FAT:
An exploration into the political ramifications of excess adipose tissue in Canada

by
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B.A., University of Victoria, 2008

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of the Requirements for the Degree of

MASTER OF ARTS

in the Department of Political Science

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ABSTRACT

The state and individual must both understand that the increase in fat rates is a social phenomenon that requires reconciliation between collective and individual participation. A social movement needs to be generated that seeks solutions to this health phenomenon through preventative health measures; because the state's current reactionary response does not address the factors that contribute to increased fat. These factors transcend the direct relationship between an individual, food and exercise, and also involve power. The current policy definition of fat is incorrect because it does not address the multiple variables that have generated an increase in common indicators of obesity; rather, it relies on inaccurate measurement systems, differing conceptions of the healthy individual, and narrow understandings of what causes obesity. The result is the current paralysis of policy reform. This thesis provides solutions that reconcile the current political definition with my own in order to advocate health promotion strategies that activate both the citizen and the state.

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INTRODUCTION

The issue of fat is forcing Canadians to challenge the way we view each other as well as the way we view ourselves. For me, the word alone conjures feelings of insecurity, negativity, and bewilderment. I am a 6'1" Caucasian man weighing 175 lbs. I consider myself to be healthy. I could always be *healthier*, but I am sure most Canadians feel the same way. This is my exploration into the effect fat, as a social phenomenon, has on Canadians and how it alters the political consciousness of how we currently interpret health.

At first glance it would appear my description of myself is unconventional. It is to encourage you, the reader, to consider your position on the content of the next three chapters. I ask you to do this because this is a topic that makes us look as much at ourselves as it does the issue itself. As individuals, the fear of fat affects us each and every day, from stereotypes presented in media to any grocery store that markets the values of health through *healthy* alternatives. Fat is an issue that strikes at the very identity of each and every individual. Fat is a form of recognition that transcends ethnicity, religion, or gender. The irony is that fat itself is not a precursor to healthy living but it has become represented as a visual marker for unhealthy living.

I have yet to encounter a topic that is as anomalous as fat. It exists in many forms, whether it is in food or on our bodies. It is also used as an adjective, as a metaphor, and as a microcosm of societal change. It alters one's social interactions as much as it alters society's perception of itself. Fat itself has several definitions, and various terms will be used throughout this thesis including: overweight, obesity, excess adipose tissue, and fat. Overweight is defined as the body fat that exceeds what would be considered "normal," or between 25 and 30 on the Body Mass Index (BMI) system of measurement; and obesity is a medicalized term that applies to people with a BMI of 30 or higher. Excess adipose tissue is the accumulation of subcutaneous fat cells in the body, and fat is the overarching term that all the other definitions fall under. It will be favoured throughout this paper. As we will see, it presents a narrative that solidifies the position of the *state*, and embodies the cultural phenomenon. For the purposes of this paper the *state* is not a concretized definition applying only to structures of governance, rather, the state operates as a concept that promotes ideologies intended to alter the consciousness of citizens living within Canada. The effects of the state, for all intents and purposes, extend to the dominant themes in pop culture which present an illusionary society where individuals believe that those with excess fat constitute a low majority of the population. This, however, is opposite to the

truth, as evidenced by the heavily de-regulated food industry that offers aisles of solutions to whatever life's challenges present.

My interpretation of the state differs from the traditional formulation of the state, which exemplifies power garnered through sovereign authority, in that there is a paradigmatic shift to power residing in the systems of governance, where the act of governing results in the influence and coercion of ideology that directly affects the citizenry. In the traditional sense I maintain the fact that the authority of the state extends only to the boundaries of the physical state maintained, although not exclusively restricted, to the borders of the country itself. For Michel Foucault in his published lecture, "Governmentality," power is assembled by "institutions, procedures, analyses and reflections."[1] Through this definition of power I maintain that the state performs the functions of governmentality as its primary power relationship between its citizens. It is through this definition that I reflect on the relationship between the state and its citizenry. While the regulatory powers of the state have the ability to forcibly affect the behaviors of citizens through forms of discipline, it is the discursive elements of power found through *that which is believed to be true*. I maintain that the state is able to directly influence

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[1] Michel Foucault. "Governmentality" *The Foucault Effect*, 1991: 87-104.

the interests, needs and aspirations of the individual, which goes completely unnoticed by the citizenry.[2]

In this formulation of the discursive elements of the state, we are confronted with another dilemma. The way that this power is utilized can have both positive and negative effects on the population, which is expounded due to the fact that it goes unnoticed to the citizen. This form of manipulation creates a tension where the recreation of state and the best interests of the citizens may not be complementary.

Western medical science does not consider fat to be an illness, and as such, the health care system is not considered responsible for addressing it. Western medical science will only recognize and address a condition if someone is *ill*. The degrees by which an individual is ill vary significantly, ranging from a bug bite to terminal illness. In addition, many Western health care systems are under increased fiscal pressure and require efficiency, which has practitioners focusing on injury and disease treatment, rather than on prevention or the amelioration of risk-factors. Limited time or attention is paid to patients and the reasons surrounding their illnesses, so Western medical science reaches a diagnosis by categorizing individuals and illnesses

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[2] Ibid, 100.

through reductive practices. As long as this environment exists, fat will not be properly defined. A range of issues including technological adaptation and an individual's physical, psychological, and emotional state contribute to increased obesity rates. Fat is dynamic in nature. There is no simple pill, workout strategy, or surgery that "cures" this condition; assuming, of course, that a cure is something that is even wanted or necessary.

I do not have anything against fat. I believe it is neither an illness nor a condition; it is a state of being. Fat should be approached as a way in which we live, not strictly as a discernible collection of cells. Viewing fat as just a collection of cells eliminates an understanding of the individual. If we view fat as a social phenomenon, the increased rates of fat will be addressed at a societal level as opposed to an individualistic one. In addition, I criticize the inaccurate systems used for measuring fat and the conclusions and political decisions that are made based on those measurements. While health risks have been generated in relation to fat, and the argument is made that it is a leading contributor to premature death, these problems have not been proven to be caused by fat; they are associated with it. Fat will not be considered an illness nor a condition until a direct connection with chronic health conditions is found. This does not mean that fat is not an issue, however.

From the onset of this work we can see the development of tensions through the recognition, or definition, of fat. Seen in a negative context, it leads to increased self-awareness inevitably leading to decreased feeling of self-worth, all of which may be completely wrong to begin with. On the other hand, it draws stronger attention to the association of fat, as a visual cue of increased need for social structures dedicated to healthy living. Throughout this work, dilemmas will be presented that highlight the intrinsic difficulties in dealing with fat, that will need to be reconciled as policy makers move forward. In the end, no clear answer can or will exist that will simplify fat as either good or bad.

Since the turn of the 20th century, the social conception of fat has been transformed from a perceived physical state of health into a health condition through rhetoric, shared by organizations like the World Health Organization; through technological innovations that subject us to a need to change; and through insurance companies using actuarial data that further categorizes and restricts people. Widespread attention and concern about this issue reached the forefront in 1998 when the World Health Organization introduced the term "globesity epidemic."[3] Fat became a foreign entity

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3. Katherin B. Horgen and Kelly D. Brownell, "Confronting the Toxic Environment: Environmental and Public Health Actions in a World Crisis," in

through this expression—an enemy—to every individual throughout the Western world. Unlike transmittable diseases of the past, obesity in this conception can strike anyone, anywhere without contagions. Rather, it is conceived as a disease of wilful misconduct, which rests responsibility squarely on the shoulders of the individual who perceives himself or herself to be fat. Employing the term "epidemic" allows obesity to be seen as a disease metaphorically; however it is inching further away from the metaphorical interpretation to one that is taken literally. Since 1998, the rate of fat has steadily increased and is now said to be responsible for more premature deaths than smoking.[4]

The combination of a rapid increase in individual body mass and concerns surrounding fat-related health conditions have created an ethical divide, which has paralyzed public policy makers.[5][6][7] Increased globalization

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The Handbook of Obesity Treatment, ed. Thomas A. Wadden, Albert J. Stunkard, (New York: The Guildford Press, 2002), 95.

4. JoAnn E. Manson and Shari S. Bassuk, "Obesity in the United States: A Fresh Look at Its High Toll," *Journal of the American Medical Association* 289, no. 2 (2003): 229-230.

5. "Ethical Issues in Healthcare Provision During Humanitarian Emergencies: Introduction to the Case Study and Commentaries," *Public Health Ethics* 3, no. 1 (2010): 51-52.

6. Paul Capos, Saguy Abigail, Paul Ernsberger, Eric Oliver, and Glenn Gaesser. "The epidemiology of overweight and obesity: public health crisis or moral panic?" *International Journal of Epidemiology*, 2006: 55-60.

makes it possible to question the relationship between individuals and their physical environment, because of increased food availability, competitive free markets and technological innovation. While food availability may not be a global reality for all, the disparity between food availability continues to increase. A collection of affluent nations, such as Canada, the United States, and countries throughout Europe, are fighting with the problem of an over-abundance of calorically dense foods, which has led to increased obesity rates.[8]

The term "globesity epidemic" shows that obesity is now seen as a threat to humankind on a global scale. It creates the illusion of a disease sweeping across the globe, affecting all in its wake. This imagery only serves to instil fear in each individual. This fear of fat creates a societal division where individuals become subjected to both their own personal perceptions of fat, and the perceptions of others. However, fat is unlike other social divisions such as race or gender. Discerning who is fat and who is not is not

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7. Kim Soowon and Barry M Popkin, "Point-Counterpoint Commentary: Understanding the epidemiology of overweight and obesity—a real global public health concern," *The International Journal of Epidemiology*, 2006:60-67.
8. John Kruse, "Estimating Demand for Agricultural Commodities to 2050," *The Global Harvest Initiative*, 2008, 7, http://www.globalharvestinitiative.org/Kruse-%20Estimating%20Demand%20for%20Agricultural%20Commoditites%20to%202050.pdf.

clear, which results in a vague political interpretation created by a lack of information.

The question that has yet to be answered is this: If research has shown that fat can be associated directly with illness, why is it not considered a serious issue politically? It is here that the dilemma of fat enters this debate once again. The effects of viewing fat as this perilous disease that has waged war on mankind on a global scale certainly seems a little exaggerated; however, the undeniable fact is that fat is increasing globally. It is rising faster than at any other time in the development of humankind. Unfortunately, unlike cigarettes, alcohol, and illegal narcotics, fat is something that is not bad for you. Unlike cancer, viruses, or bacteria, fat on the body is viewed as a result of poor decision-making. Discussion is taking place on the issue of fat, however, with no action taken to address it: it is merely rhetoric. With this lack of direction, the state handles the detrimental health consequences, or illness, associated with fat reactively, when the focus should be on preventative health measures in order to stave off premature death. The concept of premature death also presents a dilemma. What exactly is premature death? The idea of dying before one 's time is due seems nonsensical, however it is often used, and when viewed in the context of an individual we know, or dare say one's self, premature death becomes a very

serious reality. The struggle between understanding natural process and the desire to live as long as possible creates a plaguing quandary that transcends the work of this paper but is pivotal in understanding the efforts that should be put forward in addressing fat.

To understand the question, "If research has shown that fat can be associated directly with illness, why is it not considered a serious issue politically?" the term "illness" must be defined. Illness is defined as the impairment of normal physiological function. The word also connotes a degree of physical discomfort. The severity of discomfort associated with being overweight or obese is affected by an individual's psychological perception of pain. In this way, fat is subjective, because it is an individual experience, and it is objective, because it is a social phenomenon. However, in the same sense, all illness falls under a degree of subjectivism despite the imperceptible consequences associated with contracting very real, life-limiting conditions. The subjective nature of fat makes it difficult to prescribe measures of political reform.

Currently, policy enacted for social control, the regulation of foods and drugs, discrimination, and the politicization of life itself[9] has inadvertently

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9. Nikolas Rose, *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*. (Princeton: Princeton University Press, 2007).

been drawn on for addressing fat. Policy makers are perpetuating an environment that lacks credible research on fat and does not hold government accountable for addressing it. They use the call for more research as a rationalization for inaction. The reality is that despite the need for more information, there is no clear-cut understanding for what amount of information is sufficient to say if fat is a problem or not. I have serious doubts, for any answer reached for such a question will be correct to the same degree that it is incorrect. What we do know is that fat is created when the human body takes in more energy than it puts out. Accountability and responsibility for fat are constantly being manipulated and altered because different actors are vying for position in order to suit their own specific needs. From a company like McDonald's saying it provides meals not intended to be eaten every day, to the non-governmental organization that fights against fat, but must have success in order to remain pertinent, many interests have something to gain and something to lose. The balance of power for both groups, whether for fiscal gain or to maintain authority through opinion, results in a struggle that inevitably alters any attempt to reach a consensus on how fat should be approached. This adds another layer to an already difficult situation, forcing a paralysis of understanding. Whether the

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ambiguity around fat is intentional, or simply a result of being in the early stages of political definition, the greater public has yet to be notified of a distinct course of action and will not unless significant changes are made. The solution to this problem is to deviate from the medicalization of fat, an attempt to provide sufficient information in order to define fat as an illness. Instead, the solution rests in changing how fat is interpreted. When fat is viewed as a social phenomenon the landscape of definition changes, removing the conditions that place accountability on the individual. This new vision applies to all Canadians, which calls in to question the country's cultural fabric in relation to its people's interaction with their physical environment.

In order for action to be taken, both the state and the individual need to understand that fat is not an illness. Fat is a social phenomenon and a state-of-being that requires reconciliation between state-sponsored activities and individual participation. A social movement needs to be generated that addresses this cultural phenomenon through preventative health measures. This is the best way to adequately address the various health conditions, such as cardiovascular disease and diabetes, which have been associated with fat. The other side of this debate questions the true effect of fat, which very well could be a myth. The effect of fat itself, not the association of fat, presents a

situation where fat itself is not the problem, unhealthy living is. In that regard fat itself cannot be directly targeted. But does that mean that social change should be avoided? Perhaps the answer to this question comes down to risk.

When looking at risk, we are led to believe that it is a result of statistics and patterns, and that these patterns define risk. However, in the case of fat, these variables have only diffused the definition of fat. We have seen the emergence of a society in which insurance has become the cornerstone of free-market liberalism. People's actions are based on the uncertainty of the future, and insurance companies quantifying or validating what it means to be an individual leads to negative identity formation. As our current health care system shifts towards privatization and individualization, the focus an individual must have on his or her own future becomes tantamount. To fall into the risk category associated with being overweight and obese fundamentally changes the way an individual views himself or herself. But being in a prescribed risk category does not necessarily mean an individual will contract a condition. Many other variables play a part in whether a person with excess adipose tissue contracts high blood pressure. But from a position of collective actuarial data, it becomes evident there is a strong connection between excess adipose tissue and high blood pressure. In this sense, the solution for should attempt to affect the greater whole as opposed

to the subjugation of a lone individual. However, the unfortunate reality is that as social change is performed the relationship between an individual and his or her physical environment will be changed regardless. This has to be viewed for what it is, which is the application of statistics that do not necessarily translate into reality for the individual.

As previously mentioned, the current lack of a policy definition for fat has only resulted in inaction. Because of the state's influence, it is responsible for addressing the rising obesity rate with the understanding that it is the result of a social phenomenon, which will minimize the negative stereotypes that have been reinforced through rhetoric and inaction. From the onset it must be clear that the current political interpretation of fat is incorrect and that in order for it to be properly addressed, without discrimination and subjugation, it must be seen as a social phenomenon. This is not without concern, however as it is difficult to assess the effect of any prescribed changes, especially in light of what those changes may be. Because of this, monitoring and modifications must be made as these changes take place. What is monitored and how it is measured is of primary importance because there is a significant difference between a decrease in excess adipose tissue and the standard of living by which these changes created an effect.

