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Defining Obesity: An Argument for the Social Environment Perspective

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Defining Obesity: An Argument for the Social Environment Perspective

Introduction

It is well documented that obesity is a growing problem in the U.S. and worldwide. In 2007-2008, the prevalence of obesity in the U.S. was 32.2% among adult men and 35.5% among adult women (Flegal et al. 2010, p.236). By 2010, 35.9% of U.S. adults age 20 and older were obese (Overweight and Obesity, CDC). Obesity has been associated with many health problems, including hypertension, type 2 diabetes, osteoarthritis, stroke, and cardiac disease (Lucey, 2008, p.202). In addition to hindering our health, obesity is also posing a large financial burden to society. The CDC estimated that the annual medical cost of obesity in the U.S. was \$147 million in 2008 (Overweight and Obesity, CDC).

What I have just described is the traditional, medicalized narrative of obesity that has been widely propagated by government agencies and research organizations. The medical and public health communities label obesity as an epidemic that demands an immediate and widespread response (Lucey, 2008, p.202). In this narrative, the blame for the problem is mostly placed on the individual, while social factors, such as socioeconomic status or neighborhood environment, are largely ignored. First Lady Michelle Obama's widely publicized "Let's Move!" campaign exemplifies the traditional medical narrative of obesity. The goal of the program is to raise a healthier generation of children by helping them eat better and get more exercise (Obama). In her discussion of obesity, the First Lady often puts the blame on parents for their children being overweight or obese. During a keynote address in Washington, D.C. in March 2013, First Lady Obama stated, "we can't lie around on the couch eating French fries and candy

bars, and expect our kids to eat carrots and run around the block. But too often, that's exactly what we're doing" (Haupt, 2013). While the First Lady recognizes that parents are stretched thin in terms of time and money, she still advocates that parents must take responsibility for their own health and the health of their children. Adhering to the traditional narrative, Obama's solution boils down to stronger will power, "We have everything we need right here and right now to make this happen. We just have to summon the focus and the will" (Haupt, 2013). According to Michelle Obama and others who believe in the traditional narrative, individual persistence can make up for any social inequalities that exist.

Because the traditional narrative remains dominant, policy initiatives aimed at reducing the prevalence of obesity focus on changing individuals' behaviors. One such policy that is being discussed in a number of states is to tax sugar-sweetened beverages (SSBs). The idea is to deter individuals from buying sugary drinks and steer them towards healthier options. In this paper, I use an SSB tax policy in order to examine how obesity is defined, measured, and viewed by different groups in American society. Furthermore, I will argue that the traditional view of obesity is flawed and contributes to unnecessary negative stigma of the obese. In contrast, I will show that social factors play the most important role in the growing trend towards larger and heavier bodies. Therefore, policy initiatives aimed at reducing obesity should focus on reducing social disparities in society.

This paper advocates that a social environment perspective of obesity should replace the traditional medical narrative. In order to do so, I will first provide a brief overview of the traditional narrative and how it developed. From there, I will examine SSB tax policies and how they reflect the traditional notion of obesity. Finally, I will use the literature to show that social environment, including factors such as neighborhood, access to healthy food, social networks,

and the media, is the driving force behind obesity. Unless we switch from the traditional narrative to the social environment perspective of obesity, policy solutions will continue to be ineffective because they will fail to target the social inequalities that contribute to obesity.

The Traditional Narrative of Obesity

Middle class Americans began the battle against excess body fat in the early 1900s. While thinness was always the ideal in Western culture, it became widely desired around the turn of the 20th century due to trends in fashion, new remedies to reduce weight, and a rise in public criticism of fatness (Stearns, 1997, p.11). For example, in 1905, *Ladies Home Journal* had a regular column on good health that recommended ways women could “lose flesh”, such as doing more housework (Stearns, 1997, p.15). New products, such as M.S. Borden’s “Fatoff”, promoted weight loss without diet or exercise (Tuske, 2011). Marketed as an obesity cream that was applied to the body externally, the ads for “Fatoff” stated it could “restore *normal* figure in 30 treatments,” and urged the obese, “YOU need it NOW if you’re corpulent” (Tuske, 2011). Obese people were seen as repugnant and despicable. In the early twentieth century, the “theory of obesity was closely linked to the many speculations about the connections between body shape, personality, and intellectual endowment” (Saukko, 1999, p.33).

