

Fat as Flawless or Fatal? Weight Stigma and its Effect on Perceptions of Fat,  
Health, and Eating Disorders.

A Senior Thesis

Submitted in Partial Fulfillment

Of the Sociology Major and the B.A. Degree,

The University of California, Santa Cruz

Nivie Oron

June 12, 2020

Professor Rebecca London, Senior Thesis Advisor

## Acknowledgements

I wish to thank my advisor, Professor Rebecca London for working with me through all of the setbacks and believing in me!

And thank you Professor Megan McNamara for introducing me to the world of sociology with such passion and care for the field and for your students.

Thank you to my family: Ima, Aba, and Nati for your valuable and honest input. A special thanks to Guy for all of your involvement – for helping with the programming (that made this research possible), for providing valuable advice and support along the way, and for being interested and excited about my research.

Thank you to my partner, Christian, for your unconditional support through every step of the process and for staying up late with me.

And thank you Amanda Kessner for introducing me to the body positive world.

I could not have done it without you all!

## Table of Contents

|   |           |
|---|-----------|
| <b>Introduction</b>                                     | <b>5</b>  |
| <b>Literature Review</b>                                | <b>5</b>  |
| <i>Fat as Fatal</i>                                     | 5         |
| <i>Living While Fat</i>                                 | 14        |
| <i>The Perfect Citizen</i>                              | 20        |
| <i>Having an Eating Disorder While Fat</i>              | 24        |
| <i>Fat as Flawless</i>                                  | 33        |
| <b>Methods</b>  | <b>36</b> |
| <i>Part 1 – Eating Disorder Questions</i>               | 37        |
| <i>Part 2 – Likert Scale Questions (See Appendix D)</i> | 39        |
| <b>Findings</b>   | <b>41</b> |
| <i>Attraction</i>                                       | 41        |
| <i>Perceptions of Obesity</i>                           | 42        |
| <i>Knowledge of Fatphobia</i>                           | 44        |
| <i>Eating Disorder Results</i>                          | 44        |
| Anorexia – Josephine                                    | 45        |
| Stigma Scales and Josephine                             | 47        |
| Bulimia – Rene  | 47        |
| Stigma Scales and Rene                                  | 48        |
| Binge Eating Disorder – Miranda                         | 48        |
| Stigma Scales and Miranda                               | 49        |
| <i>Scale Differences Between Groups</i>                 | 50        |
| <i>Fatphobic Beliefs</i>                                | 51        |
| <b>Discussion</b>                                       | <b>52</b> |
| <i>Age</i>  | 53        |
| <i>Gender</i>   | 57        |
| <i>Class</i>  | 61        |
| <i>Body Type</i>  | 63        |
| <i>Ethnicity</i>  | 67        |
| <i>Stigma Scales</i>                                    | 68        |
| <b>Conclusion and Limitations</b>                       | <b>70</b> |
| <b>References</b>                                       | <b>73</b> |

|  |           |
|--|-----------|
| <b>Appendix</b>  | <b>77</b> |
| <i>Appendix A – Form Organization and Eating Disorder Descriptions</i> | <i>77</i> |
| <i>Appendix B – Picture pairs in order from pair #1 – pair #6</i>      | <i>78</i> |
| <i>Appendix C – Survey Part 1 Outline</i>                              | <i>81</i> |
| <i>Appendix D – Survey Part 2 Outline: Likert Scale Questions</i>      | <i>83</i> |
| <i>Appendix E – Overall Scores Across Groups</i>                       | <i>84</i> |

## **Introduction**

This study is meant to examine the stigma that people hold about fat and about fat bodies, both subconsciously and consciously. The study primarily asks: Do people make assumptions about health based on body size? The study is also designed to analyze knowledge that exists surrounding eating disorders as well as which other popular assumptions are made generally about obesity and specifically about people based on their body size. What consequences do these assumptions have for people who live in fat bodies?

The answers to these questions are important for our social world, especially considering the pervasive thin ideal as well as the lack of research that exists on positive body image and on the experiences of those who are discriminated against because of their size (Homan and Tylka 2018). Almost half of American children between first and third grade already want to be thinner and half of girls 9-10 years old are dieting (Weiss 2011). In the field of psychology and in society generally, body image issues and eating disorders can be (and are) so easily disguised as problems that occur only in individual worlds. This is why the field of sociology needs to invest in researching how these problems exist beyond the self.

## **Literature Review**

### **Fat as Fatal**

In the United States, the predominant framework for thinking about weight is the “fat as fatal” framework (Bombak, Monaghan, and Rich 2019). We are bombarded with messages about the dangers of fat and the obesity epidemic, and most of us have either dieted ourselves with the goal of losing weight or grew up with mothers, fathers, family, and friends who dieted. If you were a child categorized as “overweight” or “obese” by the BMI charts in the pediatrician’s office, you were taught (at least from doctors) that you are unhealthy and that you are risking

your life. As a child, you are advised to diet, to exercise, and to try to lose weight. This information is a lot for a child to carry, but presumably, we tell them the truth to protect them. The organization now rebranded as WW (previously called “Weight Watchers”) has even recently released a dieting app for children that can help them lower their BMI or lose weight (Sole-Smith 2020). However, here is where the problem lies. There is no conclusive research proving that directly because of a child’s (or adult’s) excess weight, they are any less healthy or any more likely to die younger or be sicker (Lavie 2014). There is research, on the other hand, about how detrimental this “fat as fatal” framework is, and the countless medical and social justice issues that play into it.

According to Doctor Carl J. Lavie in his book, *The Obesity Paradox*, this common “fat as fatal” perspective is based on misconceptions about fat and obesity (Lavie 2014). Lavie is a practicing cardiologist who works at the John Ochsner Heart and Vascular Institute (one of the top 20 nationally ranked cardiac programs), and is an author or coauthor of more than 800 medical publications. In *The Obesity Paradox*, he writes about how metabolic health has nothing to do with weight and metabolically unhealthy people also come in thin, seemingly “healthy” bodies according to societal standards and the body mass index (Lavie 2014). Inactivity and blood sugar imbalances are indeed detrimental to our health, but the size of our bodies do not reflect this (Lavie 2014).

It is not easy to accept that our doctors may be wrong, but it would not be the first time. We now know that smoking cigarettes is very unhealthy, for example, but doctors used to advertise them in the 1930s and 40s (Reinold 2018; Lavie 2014; Little 2018). It is tempting to believe that our popular understanding of what is right for our health currently is superior to any other time. This is an example of a type of bias and sociological concept called *temporocentrism*.

Temporocentrism is the (often unconscious) belief we hold that our time, our period of history, is the most important and superior, and that other periods should be judged in comparison to ours (Cleveland 1981). In different time periods including today, we have been given (and have trusted) contradictory information about what is healthy and what is not (Lavie 2014).

Out of all the misconceptions we hold about fat and fat people, the core myth is that obesity in itself is a disease. The metabolic abnormalities that do indeed hurt our health (e.g., certain measures of blood pressure, triglycerides, cholesterol, glucose, insulin resistance, and inflammation) are associated with excess weight (Lavie 2014). However, in the United States we have 16 million “normal weight” people with metabolic abnormalities and 56 million “obese” and “overweight” people with no abnormalities (Lavie 2014). This is classified as “metabolically healthy obesity” in the medical community, which seems confusing if obesity in itself is seen as a disease (Lavie 2014). If these people are healthy, how is their excess weight a disease within itself? This points us toward the obesity paradox, a term coined by Dr. Luis Gruberg in 2002 when his study found that overweight and obese people had half the risk of dying within a year after angioplasty than did thin patients (Lavie 2014). Research has also confirmed this paradox in diseases such as HIV, arthritis, kidney disease, diabetes, and cancer - fat people recover better from these diseases, including when researchers rule out weight loss due to illness (Lavie 2014). Other studies that compare physically fit “obese” people and sedentary people of “normal weight” find that the “obese” people have lower incidence of heart disease and death (Lavie 2014). Unlike other diseases, the classification of obesity is just based on the BMI, not any symptoms or a pathogen - just a number on a scale (Lavie 2014).

Medical research that is based off of a small sample of specific people is often misinterpreted and generalized to an entire population, even by professionals. One frequently

cited “fat as fatal” study was completed by the Diabetes Prevention Program, which concluded that moderate weight loss can prevent diabetes and lower the risk of cardiovascular disease (Bombak et al. 2019). With a deeper reading into details of the study, however, it cannot be generalizable. All of the participants were already considered prediabetic (Bombak et al. 2019). Yes, those who lost weight in this prediabetic sample were least likely to develop diabetes, but higher levels of physical activity also led to this reduction in likelihood to develop diabetes, independent of weight loss (Bombak et al. 2019). Furthermore, participants on average regained most of the weight they had lost. Over time, higher levels of weight loss during the study were actually associated with development of diabetes (Bombak et al. 2019). This research, in line with Dr. Lavie’s research, suggests that exercise is important in reducing risk of diabetes incidence, in addition to keeping a relatively stable weight.

Another example of a “fat as fatal” study was one published by the Mayo Clinic, which found a very clear association between a larger waist circumference and higher rates of mortality (Lavie 2014). Dr. Lavie points out that another similar study said the exact opposite: that a larger waist circumference actually is associated with longer lives. Based on a paper that Dr. Lavie co-authored that studied almost 10,000 coronary artery disease patients and was also published in the *Mayo Clinic Proceedings*, the thinnest individuals actually had a higher mortality risk (Lavie 2014). Those who were classified as “fit” had an especially low mortality and risk for cardiovascular death, whether they were lean or heavy (Lavie 2014). Again and again, research suggests that a number on a scale or a BMI calculation is not a representative measure of health. It is very important to note as well that BMI accounts for as little as one-half of the variation in body fat among individuals and does not reflect differences in muscle mass, age, and race (Essayli et al. 2017).

The study by the Diabetes Prevention Program is not the only study that has found that weight loss efforts are not sustainable. Much research has suggested that weight loss from dieting does not last long term and is unhealthy (Lavie 2014; Reinold 2018). Although we have no empirically proven link between thinness and health, they are equated culturally and as a result, many people end up dieting, using dangerous diet drugs, choosing to have invasive surgeries, and suffering from constantly disciplining themselves and denying themselves sustenance (Guthman and DuPuis 2006; Bruce and Ricciardelli 2016; Lavie 2014).

The Minnesota Starvation Study was one of the first large studies to find just how dangerous dieting can be. It is now well known in the world of eating disorder treatment, but it was initially intended to help us learn about the effects of starvation (Reinold 2018). In 1944, 36 young men were put on a 3 month “normal” diet of 3,200 calories a day. Then, they participated in a “semi starvation” period where they ate 1,570 calories a day for 6 months (Baker and Keramidas 2013). Throughout the study, physiological and psychological changes were measured. During the semi-starvation period, the men experienced significant decreases in strength, body temperature, heart rate, and sex drive (Baker and Keramidas 2013). Psychologically, they became obsessed with food and began to dream and fantasize about it. They were irritable, fatigued, depressed, and reported decreases in mental ability (Baker and Keramidas 2013). This calorie intake (or less) is what the diet industry today advertises as healthy. The study did not go on to do an actual “starvation” period as they had planned because participants became suicidal, hysteric, and started to hallucinate food in their sleep (Reinold 2018). During the following 8 week “unrestricted rehabilitation” period, they engaged in extreme overeating and continued to be preoccupied with food (Baker and Keramidas 2013). This study was a landmark study that led scientists to discover more about the consequences of dieting and

how it can lead to binge-eating, as it did for the participants in the Minnesota Starvation Study (Baker and Keramidas 2013).

Just like the participants in the Minnesota Starvation Study, others who diet similarly usually gain back their weight, if not more. When they choose to diet again after they gain weight like many do (i.e. “yo-yo dieting”), they enter a cycle of losing and gaining and losing and gaining, which is detrimental for heart health and metabolism (Lavie 2014). Contestants from *The Biggest Loser*, a reality TV show that “helps” people lose weight, were followed up with 6 years after their appearance on the show (Kolata 2016). Most of the participants had regained the majority of the weight they had lost, if not more. Their metabolisms were permanently damaged, suppressed by an average of 500 calories (Kolata 2016). This means that even if they are exercising and dieting, their body now burns 500 less calories per day than they naturally did before. According to psychiatrist Stefani Reinold, when people diet their body starts to survive by slowing down their immune system and suppressing thyroid function (Reinold 2018). Even if someone does not qualify for “*The Biggest Loser*”, dieting for only 3 days can suppress thyroid function, which is the driver of metabolism and all energy functions of the body (Reinold 2018). Furthermore, Dr. Reinold explains that many people do not realize they are dieting. This is because they may not be obviously restricting physically, but even the mental preoccupation with foods and constant thoughts that we “should” restrict ourselves or that we are eating too much can affect our brains in the same way that dieting does (Reinold 2018).

The research out there clearly tells us that dieting (restricting food or calories with the goal of losing weight) is dangerous. According to a fact sheet from an eating disorder treatment center, 95% of diets fail, with most people regaining their lost weight in 1-5 years (Weiss 2011). Of the 5% of people who do not gain their weight back, 98% have clinical definitions of eating

disorders (Reinold 2018). In addition, 35% of “occasional dieters” progress into pathological dieting (i.e. disordered eating) and up to 25% develop eating disorders (Weiss 2011). In conclusion, there is a very clear connection between dieting and disordered eating/eating disorders. And we know that body size or weight cannot tell us much about health. This pushes us to think how fat people experience eating disorders or eating disorder treatment in a world where the “fat as fatal” perspective is dominant. From the aforementioned research, we can also identify a pattern of a focus on weight and BMI *over* habits that we know are healthy like nutrition and exercise. Diet and nutrition themselves are important to our health. Dr. Lavie points to the studies showing that having a nutritious diet, just like staying active, reduces cardiovascular risk (Lavie 2014). Again, these findings are independent of weight loss (Lavie 2014). This literature argues that activity and diet are extremely important, but that we start to drift away from science when we believe that a number on a scale can reflect our health in all of our naturally diverse shapes, sizes, genetics, and histories.

Inferring causation from correlation is one scientific root of the problem. We know that obesity itself does not kill and that obesity itself does not cause diabetes, but we cannot argue with the research that correlates diabetes and obesity (Lavie 2014). There is no dispute that these are correlated, but the research loses validity when we then infer causation. Social justice issues emerge when we infer causation without testing confounding variables such as smoking, fitness level, alcohol consumption, genetic vulnerability, socioeconomic status, and health insurance status (Lavie 2014). Oftentimes, the same research that reports health risks of obesity does not also report on the benefits of weight loss (Mann et al. 2007). When benefits of weight loss are reported, it is often unclear if these benefits came from changes to diet or physical activity that produced those benefits, while resulting in weight loss as a byproduct (Mann et al. 2007). In

addition, measures used for research on diets such as “food diaries” are highly unreliable (Guthman 2013).

