nutrition transition and its health implications in lower income countries.	Popkin, B.M.	1998	Published	No	No	Exclude
Biophotonics.	Popp, F.A., & Beloussoy, L.	2003	Published	Yes	Yes	Include
Morphology of the Folktale.	Propp, V.	1968	Published	No	No	Exclude
Bias, discrimination, and obesity.	Puhl, R., & Brownell, K. D.	2001	Published	Yes	Yes	Include
At the Intersection of Mathematics and Humour: Lewis Carroll's "Alices" and Symbolical Algebra.	Pycior, H. M.	1984	Published	No	No	Exclude
Supernatural Agents.	Pyysiäinen, I.	2009	Published	Yes	Yes	Include
On Barbour on Le Guin.	Richard D. Erlich.	1977	Published	No	No	Exclude
Alice in Wonderland. Variety Movie Reviews.	Richmond, R.	1999	Published	No	No	Exclude

Alarming trends in paediatric overweight in the United States.	Ritchie, L.D., Ivey S.L., Woodward-Lopez G., & Crawford, P.B.	2001	Published	No	No	Exclude
Why Literature Matters in the 21st Century.	Roche, M. W.	2004	Published	No	No	Exclude
Externality in the non-obese: effects of environmental responsiveness on weight.	Rodin, J., & Slochower, Y.	1976	Published	Yes	Yes	Include
Weight-based discrimination in employment: Psychological and legal aspects.	Roehling, M. V.	1999	Published	Yes	Yes	Include
From ‘Further Insights. Aspects of Alice.	Roheim, G.	1971	Published	Yes	Yes	Include
Jung: A Feminist revision.	Rowland, S.	2002	Published	Yes	Yes	Include
New Results of Research on Grimms’ Fairy Tales. The Brothers Grimm and folklore.	Rölleke, H.	1988	Published	Yes	Yes	Include
Encyclopedia of Greek and Roman mythology.	Roman, L., & Roman, M.	2010	Published	Yes	Yes	Include
The portrayal of the maturation process of girl figures in selected tales of the Brothers Grimm.	Rusch-Feja, D. D.	1995	Published	Yes	Yes	Include
Obese humans and rats. Erlbaum/Halsted: Washington.	Schachter S., & Rodin, J.	1974	Published	Yes	Yes	Include
Art, dreams and active imagination: A post-Jungian approach to transference and the image.	Schaverien, J.	2005	Published	Yes	Yes	Include
Psychoanalytic Remarks on Alice in Wonderland and Lewis Caroll. Aspects of Alice	Schilder, P.	1971	Published	Yes	Yes	Include
The seven deadly sins: Jewish, Christian, and classical reflections on human psychology.	Schimmel, S.	1997	Published	Yes	Yes	Include
A behavioural taxonnomy of obese female participants in a weight loss program.	Schlundt, D.G., Taylor, D., Hill, J.O., Sbrocco, T., Pope-Cordle, J.,	1991	Published	Yes	Yes	Include

	Kasser, T., & Arnold, D.					
McGraw-Hill concise dictionary of modern medicine.	Segen, J.C.	2002	Published	Yes	Yes	Include
Digesting Jung: Food for the Journey.	Sharp, D.	2001	Published	Yes	Yes	Include
A critical appraisal of the anorexia statistics in The Beauty Myth: introducing Wolf's Overdo and Lie Factor.	Shoemaker, C.	2004	Published	Yes	Yes	Include
Confronting death mother: An interview with Marion Woodman. Shadraconis, S.	Sieff, D.,	2009	Published	Yes	Yes	Include
Alternative Alices: Visions and Revisions of Lewis Carroll's Alice Books: an Anthology.	Sigler, C.	1997	Published	Yes	Yes	Include
Oxford English dictionary online.	Simpson, J., & Edmund, S.C.	2008	Published	Yes	Yes	Include
From Lewis Carroll’s Adventures in Wonderland. Aspects of Alice.	Skinner, J.	1971	Published	Yes	Yes	Include
Word of mouth: food and fiction after Freud.	Skubal, S.M.	2002	Published	Yes	Yes	Include
Socioeconomic status and obesity: a review of the literature.	Sobal, J., & Stunkard, A. J.	1989	Published	Yes	Yes	Include
The narrative constitution of identity. T	Somers, M.	1994	Published	Yes	Yes	Include
Who Stole Feminism? How Women Have Betrayed Women.	Sommers, C. H.	1995	Published	Yes	No	Exclude
The interpretive process: The power of 'mere' words.	Spivak, A. P.	2014	Published	Yes	Yes	Include
Age of onset for binge eating: Are there different pathways to binge eating?	Spurrell, E.B., Wilfley,D.E., Tanofsky M.B., & Brownell, K.D.	1997	Published	Yes	Yes	Include
A study of social stereotype of body image in children.	Staffieri, J. R.	1967	Published	Yes	Yes	Include

