

What Is Obesity?: Complementary Discourses

By

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## Abstract:

“What Is Obesity?: Complementary Discourses” seeks to present several perspectives on the entity ‘obesity’ in an effort to establish relationships, differences, and the possibility of critiques between and among the biomedical model, fat studies, media, policy and marketing, and Aboriginality. Using Foucault’s tenets of power, discourse, and governmentality, this thesis will demonstrate the ways in which discourses employ techniques of governance and the responses of self-governing individuals. Each chapter will represent a perspective with its own taxonomy, measures, and constructions of ‘obesity’. To conclude, the thesis will look at the possibility for collaboration in interdisciplinary research on the subject of obesity; in a direct exchange between the perspectives, the thesis will attempt provide a comprehensive account of ‘obesity’ as being comprised of several perspectives simultaneously.

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## Chapter I: Introduction

The purpose of this thesis is to argue that discourses differently conceptualize obesity. Each discourse conceptualizes obesity in particular ways, generates signs, symptoms, and taxonomies, creates preventions and cures, explores boundaries and possibilities, and responds to critical engagements; each construction is political, social, material, economic, and cultural. For the purpose of this thesis, the discourses that will be examined are biomedical discourse, fat studies discourse, policy and food marketing discourse, epidemiological discourse, and media discourse. Mills acknowledges that, “what makes the process of defining discourse even more complex is that most theorists when using the term do not specify which of these particular meanings they are using” (1997: 8). In this thesis, discourses will be defined as “constituted by a group of sequences of signs, in so far as they are statements, that is, in so far as they can be assigned particular modalities of existence” (Foucault 1972:107). They are “ways of constituting knowledge, together with the social practices, forms of subjectivity and power relations which inhere in such knowledges and relations between them” (Weedon 1987: 108). Discourses create ‘effects of the truth’ which are, in themselves, neither true nor false (Foucault 1980: 116-19). Using discourse to provide an analysis of different conceptualizations of obesity lends itself to examining the relationships and critiques among the different discourses. Foucault states that “power assumes a relationship based on some knowledge which creates and sustains it; conversely, power establishes a particular regime of truth in which certain knowledges become admissible or possible” (1983: 10). Therefore, looking at the discourses in their particular knowledge regimes lends itself to studying the possibility for critiques and the elaboration of

similarities between discourses. Furthermore, in acknowledging the power relationships between the discourses, and their ability to govern individuals, it is possible to study how these discourses allow for self-governance based on the governmentality of the discourses.

That is not to say that these discourses are entirely distinct or entirely overlapping; the different constructions converge and diverge in their definitions, approaches, and treatments. However, despite the potential similarities and potential differences, each discourse is creating an object called obesity that is different from other discourse's object called obesity. Therefore, it becomes difficult for discourses, like biomedicine or fat studies, to critically engage with one another about obesity because, I will argue, they are engaging with different objects. This thesis seeks to examine each discourse's construction of obesity in an effort to demonstrate the range of constructions that exist between discourses. This range might provide insight into collaborative potential for interdisciplinary research that produces and engages with constructions of obesity through the use of several discourses.

The question "What is obesity?" can be asked and responded to in several different ways. Over the past decade, obesity as an object has grown considerably as a topic in literature and media. As such, it has been constructed through several different discourses. For the purpose of this thesis, literature from biomedicine, fat studies, policy and marketing studies, media studies, and indigenous studies will be analyzed in an effort to: a) outline how each discourse constructs an identifiable object called 'obesity'; b) find points of collaboration between the discourses; c) demonstrate the similarities between the discourses; and d) demonstrate the points of departure between the discourses.

The aforementioned discourses were chosen because of their prominence in the literature on obesity and because of their interesting use of knowledge constructed by other discourses. For example, fat studies uses media discourse to critique the proliferation of body stereotypes in Western mass communications. In turn, the media uses abridged examples from biomedical discourse to report on the so-called obesity epidemic, acting as a conduit between the public and medical expertise. Epidemiology, as a sub-field of medicine, also impacts indigenous issues as obesity, and an expression of obesity in Type II diabetes mellitus, is considered, within epidemiology, to be an illness inherent to some Canadian Aboriginal communities. Furthermore, in an effort to combat obesity as so-called illness, Canadian legislators key into marketing discourse in an effort to curb the influence of food marketers by imposing restrictions about the kinds of advertisements that are available to children. These different discourses are to a greater or lesser extent aware of each other; use some of each other's evidence and rhetoric; and converse with each other in peripheral ways. These exchanges are constrained because each discourse constructs obesity differently, and therefore are all discussing different facets of obesity as an object.

Because this thesis is exploring how different discourses create an object called obesity, the most appropriate methodology for these purposes is critical discourse analysis. Discourse analysis is concerned with analyzing and studying the uses of language (Johnstone 2002). Discourse analysis, in other words, is a "heuristic discovery process in which various kinds of questions about language, participants, and their societies and cultures can be answered" (ibid: 9). However, discourse analysis is largely dependent on the epistemological framework being drawn upon. This thesis' epistemological framework posits that different discourses



conceptualize obesity differently and that there are tensions and similarities between the discourses' different conceptualizations of obesity. Furthermore, each discourse creates modes of conduct within which individuals self-govern.

### *Methodology, Research Question, and Thesis Statement*

In writing the thesis, the original research question was “how do different discourse differently create an object called obesity?” to pinpoint areas of conversation and possible complementarity between the discourses. Each chapter was written in the style of the literature in an attempt to accurately represent the language and texts of the discourse. However, a true testament to the power of the discourses, it was difficult to write an objective account of the discourse without writing each chapter as truths, which was not intentional. Furthermore, it was nearly impossible to separate out subjective interpretations of the discourses. For example, coming from a background in women's studies, I found myself identifying with fat studies discourse and, consequently, being skeptical about biomedical discourse. However, I was not wholly agreeing or disagreeing with any one discourse, rather picking and choosing what I thought worked and didn't work. In an attempt to appease my subjectivity, I looked for different connections between the discourses to resolve some of the tensions that I myself faced when looking at how the different discourses impacted individuals.

In adopting Foucauldian tenets, including power, discourse, governance, and the care of self, I found a theoretical framework that explains how the discourses differently impact individuals and use governance to manage the lives of the population. Because governance is not domination, individuals react differently to different techniques of governance. Therefore, the

techniques of powerful discourses like biomedicine, like losing weight through dieting, may not result in every individual starting a diet and losing weight. It is through the governmentality of discourses that individuals self-govern according to the discourse's techniques of governance. Using Foucault's power, dominance, governmentality, and discourse, this thesis will demonstrate the different techniques of governance that are used by the different discourses and the potential responses of self-governing, enterprising individuals.

### *Discourse Summaries*

Chapter II: The Science of Obesity explores the biomedical discourse surrounding obesity as a health issue and epidemic. Medicine understands the body in its materiality—chromosomes, flesh, and tissues. Obesity is defined as adipose tissue that can be measured and phenotyped, hormones that can be categorized, and lifestyle choices with measurable biological consequences. The biomedical discourse governs individuals through using techniques of governance like BMI, body-fold measurements, and charts that designate healthy or unhealthy weights. The chapter engages with medical models, biometrics, and rates of prevalence of obesity. Through charts, projections, and measurements, obesity becomes a caloric/energy expenditure equation that is then used by individuals to self-govern and regulate their bodies.

Chapter III: The Culture of Obesity engages with feminist critiques of science, the emergence of fat studies as a sub-discipline of sociology and feminist studies, and social movements that engage with both media and scientific understandings of fat. The vocabulary of fat studies rejects the term obese in favour of the term fat, and actively rallies against the negative connotations associated with the word. This emerging field challenges discourse that

created the obese body, and creating its own discourse of fat as an embodied experience that is neither a problem nor cause for a medical intervention. Through this conceptualization, individuals can self-govern by eating based on cravings, as posited by the Health at Every Size framework, or exercising for fun, not fitness. Although the discipline does not engage with the biomedical model directly, it criticizes the media's interpretation of science as vilifying obesity and fat. The media are complicit in propagating obesity as an issue of concern, engaging both with narratives about acceptable and unacceptable bodies, the science of obesity as constituting an epidemic in need of intervention, and the media's manipulation of images.

Chapter IV: The Face of Obesity explores media portrayals of obesity through a feminist discourse that highlights the unattainable images, the technological manipulation of bodies, and the mediated iteration of public understandings of science. The media acts as a filter between scientific knowledge and the public's engagement with science, providing simplified laypersons' versions of laboratory studies, clinical trials, and field cases. The media can govern individuals through techniques like releasing restricted images of bodies, manipulating bodies in Photoshop, or choosing news stories that incorporate Headless Fatties into the broadcast. The media are also responsible for propagating images of bodies that can impact individuals' relations to their own bodies. An interesting commonality emerges when the media are understood as a bridging of both culture and science in a public forum. Although fat studies is largely left out of mainstream coverage and the illustration of science in media are largely moderated, several antithetical discourses exist simultaneously. Society's response to science in the media impacts the culture of bodies and images, which, in turn, lends itself to objects of study in science. This recurrent cycle of scientific and cultural exchanges is reiterated in public policy as it relates to the well-being

and health priorities scientists and laypeople focus on. The biomedical discourse is reiterated through techniques of governance like issuing statements about obesity epidemics, discussing clinical obesity trials, or interviewing doctors or other medical professionals about diet and exercise.

Chapter V: The Policy and Marketing of Obesity will look at how policy and marketing serve as methods of medical intervention into the lives of the obese and the overweight. The chapter will explore how policy discourse affects certain demographics differently; for example, the impact of anti-obesity policy on children or on households with low socio-economic status. Marketing also pertains to the food industry, namely what types of food are manufactured, who has access to what kinds of foods, and what dietary policy is the most relevant in a society. Policy is directly linked to capitalist consumerism, the politics of large corporations, and the social climate of the laypeople upon whom the policy impacts. This is to say that policy reflects the needs and concerns of society. Policy and marketing govern individuals through techniques like advertising high fructose foods during children's programming, drafting new legislation about what kinds of foods are available in schools, and using colourful mascots and logos in advertising for food products. The pro-interventionist rationalization made through enacting countrywide dietary policies is reflective of the oversight that the government uses to, as it claims, protect indigenous peoples from so-called preventable medical diseases like obesity.

Chapter VI: The Race of Obesity explores the intersection of Canadian Aboriginality, policy, and medicine. Several different discourses act upon indigenous groups, including biomedicine, colonial and anti-colonial discourse, paternalism, interventionism, and

racialization. Is race a biological category or a social construct? Does racial profiling in medicine yield better patient-centred clinical care? Are theories like the Thrifty Gene Hypothesis (TGH) relevant to Aboriginal obesity and do these theories support paternalistic intervention? This discourse can govern individuals through techniques like having Aboriginality as a box to check on medical forms, launching targeted studies in Aboriginal communities, and releasing media stories about the link between Aboriginality and Type II diabetes mellitus. These negotiations examine the complex intersections of medicine and race.

This thesis will explore the intersections, parallels, differences, and similarities among these five distinct discourses and will analyze how these contribute to the construction of several objects all identified as obesity. Each chapter will address the question: How is obesity constructed within a specific discourse, with different uses of language, and unique approaches to obesity as an object. Each discourse depends upon a particular epistemology, and each discourse associates itself with truth in a particular way. The purpose of this thesis is to explore these associations to provide an account of obesity through the analysis of several discourses and demonstrate how each discourse affects individual self-governance through the use of various techniques of governance.

## Chapter II: Foucault's Governmentality, Power, and Discourse

### *Introduction*

Using Foucault's theories of governance, power, and discourse as a theoretical framework, I will demonstrate that discourses govern individuals, but an individual's reaction to governance can be varied. A discourse employs techniques of governance that are powerful and can affect individuals; however, because governance is not domination, individuals will not necessarily react to the managing of their bodies in similar ways. Discourses use governance to direct how we behave and act, whether it be eating more or eating less, weigh-ins or the rejection of the weight-scale. The governmentality of discourses is bound up with the invention "of techniques to constitute the citizens of a democratic polity with the 'personal' capacities and aspirations necessary to bear the political weight that rests on them" (Rose 1998: 155). Discourses govern through the aspirations and freedoms of the subjects, rather than in spite of them (ibid). That means that discourses like biomedicine use techniques like weight-loss programs to help govern subjects to be healthy and happy individuals who aren't overweight or obese. Similarly, fat studies discourse would use techniques like positive affirmations to help govern subjects to be happy individuals in their large bodies. Therefore, the techniques of governance result in individuals conducting and evaluating themselves into alignment with the objectives of the discourse (ibid).

### *Foucault and Discourse Analysis*

Discourse analyses are concerned with the interplay of text and context (Foucault 1972).

Discourses assist in the creation of practices and are "essential to the continuation and

reinforcement of patterns and practices” (Yuginovich 2000: 70). In the 1930s, discourse was a concept that referred to “a unit of language larger than a sentence, and discourse analysis is the study of these sequences of sentences” (Sawyer 2002: 434). In “The Archaeology of Knowledge”, Foucault defines discourse as “constituted by a group of sequences of signs, in so far as they are statements, that is, in so far as they can be assigned particular modalities of existence” (1972: 107). Discourse analysis endeavours to uncover the way in which social reality is produced (Phillips and Hardy 2002). Foucault acknowledges the fluidity, exchange of power, and transformations of discourses.

Some discourse analysis relies on single texts, others on bodies of text. With this flexibility, and using Foucault’s definition of discourse, I endeavour to demonstrate how individuals are influenced through the production of meaning in texts, representing different discourses. Critical discourse analysis encompasses “an even wider sphere that includes all of the social practices, individuals, and institutions that make it possible or legitimate to understand phenomena in a particular way” (Hodges et al. 2008: 570). Therefore, critical discourse analysis provides a macro-analysis of how discourses construct what is possible for individuals and institutions to think and say (ibid). Discourse analysis is an effective method for approaching a wide range of research questions; a vast array of literature and data is available to perform a critical discourse analysis. This methodology provides a powerful and rigorous approach to understanding a complex phenomenon, like obesity.

### *Power*

Foucault defines power as a multiplicity of relations of force (1979). Power is a process through which struggles and conflicts, transform, strengthen, or nullify force relations (ibid). That is not to say that power is wholly destructive, Foucault would argue that power is productive more than it is destructive. Power analyzes power “not as a negation of the vitality and capacities of individuals, but as the creation, shaping, and utilization of human beings as subjects” (Rose 1996: 151). That is to say that power works through, and not against, subjectivity (ibid). Therefore, Foucault argues that we need to look at the ways in which subjectivity has become a target and resource for certain tactics and procedures of regulation (ibid).

Power is everywhere because it comes from everywhere and Foucault specifies that power is neither a structure nor an institution, it is the “name that one attributes to a complex strategical situation in a particular society” (ibid: 93). Power is diffused and embodied in discourse, knowledge, and ‘regimes of truth’ (Rabinow 1994). A regime of truth is knowledge that is organized into an episteme; it’s a system of production, circulation, and regulation. Truth is linked to power; power produces and sustains truth and the effects of power extend truth (Foucault 1979). Knowledge and power are interconnected, but power is unstable because it is a product of human interaction, therefore the regimes of truth keep destabilizing versions of reality suppressed. Power can be exerted by biomedical discourse through the construction of knowledge that distinguishes between a healthy and unhealthy body weight. These ideas persist because they are reiterated through individuals and networks that uphold this knowledge as truth.