As these changes in popular culture took place in the early twentieth century, doctors began discussing weight with their patients. Throughout the middle of the century, tables measuring height, weight, and calories standardized doctors’ approach to the problem (Stearns, 1997, p.42). Doctors began advising patients on what foods to eat and how much exercise they should get. A 1955 nutrition textbook recognized obesity as “the greatest problem of preventative medicine today” (Proudfit, 1955, p.347). However, it also stated, “obesity can be overcome by strict adherence to a low calorie diet” (Proudfit, 1955, p.356-357). Health

professionals were responsible for helping patients lose weight, yet at the same time it was up to the patient to have self-discipline and perseverance (Parham, 1999, p.189). While many doctors were hesitant to enter this new realm of health, their patients pushed them to accept it and to become experts. Middle class patients began visiting their doctor solely for advice on ways to become more slender (Stearns, 1997, p.45). Consequently, thinness became conflated with good health and overweight became associated with a variety of health problems and character flaws. Doctors described obesity as a “sign of physical bankruptcy” and “a character defect, an evidence of lack of self-control” (Stearns, 1997, p.46). Doctors began to accept and preach the desirability and successfulness of thinness. A normal weight became not only the desired outcome but also the necessary course of treatment. By 1998, the National Institutes of Health *Clinical Guidelines* recommended that obese patients lose 10% of their initial body weight in a 6-month treatment period (NIH, 1998). A link had formed between “the growing cultural hostility towards the fat and physician’s often-expressed moral disdain for their obese patients” (Stearns, 1997, p.46). While doctors were not solely responsible for medicalizing fatness, they clearly played a crucial role. Physicians “accepted the widespread hostility to fat and [gave] it new medical justifications” (Stearns, 1997, p.42).

Backed by the medical profession, the traditional narrative quickly became the dominant narrative. Obesity was seen as both a physical and moral defect; it was always the fault of the individual. In contrast, thinness was fashionable, healthy, and a measure of self-attainment. In 1980, sociologist Robert Crawford coined this way of thinking as ‘healthism’ (Guthman, 2012, p.52). According to Crawford, “Good health became a means to prove self-worth and flexibility in the increasingly competitive global economy...A thin, fit body became an indicator of health, regardless of the effort required to make it so” (Guthman, 2012 p.53). As described by Crawford,

thinness became further conflated with health and success (Crawford, 2006). Additionally, the stigma against obese individuals grew as obesity became clearly defined and more easily measured.

The World Health Organization defines obesity as having “abnormal or excessive fat accumulation that presents a risk to health” (World Health Organization, 2011). Julie Guthman, Professor at the University of California, Santa Cruz, argues that, “the term *obesity* reflects a medicalization of fatness” (Guthman, 2012, p.25). Guthman points out that an *abnormal* amount of fat can now be measured and cured using a biological solution. Consequently, a *normal* amount of fat can also be measured and defined. A person’s BMI, or Body Mass Index, is most often used to measure obesity. Derived by Adolphe Quetelet from an observed mathematical pattern in body size, BMI compares weight-to-height ratios across a population (Guthman, 2012, p.28-30). When BMI became the standard measurement for obesity, it allowed medical professionals to define what a *normal* body weighs and looks like. Guthman states, “BMI is now used normatively, to say what weight/height ratios ought to be” (Guthman, 2012, p.41). The problem with this system is that the definition of what is normal can change if the categories of measurement change. For example, when the National Institute of Health released new BMI guidelines in June 1998 that lowered the BMI limit in the overweight category from 27 to 25, millions of Americans became *overweight* instantly (Guthman, 2012, p.31). While their weight did not change, the definition of *normal* was manipulated so that they no longer fit into that category.