The first chapter will explain what fat is, how it is measured, how we have become fat, and how fat frames the political subject. The objective of this chapter is to look at how the state and individual understand fat. Fat is a social phenomenon; however, it is currently falsely viewed as an illness because of clinical definitions based on inaccurate forms of measurement. This chapter also looks at why obesity rates are rising, namely in societies that are trying to adapt to rapid technological advances.

The second chapter describes the state's current political definition of fat and the quantitative analysis and published documents that have been used to arrive at that definition, while solidifying the case for a new political interpretation of fat, which views it singularly as a social phenomenon. The chapter will view fat from an international perspective while gradually refining the focus to the national level before refining that perspective to a provincial focus.

The third chapter will illustrate possible solutions that address fat as a social phenomenon. It will outline the need for an accurate system for measuring fat, as well as the need for an open source database. This database will consist of anonymously collected information, which will accurately depict the degree to which fat is affecting the population by charting regional demographics and the factors contributing to fat gain. The proposed solutions

will not target the individual directly; rather these solutions will seek to build community and confront the societal causes, of which increased rates of fat are the by-product. Additionally, the third chapter will challenge the previously conceived notions of what it means to be fat, underlining the ethical concerns that have been raised in the political formation of what it means to be fat. The focus will be on understanding the implications of policy reformations that seek to address fat.

CHAPTER 1: FRAMING FAT

Fat is a social phenomenon because the factors that lead to increased rates of fat transcend an individual's relationship with food and exercise. The current political definition of fat is incorrect because it does not address the variables that allow this phenomenon to take place; rather, it relies on inaccurate systems of measurement that result in a paralysis of policy reform.

Physiologically, fat exists as a collection of cells that represent stored energy in the body. When energy input exceeds energy output it is predominately expressed in the creation of fat cells.[10]

Initially, the body metabolizes fat into fatty acids. If the fatty acids are not immediately used, the body converts them into fatty molecules, which are then stored in the body. The storage of these molecules is called adipose tissue. As cells build they become fat that we view as an addition to, or creation of, our bodies.[11] The question that is raised is: Is fat a part of our body or does it exist as something that is merely on our body? If fat is considered a foreign entity it becomes an intrusive object, despite being

10. Albert Renold ed., and George F. Cahill ed., "Section 5 Adipose Tissue," in The Handbook of Physiology American Physiological Society, (1965), 12.
11. Ibid.

viewed as essential to human survival. If fat is *of the body*, it is merely an element of the whole.

This concept can be applied to the narrative of living in excess. As a narrative the concept of living in excess has spurned movements towards minimalist behaviours, seemingly, as a backlash to traditional neo-liberal traditions that support consumption. In the case of fat, which can be seen as a phenomenon, or effect, of living in excess, fat is quickly becoming translated as the physical manifestation of living in excess, through an excess of the consumption of food. While still in the introductory stages of conceptualization, fat may be understood and treated as not only a physical marker of the effects of free-market consumption, it presents a divide in a current cultural shift between those who consume in excess and those who do not.

Public health policy advocates try to reformulate the public's perception of fat. This reformulation of fat is due to its emergence as a political issue. Fat is a political issue because of the high costs that have been attributed to the health care system through the use of actuarial data. Additionally, fat is a political issue, due to the legal rights of the citizens who fall under instances of discrimination. Another aspect of the political approach is a shift occurring in the field of health care towards privatization,

which, if not properly attended to, can directly affect members of the population who have higher levels of fat.

Health officials are prevented from adequately presenting the risk factors of adverse health conditions associated with excess adipose tissue because of actuarial data that is collected using an inaccurate system of measurement. However, the inaccurate system of measurement would not be as significant a factor, if fat were redefined as a social phenomenon, and therefore placed in a wider social context rather than a purely medicalized and objective one. However, it is here that another dilemma presents itself. Even when fat is viewed as a social phenomenon the best interests of the state will always prevail over the action that should be taken. The effects of all forms of action taken, regardless of whether or not they are positive or negative, are indeterminate in nature. Instituting a strong regulatory framework or disseminating the knowledge of fat in any capacity is difficult to assess in relation to the overall effect that it would have on the state.

The BMI

In order to understand the degree to which fat is affecting Canadians, an effective, low-cost method needs to be established that accurately measures an individual's body fat percentage and how it is affected by other

variables, such as environment and socio-economic status. An accurate and health-relevant system of measurement is needed to generate quantitative statistical data that would gauge the severity of the problem. This data would prescribe a value to fat, allowing for policy reforms to take place.

However, the most common measurement currently employed is the Body Mass Index (BMI). The BMI was developed in the early 1800s by Belgian mathematician Adolphe Quetelet. The BMI continues to be the method of choice for determining the level of obesity for both individuals and large sample groups.[12] Quetelet defined the BMI as being an individual's weight in kilograms divided by their height in metres squared. The Metropolitan Life Insurance Company, or MetLife, popularized this method in 1943. Height and weight tables were created to define what a MetLife policy holder's "ideal" height and weight should be, based on lowest mortality rate or longest life span."[13] MetLife was able to create a standardized measurement method throughout the United States, due to the comprehensive research conducted

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12. Garabed Eknoyan, "Adolphe Quetelet (1796-1874)--the Average Man and Indices of Obesity." *Nephrology Dialysis Transplantation* 23, no. 1 (January 2007): 47-51.
13. Library Index, *Americans Weigh in Over Time - Defining And Assessing Ideal Weight, Overweight, And Obesity*. http://www.libraryindex.com/pages/1198/Americans-Weigh-in-Over-Time-DEFINING-ASSESSING-IDEAL-WEIGHT-OVERWEIGHT-OBESITY.html.

on its policy holders and the correlation it revealed between obesity and life expectancy.

Today the BMI is the dominant method of individual and population weight measurement worldwide. It is the prevalent form of measurement in statistical analysis and is used most often in policy discussion. Reservations have been expressed about the BMI; however, it still stands as the quintessential form of measurement, not because of its accuracy, but because of its applicability. This system can be used to survey any sized sample group using only two pieces of data, namely height and weight.

Though useful in this regard, the BMI fails to address factors such as physiology, muscle mass and regional distribution of adipose tissue. The BMI is also incorrectly used to measure an individual's overall health. There are even cases when the BMI is completely inaccurate. For example, the average height and weight for National Football League players is 6'1", 247 lbs.,[14] which equals a BMI ratio of 31.9, classifying them as obese. One might find it ironic that some of the top physical specimens of our species would be considered obese by the measurement system used to assess our populations.

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14. National Football League, "NFL Players," National Football League, last modified February 2, 2011, accessed February 2, 2011, http://www.nfl.com/players.

One of the greatest problems with the BMI is that it does not directly measure excess adipose tissue, despite the fact that it is the predominant form of fat measurement. All major studies pertaining to fat conducted post-WWII have been based on the BMI. This casts doubt on the validity of a majority of obesity research done in the last 60 years.

The human body represents the physical manifestation of an individual's relationship with his or her external environment. For example, my friend goes to the gym every day. He runs marathons twice a year. He eats well, avoiding processed foods as well as foods high in saturated fat. Physically, my friend is able to interact with the external environment in a way that I simply cannot. He can lift heavier weights and run further distances. But does this mean he is able to perform the physical tasks that I do on a daily basis better than I am able to? To a certain extent, certainly; however, our bodies adapt to our physical environments. If I run 10 km a day my body will acclimatize itself in order to accomplish this task in the most efficient manner. The reality is that my body is best suited to the tasks I perform on a daily basis. It could be asserted that my friend will live longer due to his incredibly healthy lifestyle, because statistics say that he is less likely to suffer negative health consequences. The future cannot be quantified, however. This does not mean an individual should not choose healthier

alternatives, as there are direct benefits that he or she will gain from exercising and consuming a well-balanced diet. We live in an environment where the negative consequences of fat on the body are highly contested. If we continue to measure the relationship between fat and detrimental health consequences using solely the BMI, very little will be proven anytime in the near future.

The BMI also has social impacts. It plays a major role in the creation of Biopower.[15] Biopower is a form of regulatory power used by state apparatuses that uses the human body as an instrument to influence citizens' thoughts and actions. According to the BMI, those with higher indexes risk greater health consequences than those within the predefined lower indexes. Ultimately this measurement authorizes a form of discrimination against individuals who have a greater body mass. Once people have been quantified and categorized, the transition towards corporate profit margins is simplified for insurance companies such as MetLife. For example, post WWII "baby

15. Michel Foucault, *The History of Sexuality*, trans. Robert Hurley, (New York: Pantheon Books, 1978), 83-85.

boomer" populations have put a fiscal strain on the health care system, resulting in a shift toward the privatization of health services.[16]

Today, MetLife is an insurance company that offers privatized health services. It has conducted the most research, using the BMI as its method of measuring fat. The company links higher BMI ratios with an increased risk of health issues, then capitalizes on that by adjusting its rates based on an individual's BMI ratio. The syllogism presented, however, is incorrect. It cannot be assumed that all people with excess fat are at a higher risk for associative conditions, but it can be assumed that they belong to a pool of patients at higher risk, and that the aggregate rates of morbidity in that pool will be higher.

Another social aspect of the BMI is that it presumes there is an average man. It was a condition for Quetelet in creating the BMI, because the index presents ranges by which someone is average in accordance with statistical averages. The original application the BMI was intended for was not to address individual body fat; rather, as its name implies, it sought to address body mass. An issue surrounding the creation of the "average man" is that it

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16. Dale M. Needham et al., "Projected Incidence of Mechanical Ventilation in Ontario to 2026: Preparing for the Aging Baby Boomers." *Critical Care Medicine* 33, no. 3 (2005): 574-579.

does not define what is considered healthy and what is not. What is interesting in this case is that a majority of North Americans do not fall within the normal range.[17] Therefore the validity of any statistics resulting from the BMI is questionable, because the average person is assumed to be the ideal person. However, from a statistical standpoint these are two completely different things. As an example, albeit not concretely proven, it is assumed 59.2 percent of Canadian adults are overweight. The BMI asserts that the normal weight range people *ought* to be is significantly lower than the Canadian average. In this case, the *normal range* must exist in order for the abnormal to be seen in contrast to it. The BMI is based on the principle that our bodies are healthiest with low levels of excess fat.

The most critical link that needs to be explored in public health policy is the relationship between fat, its perceived health consequences and particular lifestyles. A system of measurement must be in place that accurately represents the direct effect fat has on varying health conditions. Despite a renewed system of measurement, which I believe is required, it must remain contextualized in relation to fat as a social phenomenon. The

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15. "OECD Health Data 2010 - Frequently Requested Data," Organisation for Economic Co-operation and Development, accessed November 8, 1020, http://www.oecd.org/document/16/0,3343,en_2649_34631_2085200_1_1_1_1,00.html.

issue is not that quite simply an inaccurate form of fat measurement has made it impossible to enact policy change; rather, it has been used as an excuse. Where accurate systems of measurement would be helpful is in ascertaining the degree to which fat impacts associated health conditions that have been connected to it. This would refine statistical data, in order to better understand the degree to which fat is affecting the Canadian population as a social phenomenon. As explored in this chapter, the BMI as a system of measurement for large populations and on a global scale is beneficial in illustrating trends related to body mass, not fat. When it is used as such it can be quite effective. The problem, however, is that the use of this system of measurement has incrementally risen and the BMI is now used in conjunction with obesity. While the connection is questionable, it does not share the degree of correlation required to consider it a measurement for obesity. In essence the BMI attempts to illustrate the effect of fat through the association of body mass to body fat, in order to ascribe an understanding of the association of fat cells with health conditions. While the levels of association appear to be strong, the end result is one that presents far too much ambiguity to be taken seriously.

The Waist Line Circumference method has also been recommended, as this form of measurement does not require sophisticated instrumentation or expertise, and because it draws a more accurate tie to Type 2 diabetes, hypertension, and other obesity-related conditions.[18] However, it is still not an accurate way to measure an individual's body fat. The problem is that a simple system for measuring an individual's body fat percentage does not exist. Fat as a social phenomenon can only be realized through actuarial data. Regardless of the limitations surrounding a lack of sufficient information, it is understood to be an issue of growing concern, not because fat itself is a negative hindrance on the individual, rather it is the numerous health conditions that are associated with it. However, this information only extends to viewing this issue as a social phenomenon, and how it translates to the individual must be handled with equal care and attention. When inaccurate methods are coupled with conditions that are associative, not causative, the validity of these statistics becomes significantly diminished.

The issue with measuring fat in large populations is that sophisticated technology and expertise is required to accurately measure an individual's body fat percentage. However, for large sample groups, the methods of

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18. Theodore B. Vanltallie, "Waist Circumference: A Useful Index in Clinical Care and Health Promotion," *Nutrition Reviews* 56, no. 10, (1998): 300-302.

measurement must remain simple and affordable. Because of these two factors, a simple solution for quickly finding an individual's body fat percentage does not exist. Without accurate data, one cannot make the connection between health risks and body fat percentage, as the issue itself cannot be fully realized. The main issue here is that an accurate population of overweight Canadians does not exist, let alone for the purpose of identifying the prevalence of excess adipose tissue in regional pockets. Broad strokes are taken, presented as accurate data, but the reality is that funding such an endeavour has not even been broached, let alone attempted.

Being overweight or obese is a risk because it is associated with health conditions such as heart disease and diabetes; however, the degree to which risk affects an individual remains contentious as it is nothing more than a possible reality. Public health discourse from the WHO, Health Canada, British Columbia Ministry of Health and regional health authorities illustrates that higher amounts of fat place us at higher levels of risk. Risk, in this context, is indicated by a higher rate of detrimental health consequences within categorized groups. A cause for concern is that poor research methodologies and inaccurate systems of measurement are used in associating fat with risk, which is coupled with the fact that risk itself reveals only the possibility of a prescribed reality. The fact that risk is thought to be a

manifested reality based on patterns of incidence does not ensure it will become reality. Risk is calculated in large sample groups, but is then applied to the individual, but an individual's future cannot be determined by the assumed risk that applies to a group of people. You cannot assume that the risks a group face will also be faced by an individual, because there is no accommodation for other variables that allow for those risks to take place. How risk is calculated is an issue, but the greater problem is the value it is given in public health discourse today. It has been clearly indicated in this paper that there are individuals who have a BMI ratio that places them in high risk categories, even though these individuals are, by many accounts, healthier than a vast majority of the population, including those who fall within the BMI's "normal" range. At this point we know the BMI is an inaccurate system of measurement. The fact that the BMI is being relied on so heavily illustrates to us that this is an area that demands far greater attention, and could serve as a case for preventative health methodologies to be implemented for the benefit of all Canadian citizens.

Regardless of the inability to correctly measure the degree to which the obesity epidemic is affecting Canada's population, the threat continues to be assumed. The threat is assumed because the statistics, albeit flawed, do

illustrate a growing trend. For example, rates of incidences of premature deaths associated with fat are increasing. As a result, there are calls for policy direction to adequately correct an issue that has produced significant strain on the health care system.[19]

How Fat Has Become a Social Phenomenon

In the last 60 years the human race, on a global scale, has gained more weight as a species than in the history of humankind.[20] While regionalized pockets have experienced greater variation in physical adaptation, the global scale in which this is occurring is unprecedented.

The rise in obesity is a recent event, with the pattern developing over the last 100 years. While the factors attributed to this rise are almost unquantifiable, there are common trends, such as technological adaptation and increasingly sedentary lifestyles.