According to Foucault, power is immanent in all social relations, power is articulated with discourses and power is “necessarily polyvalent because its impact and significance vary



with how social relations, discourses, and institutions are integrated into different strategies” (Jessop 2006: 35; Foucault 2007). Foucault distinguishes between power relations understood as strategies which some try to use to control conduct of others and the states of domination that are usually understood as ‘power’ (Rabinow 1994). Foucault’s notion of governmentality plays a role in the analytics of power in the following ways: it offers a view of power beyond violence; “it links technologies of the self with technologies of domination, the constitution of the subject to the formation of the state”; and it helps to differentiate between power and domination (Lemke 2002: 51). Power is defined as the “strategies in which they [powers] take effect, whose general design or institutional crystallization is embodied in the state apparatus, in the formulation of the law, in the various social hegemonies” (1979: 92).

Biomedical discourse creates a regime of truth that produces knowledge and techniques of governance that are more powerful than other discourses like fat studies. Their power is circulated through the networks of other discourses that reiterate the knowledge created through biomedical discourse. Fat studies discourse does not have as much power as biomedical discourse and its techniques of governance are not as powerful. However, power acts differently on different individuals and there is no necessarily circumscribed reaction to the governance of any given discourse.

### *Government and Governmentality*

Foucault defines government as the conduct of conduct, a term that ranges from ‘governing the self’ to ‘governing others’ (Lemke 2002: 50). Governing is an activity that “undertakes to conduct individuals throughout their lives by placing them under the authority of a guide responsible for what they do and for what happens to them” (Foucault 1997: 68). Foucault

distinguishes between ‘governing’ and ‘ruling’, assuming that governing is a specific activity that denotes a specific type of power (ibid: 109).

Foucault describes governmentality as incorporating,

The ensemble formed by institutions, procedures, analyses and reflections, calculations, and tactics that allow the exercise of this very specific, albeit very complex, power that has the population as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument (Foucault 2007: 107).

He continues by describing governmentality as the development of specific governmental apparatuses and knowledges (ibid). According to Foucault, the state has not taken over society; the state has become governmentalized. The governmentalization of the state includes the invention and assembly of different technologies and strategies that are developed in political centres where the powers of state connect to manage “the economic life, the health and habits of the population, the civility of the masses and so forth” (Rose 1999: 18). Therefore, Foucault is arguing that governance is not domination, but that governmentality uses a number of techniques and strategies that govern over individuals and institutions. Foucault stated that, “nothing, you see, is more foreign to me than the quest for a sovereign, unique, and constraining form...wherever it seemed necessary, I have been prepared to add to the plurality of distinguishable systems” (1991: 60). Discourses like biomedical discourse can exert govern individuals by using techniques like skin-folds, BMI, counting calories, annual medical check-ups, post-partum weigh-ins, and physical fitness programs. Fat studies discourse uses techniques like affirmations, blogging, eating without scrutiny, activism, questioning normalized bodies, and building confidence. Some of these techniques are more powerful than others. Individuals are not

forced to diet, maintain weight, lose or gain weight, or eat healthily or unhealthily, but these mechanisms of governmentality influence and act differently upon individuals.

Governmentality describes the relationship of the self to itself and “the range of practices that constitute, define, organize, and instrumentalize the strategies which individuals in their freedom can use in dealing with each other” (Foucault 2008: 300). Freedom and power are linked because “power is exercised only over free subjects, and only insofar as they are free” and because “freedom disappears everywhere power is exercised” (Foucault 1982: 790). Foucault defines freedom as “individual or collective subjects who are faced with a field of possibilities in which several ways of behaving, several reactions and diverse compartments, may be realized” (ibid). Therefore, just because biomedical discourse employs many techniques that are reiterated in other discourses and through the individuals that promote these techniques, there are no guarantees that the power exerted will result in all individuals reacting to the techniques similarly. If governance were domination, the population would respond to a discourse like biomedicine by losing or maintaining a healthy weight, not overeating, monitoring their health, exercising regularly, et cetera. Conversely, if the techniques of governance that fat studies employs acted as domination, then everyone would eat without consideration to caloric intake, gain weight, and be satisfied with large bodies. The individual is not a passive object of governance; behaviour is not circumscribed to a few similar reactions or actions.

Foucault argues governmentality makes possible the freedom of the subject and its relationship to others (ibid). Governance directs attention to: “the nature, problems, means, actions, manners, techniques and objects by which actors place themselves under the control,

guidance, sway and mastery of others, or seek to place other actors, organizations, entities or events under their own sway” (Rose 1999:16). Furthermore, governmentality is an outcome of these interdependencies and intersections, the networks that arise from the interactions between different organizations and associations (ibid). Governmentality is meant to act upon the lives of the population in positive, meaningful ways, like helping to achieve health, happiness, wealth, and tranquility (Foucault 1979; Rose 1996). The autonomy of self is a central feature of contemporary governmentality because individuals as subjects or selves have become a resource to authorities (ibid).

### *Self-Governance and the Enterprising, Autonomous Self*

Through techniques of governance, individuals can become self-governing, evaluating themselves into alignment with political objectives (Rose 1996). This self-evaluation leads to the development of technologies of the self which

Permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts, conduct and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality (Foucault 1988: 18).

Therefore, through governance, self-governance emerges to regulate individual’s own conduct.

Self-governance develops different rules of conduct for everyday existence that can be applied to all areas of life. Enterprise is one of the self-governing capabilities that help to align the self with political objectives; it is the rules of conduct to guide an individual’s daily life. Enterprise includes “energy, initiative, ambition, calculation, and personal responsibility”; the enterprising self “calculates *about* itself and acts *upon* itself in order to better itself” (Rose 1996: 154).

Another capability of self-governance is autonomy, through which individuals take control of

their daily lives through the definition of goals and the formulation of plans to achieve those goals through their own powers (ibid). The autonomy of self is an instrument of governance that shapes individual's mentality about appropriate ethics and conduct (ibid).

Take, as an example, the practice of dieting to lose weight. An individual can choose what to eat, when to eat, and how much to eat. By eating healthy vegetables and lowering sugar intake, the individual is working on lowering their overall weight, losing body fat, and impacting their body shape. The individual would be healthier, able to work and exercise more effectively, and give themselves an advantage over their competition. When the individual adheres to a diet plan, they are using their own discipline to reach their goals by designing and undertaking a routine that they are self-monitoring. The practice of dieting for weight loss is an autonomous practice, however it is imbued with biomedical techniques of governance that equate lower body weight with health.

Similarly, consider the example of eating without measuring caloric intake. An individual can choose what, when, and how much to eat. By eating without regard to calories or grams of fat, an individual is working on loving their body and appreciating their appetites; the individual would be protesting the notion that fat is unhealthy or that large bodies are not beautiful or worthy. When an individual eats without restraint, they are using their autonomy to decide how to live their lives and feel in their bodies. The practice of eating without measuring caloric intake is equally autonomous as eating to lose weight; however, instead of being imbued with biomedical techniques of governance, the individual is responding to fat studies techniques of governance that do not equate body weight with value or worth.

## *Conclusions*

Using Foucault's power, dominance, governmentality, and discourse, the thesis will demonstrate the different techniques of governance that are used by the different discourses enumerated in the chapter summaries to create enterprising individuals who self-govern.

## Chapter III: The Science of Obesity

Using biomedical discourse, this chapter will explore the scientific discourse of obesity, which focuses on causes and measures. The science of obesity employs classifications like overweight, obese, morbidly obese, and severely obese. Medical discourse uses biometrics, the application of statistical analysis to biological data, including the Body Mass Index and waist circumference. The biomedical treatment of obesity is that of an epidemic or problem that needs to be solved. In this characterization, the biomedical model assumes that the problem of obesity is detrimental to human health; similarly, there is an average or healthy weight and certain degrees of obesity that increase the likelihood of comorbid conditions like diabetes, cardio-vascular disease, and hypertension. The biomedical model uses normative language to create a continuum of health and ill-health, as represented by the classification of normal weight and over-weight.

Medicine conceptualizes overweight and obesity as the results of an imbalance between calorie intake and calorie expenditure. Filaault (2008) states that: “when energy consumed equals energy expended, body mass remains roughly stable. When caloric intake exceeds caloric expenditure, however, a positive energy balance emerges and body mass increases, thereby potentially launching a trajectory towards obesity” (243). The trajectory equation of “calorie expenditure < calorie intake” is the most often used in medical literature.

Within biomedical discourse, fat is comprised of adipose tissues, an essential component of the human body. The adipose tissue that is distributed between the thorax and pelvis generally induces greater health risk than adipose tissues distributed elsewhere in the body (Caldwell and

Kimball 2001). Historically, fatty tissues were thought to have adaptive purposes, but previous understandings of adipose tissue were largely considered to be metabolically passive; adiposity was thought of as a consequence of a positive energy balance that performed static functions and was considered metabolically inactive (Power and Schulkin 2009). However, since the 1980s, adipose tissue has become increasingly considered as ‘adaptive’ in that excess energy was consumed and then stored (in the transient sense) so that it could be mobilized at a later time when food supply was inadequate (ibid). However, with an adequate food supply, the adipose tissues are stored, in the permanent sense, without expenditure, leading to an excess of fatty tissues. Although fat is an endocrine tissue that produces and metabolizes peptides and steroids, ‘too much’ fat can lead to the unbalancing of an individual’s physiology. However, what constitutes according to biomedical discourse, an excess of fatty tissues?

### *Defining Obesity*

The Body Mass Index (BMI), or Quetelet index, serves as a biometric measure used by scientists and medical professionals to measure obesity in adults and children. The BMI is an indirect measure of body fat that is based on an individual’s measured height and weight. Among adults, “obesity is generally defined as a BMI greater than 30kg/m<sup>2</sup>, and overweight as a BMI between 25 and 30kg/m<sup>2</sup>” (Lobstein et al. 2010:3). Figure 1.1 demonstrates the different strata of obesity classifications as defined by an individual’s BMI:



<b>Classification</b>	<b>BMI (kg/m<sup>2</sup>)</b>	<b>Risk of Co-morbidities</b>
Normal range	18.5-24.9	Average
Overweight	25.0-29.9	Mildly increased
Obesity class I	30.0-34.9	Moderate
Obesity class II	35.0-39.9	Severe
Obesity class III	≥40	Very severe

**Figure 1.1** The World Health Organization’s standard classification of obesity.

*Source:* Turconi, Giovanna and Hellas Cena. *Obesity: Epidemiology, Pathophysiology, and Prevention*. 13, 2007.

This chart uses the BMI as an indicator of increased risk for other comorbid conditions like diabetes, cardio-vascular disease (CVD), and hypertension (ibid). And the biomedical discourse frequently invokes population statistics in relation to these risk factors. For instance, there are an estimated 280,000 to 325,000 deaths annually in the United States that are attributed to overweight and obesity, more than 80% of those deaths occurring among individuals with a BMI > 30kg/m<sup>2</sup> (Powers and Schulkin 2007). A BMI of ≥ 40kg/m<sup>2</sup> is the equivalent to carrying more than 45kg of excess weight (Hu 2008a: 16).

To calculate the BMI, weight and height must be measured following certain medical protocols to ensure an accurate reading. The protocol to ascertain the accurate measurement of weight includes the removal of shoes, the scale zeroed, and the value written down immediately after being obtained; the protocol for the accurate measurement of height includes: the removal of shoes, the heels touching the wall, head straight, and the value written down immediately after being obtained (Greenwood et al. 2011). The standardized procedures for measuring weight and height attempt to provide reliability in the measurement of the BMI.

The BMI uses uniform measures for the classification of obesity by using waist-to-hip ratio (WHR) or waist circumference (WC). The WHR provides an estimate of abdominal obesity that is tailored to the stature of the individual by dividing the WC by the hip circumference (HC) (Razak et. al 2005:657). Furthermore, the hip measurement provides a rough measure of gluteal muscle mass. The measures and indices of the BMI have been refined over the past 50 years to include the addition of standards of childhood obesity. The distribution of fat is especially important because visceral or intra-abdominal adipose tissue, in contrast to subcutaneous or lower-body adipose tissue, has a higher risk of chronic-degenerative diseases like non-insulin-dependent diabetes mellitus (NIDDM) and cardiovascular disease (Turconi and Cena 2007: 5). Excess adipose tissue, especially in the abdominal region, is recognized in biomedicine as one of the major health risks in obesity. Waist circumference and centrally excess adiposity are determinants of risk factors for the obese and overweight.

### *Defining Obesity as An Epidemic*

From 1986 to 2000, the prevalence of individuals “with a BMI  $\geq$  50kg/m<sup>2</sup> quintupled” (Hu 2008a: 16). From 2001-2002, the number of people with ‘severe’ or ‘Class III’ (see Figure 1.1) obesity grew to nearly 11 million people worldwide (ibid). The World Health Organization (WHO) has estimated that there are more than 300 million obese people worldwide (ibid). The increase in obesity prevalence (%) among U.S. children ages 6 to 11 (Figure 1.2) and U.S. adolescents ages 12 to 19 (Figure 1.3) have increased significantly since the early 1970s, in some instances increasing nearly five-fold in the span of less than 30 years.

The increase in obesity since the mid-1980s has been characterized as a growing epidemic in medical literature, which is further characterized as a “disease burden”, a “public health disaster”, a “massive tsunami”, and a “health time-bomb” (Lobstein et al. 2010: 5). Over the past two decades, obesity has become the second-leading cause of preventable death in the United States (Turconi and Cera 2007). With the rapidly rising rates of overweight, obese, and morbidly obese in different contexts globally, the categorization of obesity as an epidemic has been adopted by biomedical discourse to explain the rapid growth and development of obesity.

Years	Boys	Girls
1999 to 2000	16.0	14.5
1988 to 1994	11.6	11.0
1971 to 1974	4.3	3.6

**Figure 1.2** Increase in obesity prevalence (%) among U.S. children (ages 6 to 11)

Source: Turconi, Giovanna and Hellas Cena. *Obesity: Epidemiology, Pathophysiology, and Prevention*. 13, 2007.

Years	Males	Females
1999 to 2000	15.5	15.5
1988 to 1994	11.3	9.7
1971 to 1974	6.1	6.2

**Figure 1.3** Increase in obesity prevalence (%) among U.S. adolescents (ages 12 to 19)

Source: Turconi, Giovanna and Hellas Cena. *Obesity: Epidemiology, Pathophysiology, and Prevention*. 13, 2007.

The measurement and monitoring of obesity in children, adolescents, and adults demonstrates the vast increases in overweight and obesity. Because obesity is characterized as a health problem in medical discourse, medical professionals and scientists are instructed to observe and record patients’ weight in an effort to monitor individuals whose weight is not considered normal for their height.