The development of a standard definition and measurement system of obesity contributed to the traditional narrative because the focus was placed on “normality rather than pathology” (Guthman, 2012, p.40). People have undeniably gotten fatter over the past twenty years. For

example, in 1990, obese adults made up less than 15% of the population in most U.S. states. By 2010, 36 states had obesity rates of 25% or higher, and 12 of those had obesity rates of 30% or higher (Overweight and Obesity, CDC). However, obesity is continually viewed as a disease of gluttony. About two-thirds of Americans believe that individuals who are fat lack self-control (Bogart, 2013, p.31). In 2009, content analyses of magazines, television, movies, and the Internet, found that thinness was considered “normative and attractive”, while fatness was considered “aberrant and repulsive” (Levine & Harrison, 2009, p.494). Irrespective of the actual health outcomes of the person, those who appear overweight or obese are seen as lazy and having no discipline. Regardless of bone mass, muscle mass, or age, those with a high BMI are labeled as unhealthy. It is seen as their fault for eating too much and exercising too little. Meanwhile, “thin people can eat junk food to their hearts’ content and not be called to account” (Guthman, 2012, p.44). The visible nature of obesity makes it easily identifiable and therefore easily stigmatized. As exemplified by First Lady Obama’s campaign, the traditional narrative obesity is stronger than ever. To be obese is seen as undesirable, unhealthy, and reversible with the proper individual behavior changes. The introduction of sugar-sweetened beverage taxes corresponds with this strong belief in the traditional narrative of obesity.

Sugar-sweetened Beverage Taxes: An Overview

A sugar-sweetened beverage, or SSB, is defined as any beverage with added sugar or other caloric sweeteners such as high fructose corn syrup (Friedman, 2012, p.2). SSBs include soda, sports drinks, fruit drinks, teas, flavored/enhanced waters, and energy drinks. The worldwide consumption of SSBs has increased exponentially over the past few decades (Block, 2013, p.183). Since the 1970s, adults age 19 and older have more than doubled their intake of SSBs (Popkin, 2010, p.8). Americans drink about 45 gallons of SSBs per person, per year

(Friedman, 2012, p.3). Even children and adolescents are drinking more sugar-sweetened beverages. A study conducted in 2010 found that among 2-18 year olds, the largest source of daily calories came from SSBs and fruit drinks combined (Reedy, 2010, p.1482). Across all age groups, SSBs are the largest contributor to calorie consumption of all food and beverage types (Block, 2004, p.441). Additionally, consumption of SSBs is associated with the risk of weight gain, obesity, cardiovascular risk, high blood pressure, type 2 diabetes, dental erosion, and pancreatic cancer (Friedman, 2012, p.3).

Due to the increased consumption of SSBs, their predominant role in the high-calorie diets of many Americans, and their detrimental effects on health, taxes on sugar-sweetened beverages have recently become a popular policy initiative to combat obesity. While thirty-four states currently have sales taxes on SSBs, they are negligent and therefore do not affect consumption (Friedman, 2012, p.2). In most cases, consumers do not even know they exist. The new tax policies that are being proposed around the nation look to place a large excise tax on SSBs. The IRS defines an excise tax as a tax paid when a specific good is purchased, often included in the price of the good (Excise Tax, 2013). The goal behind these excise taxes is twofold: to change individuals' consumption patterns and to raise revenue that can be used to fund additional obesity prevention programs (Friedman, 2012, p.2). The taxes are designed to mimic the success of taxes on cigarettes and alcohol, which were shown to reduce consumption and improve public health (Chaloupka, 2011, p.9). Large excise taxes are seen as more beneficial than small sales taxes because consumers are able to see the price increase at the store, the tax does not change if prices are reduced by the beverage industry, consumers are not motivated to buy larger sizes, and they generate a stable source of revenue (Friedman, 2012, p.4).