The rise in obesity can be viewed as a naturally occurring process in human development. Throughout history and across countless cultures, fat

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19. Elizabeth C. Robertson, *Major Trends in Health Legislation in Canada 2001-2005*. (November 2006): 4, http://www.paho.org/english/DPM/SHD/HP/health-legislat-trends-CAN05.pdf.
20. Tomas J. Philipson and Richard A. Posner, "The Long-Run Growth in Obesity as a Function of Technological Change." *Perspectives in Biology and Medicine*, (Summer, 2003): 587.

was something that was admired and viewed as being healthy; a view completely contrary to what is held by the Western world today. It can be argued that this is due to various social mechanisms, ranging from illusionary societies to post-consumerist expansion, or simply the availability of food and an increased understanding of living longer. The dilemma here is that if fat is a development of natural process where excess has been gained without significant consequence, it exists as a phenomenon, but the degree to which it is an issue is significantly lower. However, if the increase in fat rates is as a result of a humankinds attempt to control its relationship with nature, and has served as leading to detrimental health consequences, then it is clearly negative and more of an issue.

In the article *Obesity in Biocultural Perspective*, Stanley J. Ulijaszek and Hayley Lofink include a section titled "Fatness and Human Evolution". Ulijaszek and Lofink draw a parallel between the rapid brain development of Homo erectus and an increase in body fat in this stage of development.[21] Ulijaszek and Lofink emphasize the integral role fat plays in the evolutionary development of humankind. Higher percentages of body fat resulted in increased survival rates, which advanced the dominant genetic characteristics

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21. Stanley J. Ulijaszek and Hayley Lofink, "Obesity in Biocultural Perspective." *Annual Review of Anthropology* 35, (2006): 337-360.

that create excess fat. The benefits that this could create are yet to be seen; as our species may be ushering in a new age of physiological development.

One needs to consider the role genetics plays in the debate surrounding rising rates of obesity because it provides a new perspective for viewing fat. Understanding the factors that lead us to the decisions surrounding fat are important, because they illustrate that we live in a society that offsets issues with the assumption that "science" will find the solutions. This, yet again, alleviates responsibility of direct action, not only by the state but by the citizen. I cannot ignore the fact that people are responsible for gaining weight on their bodies, regardless of extenuating circumstances; however, the state's perspective on fat should not be alleviated because of this, and it should view fat strictly as a social phenomenon that is affecting a large segment of the population.

The inception of genetics into this debate introduces an element that challenges the relationship between the individual and his or her environment. One becomes separated from the self and free will is removed by genetic predeterminism. Accountability shifts onto a seemingly elusive force. Life, in its most irreducible form, becomes the guiding force for an individual's interaction with the world. Genetics has yet to provide the world

with a “fat vanishing pill,” but the promise of immense profits ensures this will be researched with fervour until its creation.

The role of genetics in the evolutionary development of humankind figures prominently throughout the anthropological literature surrounding fat. The role of genetics continues today through the possibilities of genetic manipulation, which offer both an explanation and a promise for solution.

At the molecular level, genetics research has resulted in countless breakthroughs since the mapping of the human genome in 2000. However, at this point, the scientific community is still struggling to understand the degree to which genetic expression and one's relationship with his or her environment are connected. While we may be able to understand a configuration of genetic expression that figures prominently in obese individuals, the degree to which genetics has contributed to their condition is not entirely understood.

There are some instances where genetics and obesity have been connected. A study in 1986, conducted by T. I. Sørensen et. al., revealed that in a sample of 540 Danish adoptees who were compared to their biological parents, there was a greater correlation between the adoptees and their biological parents than to their adoptive parents in relation to the level of

”body fatness.” [22] This study was carried further in 1989 to explore the relationship between the adoptees and their biological siblings and half-siblings. The results indicated there was a strong connection in the amount of body fat between biological siblings, with less of a connection occurring between half-siblings. [23] This strongly suggests a hereditary connection to fat. It shows not only that a genetic connection exists, but that the possibility for an answer to fat can be found in genetics.

The recent attempt to find the “fat” gene has lead scientists on the quest to find the Holy Grail of genetic research. The idea that we could simply “turn off” the gene and peoples’ weight would suddenly reach “normal” levels has become the quest for many. One gene, the MC4R, has been associated with an accumulation of fat because it is seen as the one responsible for adipose tissue storage. Although a consensus over the function of MC4R has not yet been reached, it is important to mention it as an indicator of what is currently happening in the world of genetics in relation to fat and what it promotes, which in essence, is a potential “cure” for an issue that does not require a cure. Society is looking to genetics for an answer

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22. Thorkild I. A. Sørensen, R. Arlen Price, Albert J. Stunkard and Fini Schulsinger. "Genetics Of Obesity In Adult Adoptees And Their Biological Siblings," *British Medical Journa* 298, no. 14 (1989): 87-90.
23. Ibid., 88.

because we have a faith that technology will provide solutions for an easy way out.

Technological Artefacts

Turning to technology to solve the issue of fat could be seen as a contradiction, as the sudden rise in technological advancements in the last few decades is a key contributor to the rise in obesity rates. While the solution to fat may be invested in technological advancements, the irony is that the rise in fat may be due to technology itself. The purpose of much technological advancement is to make life easier, to decrease the amount of physical effort needed to complete particular tasks. This has worked so well, that it is making us fat. The problem is that technology has advanced at a pace that humankind cannot keep up. The most important variable of an individual's body fat content is connected to his or her relationship with the external environment. As previously mentioned, there is no cause or antagonist that can be blamed for the global rise of fat; however, it can be argued that some objects play a more significant role in its accumulation. In order to illustrate the effects of certain material artefacts on society, I have chosen to explore three technological developments that have significantly affected the rise in

fat as well as the configuration of society: the microwave, the supermarket, and the automobile.

Invented in the early 1940s, the microwave moved into mass production in 1967, but it was not until the 1970s that it gained popularity in North America. Today, 85 percent of North American homes have a microwave.[24] TV dinners emerged in the mid 1950s, which offered North Americans quick and easy meals that were paired with another emerging piece of technology, the television. Initially, a problem with frozen foods was that they tasted bland, as the freezing process removed a lot of the original flavour. As a result, the foods were injected with higher percentages of fat, sodium, and sugars in order to make the foods more palatable, with little concern for health impacts.[25] This also contributed to alleviating the hunger pangs, and consequentially, ascribed a value based on taste that has been pursued by companies in a competitive environment. Today, more than 75 percent of meals and snacks in Canadian households are made in less than 15 minutes.[26]

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24. Paul R. Liegey, *Hedonic Quality Adjustment Methods or Microwave Ovens In the U.S. CPI* (October 2001). http://www.bls.gov/cpi/cpimwo.htm.
25. Kessler, *Overeating*, 175.
26. Ibid.

The microwave gives an individual the ability to eat at any time with minimal effort, in comparison to the meal preparation time required in the past. This freedom allows for increased meal frequency; meals that were traditionally set along regimented times, as eating was considered a daily social event. The microwave as a technological artefact was originally intended to save time in the preparation of meals. It was paired with the television because it was also a relatively new technology that was attaining market dominance. While the original intention of these innovations was to increase the social dynamic of these activities, the result has become its inverse: social fragmentation and social isolation.

The microwave, in one encompassing motion, was able to remove the traditional and cultural binds that were accompanied with food and its preparation and separated individuals from one another, allowing people to eat in accordance with their level of hunger, rather than the prescribed times previously reinforced by society. Efficient strategies in food production have continued to create a greater geographic distance between the production of food and the consumer, but have also resulted in a less expensive product. The efficient food production measures led the way for the creation of the supermarket.

Supermarkets began to emerge in the 1930s and 1940s. Due to their efficient nature and lower prices, based on profits generated from high volume, supermarkets quickly developed and expanded. By the 1950s and 1960s, supermarkets became the centers for suburban sprawls. They became the hubs for vast networks, and inspired the masses to shop. Supermarkets sought to purchase products in high volume, offering as many products as possible. With a stringent focus on the aesthetic to lure customers in, the shift in the 1970s moved to discount stores, concerned only with the lowest common denominator.[27] It was only in the 1990s that the mega-market claimed its dominance through the development of one company in particular, Walmart.[28]

The growth of the supermarket has a strong connection to the increase in overweight and obese individuals. Distribution channels have allowed supermarkets to offer food imported from every corner of the globe. Seasonal diets that once bound us to geographic surroundings have eroded, leaving a diversity of palatable foods within a moment's reach.

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27. *New World Encyclopedia*, s.v. "Supermarkets," last modified July 15, 2008, http://www.newworldencyclopedia.org/entry/Supermarket.
28. Thomas L. Friedman, *The World is Flat: A Brief History of the Twenty-first Century*, 3rd ed., (Vancouver: Douglas & McIntyre, 2007), 151-167.

Market forces create a race to the bottom-line price for hyper-palatable, calorically-dense foods. The producer's primary goal is for its food to have a greater appeal and taste than the competition. The supermarket allows a greater variety of competitors to occupy the same space, forcing greater innovation in creating hyper-palatable foods. The consequence of this is that healthier, albeit less palatable foods, are more expensive. One could go so far as to argue that healthier alternatives have become luxury commodities within a supermarket setting. Due to the competitive environment for hyper-palatable foods, increased marketing is necessary to establish an advantage over an already saturated field. The supermarket has been able to centralize the shopping process wherein an individual is able to preserve energy while accumulating large quantities of calorically-dense food. From the large, conveniently planned parking lots, to carts, automatic doors, efficient check out processes, and categorized goods, the supermarket strives to lower energy spent in the store in order to maximize an individual's purchasing power.

David Bassett, et al. proposes there is a direct correlation between active transportation and obesity in Europe, North America and Australia. They contend that, "countries with the highest levels of active transportation

generally have the lowest obesity rates."[29] Active transportation applies to forms of transportation such as walking, biking, jogging and rollerblading. While the argument that cars are making us fat has been posited many times in the past, this is the first time it has been applied in a study focusing on the comparative method among industrialized states.

How, then, does the vehicle make us fat? It is important to make the obvious known in this respect, as it illustrates factors that may have been previously neglected. Driving removes the ability for an individual to move physically, thus preserving calories, and also allows for greater materials to be moved with significantly less effort.

The invention of the vehicle has allowed us to transport and attain vast amounts of food. Foods that travel greater distances require more preservatives, such as salt and sugar, and fat for taste. Aggressive marketing techniques have removed healthy alternatives from convenience stores, which have been replaced with hyper-palatable foods. Ironically, you need a car to seek healthy alternatives because of the decrease in the number of places that carry such products. Clearly, it can be argued that the car has become a large contributing factor in accumulating fat.

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29. David R. Bassett, John Pucher, and Ralph Buehler, "Walking, Cycling and Obesity Rates in Europe, North America and Australia," *Journal of Physical Activity and Health* 5, no. 6 (2008): 795-814.

The most significant changes that have occurred because of technological advancements are the unintended consequences that have been inadvertently created. In relation to the microwave, it is not simply the ability to eat whenever you want; it is the overarching effect it has played on the customs that once brought people together at specific times of the day. What is now considered socially acceptable has widespread ramifications for individuals and their relationship with society. In the case of the supermarket, the most significant effect is not the products themselves but the competitive market environment that has essentially forced these products to emerge in a completely unregulated nutrient environment. And finally, in the case of the vehicle, it is not the direct effect of the automobile itself; it is the changing social conditions that the automobile has created.

The roles the microwave, supermarket, and automobile play in the increased rates of fat have been significantly understated in public health policy discourse due to the separation created between cause and effect. The critical factor in understanding the rise of obesity is society's inability to adapt to technological innovations that alter the social fabric and fundamentally change the lifestyles of North Americans.

By all accounts it would appear the rise in overweight and obesity charts a parallel trajectory to the increased rate of technological advancement.

In the absence of material artefacts such as cars, malls, roads, microwaves, televisions, and computers, there is no evidence to suggest that the increase in overweight and obesity currently being examined throughout the neo-liberal Western world would exist. However, while technological adaptations can be attributed to the rise in fat, they can also be attributed to the rise in life expectancy rates. As a result, the state of humankind is a direct result of its surrounding technological adaptations

As rates of fat and technological innovation increase, so has food availability. Starvation rates have decreased across Canada and a vast majority of industrialized, Western democratic states. There are now more overweight and obese people in the world than those who are underweight. Given the current trend, this would appear to be an issue unlike any the world has seen before. It fails, however, to take the factors of globalization into account. With far greater interdependence between states and significantly improved distribution channels, the world can be perceived as much smaller than it was in the past. Communication, and in the case of food, transportation and distribution channels, have expanded significantly. Much like the race between Coca Cola and Pepsi Co in the late 1980s to expand into lesser developed states; transnational corporations are now able to exchange goods and services internationally with ease. The frequency and speed by

which products have been able to change hands has led to an inability of many to adapt and cope, leading to a rise of fat. People cannot cope with the vast quantities of food and the various food options being presented to them. Canada is not encountering this issue alone. It is affecting many states with varying degrees of socio-economic status and political orientations. As a result, it cannot be understated that this in fact is a global phenomenon.

As I have expressed in this chapter, one of the main causes for the rising rates of fat is technological advancement. It has affected our relationships with each other, with the environment, and of course with food. Consequently, our identities have also changed. The degree to which fat affects our identity will figure prominently in how we approach finding solutions.

Identity Formation

Identity formation alters the direct connection an individual has with fat, because the state, media, marketing and advertising, and social misconceptions present a skewed representation of it. Identity formation occurs when various factors influence an individual's perception of self. How an individual views himself or herself figures prominently in relation to his or her relationship with the state, because if a person perceives himself or

herself in a way that is supported by the state it is reinforced. However, if it is a contrasting perception, that contestation, if widespread, can lead to resentment, mistrust and civil unrest. Having a strong understanding of the factors that shape this relationship will ultimately factor into any approach taken towards fat. When we look at identity formation we cannot forget what the impact of it will be in relation to the state, and how it alters the relationship between citizen and state. How the individual is viewed in relation to the state is imperative for not only understanding fat itself, but the dilemmas associated with fat.

Plato's *Allegory of the Cave* can be used to illustrate how the relationship between an individual and his or her environment creates a perceived reality and how an individual comes to terms with that reality to understand him- or herself. In the *Allegory of the Cave*, individuals sit facing a wall. A fire projects images behind them, which are made from men carrying objects that cast shadows.[30] The individuals perceive the shadow images as reality, which exists as much for them as it does for anyone else. This applies to obesity in that a subjective interpretation of what fat is and how it constitutes an individual's reality, i.e., whether or not he or she is fat is not singularly based

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30. Plato, *The Republic*, trans. Benjamin Jowett, The Internet Classics Archive. 2009. http://classics.mit.edu/Plato/republic.8.vii.html.

on how an individual views himself or herself. An opinion is formed based on the views of others. The others, in this context, are the people casting the shadows, not the people viewing them. An idea of fat is based on the shadows created by others. For example, the "shadow" cast by marketing and advertising presents an image detached from reality; that everyone is fit and healthy without having to worry about diet and exercise.