In coupling obesity with words like epidemic, obesity becomes a public health problem that needs to be solved in the immediate or near future. The biomedical construction of obesity as an object that is unhealthy serves to legitimate medical interventions and the continued surveillance of measures of obesity, like the BMI and waist circumference.

### *Care of the Self and Obesity*

Foucault studied pre-Platonic to early Christian forms of selfhood; these forms of selfhood were not determined in relation to preexisting epistemic systems in which behaviour is regulated by codes of conduct (Foucault 1990). The preoccupation with the self is associated with an emphasis on universal forms of conduct “grounded in both nature and reason, and valid for all human beings” (ibid: 238). His genealogy described modes of being that were from the perspective of ‘the self as relation to itself’ (ibid). These forms of selfhood began to realize themselves through external relations to external standards “in the form of pure praxis or ‘conducts’, examples of which are described with regard to diet, training, the home, [and] marriage” (Boothroyd 1996: 361). Foucault’s image of the self is one that situates itself in relation to moral codes and defines itself through its mastery over desire (1990). The “‘care of the self’ is one manner in which the self relates to itself in such a way that the self is not collapsed into the certitude of its genetic identity and what this identity might mean” (Murray 2007: 6). The concept of ‘care of the self’ is voluntaristic and enjoins the individual to make a project out of themselves, to see their bodies as a place for reflection, and to engage in an ‘aesthetics of the self’ (Murtagh 2008; Murary 2007; Foucault 1993).

In working on oneself, the individual attempts to access a certain kind of understand, or truth (Foucault 1993). This ‘working on oneself’ involves taking responsibility for oneself, in a kind of self-governance (ibid). This trajectory of self-governance is “not legislated for by anything outside that subject, and it is also one that is not for the good of the subject as is, but rather is in preparation for a subject that is yet to arrive” (O’Sullivan 2010: 55). This generative idea of caring for the self to *become* is fixed in Foucault’s notion of self-care through self-reflection. Furthermore, the enterprising self responds to the techniques of governance used by biomedical discourse and instills in the individual the desire to be happy and healthy through diet and exercise.

The care of self is related to the biomedical construction of obesity because they both posit that mastery of the self is within human control; therefore, obesity is a condition that is preventable because it is able to be controlled by the self; and if obesity hasn’t been prevented, then it can be diagnosed through signs and symptoms and worked on by the individual. The moral codes and universal forms of conduct influences individuals into making proper choices, like dieting and exercise. Biomedical discourse similarly argues that human actions, as part of care of the self, can prevent or mitigate obesity. These techniques of self, like fitness and diet, are a response to the biomedical discourse that governs individuals.

### *Childhood Obesity*

The measurement of childhood obesity is an interesting phenomenon within biomedicine because childhood obesity is understood as linearly impacting adult obesity. According to biomedical discourse, there is an increased likelihood that obese children will grow to become

obese adults (Hu 2008a). Therefore, medical professionals view the incidence of childhood obesity as a starting point to monitor the prevalence and consequences of obesity from childhood to adulthood. Biomedical discourse contends that BMI is a valid measurement of obesity, if measured correctly. However, there are difficulties in defining a single set of standards and practices for the measurement of childhood obesity. Although BMI exists as a proxy for body fat in adults, the height and weight of children fluctuates continuously throughout childhood development and well into late adolescence (Skinner 2009). However, according to biomedical discourse, certain values of BMI in high childhood, years 9-12, and adolescence, years 13-18, are still associated with increased risk of cardiovascular disease (including dyslipidemia, dysglycemia, and hypertension) in adulthood (Han et al. 2010). Furthermore, children with BMI values above 85th (overweight) and the 95th (obese) percentiles are still considered predictive of adverse health outcomes in adulthood.

Nevertheless, despite the somewhat contested cut-off values, the BMI is used for children because early BMI scores can later be compared to adult BMI scores, mapping a progression of obesity throughout an individual's life. According to biomedical discourse, this is significant because obtaining a scale of comparison allows medicine to trace the progression of obesity from pre-birth to adulthood, locate the factors and behaviours that contribute to unhealthy lifestyles, and potentially provide inroads to finding patient-tailored solutions to obesity as it affects the individual.

### *Conclusions*

The language and measurements of obesity contribute to the biomedical model's construction of obesity as a problem and as an disease that is within human control. Biometrics like the BMI or waist circumference contribute to the stratification of health as average as synonymous with healthy, and obese as synonymous with unhealthy. The monitoring of childhood obesity and the medical statistics chronicling the rise in and prevalence of obesity over the last 40 years contribute to the biomedical construction of obesity as epidemic and obesity as requiring a solution. Biomedical discourse presents obesity as a medical condition that can be resolved through self-care.

## Chapter IV: The Culture of Obesity

### *Introduction and Definitions*

Fat studies is a discourse that has emerged in the past 10 years from both academic feminist, sociological, and cultural studies, and non-academic activism, art, and cinema (references).

According to fat studies discourse, fat activism, the participation in a size-acceptance movement, serves to embody liberation from fat oppression and to conceptualize fat as something other than obesity (Wann 2010). The emergence of the discourse coincides with what biomedicine terms the epidemic of obesity; fat studies presents itself as an alternative, social/cultural construction of fat that uses its terms and measures in opposition to biomedical discourse. Fat studies approaches fatness by challenging negative attitudes and stereotypes about size and health, namely propagated by biomedical discourse (Solovay and Rothblum 2010).

Within fat studies discourse, fat is conceptualized as an identity that serves to represent the reclamation of bodies from normative, biomedical discourse. As obesity is objectively measured, fat is subjectively lived, acted, and embodied by individuals who self-identify as ‘fat’. In response to medical discourse that conceptualizes fat as a health issue, fat studies discourse contends that fat is not inherently unhealthy and that it exists in different forms outside biomedical discourse. Fat is a word that can be used by fat studies scholars and fat activists to describe the body without the medical characterization of fat as a problem that requires solving. Within fat studies discourse, the term fat is used to challenge and ultimately reject the biomedical concept of obesity, with all of its associated focus on etiology, individual responsibility, and



treatment. Therefore, the techniques of governance that fat studies use includes: eating until satisfied, not based on caloric intake; reading zines and brochures about fat positivity; and exercising for fitness, not weight loss. These techniques of governance are in response to the governmentality of biomedical discourse.

### *Conceptualizing Fat*

According to fat studies discourse, the measurement of fat doesn't exist; there is no calculation or equation that is comparable to medical discourse, because there is no measurement that fat studies uses (Solovay and Rothblum 2010). The term fat in fat studies discourse describes a state of being rather than a physical state. The social construction of a concept of the body, not the material body itself, is the object of study for fat studies scholars, including feminists, sociologists, and cultural studies scholars. Social scientists attempt to conceptualize the relationship between the mind, self, and the body (Lester 2004). The social construction of the body focuses "on the development and cultural aspects of identity formation and negotiation" (Hird 2004:223). Fat studies conceptualizes the body as a social process and, as Rubin asserts, "we never encounter the body unmediated by the meanings that cultures give to it" (1984: 276). Therefore, the body materializes as a social construction within relationships of power, experience, and understandings of embodiment. In fat studies, there is little engagement with the physicality of the body as material object. Fat studies discourse governs using techniques that respond and critique biomedical discourse's governmentality.

A Foucauldian analysis suggests that the body is discursively constructed (Foucault 1971). Foucault proposes that "in every society the production of discourse is at once controlled,

selected, organized and redistributed according to a certain number of procedures, whose role is to avert its powers and its dangers...to evade its ponderous, awesome materiality” (ibid: 8). Power affects biological entities, but can also be discursively constructed by discourses like philosophy and biomedicine (Fox 1998). Therefore, “the body is no longer understood merely in organic terms as a biological entity” (Magdalinski 2009:33), but is to be regarded as “an open text that is constantly rewritten and reinterpreted” (Armstrong 1996:10). Within fat studies discourse, it is “impossible to know the materiality of the body outside its cultural significations” (1992:36).

### *Defining Fat through Stereotypes*

According to fat studies discourse, fat appears to be a derogatory word, brimming with cultural stereotypes and value assessments. Fat is conceptualized as a place “where numerous discourses intersect, including those concerning normative feminine beauty and sexuality, health and pathology, morality, anxieties about excess, and the centrality of the individual in the project of self-governance” (Murray 2008:5). Fat studies is a relatively new discourse that has been taken up by feminist scholars in academia; therefore, due to fat studies’ association with feminism, a lot of the literature relates fat to gender, namely women’s bodies.

There are several different pervasive negative stereotypes that surround the fat body; a fat woman is often dismissed as careless and sloppy, lazy and self-indulgent (ibid). Being overweight is linked to laziness, lack of willpower, and being out of control (Grogan 2008:9). Fat signifies a purposeful rejection of what Foucault characterized as the care of the self, as “expendable female filth; virtually cancerous matter, an inert or treacherous infiltration into the

body of nauseating bulk waste” (Wolf 1990:191). Fat is viewed as ugly, obscene, unclean, funny, repulsive, and “something to lose” (Braziel and LeBesco 2001: 21). Notions of sexual voraciousness, stupidity, and helplessness are all related to the fat body; the fat body is an out-of-control mass of flesh (Kuppers 2001:280). In the contemporary West, “body shape or size is formulated as a project of the self, with ‘fatness’ seen as indicative of lack of self-control, laziness, ill-health, and low status, and as therefore carrying a social stigma” (Petersen 2007:50). Conversely, slenderness is generally associated with happiness, success, youthfulness, and social acceptability (Grogan 2008).

#### *Reactions to Assumptions About Fat: FAT!SO? Activism in the 1990s*

Marilyn Wann’s *FAT!SO?* size-acceptance movement began as a small-scale zine distribution in the mid-1990s in San Francisco. A zine can come in a variety of forms, including “drawings, photographs, cartoons, poetry, prose, reviews, and transcribed roundtable discussions” (Snider 2010: 223). *FAT!SO?* incorporated the rhetoric of pride movements, like the Civil Rights Movement and Gay Pride, and adopted the riot grrrl zine publications of the early 1990s (Wann xxii). *FAT!SO?* conceptualized itself as a self-empowerment project for women who have been recipients of fat-phobia—weight bias—or size-ism—discrimination based on weight. The zine encouraged Californian women to participate in a dialogue about fatness, weight, and beauty standards, making sizeable efforts towards the reclamation of the term fat. The *FAT!SO?* movement allowed for individuals to develop a sense of community and solidarity with other fat people. As the movement expanded, Wann published the first edition of *FAT!SO?: Because You Don’t Have to Apologize For Your Size* in mass-market paperback in part to allow a greater audience of “‘fat’ women to decide for ourselves that negative readings of ‘fatness’ can be

discarded in our project of self-empowerment” (2004:14). The central tenet of *FAT!SO?* advocated a similar message to that of most size-acceptance organizations: individuals should come to love their fat bodies and to increase the visibility of the fat body in enabling, politically empowering ways (Murray 2008).

Wann’s *FAT!SO?* Manifesto included 12 principles or ‘steps to recovery’, based on an addiction support group structure; there was no intended progression through the steps, but each step offered empowering statements like: “large, big-boned, heavy, overweight, chubby, zaftig, voluptuous, Rubenesque, plump, and obese are all synonyms for fear” and “this is how we see: thin, vertical lines are good; horizontal fat rolls are bad. A hierarchy of Y-axis over X. Marx says: reverse the terms, put fat on top. I say: dichotomies are dumb. Love it all” (Wann 2004: 28).

With the increasing popularity of internet websites, *FAT!SO?* went viral in 1995, and promoted an online community of activism and open celebration of fat. Similar to Foucault’s discursive power, Wann emphasized the importance of changing the language of fatness, encouraging women to call their bodies what they were: fat. Manifesto #6 emphasized the importance of invoking the word fat until it “feels the same as short, tall, thin, young, or old” (ibid). Naming or giving a voice to fat was a subversive act. Wann urged women to

[c]hat with your fat. Give it pet names. Doodle fat on your notepad during meetings: fat, fat, fat, fat, fat. Use it with your parents, with your partner. Let friends in on your secret. Say, ‘By the way, I’m fat’. Not plump, not bloated. FAT! Combine the word fat with other words in new and ‘unusual’ ways: beautifully fat, fat and fabulous, fat pride. Use fat in a sentence: ‘You’re looking good, are you getting fat?’, ‘I met a handsome, fat man the other day’, ‘Gee, I wish I could be fat like her’. Try out these radical phrases on people you meet and watch their stunned reactions (ibid: 28).

These different techniques of governance are intended to govern individuals by internalizing and propagating positive body images. For example, if an individual becomes comfortable with using the word fat in a fat studies context, then they are able to self-govern accordingly, rejecting biomedical governance that would use techniques to promote happiness through thinness. All of these manifestos in Wann's *FAT!SO?* framework are techniques of governance.

According to fat studies discourse, sizeist discourse must be challenged. The *FAT!SO?* movement began as an attempt to challenge biomedical discourse by creating and reclaiming radical and fat-positive stories that promote equal representation and acceptance. The *FAT!SO?* movement served as the beginnings of self-acceptance, size-positive movements in the 2000s and beyond by acknowledging the capabilities of individuals to make large-scale, social impacts on negative constructions of the fat body. *FAT!SO?* was foundational to the rise of Fat Studies as a discipline.

### *Health at Every Size®: The Intersection of Biomedicine and Fat Studies*

Health at Every Size is a framework put forth by medical professionals and fat activists as an alternative approach to biomedicine's weight-centered approach to obesity. Biomedicine prescribes behaviour modifications, exercise, and dietary restrictions to lose excess weight that is considered to be 'unhealthy' or a 'dangerous lifestyle choice' (Hayes 2010; Han et al. 2010; Hu 2008; MacMillan et al. 1996). The underlying goal of traditional biomedical approaches to health and weight is for individuals to be smaller by losing weight. HAES argues that these measures are rarely successful and can contribute to negative body image, dangerous eating habits, and exercise addiction (Robison 2005). The underlying assumption of the HAES framework is that

fat is not intrinsically unhealthy or unappealing, nor is thin intrinsically healthy and beautiful (ibid).

The HAES approach includes the acceptance of the diversity of body shapes and sizes, the ineffectiveness of dieting for weight loss, the importance of eating in response to body cues, and “the acceptance of the critical contribution of social, emotional, and spiritual as well as physical factors to health and happiness” (ibid: 13). HAES defines a healthy weight as “the weight at which a person settles as they move toward a more fulfilling and meaningful lifestyle” (ibid). Therefore, biometrics like BMI and body fat percentage cannot determine a healthy weight because a healthy weight is relative to the individual. Health at Every Size strives to enhance health without focusing on a specific ‘ideal’ weight; respect and appreciate each individual’s diverse shape, features, and sizes; eating based on internal cues of hunger, appetite, and satiety; encouraging physical activities for the associated pleasure and health benefits; and ending weight bias through the recognition of beauty and worth in every body (Burgard 2012). HAES also stipulates that is relative to the individual at a particular time, place, and context. Therefore, a person’s weight may change given a different context (for example, famine or different geographic locations) but that does not necessarily indicate anything about the individual’s health. The goal becomes helping individuals to make these healthy practices a lifelong investment in their own well-being. HAES seeks to “recognize that body shape, size, or weight are not evidence of any particular way of eating, level of physical activity, personality, psychological issue, or moral character” (Burgard 2012: 43).