Fat history: Bodies and beauty in the modern West.	Stearns, P. N.	1997	Published	Yes	Yes	Include
The effect of age on the association between body-mass index and mortality.	Stevens, J., Cai, J., Pamuk, E. R., Williamson, D. F., Thun, M. J., & Wood, J. L.	1998	Published	Yes	Yes	Include
Personal and interpersonal characteristics associate with childhood obesity	Strauss, C.C., Smith, K., Frame, C., Forehand, R.	1985	Published	Yes	Yes	Include
Psychological consequences of obesity.	Stunkard, A.J., & Sobal, J.	1995	Published	Yes	Yes	Include
Serious Nonsense. Alice in Wonderland in Philosophy: Curiouser and Curiouser.	Taliaferro, C., & Olson, E.	2010	Published	No	No	Exclude
The Hard Facts of the Grimms' Fairy Tales.	Tatar, M.	1987	Published	Yes	Yes	Include
The Classic Fairy Tales.	Tatar, M.	Ed.	Published	Yes	Yes	Include
Inside the Wolf's Belly: Aspects of the Fairy Tale.	Tatar, M.M.,	1999	Published	No	No	Exclude
Impact of biofeedback on self-efficacy and stress reduction in obesity: A randomised controlled pilot study.	Teufel, M., Stephan, K., Kowalski, A., Kasberger, S., Enck, P., Zipfel, S., & Giel, K.E	2013	Published	Yes	Yes	Include
Archetypes, Stereotypes and Humanity.	Thomas, J.	1989	Published	Yes	Yes	Include
The Folktale.	Thomas, R.	1983	Published	No	No	Exclude
The Types of the Folktale: A Classification and Bibliography.	Thompson, S.	1946	Published	No	No	Exclude
An Anatomy of Literary Nonsense. Amsterdam: Rodopi B.V. 1988.	Thompson, S.	1961	Published	No	No	Exclude
Racial Indigestion: Eating Bodies in the 19th Century.	Tiggs, W.	1988	Published	No	No	Exclude

A confederacy of Dunces.	Tompkins, K. W.	2012	Published	Yes	Yes	Include
Overweight prevalence and trends for children and adolescents.	Toole, J.K., & Percy, W.	1994	Published	Yes	Yes	Include
Carl Gustav Jung, Quantum Physics and the Spiritual Mind: A Mystical Vision of the Twenty-First Century.	Tyson, L.	2006	Published	No	No	Exclude
From Papyrus to Hypertext: Toward the Universal Digital Library. Trans. Phyllis Aronoff and Howard Scott.	Valadas Ponte, D., & Schäfer, L.	2013	Published	Yes	Yes	Include
Overweight/obese patients: an overview.	Vandendorpe, C.	2009	Published	No	No	Exclude
Obesity: listening beyond the fat cells.	Vener, A. M., Krupka, L. R., & Gerard, R. J.	1982	Published	Yes	Yes	Include
A Practical Guide to Joseph Campbell's The Hero with a Thousand Faces. Hero's Journey.	Vilhena, J. D., Novaes, J. D. V., & Rosa, C. M.	2012	Published	Yes	Yes	Include
The Feminine in fairytales.	Vogler, C.	1985	Published	Yes	Yes	Include
The Interpretation of Fairy Tales.	Von Franz, M.-L	1972	Published	Yes	Yes	Include
Psyche and Matter.	Von Franz, M.-L., & Crossen, K.	1970	Published	Yes	Yes	Include
Why it is difficult to see the anima as a helpful object: critique and	Von Franz, M.-L.	1992	Published	Yes	Yes	Include
Obesity in children: a risk for depression.	von Raffay, A.	2000	Published	No	No	Exclude
Trends of overweight and underweight in children and adolescents in the United States, Brazil, China, and Russia.	Wallace, W.J., Sheslow, D., & Hassink, S.	1993	Published	Yes	Yes	Include
The Dictionary of Omens and Superstitions.	Wang, Y., Monteiro, & C., Popkin, B.M.	2002	Published	No	No	Exclude
From Beast to the Blonde: On Fairy Tales and Their Tellers.	Waring, P.	1978	Published	No	No	Exclude
Carroll and His Alice Books. In Continuity.	Warner, M.	1994	Published	No	No	Exclude
Dark nature: Natural history of evil.	Warren, A.	1996	Published	No	No	Exclude