Marketing and advertising create a reality that alters the perception of not only what fat is, but who is fat and why they are fat. Even though it has been proven that the majority of the population is overweight, people believe in an *illusionary society* that does not perceive that to be true. I accept this; however I do not accept the degree to which fat affects our population, which can only be known through greater research. But what is most important is an awareness of who we are and what fat really is. An illusionary society is a social construct that blurs our ability to see society for what it really is. Marketing and advertising skews our perception of society, which is reinforced by the state. How can fat be viewed with disdain when the majority of people are fat? I lend this idea from John Stuart Mill's rendition of "Tyranny of the Majority" from his text, *On Liberty*.[31] The idea is that a

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31. John Stuart Mills, "On Liberty," in *On Liberty and Other Essays*, (Oxford: Oxford University Press, 1998), 8.

majority dominates democratic spaces and marginalizes dissenting opinions of the minority. Since a majority of people are overweight, it should be accepted as the new norm. The illusionary society's ability to change the perception of the public is so strong, though, that it overwhelms the majority. If the state embraces the illusionary society an individual has only him or herself to blame, as his or her perception of what is reality is blurred by the illusionary society. The illusionary society creates an environment where individuals are responsible for their own fat, because they contrast themselves to a world where they are fat and others are not.

The state can best be understood as a social structure that perpetually reinforces itself by reinforcing its citizens' conceptions of who they are. The citizen must then be seen in accordance with the definition of the state. The identity formation of the citizen is contingent upon the view held by the state. The state supports a view that is expressed by the illusionary society because this view allows it to remain inactive in terms of policy reformation, while remaining active in its application of discursive elements of power.

The state has a dialectical relationship with the citizens it governs. The citizens create the state; without them there is no state. Citizens also rely on the state for governance, or there would be no order. Both the state and the citizen need each other in order to exist in civilization. This relationship is

imperative in the societal articulation of fat. The state views people in accordance with their health conditions. This forms an individual's identity through health and compartmentalizes people in relation to the conditions they have, and they are recognized as such. When a state recognizes an individual on the merits of health, it uses a form of recognition that forces all other identity forming forces to comply.

In her book, *States of Injury*, Wendy Brown explored the concept that the state's influence can be directly applied to the identity formation of fat. In it, Brown argues that the state propagates a form of injury of the citizens under the auspices that fat is a direct result of personal choice.[32] The state does not confront the issue of fat because of the individualization of responsibility. The individualization of responsibility occurs when responsibility or accountability for an event or phenomenon is internalized by the individual. The state reinforces the conditions of fat as a state of injury, which can be evidenced not in the action taken by the state, but in its inaction, and how it has transferred the responsibility of fat on to the individual. The identity that the state recognizes, however, is limited in scope. The state's recognition of an individual's body trumps individual recognition. If an

32. Wendy Brown, *States of Injury: Power and Freedom in Late Modernity* (Princeton: Princeton University Press, 1995). 142-152.

individual regards himself or herself as thin, but the state says he or she is fat, the individual has no choice but to identify himself or herself as such. In this sense the avenue of power being employed is one through political structure, as opposed to the interpretation of power mentioned earlier. However, through increased forms of information dissemination propagated by the state, an individual may be lead to the same conclusions prior to the definition being established by the structural forms of the state. Instead of including variables such as the physiological effects fat has on the body, the inaccurate methods of measurement currently being used to classify overweight and obesity, hyper-palatable foods' psychological effects and the dominance of such foods in industry, and the increased global trend of accruing fat, fat is being viewed as a state-centered phenomenon. This is because the state must continually reinforce itself by promoting this state of injury in order to perpetuate its necessary role in society. In this sense the re-creation of the state favours a perspective that is not necessarily for the betterment of society itself, rather it is in the self-interest of maintaining systems of influence. Having citizens in a state of injury means they will perpetually turn towards the state for help. The greater the need, the more powerful the state becomes, and the more subservient its citizens will be. Fat

categorizes and divides people, so the state uses it as an instrument to force its citizens to turn to it for guidance.

Another aspect of identity formation largely excluded from the public discourse on obesity is the effect of the cultural creation of the illusionary society. The media represents it through the reification of an aesthetic perfection, which presents an unrealistic society. The unreal society is one that is imagined to be true. Media exposure through Internet, film, television, and radio, is steadily emerging as the prominent form of exposure an individual is subjected to. The recreated society that exists in the media, much like the state, requires that the aesthetic spectacle of this illusionary society is preferred, in order to retain the attention of its audience. Fat is pathologized in order to make prospective consumers feel inadequate, resulting in them purchasing products that purport to address those inadequacies. When people have been subjected to the illusionary society they become conditioned to such an extent that when they step outside of that society, they are unable to remove the effects of it. The illusionary society, in turn, reinforces the identity instilled by the state. The state uses the illusionary society to pathologize fat, because of its dependency on capital in a liberal free-market environment. The illusionary society becomes a powerful tool for the state, because of the ambiguous nature of fat. Identity is not fixed to a

particular set of variables, unlike other identities like ethnicity, gender, or socio-economic disparity.

What effect does an illusionary emphasis on healthy lifestyle and consumption have on an individual? The North American "self," while speaking in the most abstract way possible, is overweight. This "self" is compared to an ideal image that is healthy, and as a result, there are limitless products for attaining the goal of being healthy. Despite measures taken towards dieting and other health alternatives, weight still increases. The society that is represented is not one of reality; rather, it is the *unreal* reality, the illusion of reality created by a powerful network driving the buyer to consume. The self wants to be attractive because it exists as a biological imperative. One can simply buy products to make him or herself more physically attractive, so consumption continues. The illusionary society reinforces everything that one is not, in order to propagate everything he or she needs to be. The ideal self, as it stands, remains a place on the horizon that one can never get to. We must become conscious of this process in the decision-making process when approaching fat from a policy-maker's standpoint.

This chapter illustrated the current definition of fat and how it is being applied. This definition was critiqued, which allowed for a formulation of

how fat should be viewed as a social phenomenon, despite the potential windfalls associated with it. This was done, firstly, by noting the limitations of the dominant form of measurement, the BMI. Secondly, society's inability to properly adapt to technological innovation was proven to be a contributor to increasing rates of fat through an analysis of technological artefacts that have significantly affected society. Finally, I looked at the role identity formation has played, both in civil society and through reinforcement by the state in order to ascertain the degree to which fat affects the relationship between citizen and state.

The next chapter will look to define a political interpretation of fat, as a social phenomenon. In order to do this we will begin by looking at fat's influence on an international scope, and gradually narrow the focus to the province of BC.

CHAPTER 2: FINDING FAT

This chapter illustrates the current political definition and approach that has been used to understand the existing direction taken by policy makers on what fat is and how it affects people on an international, national, and finally on a provincial scale. I will position BC in the international and national scope to show the degree to which fat is a problem in this province. This will show how fat is a social phenomenon that transcends the boundaries of a specific province or nation. Providing this context shows us that this must not only be done in a provincial context, but that it should be applied in a national context as well, and could even be supported in an international context, despite the dilemmas associated with it.

The state plays a role in defining fat because of its ability to influence individual behaviour, and this chapter will show the multi-faceted nature of the political reality of fat in BC. The current political definition of fat is a two-part definition. The first part is a rhetorical definition, created by state-led organizations and used by the media, which associates fat with fear with terms like "obesity epidemic." The second part of the definition interprets fat in a clinical sense. The current political approach is reactive. Whether we choose to acknowledge it or not, the state either influences popular opinion or exists as a representation of it, which consequently frames how we perceive fat. An aspect

of fat that also cannot be ignored throughout this chapter, much less the entire paper, is the intense moralizing that serves as the justification for positions taken towards fat. Fat is an issue that affects each and every individual because of the division that is being created between those that the state sees as either fat or not fat. As such it must be approached in a manner that does not define whether fat is right or wrong because fat in itself is not detrimental to health.

This chapter will narrow the focus on fat from an international and national standpoint, to the position taken by the province. Understanding how the province views fat will determine its response to fat. Due to space and available information, the chronology will be predominantly based on direct health data from the last 10 years, while drawing upon secondary literature to mark emerging trends post-WWII.

This chapter will apply the interpretation of fat provided in the first chapter to a provincial context. It will argue that within the province of BC, fat has not been adequately measured, defined or acted upon. The aim of this chapter is to illustrate the current position that has been taken by the provincial government and to highlight the connection it has with the interpretation of fat provided in the first chapter. Specifically, the state's approach to addressing fat needs to change from viewing fat as an illness to viewing it as a social phenomenon, while

at the same time illustrating a policy terrain that is fraught with numerous challenges and dilemmas.

The state's role in interpreting needs to be assessed, as does its attempt to solve or "cure" fat. We must review what has been done up until this point, while detailing the policy direction that has been undertaken. This will show that addressing fat is a highly debated topic with proposed solutions that have been inadequate at best, when compared to the rhetoric that has been used to highlight this as a critical issue. We must explore the ethical ramifications before any action is proposed, which presents a challenging quandary, as the ethical debate surrounding whether fat is good or bad is shrouded by varying perspectives, which each offer valid reasoning. The vast numbers of varying perspectives on whether or not fat is good or bad in a medicalized context are difficult to disentangle and explore. This ambiguity sets the stage for an ethical discourse that does little to guide or present clear policy direction; even though the state has the ability to clarify and apply a clear and concise policy direction that can significantly affect the phenomenon of increasing fat rates.

On an international and global scale, overweight and obese individuals represent a growing condition transcending Western industrialized states. China and India, both of which have strong emerging economies and high populations, are now recording significantly higher incidences of overweight and obese

individuals.[33] The significant economic growth has resulted in more consumption, which in turn has resulted in more people becoming overweight or obese.

Fat in Canada

Similar to other nations, Canada's obesity rates are growing. Arguably, this trend began after WWII.[34] The nations with increasing obesity rates experienced significant economic growth after WWII. Among states within the Organization for Economic Co-operation and Development (OECD), Canada falls within the average for a global increase in obesity rates within industrialized states.[35] This post-WWII trend is also reflected in the steady increase in health care costs. As more demand is placed on the health care system, costs rise, and governments have to do more with less money. This forces them to choose which areas of health care to focus on, inevitably alienating several groups of people needing care. When looked at in a broader context, the rise of obesity seems like a significant issue facing many governments, but when it comes down to investing

33. Jason Gale, "China Tops India on World Diabetes Ladder as Boom Spurs Obesity," *Bloomberg Business Week*, March 24, 2010, http://www.businessweek.com/news/2010-03-24/china-tops-world-diabetes-ladder-as-economic-boom-spurs-obesity.html.
34. "OECD Health Data 2010 - Frequently Requested Data," Organisation for Economic Co-operation and Development, accessed November 8, 1020, http://www.oecd.org/document/16/0,3343,en_2649_34631_2085200_1_1_1_1,00.html.
35. Ibid.

money in addressing it, more value is placed in other areas of health care and it ends up getting ignored.

In Canada, the prevalence of overweight and obese individuals is regionally focused, with higher concentrations of obesity in both the Atlantic and Prairie provinces.

Interestingly, Canadian populations with excess fat are far more dispersed than in the United States, where specifically the south has more overweight and obese individuals than the rest of the country.[36] What is currently needed to concretely define the incidences of fat is solid, definitive data. Unfortunately, such data is difficult to collect, because no accurate forms of fat measurement exist. Therefore, the stats used in this chapter will be ones that use the BMI, despite its inaccuracies, because it is the dominant form of measurement that is currently being employed. In the process, this chapter will illustrate how the BMI has been implemented for measuring fat and why it is incorrect.

In an attempt to measure the cost of obesity, Christopher Auld and Lisa M. Powell argue in *The Economics of Obesity: Research and Policy Implications from a Canada-U.S. Comparison* that, "differences in income, education, living arrangements or race explain little of the 'obesity gap' between Canada and the

[36] "U.S. Obesity Trends," Centers for Disease Control and Prevention, accessed March 13, 2011, http://www.cdc.gov/obesity/data/trends.html.

United States."[37] For both Canadian and American men, income and weight are positively correlated. However, this study suggests if socio-demographic characteristics were identical for both Canadians and Americans, Americans would still be heavier. Furthermore, income, education, living arrangements, and race can only explain nine percent of the BMI variation between the two countries, indicating they explain relatively little of the total variation. The study also found that low-income and high weight is only strongly linked among Canadian women. In terms of understanding obesity within a quantitative political context, obesity, yet again, becomes even more difficult to solidify with a concrete definition.

Dr. Kim Raine attempted to analyze and offer solutions on the complex issue of fat in her study, *Overweight and Obesity in Canada: A Population Health Perspective*, which exists as a central piece for framing the political discussion around understanding obesity.[38] The Canadian Institute for Health Information funded this original venture, but to date, there has been no follow-up or action

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37. Christopher Auld and Lisa Powell, *The Economics of Obesity: Research and Policy Implications from a Canada-U.S. Comparison*, (working paper, McGill-Queen's University, 2005).
38. Kim Raine, *Overweight and Obesity in Canada: A Population Health Perspective*, prepared at the request of Canadian Institute of Health Information, (Ottawa, Ont., 2004), http://secure.cihi.ca/cihiweb/products/CPHIOverweightandObesityAugust2004_e.pdf.

taken since the release of the initial work. This 81-page document sought to define, assess, and address obesity through channels that it itself acknowledges are flawed and require policy change. It exists as the most comprehensive, government-funded piece of work on obesity within Canada. Due to this, the opinions I express discuss the ongoing dilemmas that have been addressed throughout this piece as well as the ongoing inability to properly address the severity of fat in Canada.

From the onset of Raine's examination, it is evident there is a stark differentiation between the amount of research conducted in United States, which spans well over 40 years, and Canada, which has significant gaps in all charted data over the last 20 years. What Raine neglected to address is that private insurance companies have conducted a majority of research in the United States. The unfortunate reality of Raine's work is that the statistics she used were not current, and because of that, the policy relevance of her work may be questioned, not due to a lack of research, but rather, a lack of available information. At the same time, the information provided illustrates the deficiencies within obesity research, and provides no direction for future developments. This lack of data results in our inability to adequately assess the effects fat has on the health conditions that have been connected to it. The current political definition stands as an expression of this lack of information and reflects

the inherent difficulties associated with promoting policy reformation, despite the attempts made on Raine's behalf.

Raine addressed the issue of obesity as it is related to non-communicable or chronic diseases. Understanding the significance of obesity rests primarily on the effect it has on recognized conditions. This presents a situation where obesity can be measured, and has become one of the dominant characteristics for the discourse of obesity. Cardiovascular disease, the leading cause of death in this country, has been strongly connected to excess adipose tissue. Raine notes the problem that, "nationwide programs over the last 30 years…have not explicitly emphasized obesity."[39] Type 2 diabetes is another condition that shares a significant connection with excess adipose tissue. In fact, more than 70 percent of people with Type 2 diabetes are obese.[40] While Raine may be addressing an association that creates startling results, an issue that is raised is in relation to how excess adipose tissue should be viewed. For Raine, viewing obesity as classified by the BMI, allows her to medicalize fat, to frame it as a medical condition. This is not unique to Raine specifically, as obesity is currently medicalized throughout Canada. The problem with this is that the detrimental

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39. *Ibid*, 13.
40. "American Heart Association: About Diabetes," American Heart Association, accessed May 6, 2010, http://www.americanheart.org/presenter.jhtml?identifier=3044759.

health consequences that result from obesity result from degrees of physical wear from literally carrying extra weight. The physical wear that degrades the body can clearly be seen as an effect of fat. However, with that in mind, physical wear is a naturally occurring process that will inevitably happen to an individual over his or her lifespan. To say that this form of degradation is premature raises the issue of natural process. The dilemma associated with natural process was raised earlier in relation to premature death, and in this case, carries the same form of logic that is currently being utilized. To assume that any form of physical wear is premature can only be based on what is considered to be statistically normal. If an individual deviates from what is considered normal, or within the median range, they become victim to premature degradation. At what point is something considered to be a natural process and when should it be considered premature? For example, a brick layer who has lifted excessive amounts of weight for a vast majority of her life has learned from her doctor that she has significant physical degradation due to a job with an intense physical component. By what account would an individual consider the effects of her profession to have lead to premature physical degradation? The cause of degradation is clearly known and would be considered to be a natural process. However, if that same example was applied to a brick layer who was classified as obese, or more accurately, a person with at least 25 percent body fat, would her physical condition be viewed as a

natural process or premature? Inevitably the effect is altered due to the weight variable, but should this be the case?