Although this framework is not necessarily revolutionary to fat studies discourse, it is exciting because it originates within the biomedical discourse as an alternative to the weight-focused biomedical discourse. Dr. Jon Robinson, Dr. Michelle May, and Dr. Linda Bacon are among several ‘experts’ who are involved with the Association for Size Diversity and Health (HAES 2012). The experts all have an interest in medicine or medical backgrounds, including psychologists, researchers, fitness professionals, professors, policy consultants, and registered nurses. Each expert is a volunteer who contributes to online forums, journal articles, and conferences. The HAES framework is a “continuously evolving alternative to the weight-centered approach to treating clients and patients of all sizes” (ibid). This is especially poignant because the experts are within the traditionally weight-centered field that they reject.

The Health at Every Size framework is an interesting intersection of fat studies concepts influencing biomedical practices. One of the biggest critiques of fat studies is its lack of engagement—or inability to engage with—biomedical discourse. Furthermore, biomedicine as a powerful and prominent discourse, does not engage with fat studies discourse. Therefore, the HAES framework demonstrates the ability for both discourses to interact and influence each other, thereby reconciling aspects of both biomedicine and fat studies discourse. HAES contends that medical professionals have lost their ability to “think critically in the face of lucrative weight loss opportunities, the assumption that fat people are looking for excuses, and the medical training conditions that intensify physicians’ revulsions to fatness” (Burgard 2012: 46). HAES proponents focus on nurturing and compassionate medical care, instead of demanding a conventional ‘healthy’ lifestyle. Because medical discourse is a more prominent discourse than fat studies, the HAES is a stronger framework emerging from medical discourse than it would be

emerging from fat studies discourse. However, it is doubly strong because it utilizes both fat studies and medicine to create a new framework within the biomedical discourse that incorporates ideas and concepts from both fat activists and biomedical professionals.

In addressing the issues in biomedicine through fat studies discourse and the issues in fat studies through biomedical discourse, the discourse becomes more fortified and accessible than either discourse on its own. Robison states that, “HAES offers an effective, compassionate alternative to the failures of traditional approaches” (2005: 14). The HAES framework does not recognize traditional measures of obesity, like BMI or skin fold thickness; HAES acknowledges the critical contribution of emotional, social, spiritual and physical factors to health and happiness (Robinson et al. 2007). Instead of operating within the biomedical weight-centered framework, HAES offers a different kind of medical support to individuals who have weight-related concerns.

### *Conclusions*

The vocabulary, intentional non-measurements, and activist applications of ‘fat’ contribute to the fat studies’ discourse of fat as an identity free from biomedical discourse and negative cultural connotations. In critiquing the association between fat and ill-health, fat studies discourse seeks to incorporate fat-positive in dialogues about weight, obesity, and size. The continued activism in the fat studies community and the increasing contributions of scholarly work are instrumental in upsetting biomedical definitions of fat as physically, culturally, and morally bad. As fat activists continue to combat negative media stereotypes, academics are becoming increasingly responsible for engaging and contributing to the critique of fatphobia and sizeism.



## Chapter V: The Image of Obesity

### *Introduction and Definitions*

For the purpose of this thesis, media will be defined as any form of mass communication including, but not limited to, television, advertisements, newsprint, radio, and Internet. Several discourses engage with media and its relationship to power and surveillance, including sociology, gender studies, and film studies. In relation to bodies, the media has come to constitute a new ‘visual grammar’ that relays messages about bodies (Bordo 2010). This media- focused discourse focuses on the idealistic, restrictive, and technologically-doctored images that are promulgated into contemporary society. Media discourse uses techniques of governance, like Photoshop and using biomedical language in news studies, to govern individuals to attain thinner bodies and reject larger bodies. Borrowing from sociological and feminist dialogues, this chapter will examine the media discourse about fat bodies.

### *The Measurement of Bodies: The Falsity of Images in the Media*

As Bordo argues, media representations of bodies constitute a new ‘visual grammar’ in Western societies; the inundation of media images can have an affect on the way that individuals relate to their bodies (2010). Instead of a subjective embodiment, women have begun to internalize the gaze of the observer, scrutinizing themselves from an outside positionality or othering their gaze (Wolf 1990). This internalized other is inherently oppressive and gendered; “we focus specifically on women because the media panopticon is infused with patriarchal beliefs, and therefore women learn to see and judge themselves through men’s eyes and according to men’s criteria” (Giovanelli and Ostertag 2010: 289). Women are expected to work on their bodies, and

care for their bodies in such a way that they become smaller, weaker, and thinner than men's bodies. This expectation is borne through the governmentality of biomedicine which governs individuals by using techniques of self that encourage fitness and exercise as a means to happiness and health. These internalized fat-oppressive notions are reinforced through individual's engagement with the media (Hartley 2009). The omnipresent and influential visual culture demands a certain type of body for both men and women. When individuals find their bodies falling short of meeting the perceived social expectations, it is the individual's failure to conform, not society's obligation to accurately represent a diversity of acceptable or desired bodily forms (Orbach 2009). The inundation of negative images of bodies in the media facilitates women's internalization of the unattainable beauty standards that are portrayed by the torrent of daily images propagated by beauty companies, fashion houses, and advertising conglomerates. Orbach notes that "the hurt becomes less potent as this does not appear to be an assault inflicted on us from outside but an action we desire and instigate. We see ourselves as agents, not victims" (114). A woman is likely to feel responsible for not living up to the current imagery that imposes a beauty standard. Orbach indicates that

it is not that the image is discordant. Her sightline has become faulty. She is now energized to make the new images her own signature and to express herself through these new forms. She applies herself to the job of perfecting that image for herself and so makes it her own, not assaultive or alien (116).

Foucault's theory concerning the care of the self is apparent when individuals believe that they are responsible for their bodies and can master their desires by conforming to certain principles of conduct. To survey and to maintain gives individuals a sense of participation in the core (the media's image of a body), not the periphery (the individual's reality of a body) of media imagery.

The internal rationalization falsely places the burden of responsibility on the individual; if the body is unacceptable by social standards, it is the individual to blame. Therefore, it is the self-governing individual who employs enterprise and autonomy that can conquer or stave off obesity.

*The Conditions and Assumptions About Bodies: The Production of Images*

The quantity of images in the media has steadily increased since the 1940s; the current images are so ubiquitous that it is virtually impossible not to be affected by them (ibid:108). The unavailability of images can lead to a hierarchy that requires constant body surveillance and maintenance (Gauchet 2006). Individuals' engagement with other bodies "is at the level of the body that we perceive and read other bodies, and it is at the level of the body that other bodies are intelligible to us" (Murray 2008: 35). Images allow for a form of representation and recognition of one's self in the larger society. That means that the power of observation "lies primarily in its ability to render information visible, thus offering a means for controlling deviance through the [media's] gaze" (ibid).

There is a limited, constrained pool of images available in the media to represent a wide configuration of bodies. The values that are ascribed to each image are bound into the system of communication that structures societal understanding of acceptable bodies using media discourse. For example, media governmentality would use a technique of governance like Photoshopping bodies. The individual would see these distorted images and respond through self-governance by working towards the media's body ideal. The truths that society holds as immutable knowledge inform social interactions; this knowledge positions individuals along a

spectrum of identities and bodies. Individuals learn these ascribed knowledges: “[we] internalize them, and deploy them at an almost pre-conscious level: we have a learned negative response to fat bodies, and their aesthetic transgressions” (Murray 2008: 154). The discourses that exist around fatness reinforce a ‘knowingness’ of what the fat subject is (ibid). These discursive labels are upheld and reproduced, in part, by the pervasiveness of media imagery that exalts the thin body and vilifies the fat body.

With neo-liberal capitalism, there is always a product to aid in the maintenance of bodies.

According to Magdalinski,

commercial television offers a nightly smorgasbord of pills and potions designed to improve both the efficiency and appearance of our bodies, celebrity culture reminds us that a nip here and a tuck there will sustain a youthful visage, and the fitness and dietary fads since the 1970s and 1980s have made us more body-conscious than perhaps any other time in history (2009:31).

This constant iteration of self-awareness and comparison promotes both consumerism and a body consciousness with potentially negative repercussions. In one week, an individual will see between 2000 and 5000 digitally altered images (Orbach 2009). The images depict a technologically manipulated, idealized body, which does not exist in the real world. Orbach states that “the photo shoots which produce the raw pictures of the models are carefully lit to exaggerate features prized today and then further perfected by being Photoshopped, airbrushed, and stretched” (2009:110). The flawless beauty advertised in media images is a product of illusion, of generated images that have been artfully retouched (Bordo 2000). The images of bodies are transformed: some bodies are digitally manipulated to proportions that could not exist in nature. The falsehood promoted in images demonstrates that

[i]t's clear from the photo that great new haircut of Sharon Stone's could change a woman's life. But in this era of digital retouching not even Sharon Stone looks like Sharon Stone. (Isabella Rossellini, who used to be the Lancôme girl before she got too old to be beautiful, has said that her photos are so enhanced that when people meet her they tell her "Your sister is so beautiful") (ibid:144).

This is an example of a technique of governance used by media discourse. Even the self that is portrayed in the media requires enterprise to look as they are portrayed. The image creation business is comprised of many different workers: photographer, hairstylist, make-up artist, fashion stylist, fashion designer, art directors, corporate sponsors, magazine editors, and the account executives from the advertising side (Orbach 2009). The creation of an image is a larger production than the image itself conveys; the finished product is stylized according to the requirements and conceptualizations of a long list of individuals involved in its design. Orbach argues that "in the March 2008 issue of US Vogue, the artistic retoucher, Pascal Danging, changed 144 images: 107 advertisements, thirty-six fashion pictures and the cover" (2009:110). The images of minuscule bodies with ample breasts, curvy bottoms, and waifish waists infiltrate the visual field and help to (re)construct a woman's perception of themselves.

#### *'Headless Fatties': The Image of the Fat Person in the News Media*

One of the images of fat people that is most often disseminated in the news media is the 'Headless Fatty', a term coined by Charlotte Cooper in the late 1990s (Wann 2010). Cooper asserts that the Headless Fatty phenomenon was concurrent with the increased press and news coverage of what both biomedical and media discourse identify as the North American obesity epidemic (Harding and Kirby 2009). Accompanying each article or news piece was a photograph of the body of a fat person with their head trimly cropped out of the picture (Cooper 1998). This type of photograph became a staple of news journalism. Cooper argues "fat people are in the

news all the time, almost constantly; ‘obesity’ returns more than twice as many Google News hits as ‘Madonna’. But we are presented as objects, as symbols, as a collective problem, as something to be talked about” (ibid: 25). In a Headless Fatty photograph, the body is symbolic: the head is the mouth—voice and agency—and the head is the brain—thoughts and opinions. Without a head, the individual is stripped of their subjectivity and humanity. Cooper declares that “instead we [fat people] are reduced and dehumanized as symbols of cultural fear: the body, the belly, the arse, food” (ibid: 26). Furthermore, the beheading of a fat person can represent a sort of punishment for existing, “our right to speak has been removed by a prurient gaze, our headless images accompany articles that assume a world without people like us would be a better world altogether” (ibid: 25). To have a voice in the media the fat person must represent a repentant, self-hating, medicalized discourse about fat (ibid). According to Cooper, news journalism seeks to frame corpulence as disgusting and diseased. Cooper asserts that the fat person is unable to capitalize on the benefits, allure, and desires of a fat body because the fat person is absent or alienated from discourses on fat (ibid: 27). In defining the obesity object in this way converges with biomedical discourse, which conceptualizes obesity as an object in need of intervention and cure.

Cooper continues by likening the media’s surveillance of fat to the day-to-day policing of bodies by individuals who have partake in the media’s hateful labeling of fat. The Headless Fatty is a parody of fat people that is sold back to the wider society—and to the fat person themselves—with hateful ignorance. The use of the Headless Fatty is another technique of governance that is used by media discourse. The enterprising self who is represented by the Headless Fatty seeks to regain personhood through diet and exercise. The media governmentality demonstrates that

only thin people are human and thus attempt to govern the population through goading the enterprising self into action. The fat person is subject to monitoring and inspections by society.

Cooper contends that

you could be anywhere, walking down the street, on your way back from the shops, waiting for a bus...looking gorgeous or looking crappy, and an image of your disgustingness could be produced and reproduced outside of your control, perhaps without you ever knowing it...There are photographers waiting for people like me, lurking, looking for the money shot: a cheaply-dressed, underclass fat woman tucking into some fast food on the street (29).

These sentiments of scrutiny or monitoring come from the media governmentality and the subsequent self-governance that equates thinness with happiness. In this context, the Headless Fatty is the antithetical enterprising self, and thus a representation of what happens to the individual when the self is not governed properly. The implication is that the Headless Fatty photo attempts to fulfill a stereotype of the fat person. Men, women, and children are subject to having their image distorted as long as they are members of the category of 'fat'. Cooper also acknowledges that food is largely absent from the Headless Fatty image; it is often the woman that is coincidentally standing next to a McDonald's billboard who is captured on film. Fat activists Harding and Kirby argue that the Headless Fatty photograph is defamatory to fat people not because of the fear of being 'outed' as fat, but

it's that you're there as the embodiment of a 'crisis', and more often than not, the reporting will reinforce that people like you brought this upon themselves, are emotionally dependent on food, are obviously sedentary, have no self-discipline, are suffering from serious health problems (or will be soon), are costing other citizens money because of those health problems... (2009: 176)

### *Conclusions*

Media discourse creates an object called obesity and conceptualizes it as an aesthetic problem that demonstrates lack of care of the self. A critical engagement with fat activists and feminist

scholars demonstrates that media discourse can be detrimental to populations who exist on the periphery of media representations. Through the restrictive and technologically-produced images, media discourse creates its own visual taxonomy about 'appropriate' bodies and unfathomable bodies; for example, the Headless Fatty. These techniques of governance govern the population by demonstrating the antithetical enterprising self as less than human, or without a head. Media discourse distinctly classifies and ranks bodies by virtue of what and how representations exist.



## Chapter VI: The Marketing and Policy of Food

### *Introduction and Definitions*

Policy and marketing, paired because of their similar interests in consumption and distribution patterns of food and consumerism, are both important in terms of discourse generation and circulation. From the reiteration of science to political anti-obesity campaigns, policy and marketing contribute to the population-wide health crisis (Tillotson 2004). Biomedical discourse conceptualizes obesity as a calorie intake greater than the caloric expenditure; food marketing and policy discourse creates an object of obesity that is less about bodies, and more about access to food and the regulation of markets. The techniques of governance employed by marketing and policy include using advertising that targets children with toys or prizes; policy that bans certain food in school cafeterias; policy that ensures all food products are labeled with nutrition information; and marketing that is health-based, like products that have enriched wheat or vitamins added. However, marketing also uses techniques of governance that are antithetical to the biomedical techniques of governance, like a Lays potato chip commercial that only uses thin actors. That is an interesting example because the overall message is still that thin bodies are worth putting on television, but it's being used to different ends, because fat actors eating potato chips wouldn't fit with the enterprising self, governed by biomedical discourse, who work to become fit and healthy. Marketing and policy discourse also focuses on the marketing of food to children, creating an object of obesity that is conceptualized as harmful for children.