Many researchers in addition to Dr. Lavie have discovered a flaw in the ways research on obesity is conducted. In addition to inferring causation from correlation, research is also flawed because it is informed by biases and assumptions about how someone even becomes fat or obese, fueled by the War on Obesity and the core myth of obesity being a disease, being “bad.” Professor and researcher Julie Guthman points to the occurrence of “problem closure” - the phenomenon that occurs when narrow or incorrect definitions of a problem then are used to frame how we study that problem, its causes, and its consequences (Guthman 2013). Then, we are limited when looking at solutions to the problem to find solutions that are socially acceptable given the way that we understand that problem (Guthman 2013).

One of these assumptions that inform our research is the energy-balance model (Guthman 2013). The energy-balance model states that obesity results from the unhealthy ratio of intake of calories relative to expenditure. However, Guthman points out that it actually has not been demonstrated empirically that people’s intake of calories relative to expenditure has gone up since the 80s (Guthman 2013). While we see objectively that Black people and lower income people have higher rates of “obesity,” it has not been demonstrated that Black people or low-income people eat more or less than other races or income-levels (Guthman 2013). And as stated earlier, BMI accounts for as little as one-half of the variation in body fat among individuals and does not reflect differences in muscle mass, age, and race (Essayli et al. 2017). This energy-balance model is taken for granted, and so if results do not support the model, researchers assume it is due to a flaw in the methodology (Guthman 2013).

Another assumption that Guthman writes about is that the built form of neighborhoods determines people's eating and exercise behaviors (Guthman 2013). Combined with the energy-balance model, this assumption has led to the commonly believed theory of the "obesogenic environment," which claims that the way our environment is built (to discourage healthy eating and exercise) causes obesity (Guthman 2013). Again, these assumptions all stem from the core assumption from earlier in the paper, that obesity is a "bad" thing that needs to be prevented or stopped. Because this myth structures the entire research, we encounter problem closure, and we are limited when it comes to finding solutions and helping communities that actually do need our help such as people experiencing homelessness, poverty, or hunger. In addition to the confounding variables mentioned by Dr. Lavie, Guthman mentions the role of environmental toxins (Guthman 2013). In a world that is not trained to think using a sociological lens, we turn to solutions that fall on the individual fat person and not the large and systemic racial, gender, and class inequalities that exist and may confound our research. We assume that the environment has these "problem features" that just exist independently of the bodies that occupy that space (Guthman 2013). Guthman writes: "In neglecting these other possible causes, which also have social-political dimensions, they reinscribe a thesis that also has social-political consequences. That is the risk of premature problem closure" (Guthman 2013:153).

People often try to solve the obesity "problem" (using the obesogenic environment thesis) by restricting or taking away options in neighborhoods, again demonstrating problem closure (Guthman 2013). Under the guise of creating a healthier space for those less fortunate people who live there and giving them more opportunities for exercise and nutritious and fresh foods, they are often taking more away than they are giving, and actually exacerbating inequalities in the long run. When they try to make the environment look like one where thin people live they

strip choices away from people, in their own homes, who are disproportionately people of color, poor, and/or fat (Guthman 2013).

In short, the research surrounding obesity is concerning. After estimating that 365,000 deaths a year could be related to obesity, the CDC itself admitted to statistical errors about their claims about obesity and it being a leading cause of death, and reduced that number to 112,000 (Guthman and DuPuis 2006; Lavie 2014: 152). The war on obesity seems to have created bigger health and social problems than obesity itself, which I will continue to explore in this paper. Lavie (2014) suggests that instead of focusing on preventing obesity, we should be looking at real diseases that we are concerned about such as Type 2 diabetes and heart disease. These diseases exist in people of every size and weight category, and perhaps we should be promoting healthy habits (not numbers) to people of all sizes instead of pushing weight loss. Healthy habits have proven benefits, and weight loss does not. Fat people should be encouraged to exercise in just the same way that thin people are encouraged to exercise and have healthy habits, and not for the purpose of losing weight. If the thin ideal is not the health ideal, perhaps the way we define the “healthy” body has less validity in the study of physiology or biology and more validity in the study of norms - ideas of beauty, goodness, perfection, attractiveness, femininity, masculinity, deservingness, and so on that we are made to believe we should aspire to, and how these norms affect our lived experiences. The appearance of “the healthy body”, therefore, is a social construct.

### **Living While Fat**

The War on Obesity is not just waged on obesity but also on the people who live in fat bodies. The classification of obesity as a disease is not merely a medical issue, but also a social justice one. The assumptions (unproven and disproven) that are held about fat people inform our

research and guide us to make conclusions about the world and people's lives. They also motivate our decisions and real tangible changes that we make to our society (to policy, environment, etc.). Cultural "knowledge", research, and tangible changes feed into each other to support the War on Obesity, and unfortunately, they are rarely challenged. As we move in the downward spiral, this information becomes more ingrained in how we operate in our world, and it becomes harder and harder to go backwards and to see the world differently. Lavie (2014) writes about this challenge and the disapproval that he was met with when he started to try and publish his data. Belief systems do get in the way of evidence, and even respected journal reviewers and scientists were skeptical. By now, we have made some progress and there are many studies confirming the obesity paradox. Yet still, information does stay buried for political, economic, and personal reasons. The consequences of this cycle fall onto all of us, but especially onto fat people.

Fatphobia (and its intersections with other forms of oppression) seems to be an underrepresented issue within progressive politics. Santa Cruz happens to be one of the only six cities with legal protection against weight discrimination in addition to the state of Michigan (National Association to Advance Size Acceptance). A survey in the U.K. found that 54% of doctors believe the National Health Service should have a right to deny treatment for "overweight" people (Campbell 2012). Fat people are more likely to be fired from their workplace and earn smaller salaries than thin people in the same position (National Association to Advance Size Acceptance). In school, teachers have a lower expectation for fat students than for thin students (National Association to Advance Size Acceptance). Obesity prevention programs and policies in schools may be associated with disordered eating in students (Evans, Rich, and Holroyd 2004). Even what we see as solutions, like movies exposing the fast-food

industry, contribute to this issue of stigma. They dehumanize fat people and picture them with blurred faces and ultimately, although they pretend they are just generating disgust with the system, they add to the disgust our society feels towards fat people (Guthman and DuPuis 2006). They add to the shame around food choices and to the judgement of fat bodies.

We know through scientific literature that the physical, mental, and psychological stress of discrimination has real health consequences. Obesity, like race or gender, is a social construct that is used to define people and their level of humanity. Fatphobia is a form of discipline in our social world just like racism, sexism, or homophobia (Guthman and DuPuis 2006). It is yet another tool to police normalcy - we want to “explain it away” just as we often try to explain away other bodies that don’t fit our norm. Fatness is positioned as “the problem” and thinness as the norm (Guthman and DuPuis 2006). As a result, fat people are subject to discrimination based off of stereotypes. They are seen to be lazier, messier, dumber, and lacking in will power or ability to control themselves because they brought this “disease” onto themselves.

One part of this experience that can get neglected in research when the research is built on assumptions is resistance. Simply existing and surviving and eating and moving in a fat body can be a form of resistance in itself. In the podcast episode “White World, Black Body” in the series *Truth Be Told*, Virgie Tovar and Chloe Hilliard are interviewed about their experiences as women of color in their bodies that are or have been fat. In the episode, there is a question asker who struggles with occupying space in the world and at her job as a fat Black woman (White World, Black Body, KQED Podcasts). Chloe Hilliard advises her on her approach of resistance: to be as unapologetic as possible with her food and her body and to not validate her coworkers and their fatphobic comments by letting them sense that you are uncomfortable (White World, Black Body, KQED Podcasts). She advises the question-asker to eat and enjoy what she pleases

despite her thin white coworkers who are commenting about how they cannot eat cake because they need to lose five pounds (White World, Black Body, KQED Podcasts). The War on Obesity does and *should* generate resistance (in whichever form it comes in) because our bodies do not deserve to be the victims of this war and our bodies refuse to be the victims of this war.

Even internalized weight stigma has been found to be very detrimental to our health. In the words of Judith Butler, a norm is internalized because it “informs the ways we do or do not recognize ourselves at the level of feeling, desire, and the body, at the moments before the mirror, in the moments before the window, in the times that one turns to psychologists, to psychiatrists to medical and legal professionals to negotiate what may well feel like the unrecognizability of one’s gender and, hence, the unrecognizability of one’s personhood” (Butler 2001:622). Although Butler is speaking about gender, it is relevant for body size as well. A study by O’Hara et al. (2016) found that of 420 Emirati undergraduates, 30% had eating disorder symptomatology and 44% reported frequent teasing about weight. Eating disorder symptomatology was positively correlated with both being bothered by the teasing and internalized weight stigma (O’Hara, Tahboub-Schulte, and Thomas 2016). Weight- and body-related shame/guilt was the strongest predictor of eating disorder symptomatology (O’Hara et al. 2016). This stigma causes eating disorders, but conversations about eating disorders often only mention the thin ideal and not fatphobia.

There is other research suggesting that stigma and stereotypes hurt fat people more than any “excess” weight. For example, there is evidence that as a child’s BMI increases, their working memory declines. Researchers Guardabassi and Tomasetto (2020) questioned whether the stereotype that fat people are less intelligent plays a role in this well documented correlation. They created a “stereotype threatening” condition and one without stereotype threat. In the group

without stereotype threat, there was no relationship between BMI and working memory (Guardabassi and Tomasetto 2020). In the group with stereotype threat, working memory decreased as BMI increased. This study has huge implications. Children in larger bodies are exposed to body ideals and stereotypes early in life, and this may contribute to their working memory deficits. These findings were not moderated by task difficulty, gender, or age (Guardabassi and Tomasetto 2020).

And just like other forms of oppression, fatphobia is a major intersectional issue. The thin body norm is inseparable from other efforts to control, dominate, and marginalize whoever may be “othered” in our world (Guthman and DuPuis 2006). Virgie Tovar in “White World, Black Body” comments on intersectionality when she talks about diet culture, saying that it “primes us to accept discomfort, shame, self-denial, sense of failure, gaslighting, and financial exploitation which share characteristics with racism, sexism, capitalism, etc.” (White World, Black Body, KQED Podcasts). Virgie Tovar is well known in the body positive world. She is an expert on weight-based discrimination and body image, an activist, a contributor to Forbes, and was named one of the 50 most influential feminists by Bitch Magazine. In the podcast, she speaks of fatphobia’s intersection with sexism when she explains that at a time when she was thinner, men she dated would talk down about other women’s bodies who were larger than her. At the time, this actually made her feel secure, and she explains that she felt this way because as a woman she was socialized to see his negativity as a display of loyalty and attraction towards her (White World, Black Body, KQED Podcasts).

Fatphobia has a strong intersection with racism as well. The mission to make neighborhoods thinner cannot be separated from the missions to make those neighborhoods whiter or richer. Inseparable from histories of colonialism, attempts at weight loss are always

racialized, and the thin ideal is based on the white body (White World, Black Body, KQED Podcasts, Gershon 2019). According to historian Christopher E. Forth, the French and English obsessed over fatness in Africa and Asia partially because they were worried about their own weight due to how much they were eating using all the wealth acquired from their colonies (Gershon 2019). In the 1800s, American and European authors wrote of being horrified that “uncivilized” men desired fat women, and even claimed that this desire reflected lust and not real love (Gershon 2019). One of the same writers who claimed this, Henry T. Finck, later wrote a diet book for American white women that spread the idea that fatness is associated with savagery, with being uncivilized (Gershon 2019). This association with fatness, and also with black or brown skin, is the same one that exists today.

The question asker in “White World, Black Body” specifically spoke about her experiences at the intersection of racism and fatphobia both in the world in general and at her job in the medical field. She said that being both overweight and Black feels like she is invisible but also occupying too much space at the same time (White World, Black Body, KQED Podcasts). Her friends and coworkers tell her that they would refuse care by a healthcare worker if that worker were overweight. Especially the non - Black nurses would make derogatory comments (White World, Black Body, KQED Podcasts). Hilliard responds that she has heard very similar things in white spaces that she was in. It is a known problem among fat people that when going to the doctor with a specific issue, they are just told to lose weight instead of having their problem focused on. In a field with so much proven racial bias, Black people who are also fat, and Black women who are also fat face many disadvantages in their medical care (White World, Black Body, KQED Podcasts).

The podcasters also talked about Professor Brittney Cooper from Rutgers University and her research. She claims that the stress and anxiety caused by racism and racist policies changes people's metabolisms, in turn making it more difficult to lose weight (White World, Black Body, KQED Podcasts, Cooper n.d.) This just goes to show how we cannot possibly take the factors that are out of someone's control (e.g., racism) and those factors that we perceive as in someone's control (e.g., daily choices) and map them onto why their body looks the way it does. The intersection with race, class, and fatphobia and its effects on psychological well-being has also been documented. Researchers Ciciurkaite and Perry (2018) found that the effects of weight-based discrimination on psychological well-being vary depending on social status. They found that the psychological consequences of discrimination on Hispanic women and women in the lowest household income group were significantly greater compared to the white women and women with higher household income (Ciciurkaite and Perry 2018).

And just like other systems of oppression, fatphobia affects us all and limits us all. Our freedoms are tied together. Defining health by appearance is dangerous to everyone. None of us will feel like we have achieved the "perfect" body until we accept that we have had it all along.

### **The Perfect Citizen**

The stereotype of fat people being undeserving of subjectivity and lacking in will power is connected to the neoliberal notion of the self (Guthman and DuPuis 2006). Guthman and DuPuis (2006) write about how citizenship is not allocated to someone based on their participation in the public sphere, but based on their contribution to society through consuming and purchasing. The numbers vary, but the weight loss industry is estimated to be worth around 70 billion dollars (Sifferlin 2017). In 2016, Weight Watchers made \$1.2 billion in revenue (Sifferlin 2017). Because obesity has been classified as a disease, the Food and Drug

Administration approves weight loss drugs, and adds to the stigma and belief that we need to lose weight (Lavie 2014, Guthman and DuPuis 2006). In doing so, the industry profits off of all of our body hatred and shame. We are told we should spend money and time to shape our bodies. We are supposed to actually believe that so much of our focus should be on ourselves, on harming ourselves, on being preoccupied with our bodies constantly, on disciplining our bodies constantly.

When Julie Guthman taught a class called “Politics of Obesity” at the University of California, Santa Cruz, she noticed how large of a role obesity discourse has in governing and disciplining people. The students in her class, at a university known for open mindedness and acceptance of structural explanations, were enraged (Guthman 2009). She analyzed journal entries from her students, and found that their anger was related to her disruption and deconstruction of the neoliberal discourses that governed them so deeply (Guthman 2009). These included connections of weight loss with themes of personal responsibility and personal empowerment (Guthman 2009).

Guthman (2009) specifically noted the ways we attribute individual weight loss not only to personal empowerment, but also to the strength of our society. She relates this to the reality show *The Biggest Loser* which emphasizes both individuals and teams. The participants’ success is seen as necessary not only for themselves but for the good of society (Guthman 2009). Their discipline is described as necessary for the health of the nation and capitalism (Guthman 2009). This is similar to research by Francis Ray White (2013), who did an analysis of the “fat (d)evolution image”. This imagery is a play on the evolution process of humans from apes. However, this one is about devolution from the human to the fat human, with the last picture being a fat person often holding a burger or a fizzy drink and not walking but standing still and

hunched over (White 2013). Unlike the bodies before it that get progressively taller, the obese individual is shorter. It suggests that by choosing to be fat and lazy, they are causing our species to devolve (White 2013). White (2013) also comments on how people find this image to be funny, and how this humor also acts to discipline and remind us all to follow norms.