Raine also touched on the psycho-social impacts of obesity. Although limited in scope, this part of the study is nonetheless impressive, as this issue is rarely covered in government-funded publications. In this section, Raine questioned the social environment surrounding obesity and how such beliefs may affect forms of discrimination and prejudice in relation to social class. The effects of fat as a psycho-social phenomenon must factor highly in any policy reformations that seek to confront fat. Despite the inclusion of this aspect, Raine did not delve into the subject matter, due to what I believe is an environment riddled with dilemma, compounded by numerous variables. How fat affects an individual in most cases is totally different than how it affects another. Factors such as lifestyle, habitat and an individual's psyche, all affect the subjective nature of how an individual interprets himself or herself in relation to fat, having fat, or being fat. .

When Raine turns to consider the economic impact of obesity, her analysis suffers from the same program that plagues many similar works. It appears that any effort to quantify the costs of obesity is a conservative estimate at best. In many cases the aggregate cost is unquantifiable because fat does not have a

uniform effect on individuals or society. This is a problem that has persisted throughout this chapter in regards to the role of fat in society, and has ultimately served as the crux to this issue. The absence of socio-economic differentiation prevents it from being properly addressed. This trend will continue as long as decision-making frameworks focus on the impossible task of trying to apply quantified value to fat.

Raine's study proposed that policy reform in areas such as tobacco-use, wearing seat belts, and recycling have generated social change. She said the same concept could be applied to addressing fat.[41] While it is true that such issues require significant social change, and in large part have made incredible strides, fat is an entirely different issue. In regards to tobacco, you either use it or you do not. The same applies to wearing a seat belt and recycling; you either take part in those activities or you do not. Fat is unlike these examples in that a definition of fat does not exist, so it cannot be determined who is fat and who is not. This makes it impossible to enact policy reform and social change, because there is no established target audience. Raine was optimistic that the movement towards supporting social-change was beginning to address obesity in Canada, but the

41. Raine, "Overweight and Obesity,"41.

reality is arguably the opposite. This is reflected in the continued increase in overweight and obese individuals since Raine's 2005 publication.[42]

A connection between smoking and obesity is often made in terms of health implications and policy approach.[43] But while they measure closest in scope compared to other issues, the policies enacted for smoking would not resolve the social condition of obesity. In the case of smoking, education campaigns and an onslaught of years of information dissemination have created a negative connotation with smoking. Smokers have become the social lepers of today, hiding in low-traffic areas that are a regulated distance away from entrances. We cannot create this form of stigmatization with individuals who have fat; rather, there needs to be open acceptance. How, then, do we move away from a situation that categorizes and identifies individuals based on whether or not they are carrying excess fat? If in fact such a target group exists, who makes up this group? In other words, how much fat is too much fat? And finally, the degree to which fat currently impacts our health care system, both directly and associatively, is speculative. So how would this target group be viewed if its fat resulted in extra cost on our excessively overburdened health care system? All of these questions raise issues in relation to the dilemma of fat. This is a topic that,

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42. OECD Frequently Requested Data, "OECD Health Data."
43. Raine, "Overweight and Obesity,"41.

as a social phenomenon, reveals the intrinsic difficulties associated with the concretized definition that has been applied throughout the medical sciences community and why it remains ineffective.

Raine's work also focused on school programs. She emphasized issues such as childhood obesity and increasing obesity rates with age, with less emphasis on the issue of the overweight, aging population. However, in reality it is the adult population's overweight and obesity rates that are placing the most immediate economic burden on the Canadian health care system.[44] The logic surrounding the rise of childhood obesity illustrates a concern over a population that is continually getting heavier. The central theme to this idea is that if obesity can be stopped early enough, there is a far higher chance that individuals will have lower fat rates throughout their lives. However, one of the most important factors in a child's health is the direct influence of the parent. The correlation between a parent who is obese and the child being obese as well is far more prevalent than the opposite.

In Raine's policy recommendations section, a series of 10 steps were illustrated, and a call was made for greater funding towards related research

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44. Réjean Hébert, "Can Canada's healthcare sustain the age transformation?" Canadian Institutes of Health Research, accessed January 12, 2011, http://www.cihr-irsc.gc.ca/e/10518.html.

within the Canadian context. The call for more research does not serve as an appropriate justification for inaction, even though it continues to be used as such. Raine argued that too little was known at that point, and believed there must be a sufficient knowledge-base in order to build and implement changes required to curb the rise of obesity. The problem here is that Raine calls for a sufficient knowledge-base which would most likely use the flawed BMI system of fat measurement. Using this system as the basis for future research would not elicit any meaningful solutions for the problem. I completely agree with Raine that this is an issue that deserves more attention, but I believe it needs to be seen as a social phenomenon. This is not a problem that can be viewed from an individual's medicalized perspective. It must be approached, maintained and addressed as a collective issue. The goal, unlike stopping smoking, is not simply to prevent people from eating calorically dense food. Rather, I believe the solution, assuming a problem even exists, is to implement changes in the ways people interact with their physical environment, a focus dedicated to making a happier, more active society, rather than a a "skinny" one. Raine should have made recommendations that included all individuals, rather than targeting specific groups, like school children and those with cardiovascular disease. Her approach may be more economically responsible, but ultimately it does not have the same impact and opportunity for growth as an approach that identifies fat as

a social phenomenon. Her approach also suffers because of the lack of information made available to her.

A lack of information has been an ongoing issue for policy-makers. It was only in the 21st century that health researchers realized self-reported rates of obesity were significantly lower than actual rates of obesity.[45] Not surprisingly, it was revealed that individuals lie about their weight. This is due to the social conditions surrounding fat, which is a result of the stigma attached to being overweight. This illustrates the negative connotation that is attached to being overweight and the underlying issue that being overweight is something to be ashamed of. This disdain for fat can be seen in the billion-dollar market for weight loss products.

In Canadian culture, primary importance is placed on efforts to lose weight; however the connection between the negative health consequences of fat and a federally funded health care program have yet to be made. While this may call into question ideas such as shared responsibility, it appears that health care is understood in a universal context, yet health is not. This applies to fat in that fat is not factored into the health care system's preventative health methods. The dilemma here is that if individuals have excess fat, what degree of that is of their

45. Raine, "Overweight and Obesity,"3.

own doing, and what percentage of that fat is a result of the social variables that are out of their control? It may seem simple enough to simply say that people control what they eat and how much they exercise, but is that necessarily the case? Perceptions of satiation, the time an individual has in the day, extra-curricular activity, even the distance to work or the amount of sleep an individual gets, all factor into this. As fat is portrayed as an indicator of physical health, countless variables must be viewed in relation to this phenomenon, as the only way to adequately address fat itself is to exclude the issue of fat and to focus on health. This dichotomy is further demonstrated by the contrast between health promotion and population health.

The most notable funding for overweight and obesity research over the last 10 years comes from the Institute of Nutrition, Metabolism and Diabetes (INMD), which totalled $3 million. That amount of funding is not enough to formulate solutions that attempt to review and institute changes to the relationship between people and their physical environment. So the misinformation surrounding fat continues, which allows policy makers to continue with the current discourse. Conditions attributed to obesity have received more funding, but direct research regarding obesity continues to be severely limited, which only makes sense as our understanding of fat cells currently views fat as an indication of poor health. Undertaking a re-

conceptualization of health in an attempt to reconfigure the relationship between citizens and their physical environment would be a massive undertaking, dealing with countless variables and requiring an exorbitant amount of funding, which at the end, could reveal very little. Overweight and obesity is under-funded because there is no concrete definition of fat. Greater understanding of obesity and what is making individuals overweight in Canada is necessary but difficult. In addition, a greater emphasis on health promotion for all Canadians is necessary for stimulating change. In the end, however, this begs the simple question, "is it okay to be fat?"

In 2003, the government publication, *Obesity in Canada: Identifying Policy Priorities*, "discuss[ed] obesity prevention dialogue on policy associated with the determinants of health."[46] Much like with the select standing committee, similar trends emerged concerning the political context of obesity as well as the proposed solutions. Such trends include the fact that this is a growing concern and that there is a lack of data available.

As of 2003, obesity—which the WHO had been identified as an issue of global importance in 1998—was still greatly misunderstood. This can be demonstrated by the lack of surveillance data, minimal understanding of causal

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46. *Obesity in Canada: Identifying Policy Priorities, Round Table Proceedings*, prepared by the Canadian Population Health Initiative (Ottawa:2003), 1.

relationships among factors relating to obesity and negligible obesity interventions at that time. This round-table focused on evidence and surveillance, school health, urban design and transportation policy-related research, the evaluation of policy tools, and an analysis of social inequalities as determinants of obesity. The findings revealed the depth of this issue, despite the narrow focus on a few topics associated with excess adipose tissue. Upon reflection, the common trend is the inherent difficulties that are associated with fat. The reason behind this, of course, is due to the fact that upon initial examination it appears that fat is a singular entity, but once we begin to extrapolate the causes of excess adipose tissue, it becomes an issue of health in a general context and less about fat.

The Heart and Stroke Foundation of Canada is a not-for-profit funding and public education organization that has looked at obesity. The foundation assembled a think-tank in 2005, which sought to address obesity in Canada through the "dimensions" of economic policy and the built environment.[47] The targeted groups emphasized in this piece included children, youth and the agri-food sector. The layout of the document sought to explain overweight and obesity through a series of questions. The first question posed to the panel was, what is a "built environment?" This question was asked because panel member

47. *Addressing Obesity in Canada: A Think Tank on Selected Policy Research Priorities*, prepared by the Heart and Stroke Foundation of Canada, (Toronto, 2005).

Dr. Larry Frank, the University of British Columbia's chair of Sustainable Transportation, saw it as a method to curb obesity. Frank defined the built environment as "the arrangement of activities of land uses within urban settings and the nature of the physical connections between the places where we live, work and play".[48] With a focus on sustainable development, the idea is to recreate an urban landscape that promotes active living. In understanding people's changing interaction with their environment, the focus of landscape formation should promote healthy living and directly affect changes that are made in the built environment.

The built environment serves to address the relationship between individuals and their physical environment. The solution is a rather simple one at first glance, however upon further examination, opens itself up to a plethora of pitfalls and extended discussion. Changing the physical environment would intend to restrict personal choice by changing an individual's physical environment. It may be argued that all environments in some way restrict and guide the nature by which individuals interact with them. Regardless, an individual must adapt. However, is there a social responsibility or ethical concern over creating an environment that guides people to perform desired functions without having a conscious awareness? For the design of a house or the

48. Ibid, 6.

location of a parking lot, this may seem trivial. But what if this concept is applied to a university campus, a village market, or a city center? The greater the scale of application, the increased form of manipulation that is taking place. Should a critical appraisal of this be excluded due to the fact that it is considered to be for the betterment of society? My personal thoughts support the built environment; however, the levels of contestation that could be brought against it require serious consideration. Another issue is that even though the built environment promotes physical activity, will it be effective? An environment where an individual is required to walk more does not mean that the ratio of caloric intake to caloric output will change significantly. Ultimately, in order for "success" to be had in a built environment, individual will-power must be altered. Health promotion would need to play a critical role in altering said individual will, yet it does not figure prominently. While the built environment has the opportunity to contribute to a healthy lifestyle, individuals have to want to be healthy on their own; it can't be forced on them because ultimately this is not an issue that has been proven unequivocally. Additionally, this is a situation where, if an individual chooses to live a certain way, it must be respected. While said choices can be regulated in an environment that prevents unhealthy products from being available for public consumption, the accumulation of fat cannot be solved easily, as fat can be accumulated in the healthiest of all alternatives.

Sherry MacLauchlin, Manager of Government Relations for McDonald's Restaurants of Canada, was a member of the panel who represented the industry perspective. She disagreed with taxing foods that are not conducive to healthy living. MacLauchlin argued that it "would be impossibly complex to determine what foods should be taxed, and at what levels."[49] While I believe the logic employed is under the argumentation that it is difficult to tax specific items that are calorically dense, it does not mean that it cannot be done. It is particularly interesting that the same paralyzing logic used by MacLauchlin, that fat is difficult to define in order to tax, is the same used by policy researchers. Both acknowledge specific causes, but due to the dynamic nature of their definition, the only result is inaction. An easy solution to this would be comparing the amount of calories in a food item to the weight of the item itself, and the amount of nutrients it has. This would be an effective way to limit calorie-laden foods that do not provide adequate nutrients. However, even with this proposed solution, I am hesitant to prescribe it as a firm solution because it does not address consumption levels. It does, however, provide a means of revenue generation which can be used for funding a regulatory environment, social programs, and information dissemination.

49. Ibid, 9.

The recommendations that emerged out of these think-tank proceedings included the need, yet again, to gather research in order to ensure the creation of effective changes. This "think-tank" illustrated a movement away from public, collective community involvement. Rather, it sought corporate-friendly solutions, which facilitate neo-liberal ideologies advocating free markets above all else. In regards to policy, there was a greater emphasis placed on information dissemination in relevant fields. This line of reasoning should extend in its scope to increased dissemination of information on preventative health methods in order to promote healthy living. This information on healthy living and preventative health should be shared with the general public to such an extent that it is top of mind for the average person. This study proposed an approach that first sought more information, followed by seeking solutions through methods pertaining to community building. I agree with the proposed policy solutions seeking more information, and believe the issue should focus on creating and implementing physical solutions through state-sponsored programs designed to acquire information, while promoting healthy living and preventative health-care. The idea is to change the psyche of society, to create and instil the merits of healthy living and to make healthy living a conscious decision that holds a higher value with all Canadians. The aim is to foster a nationalistic

identity where an increased awareness changes what citizens seek, as opposed to what is merely accepted.

Fat in British Columbia

Confronting fat in BC is complicated because health services are divided throughout the province. The more the responsibilities are divided, the more difficult it is to address overweight and obesity as a social phenomenon requiring significant change. The issue of fat is one that requires a wider scope in order to be realized, as the issue extends beyond the boundaries created by the province.

The distribution of BC's health services are made up of five regional health authorities and one encompassing authority. Of these health regions, the highest percentages of overweight and obese individuals are found within the Northern Health Authority and Interior Health Authority, as well as in the northern section of the Vancouver Island Health Authority. This provincial trend reflects the national trend that higher percentages of overweight and obese people reside in rural areas.

BC can be considered a province "healthier" than the others, despite rising rates of overweight and obese individuals. In a minefield of conflicting and outdated statistics—and in some cases a total lack of statistics--fat remains a

complicated issue, with many associated stereotypes, generalizations and assumptions significantly affecting policy direction.

Understanding obesity through measured statistics offers a scope for viewing BC in comparison to other groups of analysis. However, what is required from the provincial context is an understanding of the economic costs associated with overweight and obesity so funding preventative health can be justified. Though complex and difficult, there have been attempts to quantify the direct and indirect costs of obesity. The unfortunate but necessary question is one of economic perspective: How much does being overweight or obese cost? While estimates can be generated, the varying health conditions associated with fat are too vast and too complex to determine what the exact costs are.