Integrated policy networks include a wide variety of participants including not-for-profit, non-governmental organizations, the private sector, research groups, government, and

professional groups that form broad coalitions—and coalitions of coalitions (MacLean et al. 2010). Using multiple intervention programming, the synergistic and coordinating strategies of policy stakeholders leads to the development of public health strategies and initiatives.

This chapter will explore how marketing and policy discourse creates an object of obesity that is associated with food. Many of the policy measures seek to offset unhealthy food marketing to children by regulating advertisements, subsidizing healthy foods, and providing resources for physical activity. Taste, macro-marketing, the nutrition transition, and fast-food will also be incorporated into the chapter, demonstrating the different layers of marketing throughout the process of food manufacturing. Policy and marketing discourse both contribute to the object of obesity.

#### *The Measures of Markets: The Nutrition Transition, Taste, and Marketing Adaptation*

Over the past 50 years in North America, there have been significant changes in the lifestyle and physical growth of children and adolescents. Dietary habits have changed; children now consume “more sweetened carbonated beverages, fruit juices with added sugars, and fast food and other convenience foods rich in fat, sugar, and salt” (Teran-Garcia et al. 2008: 988). Additionally, children are increasingly sedentary at every grade level and more likely to spend several hours watching television, at a computer, or playing video games (ibid). An increasingly sedentary lifestyle in addition to the consumption of calorie-dense foods directly impacts obesity rates amongst children, adolescents, and adults.

The nutrition transition has been underway internationally for 100 years, beginning when families began to earn additional money and altered their diets by increasing their intake of

animal fats and caloric sweeteners, at the expense of fruits, vegetables, and grains (Witkowski 2007; Dixon 2009). Furthermore, with expanding opportunities in the labour force, employed individuals who are responsible for the preparation of meals substitute nutritionally wholesome meals in favour of more convenient, calorie-laden processed foods and pre-prepared meals (ibid). These ‘convenience foods’—as opposed to ‘functional foods’ that are high in nutrients, low in calories— are super-efficient at delivering calories because of “their calorie density, the super-sizing of portions, the speed with which they are consumed, the frequency of their consumption through grazing or snacking” (Dixon et al. 2006: 636). The departure from ‘home cooking’ in favour of high-calorie convenience foods results in the addition of hidden fats, sugars, and salt in every meal. With an economic transition, urbanization, and women’s labour force participation, convenience foods are proliferating grocery stores from “the humble meat pie to gourmet heat and serve dishes, delivered by firms marketing themselves as ‘cuisine courier’” (ibid: 638). However, it is not only working families that are purchasing convenience foods; “those at the base of the socioeconomic pyramid have been most exposed to these changes [nutrition transition] and have the fewest resources to resist or counteract them” (Ambider 2010: 76). Parents in low-income families are more likely to purchase high-calorie foods, instead of vitamin-rich foods because “on a per calorie basis, energy-dense foods (those containing fats and sugars) are cheap, whereas foods low in energy density, like fresh fruit and vegetables are much more expensive” (Cawley 2007: 32). North Americans are becoming “overweight and obese while consuming more added sugars and fats and spending a lower percentage of their disposable income on food” (Drewnowski and Specter 2004: 6). In other words, a trade-off is made by low-

income, and even high-income families with a varying severity of consequences. Figure 2.1 demonstrates the comparisons of aspects of food in the United States and Canada:

**Figure 2.1**

<b>Aspect of Food</b>	<b>In Ancestral Environment</b>	<b>In Developed-Nation Environment</b>
Quantity available	Sufficient but not abundant	Superabundant
Temporal availability	Often highly seasonal; episodically rare	Most foods available year- round
High caloric density foods	Rare	Common
Energy expenditure necessary to obtain food	Substantial	Minimal
Time expenditure necessary to obtain food	Substantial	Minimal
Risks inherent in obtaining food	Substantial	Minimal
Function of food	Primarily nutritional with some socio-sexual functions	Social often more important than nutritional

*Source:* Power, Michael L. and Jay Schulkin. *The Evolution of Obesity*. 43, 2009.

Figure 2.1 demonstrates that the availability of high-calorie foods have become increasingly common, whereas the risks and energy expenditure necessary to obtain food has decreased. Therefore, more high-fat food choices are widely available and increasingly cost-effective for most familial budgets. The nutrition transition has facilitated a different marketing strategy that relies on adaptation and macro-marketing.

Adaptation in international marketing, or the willingness to adapt or at least accommodate, is required on both a small and large scale (Cateora and Graham 2005). Marketers must adapt to meet cultural differences and advertisers must adapt to target certain demographics—like children or ‘health-conscious’ families. Companies regularly modify their ‘global’ products to suit the tastes of different markets. For example, companies like Nestlé or McDonald’s formulate different menus for different markets; in China, Nestlé has flavours like red bean and sesame-flavoured chocolate, and McDonald’s offers ‘McVeggies’ or ‘Maharaja Macs’ in India and ‘Dulce de Leche’ pancakes in Uruguay (Witkowski 2007). This macro-marketing includes substituting traditional Western side-dishes like mashed potatoes and coleslaw for fungus, bamboo shoots, and rice porridge in China. The commonness of companies’ global adaptations is then applied to different domestic marketing strategies. Food is not marketed solely as a commodity, but as a cultural good; these marketing adaptations may also be encouraging increased levels of energy intake that are potentially excessive for more and more consumers. The taste of fast-foods, similar to other high-calorie convenience foods, is also a factor in its popularity.

The low cost of energy-dense foods is reinforced by the high palatability of sugar and fat. Laboratory studies demonstrate calorie-dense food provide more sensory enjoyment and pleasure than foods that are not energy-dense (Dixon 2009; Zheng and Berthoud 2008; Drewnowski and Specter 2004). In times of dietary scarcity, “human preferences for energy-dense foods represented an advantage in survival. Human taste preferences for sugar and fat are either innate or acquired very early in life” (Drewnowski and Specter 2009: 9). Even children as young as 3 years old show a taste preference for potato chips and chocolate cookies over fruits and

vegetables. In children, it is understandable that food preferences are more likely to be guided by taste, whereas “external factors (such as environmental cues) contribute more to adult perspectives. From a health perspective, preferences for sweet foods are common in children but diminish with age, and preferences for high-fat foods endure” (Raine 2005: 9). As the food industry has developed over the past 100 years, Americans largely report choosing and buying food based on convenience, taste, and economic reasons rather than health reasons (Tillotson 2004). Therefore, due to the nutrition transition and the introduction of convenience foods, macro-marketing and micro-marketing strategies by food companies, economic and taste preferences, North American food choices have undergone a radical shift over the past century.

#### *The Conditions and Assumptions of Markets: Demographic-Specific Marketing Strategies*

In the past 10 years, alongside the advent of what the media present as an obesity epidemic, food marketing has changed in several ways. Firstly, people are being “encouraged to think about and consume food in a totally new way, that is, to repair or prevent disease” (Dixon et al. 2006: 640). In addition to the consumption of food as a social function, the nutritional benefits are still salient in consumers’ decision-making. Marketing strategies are “using people’s fears about their health and possible future disease risk...as a basis for development and marketing” (Heasman and Melletti 2001: 33). With increased media reporting of risks associated with certain foods, North America has become sensitized with eating a certain way in order to stave off disease (Lawrence and Germov 2004). If certain foods can lead to ill-health, then other foods should also be the pathway to health. This reasoning especially resonates with individuals in higher economic brackets who can afford to pay for organic, fresh, and unprocessed foods. Foucault’s care of the

self would argue that individuals will master their desires and make lifestyle choices that conform to universal codes of conduct.

Secondly, marketing assumes that individuals have a loss of intuitive understanding about most food products, for example, yogurt can be low in carbohydrates and high in fat or high in carbohydrates and low in fat (Dixon et al. 2006). Therefore, individuals have limited capacities and competence in assessing marketing information. Policy attempts to pressure governments into assisting the public to become more confident and well-informed consumers; the rationale is that in helping to enhance individual determinants like nutritional knowledge, consumers will make healthier food choices (Raine 2005). However, companies capitalize on the consumer's lack of information and market their products based on the convenience, taste and economic reasons that consumers understand (Tillotson 2004). This marketing strategy targets a wider audience of consumers, assuming that certain words, slogans, or ingredients will appeal to different demographics (words like 'easy', 'delicious', 'fortified', and 'low fat' or 'no fat').

Lastly, there is a form of marketing that targets young children, using incentives like toys. Food marketing to children is not confined to television advertising; it can occur through several media outlets like cinema, radio, magazines, outdoor advertising, and mobile phones (Kelly et al. 2010). The inundation of food advertisements in the media panders to children's natural preference for sugary foods. The marketing of "unhealthy food to children is linked to the increase prevalence of obesity worldwide" (ibid: 336). Additionally, the methods used by advertisers to entice children are increasingly questionable; in 2008, the American Federal Trade Commission estimated that "in 2006, ten restaurant chains spent \$360 million to acquire toys to

distribute with children's meals and sold more than 1.2 billion meals with toys to children aged <12 years" (Otten et al. 2012). Furthermore, a 2010 analysis of children's meals at the 12 largest fast-food chain restaurants in America found a combination of 3039 possible meals, of which only "12 met the nutrition criteria for pre-schoolers and 15 for older children" (ibid). With the lack of healthy food choices for children at fast-food chain restaurants, food advertisements for these companies are consequently marketing unhealthy foods to children. The Committee on Food Marketing and the Diets of Children and Youth contributes to the development of unhealthy eating patterns in children; these unhealthy behaviours lead to childhood obesity (2006). Careful not to incite an anti-industry stance among the public, national advocacy groups encourage parents to become active in the resistance against what they define as the manipulative methods that are being used to target children. Lobstein argues that "[only] a few parents move to the stage of getting active and making complaints—complaining at the supermarket checkout about the array of confectionery at child height, complaining at the school about the lack of water fountains...complaining to their governments about TV advertising to kids" (Lobstein 2009: 82). Food marketing to children evokes a different public and legislative response; the express targeting of a vulnerable group is more of a cause for concern than marketing to health-conscious adult demographics.

### *The Measures of Policy: Childhood Obesity Preventative Policy*

No one wants to take responsibility for the problem. The food industry blames those who do not make proper choices in what foods they eat. Likewise, those blamed for not making proper choices accuse the food industry of facilitating their addiction to its fatty and unhealthy food. Not even the government, which may have the greatest ability to effectuate positive change, can say it has taken sufficient steps to fight this problem (Thompson 2004: 544).



As Thompson describes, there are several stakeholders who seek to place responsibility for the obesity epidemic on another group. However, Thompson alludes to the responsibility of all stakeholders to combat the obesity epidemic. One key means of challenging obesity, according to this discourse, is policy intervention. An intervention is “a single public health activity meant to positively affect the health of target groups, whether that be aimed towards prevention, control, or reduction of negative conditions, or enhancement or maintenance of positive ones” (MacLean et al. 2010: 2). There are a few major issues that policymakers are intent on tackling in an effort to make a positive impact on the obesity epidemic—in itself, a metaphorical comparison that captures both the attention of the public and the media. The implementation of policy is a form of governmentality that manages individuals through legislation and law.

One area for policymakers is the regulation of food advertising aimed at children. According to Wadden et al., the average American child views at least “10,000 food advertisements on television each year; 90%–95% of these are for sugared cereals, fast food, soft drinks, and candy. There is clear evidence that exposure relates to food preferences and that the content of food ads aimed at children overwhelmingly favors foods of poor nutritional quality” (2002: 520). Although direct regulation is less feasible than offering time to pro-nutrition messages, the particular concern is to increase advertising regulation in schools. With the wide availability of fast food, snacks, and soft drinks in cafeterias, the presence of vending machines, and the ‘super-sizing’ of fast-foods outside of the home, children are environmentally inundated with calorie-dense foods (Drewnowski and Specter 2004). To challenge this childhood exposure, policymakers are also considering the prohibition of fast foods and soft drinks from schools through legislation like the Harkin/Murkowski School Nutrition Amendment in the

United States (Lowery 2009). Increasingly schools are importing “fast food franchises into cafeterias and signing contracts with soft drink companies that increase exposure to food low in nutrition” (Wadden et al. 2002: 520). Having health foods predominate in cafeterias and vending machines is a step towards modeling proper eating habits in children. The Harkin/Murkowski School Nutrition Amendment sought to ensure the sale of healthy food and beverages in schools across the country. Although these standards were not incorporated into the Farm Bill, advocacy efforts seek to include the policy and legislation for future sessions. In British Columbia, the healthy schools initiative, *Actions Schools! BC*, is based on a socio-ecological model and has implemented a school-based physical activity and healthy eating program that was initially aimed at elementary school children, and later expanded to include high school students. The program is focused on creating school environments where students are given many new opportunities to make healthy choices. These opportunities fit with the notion of self-autonomy and the right to make choices about food; however, this self-autonomy is largely targeted by governmentality that seeks to govern individuals to choose healthier, less fatty options in school cafeterias. Supportive community and provincial environments have provided the resources and political investment required to ensure program uptake and sustainability (MacLean et al. 2010).

Advocacy is needed “for congressional support of legislation for child nutrition, including the school lunch program, and for the integration of fitness activities with teaching” (Lowery 2009: 237). According to this discourse, it is important to intervene in children’s eating habits because evidence suggests that early interventions increase children’s preferences for healthy foods (ibid). Only a small minority of young children have dietary habits that meet food and nutrition guidelines (Teran-Garcia et al. 2008). Other state-level policies that

apply to children's anti-obesity legislation include themes like: curriculum for health and physical education classes; BMI reporting: "require or allow schools to measure, monitor, and report students' body mass indexes in conjunction with intervention strategies to help reduce childhood obesity" (Lowery 2009: 238); soda and snack taxes; and statewide initiatives to establish farmers' markets and walking paths. All of these policies use biomedical discourse that creates childhood obesity as a threat to national health. Furthermore, children are classified as a vulnerable population that ought to be protected from the persistent expansion of the obesity epidemic. As Barboza notes, "we don't sell children guns, alcohol or drugs, but we do allow them to be exploited by food companies" (qtd. in Lawrence 2004: 66). National advocacy groups, like the National Taskforce on Obesity, make several recommendations to schools including: that all schools are to be encouraged to develop school policies that promote healthy lifestyles; the development of a code of practice in relation to the content of vending machines; and that a regularly reviewed code of practice is enacted that monitors industry sponsorship and funding in schools and local communities (Kelly et al. 2010). The political preoccupation with childhood obesity is representative of a staunch nation-wide anti-obesity stance.

### *Conclusions*

Policy and marketing discourse create an object of obesity that is primarily defined by access and marketing of food. Policy and marketing impact certain groups of individuals differently; for example, children are marketed to with incentives like colourful toys. With little overall comprehension about food marketing, marketers have the opportunity to deceive, exaggerate, or withhold certain information about their products. Legislators, advocacy groups, and policymakers attempt to balance the unbridled marketing potential by ensuring that healthy foods

and lifestyles are also represented, and substantiated, by the food industry. Policymakers largely encourage public education about healthy living and the participation of citizens, like parents or teachers, in the marketing campaigns of industries. Policy and marketing discourse reinforce the biomedical definition of obesity as a disease that requires prevention and cures and they use similar techniques of governance.