There is considerable debate and a growing body of research surrounding the effectiveness of such taxes. A 2010 study found that existing sales taxes on SSBs, which generally are around 4%, do not significantly affect consumption or obesity rates (Sturm, 2010, p.1). Current sales taxes are not effective at reducing rates of obesity because they do not change individuals' buying patterns. The taxes are so low that consumers do not even realize they are there. This is an ineffective way to initiate behavior change, because the incentive is too small. In addition, as I will discuss later in the paper, even if their rates are increased, SSB taxes cannot effectively reduce rates of obesity because they fail to target any of the social causes of obesity. A 2013 study examined what effect a large excise tax would have. Finkelstein et al. estimated that a large tax of 20% would lead to beneficial outcomes in terms of obesity, namely a 24.3 kcal/day per capita calorie deficit and an average annual weight loss of 0.7 kg (Finkelstein et al., 2013, p.225). The authors took into account the fact that individuals may attempt to avoid the taxes by switching to other unhealthy foods and beverages, rather than switching to healthier options. The results were the same even when these unhealthy substitutions were taken into account. According to this study, large excise taxes would have the intended effect of changing individuals' behaviors, meaning that consumers would generally purchase healthier foods and beverages to avoid the taxes. Therefore, SSB taxes may in fact lead to weight loss if implemented on actual consumers. However, the predicted weight loss is not enough to significantly affect rates of obesity. This claim can be further supported by a study published in 2009 that examined how changes in states' taxation rates from 1990 to 2006 affected BMI (Fletcher, 2009, p.2). The researchers found that a one-percentage point increase in the tax rate was associated with a decrease of 0.003 points in BMI (Fletcher, 2009, p.9). This suggests that a 20-percentage point increase, which is the same as the tax rate that was estimated in the previous

study, would lead to a decrease in BMI of 0.06 (Fletcher, 2009, p.10). To put that into perspective, a person is overweight if their BMI is between 25 and 30 and obese if their BMI is above 30. While individuals may in fact lose weight as a result of the taxes, a drop in BMI of 0.06 would not effectively reduce the number of people who fall into the obese category. Furthermore, I argue that other more prominent causes of obesity should be targeted rather than just individual consumption.

Additional studies have examined the price elasticity of demand for SSBs. A review performed in 2009 looked at 14 different studies on elasticity and concluded that sales of soft drinks would decline by 7.9% for every 10% increase in price (Block, 2013, p.184). In one commentary on food taxes in general, the authors compile results from several different studies and conclude that, “SSB taxes will likely ‘work’” (Block, 2013, p.184). However, in a response to this commentary, other researchers question whether consumers may simply respond to the increase in the price of SSBs by switching to other unhealthy foods or beverages, meaning that the taxes would not have the intended positive effect (Devisch, 2013, p.96). Additionally, the researchers point out a common criticism of food taxes in general, which is that they place an undue burden on low-income groups and therefore serve to increase income inequality (Devisch, 2013, p.96). Finkelstein *et al.* found that “lower-income households purchase more beverage calories from stores than those in higher-income households” (Finkelstein, 2010, p.2032). In addition, those in lower-income households did not show significant weight loss. The authors suggested that this was because these households were more likely to change their behavior in order to circumvent the tax, either by buying in bulk or switching to non-taxed items that were just as high in calories (Finkelstein, 2010, p.2033). Based on this data and the fact that these taxes only target individual behavior, I do not believe SSB taxes will be effective at reducing

rates of obesity. However, despite the mixed recommendations from researchers, nine states have currently implemented an excise tax on SSBs. I examine West Virginia's policy as an example.

West Virginia was one of thirteen states to have a prevalence of obesity equal to or greater than 30% in 2012 (Overweight and Obesity, CDC). In 2010, 67.4% of adults in West Virginia were overweight and 32.5% were obese (Overweight and Obesity, CDC). As a response to the obesity problem, West Virginia's legislature passed the Soft Drinks Tax. The Soft Drinks Tax levies an excise tax upon the sale, use, handling, or distribution of bottled soft drinks, syrups, and dry mixtures (Soft Drinks Tax, p.67). In Ch. 11, Article 19 of the law, bottled soft drinks are defined as "any and all nonalcoholic beverages, whether carbonated or not, such as soda water, ginger ale, coca cola, lime cola, pepsi cola, doctor pepper, root beer, carbonated water, orangeade, lemonade, fruit juice when any plain or carbonated water, flavoring or syrup is added" (Chapter 11, Article 19). In-state manufacturers, distributors, and dealers, whether wholesale or retail, pay the tax by purchasing tax stamps or tax crowns from the Department of Tax and Revenue (Soft Drinks Tax, p.67). While the tax is levied at the wholesale level, it ultimately gets embedded in the purchase price that consumers pay at the store. All the revenue from the tax goes towards the construction, operation and maintenance of a four-year medical, dental and nursing school at West Virginia University (Chapter 11, Article 19).