This reminds us that the ways in which norms discipline us can be covert. The discipline does not solely come from one political party or from the people we think of as less socially conscious. When criticizing Donald Trump, for example, the left often makes fun of his body size, skin color, or penis size. During Trump's campaign, an anarchist group put up naked statues of him with a micro-penis around the public. Many of those who were anti-Trump loved the statues poking fun at him and the images trended in left-leaning circles on social media. Recently, Nancy Pelosi called Trump "morbidly obese" when speaking of his dangerous decision to take hydroxychloroquine for COVID-19 (Belle 2020). These statues, Pelosi's comments, and this general pattern of using Trump's appearance as a case against him take away from much larger issues such as Trump's racism, sexism, xenophobia, and extremely problematic ways of handling a world pandemic. In addition, they hurt men, transgender people, and fat people by equating penis size and body size to worth.

We look for fat people to demonstrate this discipline for us, while we see thin people as automatically possessing the ability to control themselves because they have succeeded in being thin (Guthman and DuPuis 2006). For example, when we take options out of neighborhoods to try to make them thinner (e.g., liquor stores, vending machines, fast food,) we imply that fat people are the ones that need to be stripped of choice because of their clear lack of discipline and self-control (Guthman and DuPuis 2006; Guthman 2013). These communities are also disproportionately poor, and disproportionately of color.

In conclusion, there is a confusing balance that we ask people to adhere to in order to be seen as “active citizens” and deserving of subjectivity. On one hand, contribute to our economy by purchasing and consuming. But on the other hand, prove that you can discipline and restrain yourself. Those who are thin demonstrate to society that they have self-control in a world of plenty and in turn receive the right to make decisions for themselves (Guthman and DuPuis 2006). Thinness in this way symbolizes the self-restraint that we value in a neoliberal world (Guthman and DuPuis 2006). Giving people access to an affordable grocery store with fresh food is great. But what are the intentions behind it? To control the residents’ choices or to allow them choice? To put a Band-Aid on larger systemic issues contributing to health problems or as a first step in tackling these issues? Are these changes being made along with changes to make the environment more accessible and inclusive for the bodies that already live there and not just the bodies that we want to see living there? For example, having clothing stores with affordable options for fat bodies, having desks in schools that fit fat bodies, and safe and inclusive spaces for fat bodies to exercise. Instead of these larger problems, we again see the pattern of the ongoing theme in which blame and responsibility end up falling onto cultures, onto mothers (of fat children), and onto individuals (Felkins 2019). And in the case of fatphobia, these judgements so easily disguise themselves as concerns about health (Felkins 2019; Fabello and Bacon 2016).

There are also fat activists that on an individual level are making the world more welcoming for fat people by reclaiming the space that they deserve. Many fat activists are influencers on social media, sharing pictures of themselves being happy and confident in their bodies, enjoying food, or dancing their hearts out. Ragen Chastain is an activist who shattered the Guinness World Record along with many stereotypes when she became the heaviest woman to run a marathon (Ospina 2018). She said:

It's absolutely critical to get clear that nobody of any size is obligated to exercise, but that every one of every size should be welcome... For that reason, I purposefully work out in public as a way to create visibility for other plus-size people who may want to do the same, so that they know that we have every right to take up space in the fitness world, and that we are under no obligation to bow to the whims of size bigots.

The pressure and discipline required to be seen as both the “out-of-control consumer” and the “self-controlled subject” in certain ways echoes the same struggle of those who suffer from bulimia nervosa, which entails binge eating and compensatory behavior (e.g., purging, intense exercise). For this reason, our culture has been called a “culture of Bulimia” (Felkins 2019). This culturally valued and glorified self-disciplining and self-punishment and shame (especially for larger people) is inseparable from the discipline, punishment, and shame that often embody an experience with an eating disorder.

### **Having an Eating Disorder While Fat**

The more one looks into the literature on obesity, weight stigma, and eating disorders, the more it becomes unclear if our struggles are coming from our own excess weight as we are told from the “fat as fatal” frame or if they are really rooted in the stigma and other larger societal issues. In addition to research being focused on obesity as a disease, the energy-balance model, and the obesogenic environment thesis, research is also disproportionately focused on negative body image, with copious research on its symptoms such as body/appearance dissatisfaction, body surveillance, body shame, and internalization of media appearance ideals (Daniels, Gillen, and Markey 2018). Negative body image is focused on because it is assumed to be more important for eating disorder prevention, and the field of psychology has a trend of focusing on pathology (Daniels, Gillen, and Markey 2018). Positive body image (and how it is created) is therefore under-studied and misunderstood (Homan and Tylka 2018). Clinicians and doctors are left unqualified to promote positive body image, because they assume that it is simply the

opposite of negative body image, meaning that it can be attained by alleviating the symptoms of negative body image (Daniels et al. 2018).

However, more recent studies on positive body image (since 2010) suggest that it is its own construct, separate from negative body image, and must therefore have its own field of research (Daniels et al. 2018). Within the growing body of research that we have, we have learned about the benefits of positive body image and not so much about how it is cultivated (Daniels et al. 2018). However, there is research suggesting that weight- and appearance-centered approaches to health hinder us from developing a positive body image.

For example, (Essayli et al. 2017) found that in developing a positive body image, it is important to avoid weight-related labels such as “overweight” and “obese”. In order to examine the psychological impact of weight labels, they randomly labeled female participants as “normal weight” or “overweight (Essayli et al. 2017). They found that those labeled “overweight” reported greater body dissatisfaction, higher internalized weight stigma, and greater negative affect, and they also perceived themselves as less healthy than those who were labeled “normal” (Essayli et al. 2017). In another experiment with participants who classify as “obese” adults, 50.9% incorrectly classified their weight as overweight versus obese while the other 49.1% accurately perceived their weight as obese (Jones et al. 2010). Although all participants had similar BMIs, those who were inaccurate in their own labeling reported significantly less binge eating, eating disorder psychopathology, distress regarding overeating, and loss of control over eating (Jones et al. 2010). Lastly, a cross-sectional study using data from the Australian National Health Survey of 17,253 men and women found that those who perceive themselves as an “acceptable weight” reported less psychological distress than those who perceived themselves as overweight (Atlantis and Ball 2008). The results did not vary significantly between the genders,

and weight status or weight misperception were not associated with psychological distress (Atlantis and Ball 2008). These findings imply that labels may be hurting people more than actual so-called “over-” weight.

The lack of knowledge around positive body image, the ignorance around fat and obesity, and the discipline and thinness that we so deeply value in society lead to lifestyle habits (for bodies of all sizes) that revolve around weight and body size and that end up threatening our health and our lives. The War on Obesity normalizes habits (like disordered eating) that come from societal obsession with weight and thinness, that would otherwise be seen as dangerous. Bombak, Monaghan, and Rich (2019) refer to this romanticizing of pathological behaviors as “Anorexic ideation”. We are all pressured to participate in these unhealthy habits, but different bodies who we may not think “look” like they have eating disorders (those that do not belong to thin, young, white women) may have greater levels of pressure directed at them when they engage in disordered eating. They may experience anorexic ideation differently because of stigma - both internalized and from society.

There is often an assumption that eating disorders only affect thin, young, white women when really they do not discriminate based on race, sexual orientation, gender, culture, age, or socioeconomic status (Thomas and Schaefer 2013). Eating disorders in middle age, for example, have been overlooked (Gagne et al. 2012). One study found that among a sample of women over 50, 71.2% were currently trying to lose weight, 35.6% were spending half of the last five years or more dieting, 41.2% reported checking their body size or shape daily or more, and 40% reported weighing themselves a couple times a week or more (Gagne et al. 2012). In addition, 7.5% were taking diet pills, 6.8% were engaging in excessive exercise, and 61.8% reported that “concerns with eating, weight, or shape ‘occasionally’ to ‘often’ negatively affected their lives

(Gagne et al. 2012). For 79.1% of them, weight or body shape had a “moderate” to “most important” role in their self-perception. Of these middle-aged women, 63.9% thought about their weight daily or more, and 63.7% report that they feel ‘moderately’ to ‘extremely’ upset if they gain five pounds (Gagne et al. 2012). In addition, higher BMI was associated with greater endorsement of eating disorder symptoms, behaviors, and concerns (Gagne et al. 2012).

Eating disorders for fat people have also been overlooked, and the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (the DSM-5) is not particularly written in an inclusive way. It has very rigid eating disorder criteria, although it is viewed as an improvement from past DSMs. Still, the manual does not push psychologists and psychiatrists to see disordered eating on the continuum that it realistically exists on (Thomas and Schaefer 2013). In the previous edition of the DSM (DSM-IV) which was published in 1994, Amenorrhea was required for diagnosis of anorexia, which was very controversial and taken away in the DSM-5 (Thomas and Schaefer 2013). It is now generally looked down upon that we ever thought it was okay to require a loss of menstruation for an eating disorder to be diagnosed (because not only menstruating people develop eating disorders and for many other reasons). One criteria that still exists for anorexia nervosa, however, is a BMI that reflects “significantly low weight” (DSM-5: Feeding and Eating Disorders). In many communities, this BMI requirement is being challenged in the same way amenorrhea was - How can we rely on the measure of BMI (a measure so deeply flawed and inseparable from its associations with the War on Obesity, colonialism, and sexism) when so many normal, overweight, or obese people (according to BMI) have all the same symptoms and suffering as those who are categorized as underweight? Furthermore, how can we value BMI when we know that extreme restriction of calories does not have the same effect on all bodies and that weight is not an accurate measure of health or reflective of habits?

In response to this valid criticism, the DSM-5 included a different eating disorder called “atypical anorexia nervosa” (AAN) for those who are not categorized as underweight despite significant weight loss (DSM-5: Feeding and Eating Disorders). They also added bulimia nervosa (of low frequency and/or limited duration) and Binge Eating Disorder (of low frequency and/or limited duration) (DSM-5: Feeding and Eating Disorders). These three were all added to a category called “Other Specified Feeding or Eating Disorder”. Still, how do we define “significant weight loss”? If someone is clearly suffering from the other criteria of the disorder but has lost what we think, in some arbitrary way, is a “non-significant” amount of weight, do they not truly have the disorder? And also, do the symptoms and consequences faced by those who are “underweight” and anorexic differ enough from those who are “normal weight” or “overweight” and anorexic to warrant a completely different diagnosis? And still on top of *that*, what effect does a diagnosis being labeled as “atypical” or “other” have on those people in heavier bodies, who we know already have immense stigma that they are forced to endure?

It is confusing that we separate the two disorders, labeling one as “atypical” or “other” when research actually suggests that those who meet some but not all criteria for bulimia or anorexia still tend to have comparable issues in regards to their symptoms, medical consequences, and mental health (Thomas and Schaefer 2013). Forney et al. (2017) found in their sample that at least 25% of women and 40% of men with AAN were classified as overweight or obese. Between 64-91% of women and 84-100% of men with AAN reported being previously overweight or obese (Forney et al. 2017). A minority of those with AAN endorsed thinking that they had an eating disorder. Of those who had one of the three main DSM-5 eating disorders (anorexia nervosa, bulimia nervosa, or binge eating disorder), four times as many reported that they had an eating disorder (Forney et al. 2017). This reflects on how both

internalized stigma and stigma in general can act as a barrier in just understanding that you have an eating disorder or that you need help. In their sample, women with AAN were less likely to have received treatment, and none of the men with AAN reported having received treatment (Forney et al. 2017). In addition, a different study found that adolescents with AAN endorse similar if not higher levels of eating pathology and comorbid depression than adolescents with anorexia nervosa (Sawyer et al. 2016).

Forney et al. (2017) were responding to the unclear “significant weight loss” criteria in their research, setting out to explore how much weight loss is “significant” enough to warrant a diagnosis of an eating disorder. In addition, they wanted to explore how AAN differed from general weight loss, given that there is no “underweight” requirement (Forney et al. 2017). They used data from 1,640 women and 794 men, separating them into groups: a control group (with no eating disorders), a DSM-5 eating disorder group (those who meet the DSM-5 criteria for anorexia nervosa, bulimia nervosa, or binge eating disorder), and a group with atypical anorexia nervosa. Those with AAN were separated into groups based on how much weight they had lost: one group with 5% of their weight lost, one group with 10% of their weight lost, and a third group with 15% weight loss (Forney et al. 2017). They found that the prevalence of those with AAN at 5% weight loss was much greater than those in the higher percentage groups. Even at 5% weight lost, those with AAN were clearly experiencing something different than those who had generally lost weight (Forney et al. 2017). General weight loss was 2-4 times more common than AAN, and those with AAN experienced elevated eating pathology and distress (Forney et al. 2017). The researchers concluded that AAN criteria does not pathologize weight loss generally, a critique that a “fat as fatal” frame may likely have. They also concluded that requiring a strict weight loss definition for “significant weight loss” may likely increase eating

pathology associated with AAN, and stressed the importance of testing for restrictive eating disorders at all weights and sizes (Forney et al. 2017).

Even Forney et al.'s (2017) research, as progressive and helpful as it is, still plays into harmful neoliberal ideas in subtle ways. One very commonly studied aspect of eating disorders is their association with perfectionism, which has been demonstrated many times. In the study, those with AAN also clearly differed from those without eating disorders because of their greater endorsement of perfectionism (Forney et al. 2017). Because of this, they suggest that perfectionism may be useful in identifying which overweight or obese people are most at risk of developing an eating disorder while trying to lose weight (Forney et al. 2017). In this covert way, by continuing to emphasize a personality trait, the research endorses the neoliberal view of eating disorders. They frame eating disorders as operating only on a personal level, and they are actually still saying fat people should lose weight (just not while being perfectionists). It brings us back to the contradictions of the "perfect citizen": prove that you are an active consumer and disciplined. And prove that you can lose weight, but don't be too perfect about it... but lose it. Are these higher levels of perfectionism associated with the messages and stigmas they receive from society? How might other circumstances that are out of their control contribute to their eating disorder? Yes, this association seems clear. But by overly- emphasizing perfectionism, we are not treating eating disorders as the social justice issue that they are, and we are also adding to the delicate criteria that fat people have to navigate in order to be seen as having an eating disorder (or at risk of having one) and needing help.

Much of the literature suggests that a specific weight loss or underweight requirement, just like amenorrhea, does not account for how all of our bodies work so differently. Forney et al. (2017) also looked at amenorrhea, finding no association between greater weight loss and

amenorrhea. These requirements may also result in people suffering from an eating disorder to not take their situation seriously, or to justify their habits. If other people still think they are fat, or if they are still menstruating regularly, maybe they are more likely to think everything is okay. Writer Shawna Felkins talks about struggling with Bulimia while fat when she was in college (Felkins 2019). When she finally worked up the courage to confide in her friend, that friend asked if she was really bulimic, because it did not look like she had lost any weight (Felkins 2019). This experience for people, of not “looking” like they have an eating disorder, presents barriers for them in treatment and recovery. Moreover, if other people are congratulating them on their weight loss, they are more likely to feel validation for their disordered eating.