## Chapter VII: The Race of Obesity

### *Introduction and Definitions*

Epidemiological discourse creates an object of obesity that constructs biological categories of race and ascribes certain predispositions and conditions to these categories. In using race as a variable in research, medical researchers present their readership with the assumption “that certain racial groups have a special predisposition, risk, or susceptibility to the illness studied. Since this presupposition is seldom warranted, this kind of comparison may be taken to represent a subtle form of racism” (Osborne and Feit 1992:275).

Tracing the advent of the racialization of obesity to the geneticization of race, this chapter explores the epidemiological discourse of race as a biological category and its relation to Canadian indigeneity. Race and obesity is an interesting intersection with which to apply both social and medical knowledge for a comprehensive understanding of the variables and practices that contribute to understandings of indigeneity. The governmentality of racial discourse uses techniques of governance like having an Aboriginal (or other visible minority) checkbox on educational and medical forms, using Aboriginal populations in medical studies, and having Aboriginal-peoples specific literature on treatments for diabetes. These techniques of governance continue in the tradition of biomedical discourse governmentality. Using theories of geneticization, epidemiology, and racial profiling in medicine, this chapter will explore the epidemiological discourse construction of obesity as a racialized object.

The intersection of race, morality, and obesity has a long, complicated history. Obesity is part of a discourse on race that “surfaced in the nineteenth century, shaping the very manner by

which obesity is understood today” (Gilman 2008:102). Before obesity came to be considered as a ‘modern epidemic’, scientific anti-Semitism characterized the body of the ‘fat Jew’ as a site for disease and decay. The obese body became a marker for Jewish difference, presented antithetically to the healthy Christian ‘true believer’ (ibid). Like the eugenics movement that understood identities through biological concepts and metaphors, the archetype of the ‘fat Jew’ married anti-Semitism and the new social sciences (Raffles 2010). Scientific discourse about Jewish-fat inheritance, or a predisposition to fat, linked a gluttonous lack of dietary self-control to poor hygienic traditions (Gilman 2008).

In the Hebrew Bible, gluttony was absent in either version of the Ten Commandments, unlike Christian theology’s enumeration of ‘Seven Deadly Sins’ (Gilman 2004:50). Therefore, the biblical contrasts between Christian and Jewish attitudes towards obesity legitimated the rhetoric of Jewish excess and Christian restraint. Anti-Semitic beliefs in the nineteenth century became reified through biological scientific evidence and thus legitimated Jewish cultural stereotypes through science. Jewish people were characterized not as victims of disease so much as the carriers of disease; the implication being that disease was an inherent trait as opposed to a treatable (curable) condition (Raffles 2010). The concept of disease at this time, according to Raffles (2010), “both necessitated and facilitated the isolation of particular groups as sites of medical intervention and social control. The apparent predisposition of Jews and certain others to infection was self-evidently a mark of cultural primitivism” (158). Similar to 21st century media characterizations of ‘fat’, the association of race and obesity is reductive and emphasizes that obesity is pathology. When obesity is pathologized as a ‘disease’ or an ‘illness’, it gives license for people to label overweight communities as ‘sick’. This is propagated through racialized

discourse that has produced studies like the Pima Indian study that lead the Pimas who participated to say that “it [Type II diabetes] is in our blood” (Goodman 2000:1701). The techniques of governance lead to the group autonomously choosing to identify themselves as biologically predisposed to Type II diabetes. Unlike some other techniques of governance, this technique is intended to manage the population of Aboriginal peoples by identifying them as inherently sick, and therefore in need of medical intervention.

*The Measures of Race: Epidemiology, TGH, and Paternalism*

The epidemiology of obesity is relatively new, paralleling the marked increase of the ‘obesity epidemic’ over the past decade (Hu 2008). Epidemiologists have produced “unprecedented amounts of data on the health consequences and determinants of obesity” (ibid:7). The crux of the epidemiology of obesity is that obesity is a ‘problem’ or ‘danger’ to health. As such, the emergence of the field of epidemiology has been described as a “response to the political problem of dangerous behaviours in the general population” (O’Neil et al. 1998:230).

Epidemiological discourse is both a response and an instrument of disciplinary power to regulate so-called “precarious lifestyles within problematic populations” (Poudrier 2007: 242). In order to make the concept of health meaningful, epidemiologists must critically examine “the epistemological, ontological, and ethical features of their work and the implications that this knowledge has, not only in the lives of the ‘diseased’, but on the trajectory of future health-related research” (Poudrier 2007:242). The effects of epidemiological diagnoses, such as diseased, impact a variety of populations and sub-populations by making the distinction between health and ill-health; epidemiological labels have repercussions for individuals deemed unhealthy or living so-called dangerous lifestyles.

Epidemiological discourse presents the concept of a biological race as a rough proxy for health determinants, despite many biologists agreeing that “there is no cluster of genetic properties possessed by all and only individuals customarily sorted at some site as members of the same racial group” (Fee 2006:2988). According to Poudrier, “where populations are epidemiologically at-risk and where scientific explanation proceeds with a hazy inclination to...finding and reifying genetic racial susceptibility, the racialized diseased gene equation thrives” (2007: 252). Scientific concepts, like a biological race, can endure and be made to seem real if they are socially, politically, and economically useful (Goodman 2000). Conceptual distinctions between race and ethnicity in epidemiological and population health research propose that race is a natural unit that describes populations that share biological characteristics whereas ethnicity are culturally distinct populations (Bourassa 2004). However, these terms are used interchangeably and “often [leave] out a discussion of the processes by which racism creates conditions of poor health for certain health groups” (ibid: 23). Wasserman acknowledges the static nature of a genome profile; even if medical profiles included gene-gene interactions, “it could not incorporate the patient’s history, the environmental circumstances and events that interact with his genome and individuate him still further” (2010: 127). Goodman (2000) states that “as a static and typological concept, race is inherently unable to explain the complex and changing structure of human biological variation” (1699). Nevertheless, as Epstein (2007) acknowledges, a debate has arisen:

out of the convergence of three streams of public and expert discussion: disagreement in the health arena about the reliability and meaning of schemes of racial classification, perceptions about the booming production of racial ‘difference findings’ in medicine, and recent debates in the field of population genetics about the meaning of race (205).



The question of the incorporation of race and ethnicity—or any dimension of identity—in biomedical discourse is part of the ongoing debate about race as a biological variable.

The construction of an Aboriginal identity in Canada is based, in part, on epidemiological portrayals that depict Aboriginal communities as rife with illness, poverty, disorganization, and disease (ibid). Epidemiological studies claim that Aboriginal people are predisposed to obesity (ill-health) due to a variety of biological factors (Cass 2004). For example, the thrifty gene hypothesis (TGH) posits that Aboriginal obesity is a product of ancestral hunter-gatherer genes that became ill-suited to the 21st-century change in environment which included an increasingly sedentary lifestyle with higher caloric consumptions. The TGH has been employed in research to explain why type 2 diabetes mellitus (T2DM) “disproportionately afflicts a range of disadvantaged ethnoracial groups” (Paradies 2003:204). Neel developed the TGH in 1962, arguing that during 99% of human existence, humans experienced frequent cycles of alternating famine and feast (Neel 1998). Therefore, according to Neel, hunter-gatherers developed a genotype that is exceptionally efficient in “absorption, storage, or utilization of nutrients, which has now become maladaptive in a first-world context of sustained energy surplus” (ibid: 54). Using the hunter-gatherer hypothesis, the TGH supposes that indigenous peoples are physiologically predisposed to obesity because of their genetic ability to store fat better than European-descendants who evolved from hunter-gatherer societies sooner than Aboriginal peoples (Reading 2003). The TGH describes that Aboriginal peoples remained hunter-gatherers longer than European peoples. The TGH is yet another example of a technique of governance that is used to manage the population of Aboriginal peoples by positing that they are inherently

diseased. Self-governance, then, would result in seeking help from medical professionals or other paternalistic entities.

The TGH is posited in relation to Indigenous Australians, Native Americans, and Canadian Aboriginal peoples (Paradies 2003). The TGH demonstrates that European descendants have had more evolutionary time to adapt to the current environment than Aboriginal peoples, whose environments changed more recently. According to Poudrier, “the thrifty gene draws significantly on problematic and intersecting binaries, notably: civilized/primitive, Aboriginal/non-Aboriginal, and science/culture” (2007: 239). The TGH has been used to legitimate racial profiling in medicine and further colonialist discourses.

In 1992, Barker and Hales developed the Thrifty Phenotype Hypothesis (TPH) based off of the Barker Hypothesis, and as an alternate theory to the TGH. The Barker Hypothesis associates reduced fetal weight at birth with chronic adult conditions. The TPH suggests that the nutritional status of the fetus—caused by the effects of maternal malnutrition or maternal diabetes—determines the predisposition to non-insulin-dependent diabetes mellitus (NIDDM) later in life (Poudrier 2007:246). The main difference between the TGH and the TPH is that the TPH postulates “the effects in one generation of either malnutrition or of diabetes are passed on to the next in the form of increased susceptibility, but not through genes” (Fee 2006:2992). Therefore, NIDDM might not be as closely linked to genetic susceptibility as it is to a variety of social factors—including poverty—that impact certain populations. Nevertheless, Barker and Hales assert that the trend of:

subsequent studies of individuals [Pacific Islanders] born after the war in better nutritional circumstances (but for whom unfortunately we do not have birth weights or infant weights) have shown a substantial reduction in glucose intolerance. This population is particularly informative because over the years of study the amount of obesity, although great, has not increased. In contrast, in the Western world obesity is increasing and, until this trend ceases or is reversed, the benefits of improved fetal and infant growth may not be evident in declining rates of type 2 diabetes (2001:13).

Both the TGH and the TPH are similarly recognized in the scientific literature as providing insight into the genetic and biological predisposition of certain racialized groups to NIDDM.

These types of studies are techniques of governance that are used to manage the populations of Aboriginal peoples that are being studied. It also serves as further governance when the results are published and distributed to other individuals who self-govern accordingly.

Probyn-Rapsey defines paternalism as “characterized by domination coupled with love and affection, where one party, which assumes superiority, purports to act ‘in the best interests’ of the subordinate” (2007: 97). Protection, a key precept in paternalist discourse, is embedded in an institution like a sovereign or a governmental regulatory body. With a focus on the ill-health in Aboriginal communities, epidemiological studies demonstrate that Aboriginal communities have a higher prevalence and greater severity of several co-morbid chronic vascular diseases—hypertension, diabetes, and proteinuria (Cass 2004). Through this racial discourse, Aboriginality becomes an indicator of ill health. Scientific studies on NIDDM serve to reinforce the need for interventionist methods; for example, a recent study demonstrated that “in some age and sex groups (e.g., women between 45 and 54 years of age), almost 90% of the respondents had a body mass index in the overweight or obese range” (MacMillan et al. 1996:1572). Increasingly, intervention programming has been suggested as a key approach to developing public health initiatives (MacLean et al. 2010). When obesity is characterized as an illness, Canadian health

discourses about Aboriginal communities serve to legitimate governmental regulatory surveillance and the micro-management of Aboriginal peoples (O’Neil et. al 1998). Beginning in the early 1900s, a medical surveillance system, implemented by the Canadian federal government, began in British Columbia because of the “perception among non-Natives that the First Nations were naturally or inevitably diseased” (Fee 2006:2994). The image of a sick, undisciplined Aboriginal community serves to justify paternalism and dependency.

Probyn-Rapsey states that “[epidemiological] rhetoric gets to the heart of the paradox of protection: to protect from the thing that one *is* is not protection so much as a confirmation of domination” (2007: 94). Epidemiological discourse has been used to suppress the legitimate claims of Aboriginal peoples for full participation in Canadian society insofar as “the portrait of a sick, disorganized community implicit in this epidemiological discourse is increasingly dangerous in a tough world of negotiation for self-government and economic development” (O’Neil et al. 1998:231). The need to protect Aboriginal peoples from themselves is implicit in public health policies and reified by genetic research.

### *The Conditions and Assumptions of Race: Geneticization and Racial Profiling*

Racial profiling, refers to “the use of generalizations based on race or ethnicity to guide actions directed towards the object of those generalizations” (Wasserman 2010: 120). Racial profiling is the process by which physicians and other medical professionals make visual assessments concerning the race of their patients, making note of these assessments in patient histories (Acquaviva and Mintz 2010). The rationales for the inclusion of race in biomedicine center around the “idea that a patient’s race has relevance to understanding the patient’s genetic risks of

various illnesses” (ibid: 702). An often-debated process, racial profiling hinges on a biological understanding of race as a category that defines the treatment options and medical prognoses of the individual. Profiling in medicine is oft debated because it’s a question of whether or not knowledge of an aspect of an individual’s identity, like their race, should guide medical practice, diagnosis, and treatment (Epstein 2007). Is racial profiling good clinical care? Does phenotypic diagnoses lack scientific rigour? Racial profiling is another example of a technique of governance. The controversy about racial profiling in medicine reflects the:

convergence of three streams of public and expert discussion: disagreement in the health arena about the reliability and meaning of schemes of racial classification, perceptions about the booming production of racial ‘difference findings’ in medicine, and recent debates in the field of population genetics about the meaning of race (ibid: 204).

Race in medicine is an interesting intersection of policy, genetics and environment, public understandings of science, and colonial and anti-colonial narratives. The continuing debate about genetic difference, sameness, and validity spans sociology, science and technology studies, biomedicine, and cultural studies.

Geneticization is defined as the “condition under which cultures of individuals and groups become defined by scientific and genetic categories through a complex interplay between techniques of prenatal screening and contemporary discourses in genetic predication” (Lippman 1991:19). It is “an ongoing process by which differences between individuals are reduced to their DNA codes, with most disorders, behaviors and physiological variations defined, at least in part, as genetic in origin” (2007: 240). Aboriginal populations are subject to geneticization due to the epidemiological characterization of obesity as an Aboriginal problem. Goodman notes that “the designation of a pan-racial syndrome may fix in one’s mind the idea of homogeneity within race

and the notion that the syndrome is innate” (2000: 1701). Many epidemiological studies characterize obesity—or, more specifically type 2 diabetes mellitus (T2DM)—as a racialized disease. For example, extensive research of the incidence of T2DM in the Pima Indian people seeks to demonstrate a genetic variation that distinguishes Native Americans from European Americans (Karegowda, Manjunath, and Jayaram 2011; Lekkas and Mikhailov 2010; Pavkov et al. 2009; Razak et al. 2006; Goodman 2000). This conceptualization of a pan-racial syndrome that affects Aboriginal populations solidifies the idea of homogeneity within race and the understanding that the disease is innate. Furthermore, the biomedical inundation of race as biology quotes the Pima Indians as accepting that diabetes is ‘in our blood’ (Goodman 2000: 1701). The lack of scientific understanding of human population genetics has led to the structuring of studies that use racial categories as something that are biologically meaningful (Graves and Rose 2006: 486).