Federally, total healthcare costs reached $183.1 billion in 2009. This is an increase of $241 per person over the previous fiscal year, bringing the per person cost to $5,452. This also marks a five percent, $9.5 billion increase over 2008, and reflects the trend that health care costs have been rising for the last three years.[50] While largely attributed to health conditions associated with an aging population, an increasing prevalence in overweight and obese individuals could also be a significant factor. For example, Atlantic provinces, known for having

50. "Canadian health-care spending to top $180B," *CBC News*, November 19, 2009, http://www.cbc.ca/health/story/2009/11/19/health-care-spending-canada.html?ref=rss.

higher rates of overweight and obese individuals, have recorded significantly higher health care costs over the last three years.

In BC, rates of overweight and obese individuals are the lowest, and so too is the health care spending on a per person basis. The average per person cost is $5,253, compared to the national average of $5,452. These figures, at the very least, raise the question of the cost of overweight and obesity. If the average of health care spending in BC was applied as the average across Canada, an additional savings of $380 per person would result, producing a cost reduction of $8,094,815,100. While this methodology is limited in scope and does not account for a host of different variables, it provides insights that illustrate fat that plays a role in the cost of health care.

It could be assumed that the lower health care costs in BC must be due to younger populations; however, statistics reveal that BC has higher numbers of people over 65 years of age.[51] [52] Additionally, the highest prevalence of obesity is

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51. "Demographic Characteristics of British Columbia's Seniors Population," *British Columbia Statistics*, June 2006, http://www.bcstats.gov.bc.ca/data/pop/pop/SeniorsDemographics.htm.
52. Ian McGugan and Phil Froats, "The all-Canadian wealth test: Average incomes by age, gender and province," *CB Online*, November 2007, http://www.canadianbusiness.com/my_money/planning/article.jsp?content=20071127_144252_6060.

found between the ages of 55 and 74, which would account for an even greater amount of health care costs being attributed to obesity rates.[53]

A province's cultural make-up could be a contributing factor to lower obesity rates and their associated costs. Compared to the other provinces, BC, Quebec, and Ontario have the lowest rates of overweight and obese individuals in the country.[54] The French-speaking population in Quebec has a similar culture to France, a country that also has low overweight and obesity rates.[55][56] BC's urban Lower Mainland region has a high representation of South and East Asian ethnicities. Although obesity rates have begun to rise in China, they are still 40 percent less than the Canadian national average.[57] Therefore, lower obesity rates in the Lower Mainland could be attributed to the significantly higher percentages of individuals of South and East Asian descents. There is a strong possibility that culture plays a role in how much fat certain people accumulate. In the cases of Quebec and the Lower Mainland, culture drastically affects the degree to which fat affects their populations. Policy makers need to look at those cultures and see

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53. "Median age of the population in the last 50 years, Canada, provinces and territories," *Statistics Canada*, September 22, 2009, http://www12.statcan.ca/census-recensement/2006/as-sa/97-551/table/t3-eng.cfm.
54. Margot Shields and Michael Tjepkema, "Regional Differences in Obesity," *Statistics Canada Health Reports* 17, no.3 (2008): 61-67. http://www.statcan.gc.ca/studies-etudes/82-003/archive/2006/9280-eng.pdf.
55. Ibid, 62.
56. OECD Frequently Requested Data, "OECD Health Data."
57. "Chinese concern at obesity surge," *BBC News*, October 12, 2004, http://news.bbc.co.uk/2/hi/asia-pacific/3737162.stm..

what they do that makes them so successful in combating rates of fat. We can see that as obesity rates rise across Canada, cultural adaptations are occurring, even for those cultures with less rates of fat. People are eating during less structured times and forms of higher caloric intake are occurring. Perhaps these socio-cultural characteristics could factor into providing less evasive solutions that would promote an environment that supports higher forms of caloric output while limiting caloric input. Whether it is right to force people to make lifestyle changes remains a question on its own, the underlying auspice that living healthier will lead to less medical issues later in life, based on averages, remains true.

It would appear there is higher prevalence of overweight and obese individuals in provinces that contain higher populations of people living in rural areas.[58] This finding is also substantiated by Theodora Pouliou and Susan J. Elliott, who, in their article *An Exploratory Spatial Analysis of Overweight and Obesity in Canada,* illustrate substantially higher rates of fat in sampled rural

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58. "Percentage Distribution of Rural and Urban Population, by Provinces and Territories, 1891, 1901, 1911 and 1921," *Statistics Canada*, February 12, 2009, http://www65.statcan.gc.ca/acyb02/1927/acyb02_19270133033-eng.htm.

"Canada Demographics: Population Density by Province 2001," *Antigonish Area Partnership InfoWeb,* May 28, 2010.

areas as opposed to sampled metropolitan areas.[59] In a report issued through Statistics Canada's, *The Daily*, rural areas also showed higher incidences of obesity than metropolitan areas. In addition to metropolitan areas having lower incidences of obesity, it was found that the higher the metropolitan area's population, the lower the incidence of obesity.[60] This is a specific instance in which fat has been attributed to specific geographic areas. I would argue that the higher rate of fat in areas with lower population density is due to a lack of funding and attention paid from all levels of government. The problem that I have is not necessarily that people are fatter in regions of lower population density, but that the social programs and civic associations that once allowed the rural population to flourish are becoming a thing of the past. This creates increased states of isolation and lower social interaction, thereby increasing the chances for sedentary living and fat accumulation.

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59. Theodora Pouliou and Susan J. Elliott, "An exploratory spatial analysis of overweight and obesity in Canada" *Preventive Medicine* 48, no. 4 (February 2009): 362-269.
60. "Health Reports: Regional Differences in Obesity," *Statistics Canada: The Daily*, August 22, 2006, http://www.statcan.gc.ca/daily-quotidien/060822/dq060822b-eng.htm#cont.

Genuine Progress Index

Researchers have attempted to quantify the costs associated with obesity numerous times. Ronald Colman, head of the non-profit organization GPI*Atlantic*, published an article entitled, *Cost of Obesity in British Columbia*. The study provides a quantitative understanding of obesity through the Genuine Progress Indicator (GPI). This indicator measure a country's economic growth using the same standards as Gross Domestic Product (GDP) but also factors in other variables that negatively or positively impact the economy, such as crime, stress levels, and the environment. In the study Colman suggests that obesity rates should be included as part of such an indicator.

According to the study, individuals who are overweight or obese are 50 to 100 percent more likely to die prematurely from all causes than those with healthy weights. The study also makes the claim that direct obesity costs in BC comprise 4.5 percent of the province's total health care spending, or $380 million, whereas indirect costs are between $730 million and $830 million a year (2001). Comparatively, the direct and indirect costs of smoking in BC were estimated to be $1.2 billion. As smoking rates decrease and obesity levels rise, Colman predicts obesity-related costs will soon surpass costs associated with tobacco use. Preventative health spending comprises of only 6.9 percent of BC's health care budget; the other 93.1 percent is spent on illness-treatment expenditures.

Colman expresses a series of solutions that are based on health promotion as opposed to illness treatment. However, the greatest problem with this perspective is that health promotion presents a distinct inability to quantitatively measure short term success.[62] Addressing fat as a social phenomenon requires a significant financial contribution. In order for this to happen and for more support moving forward there needs to be measurable results. While the GPI attempts to quantify factors that contribute to well-being, such as measuring work patterns, stress levels, and the attributes of active living, it does not offer "quick fix" solutions sought by policy analysts. However, the fact that fat has yet to be correctly measured does not mean that it is not a health issue, or that it is not being regarded by policy officials. Despite inaccurate systems of measurement and a poor collection of quantitative analysis the information that we do have supports the argument that fat is having a profound effect on the Canadian population. Regardless of the degree of inaccuracy presented in the research that has been conducted, fat is a problem. The main issue that we need to understand is how severe is this problem, and what are the root causes of this problem.

While still in the introductory stages as an approach, Colman is attempting to quantify what was previously regarded as only qualifiable. He is arguing for new strategies in measuring the social phenomenon of rising fat

rates. His work illustrates common trends and patterns that would have been disregarded through a traditional economic perspective. Criticisms, of course, are raised against this approach because of the subjective nature of prescribing value to the variables presented, yet it should not discount the awareness that he is bringing to issues that have largely been left disregarded. Colman argues that there are numerous triggers for rising rates of fat including stress and productivity, in order to show that there are a myriad of factors that affect fat that most people may be unaware of. My fear, however, is that the interpretive nature of such data, despite the intention behind it, leaves too much space for questions pertaining to its application. The information available is sufficient for realizing that a problem exists but more accurate information will better define the scale to which this issue is affecting the Canadian population.

B.C. Select Standing Committee

A select standing committee of the Legislative Assembly on April 27, 2006, sought expert advice in the hopes of curbing the sudden rise in obesity.[61] A main focus was the issue of childhood obesity. Dr. Michael Golbey, president of the BC Medical Association, insists that the cure to overweight and obesity in BC is

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61. British Columbia. Legislative Assembly, *Select Standing Committee on Health*, 2nd Session, 38th Parliament, no. 3., Hansard Services, (Ottawa:2006), 15-26.

through a "cultural shift that will take efforts on several fronts" and contends that, "we're competing against a generation of attitudes and marketing, and that change won't happen overnight." This sentiment has been expressed in nearly all of the documentation provided in this chapter, as it is a central theme to understanding fat in the first chapter. In order for change to be realized, the select standing committee would have needed to make recommendations that included the role of the state through the definition provided that understands the state through the perspective of governmentality.

The recommendations that were proposed through this standing committee included creating a child health registry in order to gain a greater understanding of necessary changes and their effectiveness. The problem with this is that it shifts the blame onto children and their parents. The ethical concern is it creates a situation where children are categorized by the state in accordance to their body type, and as such, are susceptible to forms of discrimination validated by the state. However, if the information gathered resulted in viewing fat in a collective nature, encouraging children to be more physically active and instituting better lunch programs, it may prove to be beneficial to children and something that could be applied to all places of work. The second recommendation was a call for more funding. The call for more funding is a common trend. It reflects an issue that remains relatively unknown, and it is true

that the more information that is available the better we can assess the severity of the situation, or completely disprove it as being an issue. However, it also allows for alleviated responsibilities surrounding proposed policy changes, which presents a situation where nothing can be done because the problem remains under funded and for the most part, unknown. The dilemmas presented become a dilemma in itself. Paralysis occurs because of the difficulties associated with attempting to address a problem that really lacks a clear cut solution. . The third recommendation was the implementation of nutrition and activity standards across the province, as well as removing soft drinks and candy from all schools and replacing them with healthy alternatives. While this provides insulated environments, it does not indicate the need for greater information to be shared with children over healthy living. Rather, this form of isolation, which has the ability to lower caloric intake, is merely a band-aid solution. It does not change the mindset of children. What is needed is an active education campaign so children understand why the food is being removed. Additionally, it was recommended that 30 minutes of daily physical activity be compulsory in schools. This is a recommendation that I do support because healthy living is being promoted and children are guaranteed to be exercising, as opposed to the removal of pop from schools which does not ensure the children will not drink it outside of school. Schools have been implementing these changes, however

despite these changes being made, the rise in obesity rates continues among children. And finally, the committee recommended that parents be provided with healthy meal, snack and portion planners. Enforcing what children are allowed to bring to school extends beyond the rights granted to the child's parents or guardians. However this should be approached with caution. A better alternative to this would be offering a subsidized food program that could be made available as an option for parents.

Targeting children enrolled in public education has become a primary focus for a number of reasons. It allows for greater levels of regulatory policy to be enacted, to the degree that *compulsory* policy can be implemented in schools. This raises serious ethical concerns because it forces the state to play a parental role. The most effective strategy for curbing the rise of fat is through information dissemination and habit-forming characteristics in the early years of psychological development. However, this is an approach that is ultimately the parents' responsibility. The select standing committee did not explore the ethics of these measures, nor the implications they might have. A registry where children are documented, categorized and identified, presents a reality of an Orwellian theme. It is of the utmost importance to consider the ethical implications and to carefully monitor the effects of strategies that are implemented in schools because the issue of the role of the school is brought into

comparison with the parent. The question of whose responsibility it ought to be, is significant. Should the role of healthy living be the responsibility of the parent or the state, in this case implemented through the school? The answer lies somewhere in between, as this is a shared responsibility. But this leaves a great level of ambiguity, which results in the issue continuing on as a source for ongoing debate. Monitoring a child's dietary intake is a responsibility that is shared between the parents of the child and the state. The trilateral relationship between parent, child, and the state is a contentious issue that needs to be examined before any significant policies are put in place.

The state's justification for intervention, such as school-lunch programs, the elimination of soft drinks and soft drink sponsorships, increased physical activity, and information dissemination, as previously mentioned, is to prevent overweight children from aging into overweight or obese adults. Doctors M. Golby and B. Mackie reflect on the trends of children becoming "chubbier" over the last 20 years. Regardless of whether the term "chubbier" elicits a derogatory or negative connotation is secondary, but noteworthy. What is of central importance is that these experts are making recommendations wherein the solutions offered are based on a return to the past, rather than an adaptation to a changing social environment.

The significance of this is that there have been cultural shifts in the last 20 years. Of particular interest, Mackie notes that parents often believe society is no longer safe so they fear sending their children outside to play. Researchers are not asking the hard questions such as: Why do parents fear sending their kids to the playground? Why are children more interested in staying indoors? What has changed in the relationship between parent and child? Identifying what leads to heightened forms of social alienation would reveal a cultural trend that transcends merely the accumulation of fat. The social alienation we see occurring shows that more people are spending time independently of one another, be it in front of the television or computer. This cultural trend leads to a fracturing of society as people become more estranged from one another. This social phenomenon is a key aspect of what makes fat a social phenomenon.

The current definition of fat used by policy circles, which does not define it as a social phenomenon, is flawed in its scope. Specifically, the lack of attention paid towards the socio-cultural understanding of fat remains absent from the current discourse, as illustrated in the first chapter. Instead, the primary focus is fixed on the fiscal costs associated with fat; however a solution to ascertain what those costs are cannot be known with certainty. Waiting for a solution does nothing to address the problem; rather it must be taken on through a qualitative perspective until quantitative data can focus the direction. Due to the fact that fat

cannot be quantified precisely, a policy direction cannot be determined, as it does not fit within the policy-making framework. While Colman sought to integrate the GPI in quantifying fat, there is still a significant amount of variables that remain unquantifiable. However, it is clear that a direction must be taken as overweight and obesity continues to rise. A clear direction would include a re-conceptualization of the current discourse on fat.

This chapter illustrates the difficulties currently confronting the provincial government, despite its continued contribution to the discourse on fat. This chapter "finds fat," which is simply that fat remains a discourse, which exists in a space that is best used for discriminatory interpretation that singles out and stigmatizes visibly obese and overweight individuals as moral deviants. This chapter illustrates the practical implications of the landscape presented in the first chapter, that fat should be viewed as a social phenomenon, as opposed to a medicalized condition, with a primary focus on creating an setting dedicated to supporting a healthy environment.

CHAPTER 3: THE FUTURE OF FAT

The first chapter, Framing Fat, explained what fat is and what it represents throughout social and political spheres. For the purposes of this thesis, the definition of fat is malleable, and throughout public health discourse, ranges from the material object known as adipose tissue to a manipulative form of social control of individuals. The second chapter explored current political discourse around fat and raised the issues and dilemmas associated with the varying articulations and approaches. It found fat to be an issue that remains a discourse, and identified the reasons for continued inaction. The chapter also reinforced the fact that fat is not being seen as a social phenomenon. Based on the definition of fat provided in the first chapter, that it is a social phenomenon, solutions carried out by the state must be guided by that fact. The implications of fat viewed as a social phenomenon will be explored in this chapter, which will be generated by reconciling the current political definition with my own, in order to advocate health promotion strategies intended to activate both the citizen and the state, not in an effort to fight fat, but in an attempt to confront the causes of fat.