Sugar-sweetened Beverage Taxes: A Reflection of the Traditional Narrative

Sugar-sweetened beverages taxes, as exemplified by West Virginia's policy, will not be as effective as desired. Despite their potential positive outcomes, the main problem with these taxes in terms of a policy solution is that they examine obesity from the wrong perspective. They fall into the trap of the traditional narrative, which is that obesity is the fault of the individual. While wholesalers pay the tax directly, consumers are ultimately covering the cost because it

becomes part of the price at checkout. The tax is not punishing the beverage manufacturers for producing unhealthy products that contain no nutritional value. Instead, it punishes the individual consumer for their *choice* to purchase these types of beverages. Even though sodas and other sugary beverages may be the most inexpensive, and therefore the most accessible for low-income families, the taxes serve to reinforce that for the sake of their own health and the health of their families, they should choose not to buy these items. In addition, even though soft drinks are heavily marketed in all types of media, individuals are blamed for succumbing to these marketing campaigns and buying the beverages. Finally, the taxes may unfairly impact those of lower income households because upper income households will have an easier time ignoring the tax. For those of a higher income, price is not as much of a deciding factor at the grocery store. I argue that SSB taxes will not be effective at reducing rates of obesity in the long run because in relying on the traditional narrative of obesity, they fail to take into account the wider social factors that contribute to obesity.

West Virginia's Soft Drinks Tax further reflects the traditional, medicalized narrative of obesity because the plan is to use the revenue to build and maintain a medical school. Obesity is seen as a disease that needs to be treated by medical solutions. Doctors maintain the ability to decide what a *normal* weight is and can treat any patients with excess weight accordingly. Rather than using the revenue to reduce the social inequalities within society that contribute to obesity, the revenue is being spent on a healthcare institution that mainly contributes to the treatment of obesity after it is already present. Individuals are urged to make healthier choices and exhibit greater self-control, while doctors maintain the power to criticize and treat those who fail to do so. West Virginia's policy fails to address any other causes of obesity besides individual behavior. Consequently, beverage companies, fast food restaurants, impoverished

neighborhoods, and income inequality, all remain unchanged. In order for policy makers to enact more effective policy solutions, a social environment perspective needs to replace the traditional narrative of obesity. In other words, there needs to be greater recognition of the fact that social factors play an undeniable role in causing obesity.

Social Environment Perspective

In contrast to the traditional narrative, I argue that obesity is caused by wider social factors, not just individual behaviors. While this is not the leading perspective, there is support for this way of thinking. In 1989, Jeffery Sobal outlined the relationship between socioeconomic status and obesity in both developed and developing nations by reviewing 144 studies (Sobal, 1989). In *Weighing In*, Julie Guthman states that in terms of obesity, “relevant psychological, economic, social, cultural, biological, and ecological factors are inextricably coconstitutive” (Guthman, 2012, p. 189). A 2005 study by Nicholas Christakis examines how the distribution of income in one’s area of residence affects weight status (Christakis, 2005). In each of these examples, the underlying premise is that individual characteristics and choices are not the main causes of obesity. Using this premise, I advocate for what I call the social environment perspective of obesity. In examining social environment, I focus on neighborhood, access to healthy food, a person’s social network, and the influence of the media. Throughout the discussion, I note how socioeconomic status (SES) and race exacerbate inequalities that exist within one’s social environment. Although this way of thinking about obesity is not new or revolutionary, it is essential that it become more widely accepted, because the way society defines obesity affects the policy solutions that are implemented to solve it. Policy solutions that stem from the traditional, medicalized narrative target individuals’ behaviors. In contrast, policy solutions that stem from the social environment perspective focus on changing wider societal

factors. Until this way of defining obesity becomes dominant, policy solutions aimed at reducing rates of obesity will be ineffective because they will fail to target the social factors and inequalities that contribute to obesity.