### *Conclusions*

Epidemiological discourse presumes race is a meaningful concept, and uses it as a basis to conduct research interested in finding links between race, like Aboriginal peoples in Canada, and disease, which in turn lead to the construction of disease profiles for racialized groups. Through the racialization of obesity, the geneticization of race, and the advent of racial profiling in medicine, Aboriginality and biomedicine intersect through epidemiology to create an object called obesity.

## Chapter VIII: Conclusions

What is obesity? Obesity is a chronic disease that involves genetic, physiological, behavioural, and metabolic components. Obesity is the medicalization of fat. Obesity is an excess of fat that is associated with a number of comorbid afflictions including cardiovascular, cancer, and other noncommunicable diseases. Obesity is not a predictor of health. Obesity is representative of an environment that promotes consumption of calorie-dense foods and the adherence to a sedentary lifestyle. Obesity is a metabolic syndrome that is highly prevalent in the Oji-Cree First Nation peoples, largely associated with T2DM and the presence of an HNF1A mutation (Pollex et al. 2006). Obesity is a rejection of the fat body. Obesity is a consequence of marketing. Obesity is an epidemic. Obesity is a cause for concern. Obesity is a predictor of ill-health. Obesity is allied with the media in portraying certain types of bodies and necessarily ‘othering’ so-called deviant bodies. Obesity is an area of study. Obesity is a livelihood. Obesity is bad. Obesity is neutral. Obesity doesn’t exist.

### *Introduction*

The pace at which new discourses are emerging and creating the object of obesity is rapid. In the past twenty years, obesity has been conceptualized differently than it had been in the early half of the 1900s. The way that obesity is constructed through discourse has changed from an indicator of wealth and success to a sign of disease and excess,. However, in this shift in its construction, several discourses emerged that presented distinctive definitions, taxonomies, metrics, and stakeholders. Biomedical discourse began to engage with obesity as a health problem,

consequently influencing epidemiological studies of disease in certain racialized populations. Similarly, if biomedical discourse constructs obesity as a disease, then policy discourse responds to the medical prescriptions and treatments. Marketing discourse is linked to media discourse that assesses bodies through the commercialization of both diet and bodies. In response to biomedical discourse, fat studies discourse emerged to question the medicalization of fat. Each of these discourses create distinct objects that are each identified as obesity, but that are characterized in different ways.

### *Governance and Obesity*

This thesis has demonstrated how different discourses differently, and similarly, use techniques of governance to manage populations. Through techniques of governance, individuals can become self-governing, evaluating themselves into alignment with political objectives (Rose 1996). This self-governing leads to the development of technologies of the self that help individuals conduct themselves in order to attain happiness, wisdom, perfection, and other valuable ethics. Through enterprise and autonomy, individuals align their self with political objectives, like eating to lose weight or eating for pleasure without regard to caloric intake. Biomedical discourse has a lot of powerful techniques of governance that are reiterated through other discourses, like racialized discourse, media discourse, and policy and marketing discourse. Fat studies discourse governmentality responds to the techniques of government espoused by biomedical discourse; therefore, fat studies discourse provides antithetical politics to biomedical discourse. The power of the discourses allows people to self-govern, as power is productive. However, not all techniques of governance inspire the same autonomy and enterprise in all



individuals, which is why not everyone adheres to regularly exercising or taking the stairs instead of the elevator.

Each of the discourses employs different techniques of governance, although they might have similar politics: for example, the goal to lose weight. Through Foucault's theories on governance and power, this thesis has demonstrated: the complementarity between the politics of several discourses, the similar and different techniques of governance, and the responses from self-governing, enterprising individuals.

### *Childhood Obesity: A Comparison*

Childhood obesity is an interesting vehicle for comparison and will be used to illustrate the intersections that exist between the discourses discussed in this thesis. The discourses address childhood obesity, with the exception of fat studies that, itself in its infancy, has not directly engaged with childhood obesity as distinct from adult obesity. That being said, I argue that a fat studies discourse would approach childhood obesity with the same skepticism with which it approaches adult obesity; namely, that the biomedical concern with obesity as a health problem does not accurately reflect the lived experience of fat in any individual. Biomedical discourse is gravely concerned with childhood obesity as an indicator of adult obesity, which is, according to this discourse, an indicator of early morbidity. Policy is concerned with the marketing of high-calorie food products to children, using the same biomedical theory that obese children will encounter medical obstacles that will continue into adult life. Furthermore, both biomedicine and policy discourses assume that children need to be protected from obesity and that making healthy choices, like diet and exercise, are the responsibility of the caregiver.

Marketing discourse recognizes that certain younger demographics are excellent proxy consumers because they ask their parents to buy what they see advertised through the media. The media straddles policy and marketing by both disseminating food advertisements and adhering to policy guidelines about acceptable marketability. The media serves as a catalyst for several discourses, using several forms of mass communication to further biomedical, policy, and marketing discourses and, although to a lesser extent, fat activist discourse.

Each of the aforementioned discourses engage with childhood obesity in the same way they engage with obesity; each discourse creates distinct objects called childhood obesity, but they create them in distinct ways. Each discourse has created its own language with which to talk about obesity; there are some topics that are common to different discourses, but they are largely approached using a different vocabulary, definitions, and classifications. That being said, their techniques of governance are politically aligned in that they are both managing the population to the same end: weight loss or obesity prevention.

Each discourse could benefit from the critical engagement of other discourses. Through the responses to critical engagement, each discourse has the opportunity to reflect on their distinct choices. For example, marketing discourse and biomedical discourse similarly conceptualize obesity as a health problem. Biomedical discourse contends that, using Foucault's care of the self, if individuals made better lifestyle choices, like diet and exercise, to take care of their bodies, then they would not be obese. Food marketing discourse uses this definition of obesity as a health problem, and commercializes health through certain diets or supplements that can be bought in an effort to take care of the self. Conversely, food marketing also markets

calorie-dense products that biomedical discourse deems to be unhealthy. Marketing discourse capitalizes on several different constructions of obesity, dependent on their marketable value. Whereas biomedical discourse characterizes obesity as an excess of calorie intake without calorie expenditure, food-marketing discourse characterizes obesity as something that can be prevented by purchasing healthy foods. One of the differences between biomedical discourse and food marketing discourse is the audience: biomedicine targets the patient while food marketing targets the consumer.

### *The Fortification of Discourses Through Response to Critique*

This section will posit fat studies discourse against the biomedical discourse to provide an example of the possibility for growth through critical engagement. As I outlined earlier, fat studies was largely developed as a response to the pervasive biomedical model of obesity; however, without an engagement with the materiality of fat, the discourse cannot effectively respond to biomedicine. By not engaging with adipose tissues, hormones, free fatty acids, insulin resistance and so on, fat studies discourse poses a weak resistance to biomedicine's categorization of obesity as illness because each discourse is using a different language to describe the object of obesity. Biomedical discourse constructs obesity as illness because it understands the biological functions and repercussions of excess fat. Fat studies discourse does not use biological language in its definition of fat. Without engaging in a common language, fat studies will fail to make any impact in the biomedical community because it will be dismissed as wholly immaterial and therefore completely relativistic.

On the other hand, fat studies might argue that biomedicine needs to recognize its own dependence on science as pure (Shapin and Schaffer 1985). Science has never purified itself from other modes of knowledge (ibid). Bauman and Briggs contend that there has never been a pure language form which one can construct a pure science (2003). Biomedicine relies upon its association with statistics, numbers, logic, and evidence as objective. Objects have to be something that scientists can work with and be able to study. Biomedicine relies on the scientific method in which scientists and medical professionals acquire new knowledge, gather data that are observable and measurable, progress in a linear manner, and perform experiments. This sometimes obscures the fact that science is dependent upon thought collectives (Fleck 1979) or paradigms (Kuhn 1970), and a set of practices that are social. For this reason, Shapin argues science is not pure, and knowledge “as much as the state, is the product of human action” (Shapin and Schaffer 1985: 344). Therefore, biomedicine’s perceived objectivity depends on thought collectives and paradigms. Biomedical discourse is therefore vulnerable to critique because science only produces facts within this social milieu. Obesity is not studied because it is objectively a marker of ill-health; obesity is studied because of a set of social norms that identifies obesity as an object of study. If fat studies discourse is too intangible, biomedical discourse is perhaps too entrenched in biology. These kinds of critiques could provide a new perspective for the discourses that engage with other constructions of obesity.

### *Final Conclusions*

This thesis sought to outline how several discourses can create distinct objects that might be similarly identified, but that are characterized in different ways. In analyzing how each discourse constructs the object of obesity, this thesis demonstrated the variety of definitions and

conceptualizations that exist for one object. Through the critical engagement of different discourses, obesity becomes a more comprehensive object. Each discourse has similarities and differences in its created definitions, prescriptions, metrics, and language choices. “What is obesity?” is a question that has a wide range of responses. Discourse analysis is a rigorous method that examines an object through different discourses that make it possible to understand objects in a particular way. For the purpose of this thesis, literature from biomedicine, fat studies, policy and marketing studies, media studies, and epidemiological studies were analyzed in an effort to: a) find points of collaboration between the discourses; b) demonstrate the similarities between the discourses; and c) demonstrate the points of departure between the discourses. Drawing on the work of several discourses, this thesis explored how each discourse differently, and similarly, used techniques of governance to manage populations of individuals.

## References

- Acquaviva, Kimberly and Matthew Mintz. 2010. "Are We Teaching Racial Profiling?: The Dangers of Subjective Determinations of Race and Ethnicity in Case Presentations". *Academic Medicine* 85(4): 702-5.
- Ambinder, Marc. 2010. "Beating Obesity". *The Atlantic Monthly* 305(4): 72-83.
- Apter, David. 2010. "An approach to interdisciplinarity". *United Nations Education, Scientific, and Cultural Organization*. 196: 183-93.
- Bardia, A., Sherman G. Holtan, Jeffrey M. Slezak, Warren G. Thompson. 2007. "Diagnosis of obesity by primary care physicians and impact on obesity management. *Mayo Clinic Proceedings* 82: 927-32.
- Barry, Colleen L., Victoria L. Brescoll, Kelly D. Brownell, and Mark Schlesinger. 2009. "Obesity Metaphors: How Beliefs about the Causes of Obesity Affect Support for Public Policy". *The Milbank Quarterly* 81(1): 7-47.
- Bauman, Richard and Charles L. Briggs. 2003. *Voices of Modernity: Language Ideologies and the Politics of Inequality*. Cambridge, UK: Cambridge University Press.
- Bauman, Zygmunt. 2000. *Liquid Modernity*. Malden, MA: Polity Press.
- Becker, Carol. 2004. "Interdisciplinarity". *Symploke* 12(1-2): 191-208.
- Blass, Eliot M. 2008. "Preface" Pp. xvii-xx in *Obesity*, ed. Eliot M. Blass. Sunderland, MA: Sinauer Associates, Inc.
- Boothroyd, David. 1996. "Foucault's alimentary philosophy: Care of the self and responsibility for the other". *Man and World* 29: 361-86.
- Bordo, Susan. 1993. *Unbearable Weight: Feminism, Western Culture, and the Body*. Berkeley, CA: University of California Press.
- Bordo, Susan. 2000. "Beauty (Re)Discovers the Male Body" Pp. 112-153 in *Beauty Matters* edited by Peg Zeglin Brand. Bloomington, IN: Indiana University Press.
- Bourassa, Carrie, Kim McKay-McNabb, and Mary Hampton. 2004. "Racism, Sexism, and Colonialism: The Impact on the Health of Aboriginal Women in Canada" in *Canadian Woman Studies* 24(1): 23-29.
- Bovbjerg, Viktor E. 2008. "The Epidemiology of Obesity: Causal Roots—Routes of Cause" Pp. 19-72 in *Obesity*, ed. Eliot M. Blass. Sunderland, MA: Sinauer Associates, Inc.

- Braziel, Jana, and Kathleen LeBesco, eds. 2001. *Bodies Out of Bounds: Fatness and Transgression*. Los Angeles, CA: University of California Press.
- Butler, Merlin. 2011. "Genomics of Childhood Obesity". *Current Genomics* 12(3): 153.
- Caldwell, Wilma and Chad T. Kimball. 2001. "Glossary of Terms Related to Obesity and Its Management" Pp. 277-295 in *Obesity Sourcebook: Health Reference Series*, ed. 1st. Detroit, MI: Omnigraphics.
- Cass, Alan. 2004. "Health outcomes in Aboriginal populations". *Canadian Medical Association Journal* 171(6): 597-8.
- Cateora, Philip R. and John L. Graham. 2005. *International marketing*, 12th ed. New York, NY: McGraw-Hill.
- Cawley, John. 2007. "The economics of childhood obesity policy" in *Obesity, Business, and Public Policy*, edited by Z. Acs and A. Lyles. Northampton, MA: Edward Elgar Publishing Limited.
- Chopra, Mickey. 2010. "Lessons from the control of other epidemics" Pp. 15-21 in *Preventing Childhood Obesity: Evidence, Policy, and Practice*, edited by Elizabeth Waters, Boyd Swinburn, Jacob Seidell, and Ricardo Uauy. Hoboken, NJ: Blackwell Publishing Ltd.
- Committee on Food Marketing and the Diets of Children and Youth. 2006. *Food Marketing to Children and Youth: Threat or Opportunity?*. J. Michael McGinnis, Jennifer Appleton Gootman, and Vivica I. Kraak, eds. Washington, DC: National Academic Press.
- Cooper, Charlotte. 1998. *Fat and Proud: The Politics of Size*. London, UK: Women's Press Limited.
- Dixon, Jane M., Sarah J. Hinde, and Cathy L. Banwell. 2006. "Obesity, convenience, and 'phood'". *British Food Journal* 108(8): 634-45.
- Dixon, J. 2009. "From the imperial to the empty calorie: how nutrition relations underpin food regime transitions". *Agricultural and Human Values* 26: 321-33.
- Dogan, Mattei and Robert Pahre. 1990. *Creative Marginality: Innovation at the Intersections of Social Sciences*. Boulder, CO: Westview Press.
- Dubay, William. 2004. *The Principles of Readability*. Costa Mesa, CA: Impact Information.
- Duncombe, Stephen. 1997. *Notes from the Underground: Zines and the Politics of Alternative Culture*. London, UK: Verso Press.