The issue with fat is that the onus for dealing with it has been placed on two seemingly antithetical forces: the individual and the state. Weight gain is

increasingly affecting individuals and the state as well, because of the increased financial burdens fat and its associative conditions have on the health care system. As individuals continue to gain weight, we presume avoidable costs rise and more pressure is placed on the state to enact change. The state currently finds itself in a place of paralysis, where the definition of fat as a social phenomenon would require significant state commitment. In addition to this, it still remains unclear if fat is even a problem at all.

While it remains unclear the degree to which the social phenomenon of increased fat rates is having on the health and well-being of Canadians, the perpetually rising associative conditions of fat illustrate that change is required. While we cannot say for sure what the impact is, we can provide a series of solutions and the implications of such that would allow the public to interact with the physical environment in ways that would reduce excess adipose tissue and contribute to healthier lifestyles. The central tenant of proposed recommendations is not explicitly to fix fat; it is only to provide the public with options that may not have currently been available, and to limit the barriers to access for healthy living.. In the process, preventative health measures would alleviate a degree of fiscal strain that has been put on our health care system and increase the standard of living for Canadians.

The increased rate of overweight and obesity illustrates a societal pattern, resulting from sedentary lifestyles and increased caloric intake from foods that lack nutrition. It has been estimated that Canadians spend more than 5.8 hrs. per day performing leisure activities, a vast majority of which include time spent watching television, surfing the Internet, or listening to music. Coupled with time spent at work in environments that involve sitting for long hours, the amount of time Canadians spend actively moving is decreasing on a daily basis.[62] It might be assumed that the onus is on the individual to live an active lifestyle and adopt more responsible eating habits, but there is arguably a greater responsibility on behalf of the state, not only in supporting healthy living, but in removing the barriers to access that many Canadians face.

International organizations such as the WHO, as well as all states encountering this phenomenon, need to be responsible for gathering this information. They need to invest in research to provide quantifiable proof of the fiscal, social, emotional and physical effects of fat, in order to ascertain its direct consequences. This information should be acquired in a streamlined fashion that allows for cross-disciplinary analysis, and should be presented through an actuarial system that allows for easy comparisons among sample groups.

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62. "General Social Survey on Time Use: Overview of the Time Use of Canadians," *Human Resources and Skills Development*, November 11, 2010, http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=52.

In light of a continuing fiscally restrictive environment, a direction must be realized in order to determine the effects of fat. The proposal to gain more quantitative data, while being of primary importance, requires a prolonged period of time in which to measure developing trends. This quantitative data should be gathered on enacted social programs, with the focus being the analysis of the success or failures of those programs. Therefore, traditional methodologies such as fiscal savings and lower BMI must be seen in a greater context that reflects a change in a holistic view of an individual's standard of living.

Fat must be approached as it is represented -- a malleable, dynamic force that extends beyond the traditional confines of categorized issues that view fat as a stigmatized representation of an individual's interaction with his or her physical environment. Increased fat rates, as argued in the first chapter, can stem from a variety of sources, and when viewed in conjunction with one another, illustrate significant changes in how we interact with our physical environment. Previously, we looked at the microwave, the super market and the car. In one example, if an individual drives to the supermarket, buys a microwave meal and has that for dinner, the amount of calories expended versus an individual walking to a market, buying and preparing a meal are incredibly significant. The social aspect is also significant in this example as well, which only leads to a further disassociation from society itself. From the food we eat to the way we

transport ourselves, fat is indeed everywhere, and also affects all facets of governance. Fat needs to be approached in a way that accounts for its malleable nature. We need to approach it with policy changes that understand this malleable nature, not just target solutions at sub-groups. Simply put, fat is energy. Due to the increased availability of food, humankind must adapt to meet the needs of optimal health, while addressing the calls for occupying, or adhering to, a productive and consumptive environment.

Measuring Body Fat

Without discounting the practical use for statistical methods such as the BMI, the context in which it is being used is incorrect. Undoubtedly there should be increased research and development into creating a product that more accurately measures body fat. This technology needs to be accurate and standardized to ensure research on fat is horizontally consistent. In addition, this technology should be incorporated throughout the health services sector. If accurately recorded in a centralized database, it would provide enough statistical evidence to clearly outline the issues surrounding body fat percentage, and the health conditions directly associated with fat. The issue of fat should be dealt with through broad-based, society-wide reform. Understanding the scale of what needs to be done will be greatly assisted through quantitative analysis, if

collected anonymously. The data collected would not target the individual; rather, it would seek to understand societal patterns. However, this would require a significant financial contribution to be made and the infrastructure for such a system would be incredibly costly. In addition to the cost, the psychological effect of measuring peoples body fat would be unsettling, as the current social stance on fat holds negative connotations and presents discriminatory forms of judgement based on the individualization of responsibility.

As a result, the procurement of information on body fat percentage obtained by the state must be used in a way that does not target specific individuals. Fat is a social phenomenon and individual information procured on it should only be used as actuarial data, because that kind of data limits the ability to target individuals. However, this raises ethical concerns, as we see an increased tension between the responsibilities of the individual and the state. Simply to say that this responsibility should be shared does not answer how it would be shared, for this tenuous relationship would need to be based on incredibly carefully selected measures. It must also be integrated in a user-friendly format that would allow open access to the public. . All information gathered would be voluntary and anonymous, but would be added to an ongoing open source data collection system. The information fields would

remain broad in order to gather and develop data that seeks to understand the phenomenon of fat, as opposed to seeing it as a symptomatic physiological condition. Having the ability to chart the progress and effect of fat on a daily basis would enable policy researchers to assess the level of threat fat has on our health care system and develop a refined understanding of how it is evolving. Refined systems and filters in database mining in an open source environment would allow for the development of new ways that fat could be explored. This technology would allow policy makers to measure different variables that could attribute to excess fat, and allows for filters to be applied to other databases. This would allow researchers to explore many different perspectives of fat, which can be exported and applied to different statistical datasets. This information would help to demystify the social phenomenon of fat, and would illustrate how people are accruing excess fat. This hands-on information would be invaluable, as it seeks to understand fat as an issue that affects all Canadians in different ways, taking into consideration that an individual's experience with fat is a part of a greater social phenomenon.

Technology and Fat

An issue alluded to in the first chapter that must be revisited is the reason behind the increase in fat across populations. It is possible that the rising obesity rates may be a naturally occurring human development, and if so, state-led policy changes may not be necessary at all. It is entirely possible that current physiological and psychological adaptations may need to take place in an environment where food availability is high. The reality is that the sudden rise of fat may be a reaction to technological advancement that will stabilize through self-corrective measures. In the last 50 years technological advances occurred at a rate society could not keep up with. For example, the ramifications of the television on our lifestyle were not fully understood before the home computer was introduced. I believe the effect of the computer was not realized before the Internet was invented, and so on. Society has not had time to internalize the impact each technological artefact has had on our lifestyle before the next one is upon us. Recent technological developments have served as catalysts for sedentary lifestyles. In the past, people were required to perform more physical tasks as a part of daily life. Today's society, however, is in a state of technological dependence, and the need, or want, for physical activity has been largely diminished. What is now necessary is a re-conceptualization of the physical self towards the idea that fat is of the body, not on the body. We need to view the storage of fat on the

body as a necessary condition for survival and understand that the fat we accumulate is who we are, without seeing it in a negative context, and that the amount of fat we carry is case specific to the way we interact with our physical environment. This will be challenging, however, as current conceptions of what the physical self is will need to be reformed. A new understanding of what it means to be active is also necessary and it must be relevant to all Canadians. While we realize technological artefacts have changed our lives significantly, we need to provide a balance that allows people to be healthy, while adapting to the integration of technological artefacts in a way that does not create significant repercussions. The state's role in achieving this re-conceptualization and awareness is to provide increased information through inventive advertising strategies. The message should be that in order to be healthy you do not have to be thin. Advertising campaigns would need to be inventive and move away from a public service announcement- style, toward an interactive-style of communication. The current provincial government has taken steps towards generating this awareness, but this form of advertising would need to be expanded on. Television commercials are not sufficient in creating top of mind awareness. Examples would be providing dietary solutions in grocery stores or ideas for stretches you can do while at work or waiting for the bus. Television spots can

be dedicated to local organizations and groups that promote active and healthy living programs such as walking groups or bike groups rather than the dissemination of information alone. The problem with the programs currently in place is that they are not being implemented with the full support of the state. An example of state-led support in creating active lifestyles is Act Now BC.[63] This program, which was launched in 2005, is a cross-governmental health promotion, dedicated to "promoting wellness and supporting chronic disease prevention; enhancing collaboration among local government, non-government and private sector organizations; and, increasing the capacity of communities to create and sustain health-promoting policies, environments, programs and services."[64] While Act Now BC has performed numerous tasks relating to increased information dissemination and the promotion of state-led events, the scope of the program that is being currently provided is marginal when compared to the degree of change required.

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63. "ActNowBC Home Page," *ActNowBC*, http://www.actnowbc.ca/home/. Accessed August 1, 2011.
64. *$30 Million to Promote Healthy Living in B.C.*, Prepared by The British Columbia Ministry of Health, (Victoria, B.C., 2006). http://www2.news.gov.bc.ca/news_releases_2005-2009/2006HEALTH0017-000253.htm

Due to the changing nature of technological advancement and the hyper-accelerated pace that it has issued, previously implemented policy needs to change and adapt to meet the needs of society. In relation to fat, slow incremental change—typically the approach taken in policy making—will not be sufficient in curbing its rise. Rather, immediate change is required. While it is clear globalization has allowed for the rise in food availability, solutions relating to the regulation of particular food products have not entered this debate. Certain foods can be attributed to increased rates of fat. Taxation could directly target the common culprits: soft drinks, junk foods such as high fat and high sodium potato chips, chocolate bars and candy. Implementing the method of measurement outlined in Chapter 2, which compares the amount of calories in a food item to its weight and nutrients provided, does not specifically target food consumption. However, it provides a method for regulation and generating revenue to fund solutions such as information dissemination and social programs. Additionally, taxation based on caloric intake and nutritional value would force companies to provide healthier food products, without costs being incurred by the consumer. As technology develops, food availability will only increase. However the question that this poses is how does one determine if something is bad for you? Take butter for instance. Butter is undeniably a high-fat ingredient, which in moderation is not bad for you. Like all foods that are high in fat, eaten in

moderation, the effects are not harmful. Due to this changing environment, the food Canadians consume needs to be closely regulated, as the changes in technology are occurring at a rate that social adaptation cannot keep up with. However, implementing this is an incredibly challenging task that will only become more difficult as special interest groups become involved, as was evidenced by the previously mentioned representative of McDonald's. Despite the difficulties associated with this policy reformation, ensuring that Canadians are able to access healthy alternatives is important, but what is more important is the way that Canadians approach their dietary options.

Individualization and Fat

A plaguing problem within Canada's medical system is that dealing with fat is an individualized responsibility. Because of this, the state, in trying to ensure that individuals see their weight as their own responsibility, is not providing preventative responses to the issue of increasing body fat. Rather, increased forms of information dissemination and policy reformation in support of preventative health methods present an environment where citizens would be aided by the state. Currently, this individualization shifts the decision-making and fiscal responsibilities away from the state and onto the citizen, which up until this point has proven to be ineffective in confronting the detrimental health

consequences associated with fat. There is a contentious debate surrounding the direction taken by public health officials, which has seen health promotion metamorphose into population health.[65] Canada needs to place a greater focus on public health. It is clear that without a significant shift in the approach towards public health, fat rates will increase unhindered. The degree to which the state should invest in public health remains unknown because the effects of fat at this point also remain unknown. Any investment, however, should be congruent to emerging data sets proposed earlier in this chapter, which reveal not only the effect fat has on Canadians, but juxtaposes the public health investment costs with the costs fat places on the medical system.

This is a situation that speaks to the medical science's perspective. The medical sciences have moved towards a system of health promotion that is based on the quantifiable values of risk. For every procedure, condition or symptom, there is a statistically quantifiable variable by which we can assume outcomes will either be good or bad, positive or negative, affirmative or pejorative, because perceived risk is most often conceptualized by options that are diametrically opposed. The focus therefore needs to be shifted away from whether there is a quantifiable benefit, because any measures taken towards curbing obesity can

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65. Michael Orsini, "Discourses in Distress: From Health Promotion to Population Health to You are responsible for your own health," in *Critical Policy Studies*, eds. Michael Orsini and Miriam Smith, (:Vancouver: University of British Columbia Press, 2007), 347-364,

only be measured as long term. They also require the measurement of countless variables that would be impractical to consistently measure. For example, a program for walking , with the point being to increase cardiovascular fitness, may not decrease fat levels, but would directly benefit conditions associated with cardiovascular disease. In effect, this would be beneficial to the medical system through association, as opposed to understanding fat as a threat in and of itself. This example raises ethical concerns in the respect that fat is being targeted. This discriminatory framework subjugates individuals into a state of being; in this instance being fat, which requires the state to act in accordance with framing people as being fat. This form of recognition can then be used in various ways that could be both positive and negative towards citizens of the state. Due to the discriminatory abilities that specific measurements of fat would yield, it is imperative that the redefinition of fat as a social phenomenon figures prominently in policy maker's decisions as well as through the medicalization of fat itself.

This redefinition needs to be understood as a phenomenon that extends beyond those who are considered fat through clinical diagnosis, their own subjective interpretation based on a societal context, or the recognition bestowed by the state itself. Fat should be approached as a way in which we live, not strictly as a discernible collection of cells. This application should extend to all

Canadians, creating opportunities for citizens to exercise and adopt healthy alternatives into their lifestyles. Rather than viewing a symptomatic solution to fat, the emphasis should be one of preventative measures that also alleviate the effects fat currently has on the health care system and Canadians lifestyles.

As mentioned in the previous paragraphs, an all-encompassing approach that includes all people, regardless of their body mass, allows for a system of measures that does not delineate groups of the population and allows for a preventative approach, which is currently being employed through Act Now BC. Some solutions include offering free access to community centres, investing additional funding in physical activities, in both the work place and local communities, and offering cooking classes that inform people about healthy solutions. These efforts would consequentially lower the time an individual spends doing sedentary tasks, while increasing community involvement. But for those who reject such changes, providing advertising and solutions through mediums they are already interacting with will create a ”top of mind” awareness, so the next time they are in the grocery store, there will be a more deliberative thought process in regards to the foods they purchase. The goal in promoting change is to alter how people think about their relationship with their physical environment, so they can make a conscientious decision to be more active and to choose healthier meal alternatives. But we must be incredibly

careful not to create a division in society based on those who are fat and those who are not. The objective should be to create a societal view that does not divide the population between those who are fat and those who are not. Rather, there should be a shared understanding that healthy and active living are to the benefit of both the individual and society. However, when we see statistics that illustrate an environment of us versus them, there are immediate concerns, as the ideologies would reinforce a segregated environment. While having an awareness of where we are in relation to others is important, a focus on being healthy for who we are and how we live should be the most important message that is conveyed.