Within the concept of social environment, I examine both structural and non-structural factors. One key structural factor is neighborhood. There is emerging evidence that neighborhood environment, which is related to one's SES, directly contributes to the development of obesity. From 1994 through 1998, the Department of Housing and Urban Development (HUD) randomly assigned 4,498 women and children living in public housing to receive one of three housing opportunities: housing vouchers redeemable only in areas with low rates of poverty (low-poverty vouchers), housing vouchers redeemable anywhere (traditional vouchers), and no housing voucher (control group) (Ludwig, 2011, p.1510). A follow up survey was completed in 2008 through 2010 to gather data on the health outcomes of the three groups (Ludwig, 2011, p.1511). Compared to the control group, the group that received the low-poverty vouchers had a lower prevalence of high BMIs, specifically 35 or more and 40 or more. These results reflected a 13.0% and 19.1% relative reduction in obesity rates in those that were able to move to a neighborhood with less poverty (Ludwig, 2011, p.1516-1517). The results demonstrate that persons who live in areas of greater affluence are less likely to be obese. It has also been shown that persons who live in areas of less affluence are more likely to be obese. A study performed in 2005 confirmed that residence in a relatively impoverished community is positively associated with an increased risk of obesity (Boardman, 2005, p.235). The authors explain how this finding is intertwined with racial segregation, "residents of black communities face an increased risk of obesity because important health-promoting infrastructural resources may be absent in these relatively disadvantaged communities" (Boardman, 2005, p.237). Infrastructural

resources include parks, gyms, health clinics, grocery stores, and quality education. It is a double-edged sword for blacks. Not only do blacks and whites tend to live in qualitatively different structural environments, but also individuals who live in neighborhoods characterized by relatively high proportions of obese residents, which blacks tend to live in, are significantly more likely to be obese (Boardman, 2005, p.237).

A second structural factor is access to healthy food. I examine the concept of access in terms of both the presence of physical grocery stores and the affordability of nutritious food. A 2010 report entitled “The Grocery Gap” compiled the results of several studies in order to demonstrate the importance of access to grocery stores. The report found that in the U.S., “23.5 million people lack access to a supermarket within a mile of their home” (Treuhaft, 2010, p.7). More importantly, this lack of access is not distributed equally. A multistate study found that those in low-income census tracts have half as many supermarkets as those living in wealthy tracts (Treuhaft, 2010, p.7). Additionally, only 8% of African Americans live in a tract with a supermarket, compared to 31% of whites (Treuhaft, 2010, p.7). Lack of grocery stores within a close proximity to one’s household is further compounded by lack of access to reliable transportation. In Mississippi, the state with the highest rate of obesity in the nation, over 70% of residents who are eligible for food stamps must travel over 30 miles to reach the nearest grocery store (Treuhaft, 2010, p.8). Many low-income households do not own cars and must rely on public transportation, if any exists, to get to the store. In addition, even with the proper physical stores in place, nutritious, low-calorie food has been shown to be inaccessible to low-income households because it is more expensive. A 2007 study found that high-calorie, energy-dense foods cost on average \$1.76 per 1,000 calories, while low-calorie, low-energy foods that are more nutritious, such as fresh fruits and vegetables, cost on average \$18.16 per 1,000 calories

(Drewnowski, 2007, p.2074). Even if grocery stores are built, low-income households may have limited access to nutritious food because of its higher price. Individuals and families, who lack access to grocery stores or are priced out of nutritious foods, have no choice but to turn to fast food restaurants or convenience stores for their daily meals. Clearly, it is not their personal decision to do so but rather a consequence of their social environment.