Sarah J. Thompson experienced barriers to treatment as a nonbinary, fat, queer person with anorexia (Thompson n.d.). Even they themselves did not believe that they had an issue, and when everyone was giving them positive feedback and congratulating them on their weight loss, it pushed them deeper into their eating disorder. They explain that when fat people lose weight - even if it's because of an eating disorder, grief, or cancer - they are congratulated. This can be seen on a large scale if we look at the world's reaction to the singer Adele's weight loss in these past few months. The internet exploded with obsession over her “new look” and “glow-up”, her before-and-after pictures made by magazines or her fans (with all of the complicated implications they carry), and what diet or exercise regimen may have helped her lose weight. Her body became the center of attention along with everyone's assumptions that she has finally become the happier, healthier, more beautiful and worthy version of herself. She has not made any public comments about her weight loss. Thompson writes about how even though they know very well that they had an eating disorder, they still feel that they need to prove themselves to this day:

In some ways, when I tell my story, I feel that I have to express the deep, intense pathologies that I experienced in order for people to believe me. I barely ate. I'd lie about having a meal, so no one would question me. I would flush food down the toilet to hide food and give the appearance that the food had been eaten. I'd track everything that I ate while making sure it was not above the ridiculously low calorie count that I set for myself. I exercised frequently. I could not stop thinking about food. I could feel my heart pounding in my abdomen when I laid in bed at night with an empty stomach. Despite all of this, I was still perceived as fat according to medical standards. (Thompson n.d.)

While Thompson's therapy that they received was helpful in some respects, it was very fatphobic. Their friends who were underweight were able to receive eating disorder treatment, while the treatment Thompson received focused on restriction and sometimes exacerbated their condition. Thompson explains that eating disorders are a social justice issue and as long as they are not treated as one, the most marginalized are left behind in treatment. To treat eating disorders as the social justice issue that they are, one must take the approach of *intersectional equity* by examining how treatment is experienced for people with different intersecting identities. They write:

I do not know of an eating disorder treatment program for a higher level of care where I as a fat, queer, non-binary person would feel safe to attend. Some places may be okay at treating fat people with BED without weight stigma, but they may not be safe for a fat person with anorexia. If they are safe from weight stigma, will I also be able to have staff who speak easily about queer relationships and be free from the pressure of heteronormativity? Will they act as if having a boyfriend is a reward for recovery? If an ED treatment center is somehow able to be safe from weight stigma AND heteronormativity, will they get my pronouns right? Will there be gender-neutral bathrooms, so that I'm not forced to choose the safest option for myself? Will they understand the difference between gender dysphoria and body dysmorphia? Will they think that I have to look a certain way to be non-binary? **Will I have to expend precious emotional and intellectual labor to educate them while doing the intense work of recovering?** Will they make it a completely awkward situation and not know where to have me sleep, with the men or the women? Will I be in a room by myself when everyone else has a roommate? If there is a higher level of care that offers ALL of these things, will I be able to afford it?... **Eating Disorder Justice needs to become the standard of eating disorder treatment in order for true healing to ever be possible. When healing from an eating disorder is accessible to the most marginalized among us, we may finally get a little bit closer to ridding the world of food and body shame.** (Thompson n.d.)

## **Fat as Flawless**

One example of an approach that works in opposition to the “fat as fatal” frame is Health at Every Size (HAES). Although it is not mainstream, many fitness trainers, nutritionists, therapists, and dieticians endorse and utilize the Health at Every Size approach, which is research-based. One aspect of this approach is the belief that people have “set-point” weight ranges (Bombak et al. 2019). Bodies have different healthy “set-points” at different times in life. We cannot really know what weight is healthy for us, but we do not need to. Health at Every Size focuses on habits around eating, moving, and mindfulness (ASDAH: HAES® Principles). Practices are suggested in order to develop these habits, such as intuitive eating and intuitive exercise (Bombak et al. 2019). At different times in life, weight can naturally fluctuate, which is okay according to HAES.

Different studies have found HAES intervention to be effective. For example, one study found that the intervention increased body esteem and intuitive eating, and decreased dieting behaviors and anti-fat attitudes (Humphrey, Clifford, and Neyman Morris 2015). Another found that similar benefits were enjoyed, but that these were moderated by internalized weight stigma - only those with low internalized weight stigma benefited from the intervention in the long term (Bombak et al. 2019). This again demonstrates how much the ingrained lesson we have learned to hate our fat and our bodies works as a barrier on our path to health, self-acceptance, and self-love.

Researchers have started to look more and more into intuitive eating. Bruce and Ricciardelli (2016) performed a systematic review of 24 cross-sectional studies of women 18 and older that examine the relationship of intuitive eating to a psychological correlate. Intuitive eating can be understood by looking at the Intuitive Eating Scale developed by Tylka (2006) that assesses four features: “relying on internal hunger and satiety cues to guide food intake”,

“permitting oneself to eat unconditionally”, “eating for physical rather than emotional reasons”, and “making food choices to enhance body functioning”. Definitions of intuitive eating also include “making food choices for both health and eating satisfaction” and “respecting the body regardless of weight and shape” (Bruce and Ricciardelli 2016). Intuitive eating was found to be associated with less disordered eating, a more positive body image, and greater emotional functioning (Bruce and Ricciardelli 2016). Another older study found that even children under six can regulate their eating. Although the amount that they ate varied greatly between meals, it stayed relatively constant for each child over 24 hours for six days (Birch et al. 1991).

Other intuition-based practices have been shown to improve health. For example, Homan and Tylka (2014) studied intuitive exercise and found that exercise is correlated with higher levels of positive body image, but that the relationship is weakened if that exercise was motivated by weight or shape. Additionally, the habit of having gratitude towards your body (also part of HAES) has been found to indirectly predict intuitive eating and directly predict lower investment in self-worth based on appearance as well as higher body appreciation (Homan and Tylka 2018). If positive body image received more focus in research, we could learn more about our body’s innate capability to know what is good for it and how it needs to be nurtured instead of relying on outside sources that tell us how much we deserve or do not deserve to eat.

One nonprofit that has practiced a HAES approach is The Body Positive based in Berkeley, California. The Body Positive promotes positive body image in women by offering trainings for professionals, online courses, public workshops, and campus leadership training (The Body Positive 2019). Their ultimate goal is to end the harmful consequences of negative body image including eating disorders, depression, anxiety, self-harm behaviors, substance abuse, and relationship violence (The Body Positive 2019). All of their programs use their

research-based Be Body Positive Model that is structured around five core competencies: reclaim health, practice intuitive self-care, cultivate self-love, declare your own authentic beauty, and build community (The Body Positive 2019). In using their model, The Body Positive is responding to the research reporting an unmet and under-studied need for building positive body images that does not rely on the thorough understanding that we already have about negative body image. A Stanford University pilot study on The Be Body Positive intervention found that it significantly improved measures associated with body satisfaction and resilience against eating and body image problems ("Stanford University Study on the Be Body Positive Leadership Program" 2014). The participants experienced a decrease in their shape/weight control beliefs, body surveillance, self-reported guilt, and internalization of the thin ideal. They also experienced fewer social determinants of poor body image from baseline to the end of the intervention. Further improvements on all of these measures were seen eight months after the intervention.

The Body Positive, The Health at Every Size approach, and the fat acceptance movement all compel us to think: What if we were socialized to see habits as determinants of health as opposed to body size and weight? What if we understood that we are in no place to make judgements about someone's health from just looking at them, and that we are in no place, *ever*, to insert our opinions about someone's weight loss or weight gain? Over time, how would this shift our goals in life, how we choose to spend our time, how we view beauty and health, how we feel (or no longer feel) in our bodies?

Health at Every Size is such an extreme juxtaposition from what most of us are accustomed to. And that may mean it is hard to accept, just like it was for Guthman's UCSC students in their "Politics of Obesity" course. It deconstructs much of what we have seen as objective reality and what has governed our lives and our bodies. It gives us hope for a

completely different world. One world thrives when we feel alienated by our struggles with our bodies and when we desperately try to find a way to love our bodies through spending money and performing discipline, only to find other reasons to hate ourselves. But in the other world, we all know that we are on a personal *and* societal journey to understand how to care for ourselves and that the War on Obesity causes us all to suffer. Instead of focusing on numbers and labels, we know that we actually are the experts of our own bodies. And instead of focusing on anything that can be interpreted as an imperfection, we know that our bodies are stunningly, naturally, and unconditionally, flawless.

## **Methods**

Participants were gathered in personal circles and over social media to respond to an anonymous survey. The survey spread on its own via social media (NextDoor, Facebook, Reddit, Instagram, Twitter) and through different people sharing with their circles. There were 600 respondents in all. The respondents were majority female (78.6%), majority white (80.2%) and majority thin (61.7%). In the end of the survey, participants were asked about the body type that they view themselves as having (referred to as IBT meaning “internal body type”), and the body type that they think others would label them with (EBT meaning “external body type”). The proportion of thin people reported above was taken only from those who answered that their IBT and EBT were both “thin/average”. Anyone referred to as “fat” either perceived themselves as fat, overweight, or obese (or a combination) in both IBT and EBT. Ages ranged from 18-88, with the mean age of 41. In analysis, because of the sample being majority white, those who were Latinx/Hispanic, Asian, African American/Black/Caribbean, or a combination of ethnicities were combined into one “non-white” group and compared to those who were white/caucasian. Those who are referred to as nonbinary in this study identified as one of the following in the survey:

nonbinary, genderqueer, two-spirit, genderfluid, gender non-conforming, or agender. The term “nonbinary” does not reflect all of these peoples’ identities, but for the purpose of this study it is used to describe someone who is neither male nor female. Below is a table describing the study sample, labeled “Sample Demographics”.

### Sample Demographics

|                |  | Count | Column Valid N% |
|----------------|--|-------|-----------------|
| AgeByDecade    | 18-29  | 218   | 41.5%           |
|                | 30s  | 59    | 11.2%           |
|                | 40s  | 50    | 9.5%            |
|                | 50s  | 80    | 15.2%           |
|                | 60s  | 66    | 12.6%           |
|                | 70s  | 46    | 8.8%            |
|                | 80s  | 6     | 1.1%            |
| Ethnicity      | Caucasian, white                                 | 473   | 80.2%           |
|                | Latinx or Hispanic                               | 44    | 7.5%            |
|                | Asian  | 23    | 3.9%            |
|                | African American, Black, Caribbean               | 13    | 2.2%            |
|                | Other/Unknown                                    | 11    | 1.9%            |
|                | Combo  | 26    | 4.4%            |
| Gender         | Female   | 463   | 78.6%           |
|                | Male   | 103   | 17.5%           |
|                | Neither male nor female                          | 23    | 3.9%            |
| EconomicStatus | Poor or Lower-Middle Class                       | 118   | 20.3%           |
|                | Middle Class                                     | 272   | 46.8%           |
|                | Upper-Middle Class or Wealthy                    | 191   | 32.9%           |
| BodyType       | Thin or Average                                  | 334   | 61.7%           |
|                | Fat/Overweight/Obese                             | 160   | 29.6%           |
|                | View themselves as fat, others view them as thin | 44    | 8.1%            |
|                | View themselves as thin, others view them as fat | 3     | 0.6%            |

### Part 1 – Eating Disorder Questions

The survey link directed participants through GitHub, which randomly sent them to one of twelve Google Forms surveys. Each of the twelve surveys had 50 responses. All twelve surveys were identical except for the three eating disorder questions. The eating disorder questions consisted of descriptions of the three main eating disorders in the DSM-5: anorexia nervosa, bulimia nervosa, and binge eating disorder. These descriptions were presented one by

one along with a picture of the woman they were meant to describe. There were six pairs of pictures spread out between surveys. All six pairs can be found in Appendix B, and descriptions of the three eating disorders can be found in Appendix A. The pairs are meant to be as similar as possible aside from body type which was either thin or fat. Each survey had a matching survey with all of the same descriptions in the same order but with the opposite body types attached.

Each pair of surveys had the three eating disorders in a unique order. For example, Form 1 had first the description of anorexia along with the thin woman from pair #5, then a description of bulimia along with the fat woman from pair #2, and lastly a description of binge eating disorder along with the thin woman from pair #3. Form 2 had the same order of the descriptions but with the opposite body type pictures from each pair. The organization of the eating disorder descriptions on each form can be found in Appendix A and an overall survey outline for part 1 can be found in Appendix C.

Each woman with anorexia always had the name “Josephine”, each woman with bulimia always had the name “Rene”, and each woman with binge eating disorder always had the name “Miranda”. The descriptions were written to meet the DSM-5 criteria, and were reviewed by a clinical psychologist. They are not perfect descriptions, but they are the same across body types which allows for the comparison to still tell us about how body type as the independent variable affected the participants’ answers. After reading the descriptions of the women’s behaviors around food, participants were asked: “On a scale of 1 to 4, how likely do you think it is that [insert name] has an eating disorder?” A scale of 1 (very unlikely) to 4 (very likely) was chosen so that participants could not opt to choose a neutral answer. Their answers, which I refer to as an eating disorder “score” in the study, are the dependent variables. Specific names of eating disorders were never mentioned, so those who believe in the DSM-5 criteria of weight with anorexia did not have a legitimate reason not to give fat Josephine a high score (because by the DSM, it could be argued that she has atypical anorexia nervosa). Names of disorders were not given so that I could see if participants could identify the unhealthy behaviors on their own.

Those who were nonbinary were excluded from analysis in this first part because numbers were too small once they were divided between surveys.

## **Part 2 – Likert Scale Questions (See Appendix D)**

After the eating disorder descriptions, respondents then replied to twenty seven randomly shuffled Likert scale questions on a scale of 1 (strongly disagree) to 5 (strongly agree). This time, five options were given because impartial answers could be more helpful in understanding people's beliefs. Some statements were completely written by me, and others were taken from the Anti-fat Attitudes Scale from Morrison and O'Connor (1999), the Anti-fat Attitudes Test from Lewis, Cash, and Bubb-Lewis (1997), or the Anti-fat Attitude Questionnaire from Crandall (1994). Some statements taken from these scales were modified by me and others were directly copied.

Four statements were not divided into their own scale, because they were more about knowledge and less about stigma. These statements were: "I have previously heard of the term 'fatphobia' and feel that I can explain it to someone", "Obesity is a serious public health issue", "Obesity is mostly a result of excess calories consumed relative to those expended", and "Certain neighborhoods are built in a way that discourages physical activity and promotes the consumption of unhealthy foods, leading to higher obesity rates (e.g., more access to fast food or liquor stores, less access to fresh food, less physical opportunities to walk or bike)". The Attractiveness scale only had two statements, so they were analyzed separately as well as together. These statements were "If I were single, I would date a fat person" and "Fat people are less physically attractive than thin people."