In an instant an individual can go from believing that he or she is perfectly healthy, to viewing him or herself in a negative light. This is due to the fact that there may be future health complications as a result of a measurement, currently the BMI, which may or may not be valid. In effect, the real fear, anxiety, frustration, and dejection that people feel come as a result of the possibility that their current lifestyle is negatively affecting their future. People's health extends beyond their own subjective interpretation of what they think is healthy. However, if they are happy with their lifestyle decisions, which may or may not result in them accumulating fat, then they should have the right to do so and think that way. If they feel however, that they are not living a healthy lifestyle, or

that they should be healthier for themselves, they should have the opportunity to address that using state-sponsored solutions. Any policy that would be enacted would have to be geared towards the whole of society, and would also have higher adoption rates by those who are already active. However, solutions do exist that allow for reform among this subset group, without forms of identification. For example, teams of doctors, dieticians, counsellors, kinesiologists, and client support workers could be coupled with practicum students and volunteers to create a system where individuals seek assistance, on a completely voluntary basis, that would allow them to adopt lifestyle changes. Citizens of all shapes and sizes would be given the opportunity to make these changes with support staff who offer alternatives and solutions that allow for seamless transitions into everyday living. An example of this could be an individual who meets with his or her doctor, whom after answering a few questions in regards to physical health, says there is a program to be referred to. This referral would not be based on a clinical diagnosis of whether the individual is overweight; it is based on daily interactions. The referral would allow the individual to contact a case manager, whom would then set up an information session detailing what is included in the program, and what strategies may be incorporated into the individual's routine. Any statistics taken would not include the individual's name, but would reveal program effectiveness and the

degrees of severity found in geographic regions. State-sponsored solutions that promote healthy living, not this battle against "obesity," are able to circumnavigate the issue of discrimination. The program, of course, would come under severe scrutiny as the resources used would be argued as being better used elsewhere, which for the short term, is true for the most part. Using these resources to hire a surgeon to perform life saving surgeries is a better solution, without question, for maintaining the health of the citizens. It is true that these state-sponsored programs would be more effective in reducing fat by targeting specific groups of individuals; however it should not be done. The very application of such a thing creates a discriminatory environment for the individuals included and the ones excluded. The options raised treat fat as a social phenomenon, and attempt to avoid the stigma associated with fat because they operate under the auspices of creating healthier lifestyles which may or may not affect fat rates of an individual, and they are available to everyone, not just those who have excess fat. But even through these considerations, dilemmas continue to challenge the application of these options, in large part because the fundamental principles of fat have not been resolved. Is fat good or bad? Who is to blame? Why are we encountering it? Is it of or on the body? All of these questions create difficulties in moving forward in proposing recommendations in order to address fat, because at the very root of this phenomenon is a concern,

but not an objective truth, that fat is bad. From an objective viewpoint however, despite poor systems of measurements, we can see that the population is getting larger. This is a phenomenon that is not restricted to a single geographic pocket, but rather it is a phenomenon that is affecting the entire country. Despite the dilemmas, not only is the rise in fat difficult to ignore, it has risen to the degree that it calls for political intervention.

An increase in political intervention must be viewed warily, as it may be used to justify elevated levels of exclusion, under the context of fiscal restraint. Another issue that I am raising is that if there are not enough resources granted to these programs, the result could be restricting access and only allowing individuals with higher accumulations of body fat to be eligible. It would essentially come down to restricted resources made available, and if that is the case, despite the benefit it would pose to select individuals, the discriminatory environment it would create would result in more harm than good. In this environment the inclusion of one necessitates the exclusion of another, which provides the foundations for segregation and prejudice to take place.

The power that fat discourse currently wields has been grossly overlooked. Fat is a political force that transcends all forms of ethnic, class, and gender discrimination. It has a dynamic range of applicability that demands the

greatest fiscal expense in government today. Evidence suggests that approximately 50 percent of the population carries excess fat, giving it an avenue for activation that could easily change the social fabric of Canada.[66]

Inaccurate forms of measurement and limited research on the effects of fat result in a lack of a definition for fat.. Even if the definition of fat were clarified through a cost-effective body-fat percentage measuring system, and through information on the regional distribution of fat rates and correlating socio-economic and socio-cultural conditions, my approach to addressing fat would stay the same. This is because fat needs to be seen and defined as a social phenomenon. However, it is still important to procure that information, because it is needed to implement state-sponsored programs geared at preventative health.

The Medical Sciences' Perception of Fat

An aspect of this proposed action plan that has yet to be explored in further detail is the conceptual understanding of fat within the field of the

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66. "Heart and Stroke Foundation Warns Fat is the New Tobacco," *Heart and Stroke Foundation of BC & Yukon*, http://www.heartandstroke.bc.ca/site/c kpIPKXOyFmG/b.3644783/k.98D7/2004_Report_Card__Fat_is_the_new_toba co.htm. Accessed January 11, 2011.

medical sciences. As alluded to previously in this chapter, changes are required within the field of medical sciences in order to effectively conceptualize and influence change in relation to fat. Medical sciences' current perception reinforces and perpetuates a health care system that is strictly symptomatic in its treatment of patients, who now occupy the identities of customers and consumers. Health is re-conceptualized as it represents situations where one simply waits for the next health concern to present itself. The perceptions of fat will change as greater information is gathered in terms of the relationship between fat and detrimental health consequences. The focus, however, needs to shift from the individualistic sense to the collective. For example, information collected through epidemiological studies has not been incorporated into the clinical diagnosis of individuals who have higher body fat percentages. Fat must be articulated in a way that it is not seen as a discernible unit on the body. Rather, this is an issue that finds our bodies responding to our external environments. This is a far more complex understanding that seeks to emphasize interaction as opposed to effect. The unfortunate reality is that health has become a large business; wherein everyone is a customer and costs are dictated by needs as opposed to want. The illnesses are blurred by the unfortunate fact that fat is not fully understood, and because fat cells create a "condition" by which it can become medicalized.

Due to its dynamic nature, there is no way fat as a social phenomenon can adequately be represented through the medical sciences. This is because medicalization requires us to view an issue as strictly symptomatic. In the case of fat, the medical sciences' approach is to keep the discernible unit of fat from accumulating on the body. The relationship between the medicalization of fat and the social phenomenon of fat is irreconcilable because they require fundamentally different perspectives. This is a critical reason for why policies regarding fat have not been able to move forward. Rather than viewing fat as a problem of the body that needs to be "cured," the environment which motivates fat accumulation needs to be addressed. For example, if an individual injures a knee, there is no point in fixing it if the individual's behaviour that caused that knee injury does not change. In the case of fat, eliminating the fat does not address the individual's behaviour that brought them to accumulate such fat. It is the lifestyle decisions that create the social phenomenon of fat that illustrate that it is an issue that is beyond any clinical definition and cannot be solved as such.

The argument can and has been made that through epidemiology we have understood the discursive elements of fat. The issue with this perspective is that fat has not been viewed in relation to the psychological effects or technological adaptations that have changed the social fabric in which it exists. Up to this point, all research has been far too narrow in its scope. Specific focus on the

reductive elements of fat has not yielded any significant breakthroughs, nor will it, due to the fact that fat exists in a social sphere.

Health Promotion

The most effective way to approach the social phenomenon of fat is to restore a focus on health promotion. An increased state role in health promotion would alleviate the fiscal burden that is currently placed on our health care system. What must be considered, though, is that, because of the great number of resources required for implementing health promotion as a policy priority, the benefits will not be realized for a number of years. The state has minimized health promotion because it could not ascertain the direct economic benefit that resulted from it. A move was then made toward population health, which focuses on research and acquiring statistics, as opposed to taking direct action.

What needs to be considered is that a renewed focus on health promotion may result in a healthier population; however the costs of doing so remain quite high. Furthermore, discerning whether an individual's lifestyle has improved is almost impossible to measure, although resources paid towards it can be easily measured. The alternative, limiting resources towards fat, would result in high fiscal costs, because fat has been associated with poor health, which ultimately

results in higher spending on health care services. Fat is associated with health conditions and "unhealthy" lifestyles that, I believe, can be altered through health promotion.

Currently the state releases items such as Canada's Food Guide and the Physical Activity Guide. The archaic method of the information dissemination renders much of the benefit that could be gained useless. This information, as discussed previously, could be brought to individuals in areas where points-of-sale occur, such as the grocery store, sporting outlets, public transportation hubs, and sporting equipment stores.

A more effective process of information dissemination would be the creation of a collaborative online environment where people promote healthy options that could provide solutions for individuals in certain situations. While much of this information can already be found online, centralizing this information and offering expert commentary would provide solutions for specific regions, with varying resources. For example, the solutions for an individual living in a milder climate may be drastically different to a person living in the north.

The increase of state-sponsored activity clubs that currently exist in BC through the procurement of grants and licences could be streamlined, providing

subsidies for healthy living associations aimed at making people more active. This would not classify as an act of targeting; it would only draw a focus to the issue, as those who are already active would require less motivation to participate in the programs.

The state must support efforts that promote active and healthy living, and incentive-based structures must be created to decrease access barriers. These incentive-based structures could involve a healthy activity passport, or a points-system based on foods bought, activities participated in, or subsidies granted. For example, an individual could have a booklet that tracks his or her hours of interaction where, at certain levels of points, rewards would be granted. Take, for example, riding a bike. Any kilometres tracked on the bike would be counted as carbon tax credits, which would yield a value to be traded with companies requiring carbon tax credits. Another example would be subsidies granted to an individual whom, after joining a walking or jogging club, would receive a stipend in order to support further involvement in the program. The social practices that would be adopted present voluntary options that allow the public to participate in activities that promote healthy living, without placing restrictions on the lifestyles they currently live. By doing this, the state is actively endorsing healthy living, which, if done correctly, would compel Canadians to make these changes on their own volition, rather than through strict regulatory

environments that adhere to the continued subjugation presented by the state. The benefits are both health and social cohesion with an intended focus on increasing the physiological and psychological health of every participating Canadian citizen. In order to alter Canadian perceptions, easy access to programs would be required, and of course, the state would have to ensure there is a vast awareness of these programs.

Since health promotion helps people take care of themselves, the decrease in healthcare costs could be significant.[67][68] The question of whether a healthier population will significantly affect fiscal expenditure over a long period of time remains to be seen, as costs alleviated through health promotion may still be incurred later in citizens' lives.

Another method of state intervention could be stricter regulations imposed on marketing and advertising, specifically the campaigns that target children. Examples of this might include mandated restrictive environments, or a series of counter-advertising campaigns providing information on health

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67. *Evidence Supporting Population Health Initiatives*, prepared by Population Health Branch Saskatchewan Health, (Regina, Sask., 2003), http://www.health.gov.sk.ca/evidence-supporting-population
68. Graham Lowe, "The dollars and sense of health promotion," *Canadian HR Reporter*, accessed February 2, 2011,

programs in place and other healthy alternatives. Ironically, the increased awareness gained would be distributed through mediums such as the Internet, television and radio; all mediums that contribute to more sedentary lifestyles. Advertising and promotion would need to be integrated in innovative ways that could foster more physical activity, through a competition system funded through federal grants.

Throughout this chapter, options have been presented in regards to the implications of policy reform. The focus must be on preventative measures; an all-encompassing approach that is directed towards physical health maintenance and less on fat. Fat cannot be targeted due to the fragile social space it currently occupies, along with the mere fact that no concrete definition exists that can unequivocally state whether fat is good or bad. Currently, the individualization of health responsibility forces the individual to be accountable for his or her own health . It becomes the state's responsibility when health conditions, such as Type 2 diabetes and heart disease, are connected with carrying too much weight. This ultimately results in an environment that lowers the standard of living for many people. Limiting the barriers of access for people to be healthy and promoting health living could significantly alleviate costs, and at the same time, could greatly improve people's quality of life. Currently, state policy limits funding for healthy living, because fiscal restraint places a priority on immediate health care

spending for the aging population. The difficulty here is in the dilemma associated with whether fat itself is a problem and the significance of the association of fat with these consequences. What becomes clear is that in order to curb the rise of fat rates, physical activity needs to increase and Canadians need to choose better dietary solutions with lower caloric intakes. Better methods of measurement would allow a more accurate understanding of what fat in Canada looks like. However, the current political environment is one that is facing an increased fiscal pressure, so policy towards healthy and active living should be implemented immediately. However, as this solution does not directly affect the immediate needs of the population, it will not receive the proper funding necessary in order to present a significant change. . The ethical concerns regarding the discourse on fat must be considered in any policies to be enacted, with a specific focus on the societal ramifications any changes may create. The point here is that the state is involved in a permissive way, and as a result, it must assume a greater responsibility.

Conclusion

After reviewing the information presented in this thesis, it becomes clear that fat in politics is an issue that requires greater attention. When I initially

looked into fat, I kept reading about how it was the *biggest threat to humankind.* When I started to explore it a little further, I noticed there were significant inconsistencies, poor systems of measurement, a lack of data, and a lack of information regarding the cause, and as a result, the proposed solutions did little to confront such an alarming issue. I realized that this is a problem riddled with dilemmas and paradoxes, and has become one of the most difficult issues in health today.

Currently, the responsibility of fat rests on the shoulders of the individual; specifically, on an identity that has been cultivated by the state in order alleviate the requirement for fiscally-laden policy. In addition to this, defining where responsibility should rest is also difficult as it cannot be defined. While we realize that fat rates are continuing to increase, the degree to which remains unknown, there is no definitive answer for who is responsible. Fat politics currently operates as a discursive element of power that subjugates citizens. Due to the identity forming abilities of fat, this is a topic that cannot be understated, especially with the proposed financial ramifications that it has on an already strained Canadian health care system. The application of this interpretation allows for a mechanism of manipulation in order to alleviate responsibility, while reinforcing a sentiment of disempowerment.

The truth is, we simply do not know to what extent fat affects the Canadian population. It has been proposed that it will soon become the leading contributor to premature deaths. This statement, coupled with the fact that by 2030 over 58 percent of the world's population may be obese, sets the foundation for an issue that creates a fissure within society. Regardless of whether the reader embraces a preventative measures approach, or a symptomatic one, this is an issue that will only continue to play a significant role in society. Unlike smoking, this is an issue that burns at the heart of individual decision, not through addiction to a single substance, but to an excessively consumptive lifestyle.

The problem in understanding the issue of fat is the fiscal commitment required at this point in time. It is clear that attempts to understand this issue in the past have resulted in little more than an ongoing dialogue of moralizing personal opinion asserted as fact. Any funds that have been put forward to confront this phenomenon have resulted in little change. Developing a true understanding of the issue requires a significant fiscal contribution and a number of years of community involvement in order to adequately chart its trajectory.

If this issue were left alone, could it correct itself within the next 10 years? At present, I do not believe that this is an issue that will merely sort itself out; although I cannot discount that it could happen. It would appear that this is a

social phenomenon that our civilization cannot adapt to quickly enough, because technological advancements that contribute to increased food availability and less physical activity continue to be introduced at an exponential rate. In essence, fat is a microcosm, an aesthetic representation of how we interact with the world. Changing the mindsets of a Canadian population that is constantly inundated with new products and more efficient, life changing strategies and techniques, creates an environment that is incredibly difficult, if not impossible, to compete against. Changing these mindsets is the responsibility of both the individual and the state. It has to be such, because this is an issue that has grown beyond the abilities of both. The relationship between the individual and the state must be symbiotic in nature, seeking a shared goal, which would ultimately be for the benefit of both the state and the citizen.

The increasing rates of overweight and obesity need to be recognized immediately in a way that does not divide our society. In the end, we are all to blame because we support a structure that strives for excess, and that needs to change.

In the preface I shared personal information of what *I* am; my height, weight, gender and ethnicity. I did this because this is a situation that cannot escape subjective interpretation. My hope was that you, the reader, viewed

yourself in relation to the text. Because at the end of the day, it is less about how I have framed fat, and more about how we all frame fat.

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