An important non-structural factor that affects rates of obesity is a person's social network. As part of the Framingham Heart Study, researchers examined an interconnected network of over 12,000 individuals from 1971 to 2003 (Christakis, 2007, p.370). Using measurements of BMI, they evaluated whether weight gain in one individual was associated with weight gain in any of that person's friends, family members, or neighbors (Christakis, 2007, p.370). They found that obesity spreads in social networks "in a quantifiable and discernable pattern that depends on the nature of social ties" (Christakis, 2007, p.377). While they were not able to distinguish the exact method by which obesity spreads, they determined that social distance, rather than geographic distance, played a greater role, suggesting the importance of social norms (Christakis, 2007, p.378). For example, when a person's friends have heavier body weights, that person may feel more comfortable gaining weight, because heaviness becomes the norm. Lifestyle preferences within a social network could also play a role. For example, if a person's family tends to engage in unhealthy or sedentary activities together, that person will be more likely to engage in those same activities. Social networks are an important factor to examine because they tend to amplify the effects of SES and race. Social networks are highly influenced by who a person is similar to and where a person lives and works. Individuals with a low socioeconomic status are likely to befriend those in a similar income range. Similarly, people of racial minority groups are likely to interact with others in that group. The fact that

obesity spreads within these networks means that those in low-income or racial minority groups may be even more susceptible to being obese than those in upper-class or white social networks. Targeting one individual's behavior cannot change the fact that we are social beings and our health status is inevitably connected to the people we form relationships with.

Another non-structural aspect of a person's social environment is the influence of the media. Much of the research performed on this topic examines how the media affects obesity rates in children and adolescents. In recent years, advertising for fast food restaurants, snack foods, and sugary beverages has increased tremendously. In 2006, more than \$1.6 billion was spent marketing food products to children and teens (Federal Trade Commission, 2008). This includes advertising through television ads, online games, and product placement in movies. Children are thought to be especially susceptible to advertising because of their developing cognitive abilities (Brown, 2011, p.104). For example, one study found that children under 4 years of age had difficulty determining the difference between a television program and a commercial (Brown, 2011, p.104). While children are more susceptible than adults, the media still has an impact on adults, whether directly or indirectly through their children. Adults are ultimately the ones buying the food and marketing can be very effective at persuading people what to purchase. Additionally, media consumption is often associated with several unhealthy lifestyle factors. A 2002 study found that television viewing among high school students was associated with less physical activity and insufficient consumption of fruits and vegetables (Lowry, 2002, p.418). The study also found that Black and Hispanic adolescents watched more television and had lower participation rates in physical activity than their white peers (Lowry, 2002, p.419). This finding could reflect the fact that Blacks and Hispanics are more likely to live in neighborhoods with fewer parks and/or safe places to play outside. It could also reflect the fact

that physical activity programs or sports teams available to students may be too costly for low-income households or may not be offered at financially burdened schools. In addition, if parents are working late or are working multiple jobs, children might have no choice but to stay home and take care of their siblings. While home alone, they will have little parental guidance on how to spend their time. Consequently, many children spend the majority of their time in front of the television or on the computer. High rates of media consumption and the sedentary behaviors that are associated with it contribute to obesity among children and parents.

A final thing to note about the media is the role it plays in promoting the traditional narrative of obesity and reinforcing the norm of thinness. Popular fitness television shows, such as *The Biggest Loser*, often place the blame for being overweight on the individual. The trainers stress the importance of individual responsibility and willpower. Contestants must adhere to a strict diet and exercise schedule while on the show. However, during this time, the contestants are shielded from the unhealthy influences of the real world. Therefore, social factors that contribute to obesity are conveyed as being irrelevant and nonexistent. Even when shows are not specifically about losing weight, the media has been shown to provide a social context for eating disorders because of its extreme glorification of slenderness (Spettigue, 2004, p. 16). Celebrities and models convey that thinness equals beauty. While the traditional narrative would attempt to blame individuals for succumbing to marketing schemes and criticize parents for not stopping their children from watching so much television, the social environment perspective recognizes that these factors are outside most peoples' control.