Thirteen statements were combined into a "Weight Control/Blame" scale. Only one statement was omitted from this scale and from analysis completely because it had a slightly lower corrected item-total correlation of .333 and had more confusing wording that could be interpreted to represent high bias or low bias. Cronbach's alpha was 0.879 for this scale, suggesting that it was very reliable. Examples of statements on this scale were: "Fat people give

too many excuses for being fat”, “Fat people tend to be fat pretty much through their own fault”, and “Most fat people eat too much unhealthy food”. Three statements made up the “Thin Healthy” scale (Cronbach’s alpha .495) which was meant to measure if people believed thinness equates to health. The statements in this scale included “A thin person is most likely healthier than a fat person”, “Losing weight is a good thing”, and “Fat people should be encouraged to accept their bodies the way they are”. Lastly, four questions were divided into a “Weight Stigma as a Societal Issue” scale (Cronbach’s alpha 0.687). A couple examples of these statements are: “Society is too tolerant of fat people” and “Teachers and employers should be trained and taught about weight stigma.”

Analysis was done using SPSS. Eating disorder scores given to each body type were examined across age group, ethnicity group, economic status, gender, and body type. Stigma scale scores (and the statements separately) were also analyzed across these groups and compared to eating disorder scores. The calculations of the eating disorder scores were also completed with all third questions omitted to account for order effect. It may be that participant responses were affected once/if they understood that the survey was asking about body type. All reported differences had a p-value under .05 and are highlighted in the tables. My hypothesis was that people would make assumptions about health based on the women’s body sizes and not solely from the descriptions of unhealthy habits. I thought participants would think thin Josephine (with anorexia) would be much more likely to have an eating disorder than fat Josephine. I thought people would assume fat Miranda (with binge eating disorder) would be more likely to have an eating disorder than thin Miranda. I also thought people would believe that fat Rene (with bulimia) deserves to feel guilty for her over-eating and would therefore assume more often that thin Rene had an eating disorder.

## Findings

### Attraction

Those under 40 were more likely to strongly agree or agree that if they were single, they would date a fat person. However, these percentages were still low: 8.7% of young people strongly agreed, and 27.3% agreed. Four percent of those 40 and over strongly agreed, while 17.8% agreed. Men were more likely than women to disagree that they would date a fat person (32.4% of men and 23% of women). Nonbinary people in the sample were much more likely than both men and women to strongly agree (36.4% of nonbinary people and about 5% of women and men), and were also more likely to strongly disagree (43.5%) than men (11.7%) or women (10.4%) that fat people are less physically attractive than thin people. There were also large class differences with these two questions. Those in the poor or lower middle class strongly agreed (13%) or agreed (32.2%) more frequently that they would date a fat person than those in the upper middle class/wealthy group strongly agreed (3.1%) or agreed (16.8%). Those in the upper middle class/wealthy group strongly disagreed (15.2%) significantly more than the middle class (7.4%). Predictably, those in the upper middle class also agreed more than both the middle and lower middle class/poor group that fat people are less attractive – 34.2%, 22.4%, 21.2% respectively. In addition, non-white people were more likely to strongly disagree than white people that fat people are less attractive (20.8% vs. 9.7%). Thin people (both IBT and EBT) strongly disagreed (average 12.3%) or disagreed (average 28.4%) more often than fat people (strongly disagreed 4.8%; disagreed 14.9%) that they would date a fat person and strongly agreed (5%) more often than fat people (1.5%) that fat people are less physically attractive.

Though these between-group comparisons are intriguing and suggest real differences and biases, it is important to note that all groups demonstrated in high numbers the belief that fat

people are less attractive. Out of everyone, only 12% strongly disagreed that fat people are less attractive. Only half of that – 6.4% - say that they strongly agree they would date a fat person themselves. Even of the small amount of people that strongly believe fat people are attractive, an even smaller amount could see themselves involved romantically with a fat person.

### **Perceptions of Obesity**

Of the sample, 6.7% either strongly disagreed or disagreed that obesity is a serious public health issue, and 83.7% strongly agreed or agreed. Although most nonbinary people agreed, the largest proportion of them out of any demographic (by far) strongly disagreed – 17.4%. This question could have been worded more clearly to understand more about peoples' perceptions about obesity. For example, it would be important to see how people respond the statement: “Obesity is a serious disease”, since obesity research suggests to us that it is not a disease. Still, those who are knowledgeable of this and are critical of the “fat as fatal” frame would not agree that obesity is a serious public health issue. The research design assumes that those with the resources and a sociological eye would not label obesity in itself as a public health issue. And interestingly, the answers to this question varied with stigma. Those with higher WCB stigma were more likely to “strongly agree” that obesity is a serious public health issue than those with lower WCB stigma. Those who believed more strongly that “thin equals healthy” were more likely to strongly agree, and those who had lower TEH stigma were more likely to strongly disagree, disagree, or neither disagree not agree. This is interesting because although they understand to some extent that fat people are not unhealthy people, they are maybe not sure how to feel about obesity when we have been socialized to fear it and not to question that. Those with high attraction-based stigma were also more likely to strongly agree. However, those with high WSS stigma were more likely to strongly disagree than those with low WSS stigma. This was

the only high stigma group to strongly disagree with the statement. It may be that those who think society is too tolerant of fat people and that weight stigma is not a big issue also believe that obesity is a personal problem, not one for public health. For this reason, data on an additional statement about obesity as a disease would be helpful in separating those who believe it is a serious health problem or a disease from those who also believe it is a problem that exists only on the individual level and that society should not spend time and resources on.

In addition, only 6.3% strongly disagreed or disagreed and 84.1% strongly agreed or agreed with the obesogenic environment thesis – that the way certain neighborhoods are built (e.g., more access to fast food or liquor stores, less access to fresh food, less physical opportunities to walk or bike) discourages physical activity and promotes the consumption of unhealthy foods, leading to higher obesity rates. Those in the younger age group, those who are nonbinary, poor or lower-middle class, and those with lower weight control/blame stigma, lower thin healthy stigma, and lower societal issue stigma were all more likely to strongly agree with the obesogenic environment thesis.

Participants were also asked about another assumption that Guthman (2013) writes about: the energy-balance model (that obesity is mostly a result of excess calories consumed relative to those expended). In general, 25.4% strongly disagreed or disagreed, and 48.4% strongly agreed or agreed. When analyzing between groups, however, those under 40 were actually more likely to strongly agree (13.4% compared to 7.7% of the older group) with the energy-balance model. Women were more likely to disagree (20.8%) than men (9.7%). The poor or lower-middle class was more likely than the middle class and upper-middle class/wealthy to strongly agree (17.8%, 8.1%, 8.4% respectively). This time, however, those with higher weight control blame stigma,

higher thin healthy stigma, and higher attraction stigma were all most likely to agree or strongly agree.

### Knowledge of Fatphobia

When asked about knowledge of the word “fatphobia” and if they could explain it, about half of the participants agreed or strongly agreed (48.9%). Knowledge of this word followed a similar pattern with the other questions. Those under 40 were more likely (64.2%) than those 40 and over (47.9%) to strongly agree or agree. Results show that white people were more likely to disagree (20.2% vs 9.4%) and non-white people were more likely to agree (43.4% vs 31.8%). Men were more likely to disagree (20.2%) than women (17.1%), and nonbinary people were again more likely to strongly agree (34.8%) than both men (8.7%) and women (15.2%). The poor or lower-middle class were more likely to agree (47.5%) than both the middle class (31.5%) and the upper-middle/wealthy class (31.9%). The upper middle class/wealthy were also more likely to disagree (23%) than the poor/lower middle class (9.3%). Unsurprisingly, every low stigma scale group was more likely to strongly agree. In addition, those who were fat themselves were not more likely to know the term.

### Eating Disorder Results

JS

| JBT   | Mean | N   | Std. Deviation |
|-------|------|-----|----------------|
| Thin  | 3.51 | 299 | .706           |
| Fat   | 2.82 | 299 | .981           |
| Total | 3.16 | 598 | .922           |

RS

| RBT   | Mean | N   | Std. Deviation |
|-------|------|-----|----------------|
| Thin  | 3.33 | 299 | .824           |
| Fat   | 3.33 | 299 | .733           |
| Total | 3.33 | 598 | .779           |

Overall, without accounting for differences between the fat or thin pictures, the most people saw the description of Bulimia as an eating disorder. On a scale of 1 (very unlikely) to 4 (very likely), Bulimia received an average of 3.33. Binge Eating Disorder received an average of 3.19, and Anorexia received an average of 3.16. This may seem

surprising because anorexia seems to be the eating disorder we hear about most frequently. With

a between-groups analysis, however, anorexia was actually the most alarming for people (highest mean of 3.51) if it was a thin picture. The photos of a fat woman with anorexia were the least alarming for people (lowest mean of 2.82). In addition, the most people chose “very likely” for the thin woman with anorexia (62.5%) and the least amount of people chose “very likely” for the fat woman with anorexia (29.4%). Again, survey respondents were not asked about the

| MS    |      |     |                |
|-------|------|-----|----------------|
| MBT   | Mean | N   | Std. Deviation |
| Thin  | 3.04 | 299 | .856           |
| Fat   | 3.34 | 299 | .772           |
| Total | 3.19 | 598 | .829           |

likelihood of Josephine having anorexia. They were asked about the likelihood that she has an eating disorder. Even if they believe anorexia is only experienced by very thin people, they were asked about a general eating disorder based off of habits and relationship with food, and not anorexia specifically. This suggests that the same behavior seen as pathological and worrisome in a thin body is not seen that way in a fat body. Fat Josephine brought the anorexia score to be the lowest of the three disorders. Also as per my hypothesis, Binge Eating was more alarming to the people who received a picture of a fat woman (mean 3.34) than those who read the description with a picture of a thin woman (3.04). Overeating was seen as pathological for a woman in a fat body, but not as much for a woman in a thin body. Both of these fat/thin picture means were significantly different. Bulimia had the highest overall mean because people were equally concerned for the thin and fat woman with Bulimia. The mean was 3.33, regardless of body type. When looking at the differences in these scores between groups, none of the groups had significant differences across economic status. In other groups, there were many significant differences.

#### Anorexia – Josephine

As stated in the previous section, the difference between the proportion of people who said “very likely” for thin and fat Josephine was drastic. Much of this difference is dependent on

age group. Those in the younger group were more likely to choose “very likely” for both thin and fat Josephine, although there was still a big difference. Young people chose “very likely” 69.1% of the time for thin Josephine, and 39.9% for fat Josephine. Older people chose “very likely” 57.1% of the time for thin Josephine and only 18% of the time for fat Josephine. This difference for choosing “very likely” was more significant for fat Josephine than thin Josephine between age groups (p-value of .000 vs. .047), and there was no longer a significant difference for thin Josephine between the age groups when order effect was accounted for (when only analyzing those who were asked about Josephine first or second). The effect remains for fat Josephine, however – young people were more alarmed by her behavior, while older people were significantly more likely to choose “very unlikely” for fat Josephine, with or without order effect accounted for. They chose “very unlikely” for fat Josephine 18% of the time (and the young people 5.1% of the time), exactly equal to how often they chose “very likely”. While younger and older people found thin Josephine’s behavior close to equally as concerning, young people were way more concerned than the older when it came to fat Josephine’s behavior.

Stark differences were found between the two designed ethnicity groups as well. White people more frequently thought it was unlikely that fat Josephine had an eating disorder (28.9% vs. 12.7%). Although not a statistically significant difference, more white people also chose “very unlikely” (12.8% vs 3.6%). Predictably, those who were not white contributed to fat Josephine’s score by disproportionately choosing “very likely” (41.8% vs. 26%). Men and women responded very differently when it came to thin Josephine (18.8% of men said it was unlikely, and 7.3% of women). With fat Josephine, although men were slightly less concerned than women, there were no significant differences. Women demonstrated a knowledge of eating

disorders with thin Josephine – 65.4% of them chose “very likely”. For fat Josephine, this number is 29.4%.

#### Stigma Scales and Josephine

People who had lower “Weight Control/Blame” stigma scores were more likely to believe thin Josephine was very likely to have an eating disorder, and those with high WCB stigma scores more often chose “unlikely”. However, no differences along this scale were found for fat Josephine. Predictably, the “Thin Healthy” scale also produced notable differences. Those in the high stigma group, who believed most that thinness equates to health, more often believed fat Josephine was “very unlikely” to have an eating disorder. Conversely, the low stigma TH scale group more frequently believed fat Josephine was “very likely” to have an eating disorder, in turn also adding validity to the scale. Those with high “Weight Stigma as a Societal Issue” scores (those who may think society is too tolerant of fat people or that weight stigma is not an important societal issue) disproportionately believed that fat Josephine was very unlikely to have an eating disorder.

#### Bulimia – Rene

Although thin Rene was more likely to be labeled “very unlikely” to have an eating disorder than fat Rene (p-value .050), this effect went away when accounting for order effect and the difference existed between very small proportions (3.3% vs. 1%). Out of the three eating disorders, Rene’s scores varied the least depending on her body type. There were no significant differences between groups for fat Rene. Interestingly, unlike other findings from the younger group, they actually thought thin Rene was unlikely to have an eating disorder more than the older people (17.7% vs. 7.4%). More men also thought it was unlikely for thin Rene (23.2% vs. 10.4%). Although not statistically significant, this pattern continued for “very unlikely” for thin

Rene (5.4% vs. 3%). An effect actually appeared for fat Rene when the third picture was cut out in analysis – women were more likely to think fat Rene was very likely to be experiencing an eating disorder (54.4% vs. 32.5%).

#### Stigma Scales and Rene

Those with higher “Thin Healthy” scale scores were more likely to think thin Rene was unlikely to have an eating disorder than those with lower scores (17.5% vs. 19.2%). Those with higher or lower “Thin Healthy” scale scores did not differ when it came to fat Rene. Those with high “Weight Stigma as a Societal Issue” scores were more likely to think thin Rene was very unlikely to have an eating disorder (10.3% vs. 2.6%). No significant differences among the scale scores were found for fat Rene or between the WCB scores.

#### Binge Eating Disorder – Miranda

Overall, fat Miranda was much more likely to be labeled “very likely” to have an eating disorder (50.8% vs. 34.1%). Thin Miranda was more likely to be labeled “unlikely” than fat Miranda (12.4% vs. 21.7%). Thin Miranda had a mean score of 3.04, and fat Miranda had a mean score of 3.34. When the third pictures were omitted, however, thin Miranda was more likely to be labeled “likely” as well. Still with order effect accounted for, Miranda was much more frequently labeled as “very likely (35.5% vs. 53.3%. The older group was especially unconcerned when it came to thin Miranda, disproportionately choosing “very unlikely” (1.5% vs 7.1%). With third pictures omitted, men more frequently thought it was unlikely fat Miranda had an eating disorder (9% vs. 22.2%). Also with third pictures omitted, an effect appeared between body types. Accounting for order effect revealed many significant differences between body type for thin Miranda (and not for fat Miranda). Before third pictures were omitted for analysis, only a small difference of those who say they are seen by others as fat (EBT) more

frequently said thin Miranda was very likely to have an eating disorder (p-value of .050.) – 42.7% vs. 30.5%. This effect was strengthened (p-value .013) when third pictures were omitted – 49.6% vs. 33.3%. Both EBT and IBT (how they see themselves) fat people were then significantly choosing “very likely” for thin Miranda while thin people more frequently chose “likely” for thin Miranda. For thin Miranda, thin people chose “likely” about 49.4% of the time and fat people about 32.4% of the time. Conversely, thin people chose “very likely” around 29.7% of the time and fat people chose “very likely” around 48.4% of the time. These proportions are averages of the IBT and EBT percentages, because they were very close. It is interesting that those who are fat themselves were more confident in identifying a disorder experienced by a thin person that they as fat people are more likely to be stereotyped to have. Between the thin people, the percentage of those who thought it was very likely for fat Miranda to have an eating disorder jumped 20% from the percentage that thought it was very likely for thin Miranda (about 31% to 51%). This jump was half the size for fat people (from about 42% to 52%). This demonstrates that thin and fat people were both alarmed by fat Miranda’s binge-eating, but fat people were closer to as concerned for thin Miranda than they were for fat Miranda. Still, however, fat people were more concerned for fat Miranda than thin Miranda because there is still a ten percent difference.