The evolutionary biology of human body fatness: thrift and control.	Watson, L.	1995	Published	Yes	Yes	Include
The complementary roles of the IAAP and the JAP in Jungian clinical practice developing.	Wells, J. C.	2010	Published	Yes	Yes	Include
Behavioural treatment of obesity: thirty years and counting.	Wharton, B.	2006	Published	Yes	No	Exclude
Endangered Lives: Public Health in Victorian Britain.	Wilson, G.T.	1994	Published	Yes	Yes	Include
The Beauty Myth: How Images of Beauty are used against Women.	Wohl, A. S.	1983	Published	No	No	Exclude
Inanna, queen of heaven and earth: Her stories and hymns from summer.	Wolf, N.	1991	Published	Yes	Yes	Include
The Owl was a Baker's Daughter: Obesity, Anorexia Nervosa and the Repressed Feminine: a Psychological Study.	Wolkstein, D. & Kramer, S.N	1983	Published	Yes	Yes	Include
Room of one’s own.	Woodman, M.	1980	Published	Yes	Yes	Include
Strategy on diet, physical activity and health.	Woolf, V. A.	1957	Published	Yes	Yes	Include
Joint WHO/FAO Expert Consultation on diet, nutrition and the prevention of chronic diseases, diet, nutrition and the prevention of chronic diseases.	World Health Organisation	2015	Published	Yes	Yes	Include
Strategy on diet, physical activity and health.	World Health Organisation	2003	Published	Yes	Yes	Include
Acupoint stimulation on weight reduction for obesity: A randomized sham-controlled study.	Yeh, M., Chu, N., Hsu, M. F., Hsu, C., & Chung, Y.	2015	Published	Yes	Yes	Include
Thawing the 'frozen accidents': the archetypal view in countertransference.	Yolen, J.	2000	Published	No	No	Exclude
Kelly West Lecture 1991 challenges in diabetes epidemiology—from West to the rest.	Zabriskie, B.	1997	Published	Yes	Yes	Include
The global epidemiology of non-insulin-dependent diabetes mellitus and the metabolic syndrome.	Zimmet, P. Z.	1992	Published	No	No	Exclude

Happily Ever After: Fairy Tales, Children and the Culture Industry.	Zimmet, P.Z., McCarty D.J., & de Courten, M.P.	1997	Published	No	No	Exclude
Beauties, Beasts and Enchantments: Classic French Fairy Tales.	Zipes, J.	1997	Published	Yes	Yes	Include
Fairy Tales and the Art of Subversion: The Classical Genre for Children and the Process of Civilization.	Zipes, J.	1989	Published	No	No	Exclude
The Great Fairy Tale Tradition: From Straparola and Basile to the Brothers Grimm.	Zipes, J.	1983	Published	No	No	Exclude

Appendix C

The five concepts that guided the search for appropriate articles were:

- Symbols
- Food
- Obesity
- Collective unconscious
- Personal unconscious

The initial key words that guided the search for appropriate research articles in the different databases included the following:

- Symbolism
- Psychological symbolism
- Psychological influence
- Food AND symbolism
- Food AND culture
- Subconscious AND food AND symbolism

Other words that were added to the above search terms to gain additional information were the following:

AND:

- Symbols
- Culture
- Unconscious
- Psychological impact
- Historical
- Fairy tales
- Gods
- Psychoanalysis
- Jung
- Freud
- Obesity
- Dietary behaviour

- Pathology and Food
- Mythology and symbols and food
- Jung AND quantum theory
- Collective unconscious
- Quantum theory AND the collective unconscious
- Complexes