It is clear that social environment has a strong influence on the prevalence of obesity. There are many factors that are beyond the individual's control that affect the decisions they make. For example, a family that is living on a very limited income may be forced to buy the

cheapest food possible, even if it is not the healthiest. Viewed from the social environment perspective, obesity is a result of the numerous inequalities that exist in society, not a disease of immoral or lazy people. Obesity needs to be viewed from this perspective if it is ever going to be effectively solved. Policies that aim to target individual behavior, such as SSB taxes, will not make a long-term impact. The people they are meant to *change* are stuck in a position, by some combination of social factors, such as neighborhood, race, and income, which prevents them from changing what they eat and how much they exercise. Unless these systemic inequalities are addressed and resolved, rates of obesity will continue to rise.

Unlike the traditional narrative, the social environment perspective generates solutions that target more than just individual behavior. For example, potential solutions to obesity could involve advocating for higher wages in traditionally low-income jobs, helping to reduce residential segregation, opening affordable grocery stores in areas that lack them, subsidizing healthy food alternatives, building parks in low-income neighborhoods, and improving security in those same neighborhoods so that residents feel safe outside. Viewing obesity from this perspective allows comprehensive solutions to come to the forefront of the debate. Unlike SSB tax policies, which only serve to alter individuals' consumption of one category of beverages, comprehensive policies would target the wider societal factors that affect why an individual would *choose* to buy an SSB in the first place. SSB tax policies may succeed in increasing revenue for the state, but they will not succeed in reducing rates of obesity by significant amounts because they do not target the problem from the right perspective. Taking a social environment approach allows numerous factors to be taken into account when policies are discussed. It is therefore essential that this perspective be more widely adopted by the general public and policy makers. While public health experts and other scholars may be more sensitive

to the social environment perspective, they often lack the monetary and political support to implement widespread change, especially when that change has the possibility to disrupt the status quo. The social environment perspective needs to replace the traditional narrative as the prevailing way of examining obesity across all of society.

Conclusion

According to the traditional, medicalized narrative of obesity, it is solely the fault of the individual for being obese. The obese lack the self-control and the will power to control what they put into their bodies. They are seen as unhealthy and unsuccessful. Corresponding to this way of thinking, SSB tax policies are a new solution aimed at reducing rates of obesity. West Virginia's Soft Drinks Tax places a large excise tax on the sale and use of bottled soft drinks throughout the state. The goal of the policy is to reduce rates of obesity by changing individuals' buying behaviors. By raising the price of SSBs, consumers will be incentivized to choose healthier alternatives. Therefore, they will buy fewer SSBs. The idea is that the rate of obesity will decline as people consume fewer empty calories. In addition, revenues generated from the tax will fund a new medical, dental, and nursing school in the state, which can help treat people with obesity. Despite the good intentions of this policy, I argue that SSB tax policies will never be effective at significantly reducing rates of obesity because they fail to address the wider societal causes.

According to the social environment perspective, obesity is caused by a variety of factors, including neighborhood environment, unequal access to healthy food, norms within one's social network, and the media. Obesity is not simply a result of one individual's eating and exercise habits. Those who are poor may not be able to afford healthy food. Those living in impoverished neighborhoods may not have access to gyms or safe places outside to exercise. The obese are not

lazy or morally deficient but are victims of a society that is inherently unequal. In order for rates of obesity to go down, these inequalities must be directly addressed and resolved through comprehensive policies. These types of policies will only be drafted and realized if a social environment perspective is widely adopted. This paper was written to convince the reader that a social environment perspective is the correct way to define and target obesity. However, much advocacy work remains to be seen. The traditional narrative has been engrained in our nation's public discourse for decades. In addition, obesity is such a visual disease that it is easier for us to blame the obese individual eating a Big Mac, than to blame the society and way of life we all live in. To convince people that the social environment perspective is accurate is one thing. To convince people to advocate for this way of thinking, therefore challenging some of the most contentious issues within our nation, including poverty and residential segregation, is a whole other playing field. I am hopeful that this paper is a step in the right direction and will serve to spark further discussion on the matter.

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