#### Stigma Scales and Miranda

Those with high “Weight Control/Blame” stigma were more likely to think fat Miranda was very likely to have an eating disorder than those with low stigma (67.3% vs. 47.4%). It may be surprising, then, that those with high “Weight Stigma as a Societal Issue” scores were more likely to choose “very unlikely” for fat Miranda than those with low stigma (6.9% vs. 1.5%). Those who placed more blame on fat people, more responsibility on fat people to lose weight,

and endorsed negative stereotypes about fat people being lazy/careless/unhealthy/lacking willpower saw fat Miranda as very likely having an eating disorder. But those who thought society is too tolerant of fat people and that weight stigma is not an important societal issue thought fat Miranda was very unlikely to have an eating disorder.

### **Scale Differences Between Groups**

For all four scales, those who were in the high stigma group were more likely to be in the high stigma group of any other scale. In addition, those who were fat (IBT and EBT were the same) were significantly more likely to give all three eating disorders/women a score of 4 (very likely) – 26.9% of fat people gave every woman a 4, and 18.3% of thin/average people. When analyzing the total stigma score (from all of the scales), those with higher stigma and those with lower stigma chose significantly different likelihood of ED scores for Josephine (who had anorexia). Those with higher overall stigma gave Josephine an average 2.98 score, and those with low stigma gave an average score of 3.22. The means between stigma groups were not significantly different for Bulimia or Binge Eating Disorder.

The attraction scale was made up of only the two statements that were described in the first section – “If I were single, I would date a fat person” and “Fat people are less physically attractive than thin people”. Those in the high stigma group were disproportionately white versus non-white (62.6% vs. 46.2%). Both females and males were more frequently in the high stigma group compared to those who were nonbinary – 60.5%, 63.1%, 30.4% respectively. Those who are in the upper middle class or wealthy class were also more likely to have high attraction scale scores compared to both the poor/lower middle-class group and the middle-class group – 70.2%, 51.7%, 55.1% respectively. Lastly, those who were thin or average group were disproportionately in the higher stigma attraction group as well – between EBT/IBT average of

66.25% vs. 49.25%. Still, nearly half of the fat people who took the survey were in the high attraction stigma group.

In the “Weight Control/Blame” scale, males were more often in the high stigma group compared to females (32% vs. 18.6%). “Thin” or “average” people were most likely to be in the high stigma group (23.5% vs. 15.5%). Of the “Thin Healthy” scale, participants who were 40 and over were more frequently in the high stigma group (49.2% of older people, 38.3% of younger people). Those in the upper-middle class/wealthy economic status group were more often in the higher stigma group in comparison to those in the poor/lower middle class (49.2% vs. 32.2%). There were no significant differences between the middle class and the other two economic status groups. There were also no differences between groups for the “Weight Stigma as a Societal Issue” scores, but the highest percentages of people who were in this high stigma group were people 40 and over (14.1%) and men (14.6%).

### **Fatphobic Beliefs**

Outside of the attraction scale and perceptions about obesity, certain fatphobic beliefs were especially endorsed by the survey sample (these numbers combine the strongly agree/disagree categories with the agree/disagree categories):

- 30.3% agree that most fat people eat too much unhealthy food
- 25.9% agree losing weight is a good thing (with no other context given in the statement)
- 21.4% disagree that fat people should be encouraged to accept their bodies the way they are
- 31.5% agree that shame attached to fat plays a role in keeping people healthy
  - But those who were fat themselves were more likely to strongly disagree – 34.4% of those who were fat strongly disagreed (and 23.1% of thin people)

- 38% agree they would gain respect for a friend who lost weight (with no other context given in the statement)
- 22.9% do not think it is a good idea for organizations to exist that lobby for the rights of fat people in our society

## **Discussion**

The above statistics are a big deal. Nearly a third of those who completed the survey agreed that fat people eat too much unhealthy food and nearly a third agreed that shame plays a role in keeping people healthy. Fat people feel these assumptions and judgements on a daily basis. They feel that people think that they should feel shameful and think that they do not care about their health. In the survey, fat people knew that the shame is not helping them, because they more often strongly disagreed, while there were no significant differences with any of the other demographics. Fat people with eating disorders also feel that others think their shame is good for them. How does this affect their eating disorders? These are such destructive, oppressive, neoliberal views. A huge proportion of the sample (38%) agreed that they would gain respect for a friend who lost weight. Fat people feel that the respect allocated to them, even from their friends, is attached to their weight. A quarter of the sample agreed that losing weight is objectively a “good thing”. Fat people who lose weight for reasons varying from natural weight fluctuations to eating disorders, grief, or cancer and other sicknesses - they feel that others have gained respect for them and that others enjoy looking at their bodies more now that they are thinner. And nearly a quarter disagree that fat people should be encouraged to accept their bodies the way they are. These people believe that fat people should be trying to change their bodies, signaling a strong endorsement of the “fat as fatal” perspective. Nearly a quarter do not think we should have organizations lobbying for the rights of fat people.

There is no way to know what the participants' rationales were behind the scores they chose, but the numbers in this study do suggest that there is not enough general knowledge about disordered eating and what a healthy relationship with food looks like. The general and overarching finding of this study, due to the differing scores based off of body type, is that we do make assumptions about health based on body size. The results provide evidence that (and insight about how) people allow body size to affect their judgment about women's health.

Just as I hypothesized, people saw the same exact habits representing anorexia as more of an eating disorder if it was a thin woman. The same exact habits representing Binge Eating were seen as more of an eating disorder in a fat body. These findings are just another reason to try to change the medical system and programs for eating disorder treatment to fit every size. They are another reason that we should incorporate education into our world and our schools about what being healthy truly looks and feels like.

## **Age**

Some of the most drastic differences in the findings were generational - between the younger group of those under 40 and the older group of those 40 and over. For each eating disorder no matter body type except for the fat woman with Binge Eating Disorder, more of them chose "very unlikely" than the younger group. For both the thin and fat women with anorexia, older people chose "very likely" less frequently, and this difference was especially alarming for the fat woman, who only a small 18% of the older people thought was very likely to have an eating disorder. In fact, the difference between age groups no longer existed for thin Josephine when third pictures were omitted in analysis. Although older people were less likely to identify anorexia in the thin woman, the major difference between age groups lied with the fat woman's scores. In fact, the same proportion of the older group chose "very likely" as "very unlikely" for

fat Josephine, with the majority of them opting for the less extreme options. This suggests that they were maybe more indecisive than the young people on just how concerned they should be for the fat woman experiencing anorexia.

The older group also was especially unconcerned when it came to the thin woman experiencing Binge Eating Disorder, choosing “very unlikely” 7.1% of the time as opposed to the 1.5% for younger people. Overall, they seemed to endorse more stereotypes of fat people and misperceptions about health - in simple terms that the fat woman cannot eat too little and that the thin woman cannot eat too much. Their “Thin Healthy” disproportionately high stigma scores also suggest this (49.2% of them in the high stigma group versus 38.3% of the younger group). They were also among those with the highest “Weight Stigma as a Societal Issue” scores out of the demographic groups (14.1% of them), and they less frequently than the younger group agreed or strongly agreed that they understand the term “fatphobia” (64.2% vs. 47.9%).

These age differences are concerning, especially considering the research that suggests eating disorders in middle age have been overlooked (Gagne et al. 2012). They are also particularly concerning because the older people in the sample were fatter - 38% of the older group was fat, as opposed to 22.3% of the younger group. These numbers were taken from those who defined the way they perceive their bodies the same as the way others perceive it. This lack of knowledge on eating disorders and the workings and intersections of fatphobia as a form of oppression, the belief that it is not an important problem, and that thin people are healthier people are all reasons to worry about and invest in the physical and mental health of middle-aged people. They are also all reasons to think about how awareness about these issues can be spread, and even about which harmful messages have been passed down from the older generation to the younger about bodies and health. The higher levels of stigma that the older people demonstrated

both subconsciously through the scores given to the women and consciously in the Likert-scale questions does suggest that these populations likely have high levels of body hatred and dissatisfaction. How many of these older people (majority women) are suffering or sick? And maybe like Sarah J. Thompson, they do not even know they are sick because they do not think an eating disorder exists in bodies that look like theirs. Maybe, like Thompson, they have disordered habits that are further fueled by normalization of these behaviors, by “anorexic ideation”, by compliments at every sign of weight loss (Bombak, Monaghan, and Rich 2019). Since the age group with these higher levels of subconscious and conscious stigmas also demonstrated a lack of awareness of the issue of fatphobia from a sociological perspective, perhaps their quality of life would be greatly improved if educational and supportive resources were made available to them that supported a Health at Every Size approach.

However, young people still demonstrated the same biases and stigmas, just at lower rates. Again, they were more concerned for the fat woman with anorexia and they had lower stigma scores, but in certain areas this pattern did not continue. For some reason, the younger group (and also men) thought that thin Rene (with bulimia) was unlikely to have an eating disorder more than the older people and the women. I hypothesized that participants would think thin Rene was more likely to have an eating disorder, and the results did not support my hypothesis because thin and fat Rene had the same mean score of 3.33. I believed people would be more concerned for thin Rene because maybe they would believe fat Rene deserved to feel guilty for her overeating and should make up for her mistake. Rene’s scores varied the least depending on her body type, and there were no differences between groups for fat Rene, only thin Rene.

It is very interesting that her scores varied the least. A few people in their comments at the end of the survey mentioned that “intense” working out to “relieve her guilt” gave it away for them that it was an eating disorder. This was surprising to me, because I feel we so frequently hear this type of language normalized. For example, people talking about the need to “work off” the Thanksgiving meal they ate. It is possible the young people and men thought thin Rene was more unlikely just because they are used to hearing these things in conversations revolving around food. Maybe to them, because Rene was thin, her guilt actually was not alarming because she already had an ideal body type and they think people just talk that way sometimes. In addition, Rene’s description did not say directly that she was trying to lose weight. Maybe just saying she felt guilty was normalized because we all so frequently feel guilty around food. The fact that men thought it was more unlikely thin Rene had an eating disorder than women is also interesting. Did the men think that thin Rene should feel guilty so that she can work to keep her ideal body? Did Rene’s thinness (as opposed to her looking obviously too thin and starved) signal to the men and the younger group a healthy norm so that they did not feel the need to pathologize her? I do wonder if different phrasing of the description would produce different results between body types. For example, saying “too feel better about herself” instead of “to relieve her guilt”.

Maybe the fact that younger people and men thought that thin Rene was unlikely to have an eating disorder has to do with the Culture of Bulimia and the glorification of this ability to indulge and consume while “performing” restraint by remaining thin. I have observed this culture among younger people, where it’s normal, funny, and relatable to talk about overeating and needing to work it off. However, Bulimia was still the eating disorder people recognized most because the thin or fat bodies overall did not affect their answers. This also may be because

they did not know what body type to assume has this disorder - they knew to stereotype the woman who overly restrains herself as thin and the woman who over-indulges as fat. But they were unsure how to stereotype the woman who does both. Young people also more strongly agreed with the obesogenic environment thesis as well as the energy-balance model than old people - two assumptions that guide obesity research/discourse and that Guthman critiques (source). Although young people signaled progress in some ways, they also endorsed assumptions that are at the core of many of our biases about larger people.

Overall, and unsurprisingly, these assumptions were widely endorsed by the entire sample. Again, the participant answers about the belief that obesity is a disease would have been interesting to gather. Because of the wording of the statement “Obesity is a serious public health issue,” it is unknown if the large number of people that agreed see obesity as a disease or if they see obesity as a public issue, or both. Not just young people, but the rest of the demographic groups that generally demonstrated lower stigma in other areas, strongly agreed with the obesogenic environment thesis. It is important, as Guthman also says, to set the responsibility away from individuals and onto societal factors. However, Guthman also says that we do not really know conclusively from any research that the physical environment affects obesity. Many times, initiatives based on this assumption do more harm than good, and do not prioritize the needs of those who are most marginalized (source).

## **Gender**

In addition to age, there was a similar pattern of gendered differences in the findings. Men consistently demonstrated higher levels of stigma. They were more often in the high stigma “Weight Control/Blame” group than females (32% vs. 18.6%). They were more likely than women to disagree that they would date a fat person (32.4% of men and 23% of women). They

had the largest percentage of people out of any demographic that strongly agreed fat people are less attractive (8.7%), and 23.3% of them agreed. Only half of the people that could claim strongly that fat people are not less attractive could actually say they would date one. In all demographic groups aside from men, more people strongly disagreed that they would date a fat person than people who strongly agreed fat people are less attractive. It is easier to not present your bias when it does not concern you personally. Men, on the other hand, broke that pattern. More of them (8.7%) strongly agreed fat people are less attractive than strongly disagreed they would date a fat person (5.9%).

Men also more frequently endorsed the energy-balance model than women and less frequently understood the term “fatphobia”. Men thought the thin woman with anorexia was more unlikely to have an eating disorder than women did (18.8% of men said it was unlikely, and 7.3% of women). Women demonstrated a knowledge of eating disorders with the thin woman with anorexia - 65.4% of them chose “very likely”. But this knowledge did not transfer for the fat woman - both men and women were not very concerned for the fat woman with anorexia (29.4% of women and 21.8% of men chose “very likely”).

The majority of men saw neither of the women with anorexia as “very likely” to have an eating disorder. Even for the most stereotypical thin woman with anorexia, still under half of them could say that she very likely had an eating disorder. Even for the stereotypical image of a fat woman with Binge Eating Disorder, 22.2% of men thought it was unlikely she had an eating disorder (and 9% of women). This was with the third images omitted. Men have much progress to make, and this number to a certain extent probably reflects their cluelessness in regards to an issue that is largely faced by women. But again, just like for the older group, it may also reflect a pain that they too endure privately with their bodies. We do not picture a man when we picture

an eating disorder, and men also suffer from the stereotype that only thin young white women experience eating disorders. Women are more aggressively targeted and disciplined on a systemic level by the thin ideal and fatphobia, but men are also victims. While it is important to mention this way that they are victimized, on the other side of the story is that fat woman with anorexia. She received the very lowest scores.

When combining the “likely” and “very likely” percentages for anorexia without dividing by body type, anorexia received the lowest likelihood scores (76.4% vs. 79.8% for Binge Eating and 85.1% for Bulimia). However, when we divide by the thin and fat women, we see that those who were thin with anorexia received the highest scores of anyone (62.5% very likely) and those who were fat with anorexia received the lowest scores of anyone (29.4% very likely). The fat women were the reason anorexia appeared as the least understood disorder.