- Duster, T. 1996. "The prism of heritability and the sociology of knowledge". Pp. 119-30 in *Naked Science: Anthropological Inquiry into Boundaries, Power, and Knowledge*, edited by L. Nader. New York, NY: Routledge.
- Epstein, Steven. 2007. *Inclusion: The Politics of Difference in Medical Research*. Chicago, IL: The Chicago University Press.
- Falchetti, Elisabetta, Silvia Caravita, and Alessandra Sperduti. 2007. "What do laypersons want to know from scientists? An analysis of a dialogue between scientists and persons on the web site Scienzaonline". *Public Understandings of Science* 16: 489-506.
- Fee, Margaret. 2006. "Racializing narratives: Obesity, diabetes and the 'Aboriginal' thrifty genotype". *Social Science & Medicine* 62: 2988-2997.
- Fleck, Ludwik. 1979. *Genesis and Development of a Scientific Fact*. Chicago, IL: University of Chicago Press.
- Foucault, Michel. 1990. *The History of Sexuality Vol. 3: The Care of Self*. London, UK: Penguin.
- Fountas, Irene C. and Gay Su Pinnell. 1999. *Matching Books to Readers: using leveled books in guided reading*. Portsmouth, NH: Heinemann Press.
- Fox, Nick J. 1998. "Foucault, Foucauldians, and Sociology". *The British Journal of Sociology* 49(3):415-433.
- Gauchet, Gordon. 2006. "Cosmetic Panopticon: Consumption and the Normative Gaze". Unpublished manuscript. Storrs, CT: University of Connecticut.
- Gillies, John. 2004. "Philosophy for medicine: applications in a clinical context". *British Journal of General Practice*. 328(7455): 482.
- Gilman, Sander L. 2008. *Fat: A Cultural History of Obesity*. Malden, MA: Polity Press.
- Giovanelli, Dina and Stephen Ostertag. 2009. "Controlling the Body: Media Representations, Body Size, and Self-Discipline" Pp. 289-99 in *The fat studies reader*, edited by E. Rothblum and S. Solovay. New York, NY: New York University Press.
- Goodman, Alan H. 2000. "Why Genes Don't Count (for Racial Differences in Health)". *American Journal of Public Health* 90(11): 1699-1702.
- Graves, Joseph L. and Michael R. Rose. 2006. "Against racial medicine". *Patterns of Prejudice* 40(4-5): 481-93.



- Greenwood, Jessica L., Scott P. Narus, Jennifer Leiser, Marlene J. Egger. 2011. "Measuring Body Mass Index According to Protocol: How are Height and Weight Obtained?". *Journal for Healthcare Quality* 33(3): 28-36.
- Grogan, Sarah. 2008. *Body Image: Understanding body dissatisfaction in men, women, and children*. 2nd ed. New York, NY: Routledge.
- Groopman, Jerome E. 2007. *How doctors think*. Boston, MA: Houghton-Mifflin Press.
- Hales, C. Nicholas, and David J.P. Barker. 2001. "The thrifty phenotype hypothesis". *British Medical Bulletin* 60:5-20.
- Han, Joan C., Debbie A. Lawlor, Sue Y.S. Kimm. 2010. "Childhood obesity". *Lancet* 375: 1737-48.
- Harding, Kate and Marianne Kirby. 2009. *Lessons from the Fat-O-Sphere: Quit dieting and declare a truce with your body*. New York, NY: Penguin Group.
- Hartley, Cecilia. 2010. "Letting Ourselves Go: Making Room for the Fat Body in Feminist Scholarship" Pp. 245-255 in *The Politics of Women's Bodies: Sexuality, Appearance, and Behaviour*, edited by Rose Weitz. New York, NY: Oxford University Press.
- Hayes, Dayle. 2010. "Childhood Obesity: Helping Without Harming". *Infant, Child, & Adolescent Nutrition* 2(3): 145-6.
- Heasman, Michael and Julian Mellentin. 2001. *The Functional Food Revolution: Healthy People, Healthy Profits*. London, UK: Earthscan Publications Limited.
- Hird, Myra J. 2004. "Feminist matters: New materialist considerations of sexual difference". *Feminist Theory* 5(2): 223-32.
- Hu, Frank B. 2008a. "Descriptive Epidemiology of Obesity Trends" Pp. 15-25 in *Obesity Epidemiology*, edited by Frank B. Hu. New York, NY: Oxford University Press.
- Hu, Frank B. 2008b. "Metabolic Consequences of Obesity" Pp. 149-173 in *Obesity Epidemiology*, edited by Frank B. Hu. New York, NY: Oxford University Press.
- Jacobs, Jerry A. and Scott Frickel. 2009. "Interdisciplinarity: A Critical Assessment". *Annual Journal of Sociology* 35: 43-65.
- Karegowda, Asha Gowda, A.S. Manjunath, and M.A. Jayaram. 2011. "Application of Genetic Algorithm Optimized Neural Network Connection Weights for Medical Diagnosis of Pima Indians Diabetes". *International Journal on Soft Computing* 2(2): 15-23.

- Kelly, Colette, Pauline Clerkin, Saorise Nic Gabhainn, and Mauren Mulvihill. 2010. "Food marketing in Irish schools". *Health Education* 110(5): 336-50.
- Kuhn, Thomas S. 1970. *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press.
- Kuppers, Petra. 2001. "Fatties on Stage: Feminist Performances". Pp. 277-291 in *Bodies Out of Bounds: Fatness and Transgression* edited by Jana Brazier and Kathleen LeBesco, Los Angeles, CA: University of California Press.
- Lawrence, Mark and John Germov. 2004. "Future food: the politics of functional foods and health claims", Pp. 119-47 in John Germov and Lauren Williams eds., *A Sociology of Food and Nutrition. The Social Appetite*, New York, NY: Oxford University Press.
- Lawrence, Regina G. 2004. "Framing Obesity: The Evolution of News Discourse on a Public Health Issue". *Harvard International Journal of Press/Politics* 9(3): 56-75.
- LeBesco, Karen. 2004. *Revolting Bodies? The Struggle to Redefine Fat Identity*. Amherst, MA: University of Massachusetts Press.
- Lekkas, Stavros and Ludmil Mikhailov. 2010. "Evolving fuzzy medical diagnosis of Pima Indian diabetes and of dermatological diseases". *Artificial Intelligence in Medicine* 50:117-26.
- Lester, Rebecca J. 2004. "Material Bodies and the Transformation of the Social". *Theory Psychology* 14(3): 409-19.
- Lobstein, Tim. 2009. "Marketing of unhealthy food to young children: Time to get angry, get active". *Public Health Nutrition* 12(6): 882-3.
- Lobstein, Tim, Louise A. Baur, and Rachel Jackson-Leach. 2010. "The childhood obesity epidemic" Pp. 3-14 in *Preventing Childhood Obesity: Evidence, Policy, and Practice*, edited by Elizabeth Waters, Boyd Swinburn, Jacob Seidell, and Ricardo Uauy. Hoboken, NJ: Blackwell Publishing Ltd.
- Lowery, Bobby. 2009. "Obesity Policy Spotlight: Childhood Obesity". *Bariatric Nursing and Surgical Patient Care* 4(3): 237-9.
- MacLean, Lynne M., Kathryn Clinton, Nancy Edwards, Michael Garrard, Lisa Ashley, Patti Hansen-Ketchum, and Audrey Walsh. 2010. "Unpacking vertical and horizontal integration: childhood overweight/obesity programs and planning, a Canadian perspective". *Implementation Science* 5(36): 1-11.

- MacMillan, Harriet L., Angus B. MacMillan, David R. Offord, Jennifer L. Dingle. 1996. "Aboriginal health". *Canadian Medical Association Journal* 155(11):1569-78.
- Magdalinski, Tara. 2009. *Sport, Technology and the Body: The nature of performance*. New York, NY: Routledge.
- Margulis, Lynn. 2005. "The Names of Life". *American Scientist* 93: 290.
- Margulis, Lynn and Dorion Sagan. 1995. *What is life?* New York, NY: Simon & Schuster.
- Margulis, Lynn and Dorion Sagan. 1998. *What is sex?* New York, NY: Simon & Schuster.
- McNay, Lois. 1992. *Foucault and Feminism*. Oxford, UK: Polity Press.
- Meyer, Philip. 2004. *The Vanishing Newspaper: saving journalism in the Information Age*. Columbia, IL: University of Missouri Press.
- Moffat, Tina. 2010. "The 'Childhood Obesity Epidemic': Health Crisis or Social Construction?". *Medical Anthropology Quarterly* 24(1): 1-21.
- Monaghan, Lee F. 2005. "Discussion Piece: A Critical Take on the Obesity Debate". *Social Theory & Health* 3(4): 302-14.
- Moran, Joe. 2010. *Interdisciplinarity*, 2nd ed. New York, NY: Routledge.
- Murray, Samantha. 2008. *The 'Fat' Female Body*. New York, NY: Palgrave MacMillan.
- Neel, James V. 1998. "The 'thrifty genotype'". *Nutrition Reviews* 57(5): 52-9.
- Norris, Stephen P., Linda M. Phillips, and Connie A. Korpan. 2003. "University students' interpretation of media reports of science and its relationship to background knowledge, interest, and reading difficulty". *Public Understanding of Science* 12: 123-45.
- O'Neil, John D., Jeffrey D. Reading, and Audrey Leader. 1998. "Changing the relations of surveillance: The development of a discourse of resistance in Aboriginal epidemiology". *Human Organization* 57(2):230-237.
- Orbach, Susie. 2009. *Bodies*. New York, NY: Picador.
- Osborne, Netwon G. and Marvin Feit. 1992. "The Use of Race in Medical Research" *Journal of the American Medical Association* 2(267): 275-8.
- Otten, Jennifer J., Eric B. Hekler, Rebecca A. Krukowski, Matthew P. Buman, Brian E. Saelens, Christopher D. Gardner, Abby C. King. 2012. "Food Marketing to Children Through Toys: Response of Restaurants to the First U.S. Toy Ordinance". *American Journal of Preventive Medicine* 42(1): 56-60.
- Pavkov, Meda E., Clinton C. Mason, Peter H. Bennett, Jeffrey M. Curtis, William C. Knowler, Robert G. Nelson. 2009. "Change in the Distribution of Albuminuria According to

- Estimated Glomerular Filtration Rate in Pima Indians with Type 2 Diabetes”. *Diabetes Care* 32(10):1845-50.
- Paradies, Yin C., Michael J. Montoya, and Stephanie M. Fullerton. 2003. “Racialized Genetics and the Study of Complex Diseases: The thrifty genotype revisited”. *Perspectives in Biology and Medicine* 50(2): 203-27.
- Penny, Kimberley, Stephen P. Norris, Linda M. Phillips, and Glenn Clark. 2010. “The anatomy of junior high school science textbooks: An analysis of textual characteristics and a comparison to media reports of science”. *Canadian Journal of Science, Mathematics and Technology Education* 3(4): 415-36.
- Perman, Jay A. 2011. “Teaming Up Against Childhood Obesity”. *Bariatric Nursing and Surgical Patient Care* 6(3): 109-10.
- Petersen, Alan. 2007. *Body in Question: A Socio-Cultural Approach*. New York, NY: Routledge.
- Poudrier, Jennifer. 2007. “The Geneticization of the Aboriginal Diabetes and Obesity: Adding Another Scene to the Story of the Thrifty Gene”. *The Canadian Review of Sociology and Anthropology* 44(2): 237-61.
- Powers, Michael L. and Jay Schulkin. 2009. *The Evolution of Obesity*. Baltimore, MD: John Hopkins University Press.
- Probyn-Rapsey, Fiona. 2007. “Paternalism and Complicity: Or how not to atone for the ‘sins of the father’”. *Australian Literary Studies* 23(1): 92-103.
- Raffles, Hugh. 2010. *Insectopedia*. New York, NY: Pantheon Books.
- Raine, Kim D. 2005. “Determinants of Healthy Eating in Canada: An Overview and Synthesis”. *Canadian Journal of Public Health* 96(3): 8-14.
- Razak, F., S. Anand, V. Vuksan, B. Davis, R. Jacobs, KK Teo, S. Yusuf. 2005. “Ethnic differences in the relationships between obesity and glucose-metabolic abnormalities: a cross-sectional population-based study”. *International Journal of Obesity* 29:656-67.
- Reading, Jeff. 2003. “A Global Model and National Network for Aboriginal Health Research Excellence”. *Canadian Journal of Public Health* 94(3): 185-89.
- Reinehr, Thomas and Martin Wabitsch. 2011. “Childhood obesity”. *Current Opinion in Lipidology* 22: 21-5.
- Robinson, Francesca. 2009. “Tackling childhood obesity”. *Practice Nurse* 38(5): 10-11.
- Röhle, Theo. 2005. “Power, reason, closure: critical perspectives on new media theory”. *New Media Society* 7(3): 403-22.

- Rothman, K.J. 2008. "BMI-related errors in the measurement of obesity". *International Journal of Obesity* 32: 56-9.
- Rubin, Gayle. 1984. "Thinking Sex: Notes for a Radical Theory of the Politics of Sexuality" in *Pleasure and Danger: Exploring Female Sexuality*, edited by C. Vance. London, UK: Routledge Press.
- Shapin, Steven, and Simon Schaffer. 1985. *Leviathan and the air-pump: Hobbes, Boyle, and the experimental life*. Princeton, NJ: Princeton University Press.
- Severin, Werner J. and James W. Tankard. 2001. *Communications Theories: origins, methods and uses in mass media*. Boston, MA: Pearson Custom Publishing.
- Skinner, Asheley Cockrell, Michelle L. Mayer, Kori Flower, Eliana M. Perrin, and Morris Weinberger. 2009. "Using BMI to Determine Cardiovascular Risk in Childhood: How Do the BMI Cutoffs Fare?". *Pediatrics* 124(5): 905-12.
- Stewart, Laura. 2011. "Childhood obesity". *Medicine* 39(1): 42-4.
- Teran-Garcia, Margarita, Tuomo Rankinen, and Claude Bouchard. 2008. "Genes, exercise, growth, and the sedentary, obese child". *Journal of Applied Physiology* 105: 988-1001.
- Thompson, Brian. 2004. "The Obesity Agency: Centralizing the Nation's Fight Against Fat". *American Journal of Law and Medicine* 30(4): 543-59.
- Thomson, Debra. 2007. "Spectacular Decapitations: the Body Politics of Shaming Fat with Personal Responsibility". Paper presented at the annual meeting of the National Communication Association, November, Chicago, IL.
- Turconi, Giovanna and Hellas Cena. 2007. "Epidemiology of Obesity" Pp. 3-20 in *Obesity: Epidemiology, Pathophysiology, and Prevention*, edited by Debasis Bagchi and Harry G. Preuss. Boca Raton, FL: Taylor & Francis Group, LLC.
- Wann, Marilyn. 2010. "Fat Studies: An Invitation to Revolution". Pp. ix-xxvi in *The Fat Studies Reader* edited by Esther Rothblum and Sondra Solovay, New York, NY: New York University Press.
- Wann, M. 2004. *FAT!SO?: Because you don't have to apologize for your size*. New York, NY: Ten Speed Press.
- Wasserman, David. 2011. "Is Racial Profiling More Benign in Medicine Than Law Enforcement?". *Journal of Ethics* 15:119-29.
- Weedon, Chris. 1987. *Feminist Practice and Post-structuralist Theory*. Oxford, UK: Basil Blackwell.

Wolf, Naomi. 1990. *The Beauty Myth*. Toronto, ON: Random House of Canada Ltd.

Wolinsky, Howard. 2011. "Genomes, race, and health: Racial profiling in medicine might just be a stepping stone towards personalized health care". *Science & Society* 12(2): 107-9.

World Health Organization. 2000. "Obesity: preventing and managing the global epidemic. Report of a WHO Consultation". *World Health Organization Technical Report Series* 894: i.-xii, 1-253.