These scores give some sort of representation (without nearly doing justice) to the pain endured by women in large bodies with real and dangerous and lonely eating disorders. For the same people (like women in this sample) who demonstrate an understanding of eating disorders, this understanding may no longer be present when the conversation shifts to the health of fat women, or Black women and other women of color, or anyone that does not fit the stereotype of what an eating disorder looks like. That is if the conversation even goes there at all, which it often does not. The especially large gap in anorexia scores in this study suggests that those in bodies who we do not expect to have anorexia are likely to be disproportionately unacknowledged, untreated, and underrepresented. Who do we show up for during these mental and physical health emergencies? Which bodies get to have others concerned for them? And not just from people claiming they are concerned, but people who are *truly* concerned, and for all the right reasons. Because again, fat people have plenty of experience with people who act

concerned for all the wrong reasons. The phenomenon of “concern trolling” is used to describe what fat people experience when (usually thin) people disguise fatphobic judgments as pure and wholesome concerns about health (Felkins 2019; Fabello and Bacon 2016).

Those who were nonbinary showed a consistent pattern of much lower stigma than the binary genders. Data from the nonbinary participants was only analyzed for the Likert scale questions, because the groups were too small once they were divided between the surveys. The differences in these Likert scale questions were large. Nonbinary people in the sample were much more likely than both men and women to strongly agree that they would date a fat person (36.4% of nonbinary people and about 5% of women and men), and were also more likely to strongly disagree (43.5%) than men (11.7%) or women (10.4%) that fat people are less physically attractive than thin people. They were the only gender group that had much less than half of people in the high stigma attraction group - around 60% of men and women, but only 30% of nonbinary people were in the higher attraction stigma group. Although the majority of nonbinary participants agreed that obesity is a serious public health issue, the largest proportion of them out of any demographic (by far) strongly disagreed – 17.4%. This may suggest that they have knowledge of the War on Obesity and are looking at the questions with a critical eye. A huge proportion (34.8%) of them compared to men (8.7%) and women (15.2%) felt strongly that they understood and could explain fatphobia.

Living as nonbinary or gender non-conforming people, I am sure these participants have an ability to understand the ways in which norms govern and limit us. They have experienced the consequences of not fitting into a major norm. They clearly demonstrated an understanding of fatphobia as a form of oppression. The differences in opinions about attraction speak volumes as well. Although attraction is not something we can directly control, it is also not something that is

free from bias and social influences. Many “fat as fatal” believers try to argue that they are more attracted to the thin body for evolutionary “survival of the fittest” reasons (Thomas 2017). This type of argument has been used to justify racism as well. Attraction is largely a social construction, and we know that because women who are deemed attractive look very different depending on time and place. We know that because we have beauty ideals (e.g., “thick”, “slim-thick”, “curvy” and more) that did not exist only a few years ago, at least in the mainstream. They are also appropriations or features of Black bodies that white people have chosen to now selectively value. Even if attraction feels solely natural, it is not. If we do not feel attracted to a certain race or body type, we need to be called to question and dissect our biases.

### **Class**

In the sample, those who were upper-middle class or wealthy particularly did not seem to want to associate with those who are fat. Fatness can be seen as signaling a type of lower social class. Upper-middle class and wealthy people were the demographic with the highest percentage of people strongly disagreeing they would date a fat person - 15.2% (significantly higher than the 7.4% of the middle class who strongly disagreed). Those in the poor or lower middle class strongly agreed (13%) or agreed (32.2%) more frequently that they would date a fat person than those in the upper middle class/wealthy group strongly agreed (3.1%) or agreed (16.8%). And predictably, those in the upper middle class also agreed more than both the middle and lower middle class/poor group that fat people are less attractive – 34.2%, 22.4%, 21.2% respectively. The upper-middle class and wealthy had the largest difference between this proportion of people strongly disagreeing they would date a fat person (15.2%) and the proportion of people strongly agreeing that fat people are less attractive (2.1%). In some ways opposite of the male demographic, they hid their bias well when asked generally about attraction, but were more overt

than anyone when reporting their refusal to date a fat person. Again, it is important to acknowledge the social construction of the attractive body. Who were these wealthier people socialized to be attracted to? In a country with such a class divide and higher rates of obesity for low-income people and Black people, the disinterest of rich people to date fat people carries racialized, classist, and fatphobic implications (Guthman 2013).

As opposed to the wealthier participants, the poor and lower middle class demonstrated lower stigma in certain ways. They were more likely to agree (47.5%) than both the middle class (31.5%) and the upper-middle/wealthy class (31.9%) that they understand the term “fatphobia”, and less likely to disagree (9.3%) than the upper middle class/wealthy (23%). In the “Thin Healthy” scale, poor or lower-middle class participants were less frequently in the high stigma group than the upper-middle class/wealthy (32.2% vs. 49.2%). There were no significant differences between the middle class and the other two economic status groups for this scale. It is interesting that the wealthier people were less likely to understand fatphobia and that they did not understand as much as the poorer people that thinness does not equate to health. Somehow, with all of the extra resources and opportunities made available to them, they were less educated on these matters. It could be that thinness as a sign of health was taught more or valued more in their communities and socialization. It also could be that their privileges shield them to some extent from needing to learn about this oppression. From an intersectional perspective, it is possible that the wealthier survey respondents (even the fat ones) do not experience fatphobia as harshly or directly as the poorer respondents do. Because of certain privileges such as better access to health care, they may not even understand the fatphobic experiences that poorer people endure.

While the poor and lower-middle class participants demonstrated less stigma with the Likert-type statements meant to test conscious bias, they did not significantly differ from the other economic classes when it came to the subconscious bias measures (the likelihood score of eating disorders across body types). It is compelling that these lower levels of overt bias about attraction, about health at every size, and about fatphobia did not translate to lower levels of covert bias in the eating disorder questions for the poor and lower-middle class participants. This may be because as much as we are directly educated on these matters, unlearning the more deeply ingrained and systemic biases is a different type of work. Perhaps seeing a picture of a woman and a personalized story created room for those judgements. Or maybe as much as people understand something on an ideological level, it is difficult to see how it works at a medical level when we do not see examples of any medical frame that does not treat fat as fatal or equate thinness to health. Maybe those with less wealth do not see this knowledge they have as one that applies to the medical sphere.

### **Body Type**

Just after the upper middle class/wealthy people, thin people had the highest proportion of individuals strongly disagreeing that they would date a fat person (IBT thin 13%; EBT thin 11.6%). Thin people were significantly more likely to strongly disagree or disagree that they would date a fat person and more likely to strongly agree that fat people are less physically attractive. Again, this pattern of low stigma in attraction for fat people showed up in other areas of the survey. Those who were fat (IBT and EBT were the same) were significantly more likely to give all three eating disorders/women a score of 4 (very likely) – 26.9% of fat people gave every woman a 4, and 18.3% of thin/average people did. This suggests that they have a

knowledge of eating disorders at every size. They were also less likely to be in the high Weight Control/Blame stigma group compared to thin people (15.5% vs. 23.5%).

Fat people more confidently chose “very likely” for the thin woman with Binge Eating Disorder (Miranda), while thin people chose “likely”. It is intriguing that those who are fat themselves were more confident in identifying a disorder experienced by a thin person than they as fat people are more likely to be stereotyped to have. Between the thin people, the percentage of those who thought it was very likely for fat Miranda to have an eating disorder jumped 20% from the percentage that thought it was very likely for thin Miranda (about 31% to 51%). This jump was half the size for fat people (from about 42% to 52%). This demonstrates that thin and fat people were both alarmed by fat Miranda’s binge-eating, but fat people were closer to as concerned for thin Miranda than they were for fat Miranda. Still, however, fat people were more concerned for fat Miranda than thin Miranda because there is still a ten percent difference.

Although fat people still thought fat Miranda was more likely to have Binge Eating Disorder compared to thin Miranda, they were still clearly also alarmed by thin Miranda’s behavior. Fat people did not assume thin Miranda didn’t have Binge Eating Disorder in the way that thin people assumed fat Josephine did not have anorexia. They demonstrated that they believe a thin body can have an eating disorder that people may assume exists in larger bodies. Also, these differences across body type groups only appeared when third pictures were omitted. This suggests that when it came to Binge Eating Disorder specifically, people may have become aware of what the survey was asking about (eating disorders in differently sized bodies), and their own body type may have then influenced their answers. In a way, fat people “showed up” for suffering thin Miranda in a way that thin people did not show up for suffering fat Josephine. Again, around 48.4% of fat people found it very likely that thin Miranda (with Binge Eating

Disorder) had an eating disorder. Around 30.2% of thin people found it very likely that fat Josephine (with anorexia) had an eating disorder.

As a group of people that are discriminated against, the participants who were fat still had high amounts of stigma about fat people. Although the thin or average group were more often in the high attraction stigma group, for example, still nearly half of the fat people were in the high attraction stigma group (49.25% vs. 66.25%). This brings us back to those moments in front of the mirror that Judith Butler writes about (Butler 2001). It reminds us to consider, in addition to the large systemic issues at hand in our culture, the personal problems and the individual hearts that are hurting. It is difficult to think of the levels of internalized fatphobia that people experience, especially knowing from studies that this internalized stigma is positively correlated with eating disorder symptomatology (O'Hara, Tahboub-Schulte, and Thomas 2016). Still, we seem to consider body size before we consider the effects of stigma and fatphobia when looking at eating disorders. Those who were fat were also not more likely to know the term "fatphobia". It could really help fat people (and everyone) to know that this term exists, what it represents, and then to be able to see it in their own lives and understand how it has affected them. Then, to understand how they may resist it, on a societal or individual level, in order to empower themselves.

One more hidden way that fat people hurt on a daily basis from fatphobia is through microaggressions. These microaggressions hurt even more if someone has high levels of internalized stigma, because it can be hard to even justify your hurt to yourself or understand it, which leads to shame. Here are some examples of microaggressions I have heard or seen on social media or in person from those around me, some of which I still hear every week if not every day:

- “I don’t get it! How is she so skinny when she eats whatever she wants? I am so jealous.”
- “Bikini body/beach body/summer body”
- “Quarantine/freshman 15”
- “I feel fat”
- “Fat and ugly/lazy”
- “Skinny goals”
- “Skinny legend”
- “Do I look fat in this?”
- “You should keep that shirt for when you lose the weight!”
- “No no you are not fat, you are beautiful! Don’t say that!!”
- “Do you like McDonalds?”
- “You look really good/happy!” (after weight loss)

People with privilege or internalized stigma have a really hard time understanding microaggressions. Fatphobic microaggressions can hurt so much more than blatant hate because they go unnoticed. They only seem to faze fat people, and they are dismissed for being driven by good intentions. These ones hurt so deeply because they are everywhere. MJ Jones, in the essay “Being Too Sensitive Isn’t the Problem, Oppression Is”, writes about this issue that we see microaggressions as separate, isolated incidents when they are “actually reflective of a toxic and oppressive society” (Jones 2015). The casual conversation about a new trendy diet or needing to “work off” dinner is inseparable from fatphobic, racialized, and gendered implications. Jones also writes about how if marginalized people speak up against microaggressions, they are told

that they are too sensitive. In this way, microaggressions are silencing and lead to victim-blaming.

### **Ethnicity**

Lastly and unsurprisingly, white people exhibited higher levels of stigma and non-white people exhibited lower levels of stigma. Non-white people were more likely to strongly disagree than white people that fat people are less attractive (20.8% vs. 9.7%). They were more likely to agree that they understand the term “fatphobia” (43.4% vs 31.8%) and less likely to disagree (20.2% vs 9.4%). One cannot understand fatphobia without the context of racism. Fatphobia is and has always been racialized, with roots in colonialism. White people’s opinions of who is attractive or unattractive is always racialized (White World, Black Body, KQED Podcasts, Gershon 2019).

When it came to the eating disorder scores, white people more frequently thought it was unlikely that fat Josephine had an eating disorder (28.9% vs. 12.7%). Although not a statistically significant difference, more white people also chose “very unlikely” (12.8% vs 3.6%). Predictably, those who were not white contributed to fat Josephine’s score by disproportionately choosing “very likely” (41.8% vs. 26%). Just under nonbinary people, they were the demographic that was the surest that fat Josephine had an eating disorder, and 41.8% of them also chose “likely” - more than any other demographic. Together, 83.6% of them chose either “likely” or “very likely” for fat Josephine - more than any other demographic. This number was slightly larger for thin Josephine (90.2%), but this gap was much larger for other demographics. People who did not identify as white or were a combination of ethnicities demonstrated low stigma across the board - both subconscious and conscious. It could be that the intersectional nature of fatphobia and racism/white supremacy as well as the white-based thin ideal gave those

who were not white a perspective on the situation. This perspective was one of more compassion and understanding.

### **Stigma Scales**

There is much to learn from these between-group differences, but the overall message is that there is a lot of work to be done. Only just under half of the sample knew what fatphobia is. The same destructive behaviors were deemed pathological in some bodies but not others. For participants that seemed to have low stigma in the Likert scale questions, this awareness was often only associated with higher scores for the thin bodies in the eating disorder questions. People who had low Weight Control/Blame stigma, for example, were more likely to believe thin Josephine (with anorexia) was very likely to have an eating disorder, while those with high WCB stigma more often thought it was unlikely. No differences were found for the fat woman with anorexia. These people with low WCB stigma endorse less harmful stereotypes about fat people and believe fat people are not to blame for their problems in society, but maybe eating disorders (specifically anorexia) were not seen as one of those problems that they endure.

It can also be seen directly that equating thinness to health, the fat as fatal frame, has potential to cause or normalize a lot of sickness. The people who believed most in thinness as a sign of health disproportionately believed fat Josephine was very unlikely to have an eating disorder, while those who were in the low stigma group more often chose “very likely”. Those with high “Weight Stigma as a Societal Issue” scores (who think society is too tolerant of fat people or that weight stigma is not an important societal issue) disproportionately believed that fat Josephine was very unlikely to have an eating disorder. These people who may think fat people are coddled by society and that they brought problems onto themselves may not have sympathy when fat people experience eating disorders. They may think fat people should

struggle if it leads to weight loss. But these people may also not understand eating disorders, weight, and health. Maybe if they understood it would be a path to seeing that weight stigma is a societal issue and that it plays a role in every eating disorder, whether it exists in a thin or fat body. As with other forms of oppression, weight stigma affects everyone, because we are all connected. The idea that anything about health can be determined by looking at someone hurts everyone.

With bulimia as well, those who believed most in thinness as synonymous with health thought thin Rene was unlikely to have an eating disorder. Those with high “Weight Stigma as a Societal Issue” scores thought more often that thin Rene was very unlikely to have an eating disorder. With bulimia, those with higher stigmas then may have thought there was less to worry about if Rene was thin and the description mentioned overeating. This time the thin women were disadvantaged by those with the higher stigma levels. However, stigma was not associated with differences for fat Rene. People may have checked certain biases for thin Rene, but for fat Rene lower stigma did not translate to a greater level of understanding.

The respondents in the group of high “Weight Stigma as a Societal Issue” scores disproportionately chose “very unlikely” for the fat woman with anorexia, “very unlikely” for the thin woman with bulimia, and “very unlikely” for the fat woman with Binge Eating. I am not sure what this trend means. They were very adamant about weight stigma not being something we should worry about as a society, and they also overall did not think many of the descriptions sounded like eating disorders. Eating disorders are a social justice problem and it seems that the same people who did not want to see weight stigma as a social justice problem or a problem at all also did not want to see eating disorders as much of a problem in certain bodies.

Again, a takeaway message from this study is that all people are suffering due to the War on Obesity. The thin woman with binge eating disorder received higher scores than the fat woman with anorexia and much of the systemic oppression and pressures still lie disproportionately on those who are fat, but still the differences in scores for the thin and fat woman with binge eating disorder are a reason to worry about those who are defined as “normal weight” but are also suffering. Thin Miranda was more often labeled “likely”, so people were still worried for her. But for fat Miranda people were comfortable going with the more extreme “very likely”. It seems like if actual unhealthy habits are paired with large body size, it is only concerning if we can claim fat people are eating too much. Otherwise, they probably should starve themselves.

## **Conclusion and Limitations**

This research does not take an approach that is intersectional enough. The demographics were analyzed very separately, and it would be important in future research to analyze the opinions, stigma, and experiences of those at the intersections of different identities and demographics. This would also require a more diverse sample than the one in this study, especially in regards to ethnicity and gender. In addition, it is problematic to have created a group of everyone who is not ethnically white. These people come from very different backgrounds, and so not much can be concluded about them from this study. However, doing so did provide some insight about white people.

This research design would have been more inclusive if the question about the participants body types included other options such as “underweight”. The research focused on the experience of fat people specifically, and as a result others are left out that also do not meet

the stereotype of someone experiencing an eating disorders. We need research that focuses on people of different races and on men, for example.

Another limitation is that although surveys were randomized, people still may have identified that the survey focused on body type, because a fat person does not fit the norm. This may have affected their answers.

This research calls for change. It calls for us to rethink the “fat as fatal” frame. Society needs to demonstrate that it is concerned for people for the right reasons by providing fat people with access to eating disorder treatment. A treatment center inclusive towards fat women, towards fat women of color, towards fat queer or trans or nonbinary women of color, should not be a rare find. Before making changes to physical environments with the goal of changing bodies, we should change environments to cater to the bodies that already live there. The idea of the obesogenic environment is tricky. People who have a sociological mindset are attracted to it because it does not play into our destructive habits of placing blame on individuals - 84.1% of the sample agreed with it, and those who showed less bias tended to agree. But I’d like to push people to reclaim the obesogenic environment to mean one that is not built to include and offer equal access to the bodies that live there. If improving the environment means making fresh foods more available, that’s okay! But only if it also means giving people access to affordable clothes that fit them, to better health care that truly prioritizes their needs and wellbeing, and to spaces where they can enjoy life in their bodies - where they can move, eat, play, love, free of judgement. It needs to also mean looking at environmental toxins (and environmental racism), hunger, poverty, income inequality, racism, fatphobia, homelessness, and how these things (and their intersections) affect health. Indeed it is much easier to add a grocery store to a block but, in the absence of other changes, it puts a band aid on much too deep of a wound. And lastly, the

reclamation of the obesogenic environment needs to mean that we ask the people who we think are unhealthy what type of support and resources *they* need in order to be healthier and happier.

During this War on Obesity, people deserve to know that they are not alone. That just as eating disorders appear in every size, race, sexual orientation, gender, culture, age, and socioeconomic status, so do all the body issues that don't quite classify as disorders in the DSM. I am talking about the issues that lie behind the hours we quietly spend hating our different body parts or trying to reshape our bodies or feeling guilty about the food we just really want to (or don't want to) eat. And not just the hours that we waste but the money and the emotional, physical, creative energy that is lost as we experience this painful isolation in silence and in shame. I am talking about the *potential* behind reclaiming these hours and this energy - communities and connections that we could build, hobbies we could pursue, and individual journeys of radical self-love that we could embark on.

## References

- Association for Size Diversity and Health. n.d. "ASDAH: HAES® Principles." *ASDAH: Size Diversity and Health*. Retrieved May 13, 2020a (<https://www.sizediversityandhealth.org/content.asp?id=76>).
- Atlantis, E., and K. Ball. 2008. "Association between Weight Perception and Psychological Distress." *International Journal of Obesity* 32(4):715–21.
- Baker, David, and Natacha Keramidias. 2013. "The Psychology of Hunger." *Monitor on Psychology* 11(9).
- Belle, Elly. 2020. "Nancy Pelosi Forgot That It's Possible To Criticize Trump Without Fat Shaming." Retrieved May 20, 2020 (<https://www.refinery29.com/en-us/2020/05/9824437/nancy-pelosi-calls-trump-morbidly-obese-fat-shaming>).
- Birch, Leann L., Susan L. Johnson, Graciela Andresen, John C. Peters, and Marcia C. Schulte. 1991. "The Variability of Young Children's Energy Intake." *New England Journal of Medicine* 324(4):232–35.
- Bombak, Andrea, Lee F. Monaghan, and Emma Rich. 2019. "Dietary Approaches to Weight-Loss, Health at Every Size® and beyond: Rethinking the War on Obesity." *Social Theory & Health* 17(1):89–108.
- Bruce, Lauren J., and Lina A. Ricciardelli. 2016. "A Systematic Review of the Psychosocial Correlates of Intuitive Eating among Adult Women." *Appetite* 96:454–72.
- Butler, J. 2001. "Doing Justice to Someone: Sex Reassignment and Allegories of Transsexuality." *GLQ: A Journal of Lesbian and Gay Studies* 7(4):621–36.
- Campbell, Denis. 2012. "Doctors Back Denial of Treatment for Smokers and the Obese." *The Observer*, April.
- Ciciurkaite, Gabriele, and Brea L. Perry. 2018. "Body Weight, Perceived Weight Stigma and Mental Health among Women at the Intersection of Race/Ethnicity and Socioeconomic Status: Insights from the Modified Labelling Approach." *Sociology of Health & Illness* 40(1):18–37.
- Cleveland, Harlan. 1981. "The Future of the Past." *Minnesota History* 47(5):200–204.
- Cooper, Brittney. n.d. *The Racial Politics of Time*.
- Crandall, Christian S. 1994. "Prejudice against Fat People: Ideology and Self-Interest." *Journal of Personality and Social Psychology* 66(5):882–94.
- Daniels, Elizabeth A., Meghan M. Gillen, and Charlotte H. Markey, eds. 2018. *Body Positive: Understanding and Improving Body Image in Science and Practice*. 1 edition. Cambridge, UK; New York: Cambridge University Press.
- Essayli, Jamal H., Jessica M. Murakami, Rebecca E. Wilson, and Janet D. Latner. 2017. "The Impact of Weight Labels on Body Image, Internalized Weight Stigma, Affect, Perceived

- Health, and Intended Weight Loss Behaviors in Normal-Weight and Overweight College Women.” *American Journal of Health Promotion* 31(6):484–90.
- Evans, John, Emma Rich, and Rachel Holroyd. 2004. “Disordered Eating and Disordered Schooling: What Schools Do to Middle Class Girls.” *British Journal of Sociology of Education* 25(2):123–42.
- Fabello, Melissa A., and Linda Bacon. 2016. “11 Reasons Your Phony ‘Concern’ for Fat People’s Health Has Got to Stop.” *Everyday Feminism*. Retrieved May 23, 2020 (<https://everydayfeminism.com/2016/01/concern-trolling-is-bullshit/>).
- Felkins, Shawna. 2019. “The Weight I Carry: Intersections of Fatphobia, Gender, and Capitalism.” *Frontiers: A Journal of Women Studies* 40(3):180–85.
- Forney, K. Jean, Tiffany A. Brown, Lauren A. Holland-Carter, Grace A. Kennedy, and Pamela K. Keel. 2017. “Defining ‘Significant Weight Loss’ in Atypical Anorexia Nervosa: Forney et Al.” *International Journal of Eating Disorders* 50(8):952–62.
- Gagne, Danielle A., Ann Von Holle, Kimberly A. Brownley, Cristin D. Runfola, Sara Hofmeier, Kateland E. Branch, and Cynthia M. Bulik. 2012. “Eating Disorder Symptoms and Weight and Shape Concerns in a Large Web-Based Convenience Sample of Women Ages 50 and above: Results of the Gender and Body Image (GABI) Study.” *International Journal of Eating Disorders* 45(7):832–44.
- Gershon, Livia. 2019. “How Colonialism Shaped Body Shaming.” *JSTOR Daily*. Retrieved May 19, 2020 (<https://daily.jstor.org/how-colonialism-shaped-body-shaming/>).
- Guardabassi, Veronica, and Carlo Tomasetto. 2020. “Weight Status or Weight Stigma? Obesity Stereotypes—Not Excess Weight—Reduce Working Memory in School-Aged Children.” *Journal of Experimental Child Psychology* 189:104706.
- Guthman, Julie. 2009. “Teaching the Politics of Obesity: Insights into Neoliberal Embodiment and Contemporary Biopolitics.” *Antipode* 41(5):1110–33.
- Guthman, Julie. 2013. “Too Much Food and Too Little Sidewalk? Problematizing the Obesogenic Environment Thesis.” *Environment and Planning A: Economy and Space* 45(1):142–58.
- Guthman, Julie, and Melanie DuPuis. 2006. “Embodying Neoliberalism: Economy, Culture, and the Politics of Fat.” *Environment and Planning D: Society and Space* 24(3):427–48.
- Homan, Kristin J., and Tracy L. Tylka. 2014. “Appearance-Based Exercise Motivation Moderates the Relationship between Exercise Frequency and Positive Body Image.” *Body Image* 11(2):101–8.
- Homan, Kristin J., and Tracy L. Tylka. 2018. “Development and Exploration of the Gratitude Model of Body Appreciation in Women.” *Body Image* 25:14–22.
- Humphrey, Lauren, Dawn Clifford, and Michelle Neyman Morris. 2015. “Health at Every Size College Course Reduces Dieting Behaviors and Improves Intuitive Eating, Body Esteem, and Anti-Fat Attitudes.” *Journal of Nutrition Education and Behavior* 47(4):354–360.e1.

- Jones, Megan, Carlos M. Grilo, Robin M. Masheb, and Marney A. White. 2010. "Psychological and Behavioral Correlates of Excess Weight: Misperception of Obese Status among Persons with Class II Obesity." *International Journal of Eating Disorders* 43(7):628–32.
- Jones, MJ. 2015. "Being 'Too Sensitive' Isn't the Problem – Oppression Is." *Everyday Feminism*. Retrieved June 10, 2020 (<https://everydayfeminism.com/2015/04/too-sensitive-not-problem/>).
- Kolata, Gina. 2016. "After 'The Biggest Loser,' Their Bodies Fought to Regain Weight." *The New York Times*, May 2.
- Lavie, Carl J. 2014. *The Obesity Paradox: When Thinner Means Sicker and Heavier Means Healthier*. 1 edition. Avery.
- Lewis, Robin J., Thomas F. Cash, and Cristina Bubb-Lewis. 1997. "Prejudice Toward Fat People: The Development and Validation of the Antifat Attitudes Test." *Obesity Research* 5(4):297–307.
- Little, Becky. n.d. "When Cigarette Companies Used Doctors to Push Smoking." *HISTORY*. Retrieved June 11, 2020 (<https://www.history.com/news/cigarette-ads-doctors-smoking-endorsement>).
- Mann, Traci, A. Janet Tomiyama, Erika Westling, Ann-Marie Lew, Barbra Samuels, and Jason Chatman. 2007. "Medicare's Search for Effective Obesity Treatments: Diets Are Not the Answer." *American Psychologist* 62(3):220–33.
- Morrison, Todd G., and Wendy E. O'Connor. 1999. "Psychometric Properties of a Scale Measuring Negative Attitudes Toward Overweight Individuals." *The Journal of Social Psychology* 139(4):436–45.
- National Association to Advance Fat Acceptance. n.d. "Facts on Size Discrimination."
- O'Hara, Lily, Sabrina Tahboub-Schulte, and Justin Thomas. 2016. "Weight-Related Teasing and Internalized Weight Stigma Predict Abnormal Eating Attitudes and Behaviours in Emirati Female University Students." *Appetite* 102:44–50.
- Opal: food and body wisdom. n.d. "DSM-5: Feeding and Eating Disorders."
- Ospina, Marie Southard. 2018. "Why Regan Chastain Wants To Separate Fitness From Weight Loss." *Elite Daily*. Retrieved May 25, 2020 (<https://www.elitedaily.com/p/why-ragen-chastain-the-heaviest-woman-to-run-a-marathon-wants-to-separate-fitness-from-weight-loss-8469716>).
- Reinold, Stefani. 2018. "Weight Loss." *It's Not About the Food*. Audio Podcast, Ep. 4.
- Sawyer, S. M., M. Whitelaw, D. Le Grange, M. Yeo, and E. K. Hughes. 2016. "Physical and Psychological Morbidity in Adolescents With Atypical Anorexia Nervosa." *PEDIATRICS* 137(4):e20154080–e20154080.
- Sifferlin, Alexandra. 2017. "The Weight Loss Trap: Why Your Diet Isn't Working." *Time*, June 5.

- Sole-Smith, Virginia. 2020. "A Weight Watchers App for Kids Raises Concerns." *The New York Times*, April 17.
- The Body Positive. 2014. "Stanford University Study on the Be Body Positive Leadership Program for College Campuses." *The Body Positive*. Retrieved June 12, 2020 ([https://drive.google.com/file/d/1nCk3it4F5YgIxsOizEAIBhFmYN4l0hl9/view?usp=sharing&usp=embed\\_facebook](https://drive.google.com/file/d/1nCk3it4F5YgIxsOizEAIBhFmYN4l0hl9/view?usp=sharing&usp=embed_facebook)).
- The Body Positive. 2019. "The Body Positive |." *The Body Positive*. Retrieved June 12, 2020 (<https://thebodypositive.org/>).
- Thomas, Jennifer J., and Jenni Schaefer. 2013. *Almost Anorexic: Is My (or My Loved One's) Relationship with Food a Problem? (The Almost Effect)*. 1 edition. Center City, Minnesota: Hazelden Publishing.
- Thomas, Laura. n.d. *Don't Salt my Game*, Ep. 64: "How to Make Peace with Food and Your Body with Megan Crabbe of Bodyposipanda."
- Thompson, Sarah J. n.d. "Why Eating Disorder Treatment Is Failing Us All." *Resilient Fat Goddess*. Retrieved May 22, 2020 (<https://www.resilientfatgoddess.com/blog/whyeatingdisordertreatmentisfailingusall>).
- Truth Be Told: "White World, Black Body | KQED Podcasts."
- Tylka, Tracy L. 2006. "Development and Psychometric Evaluation of a Measure of Intuitive Eating." *Journal of Counseling Psychology* 53(2):226–40.
- Weiss, Christina. 2011. "Statistics on Dieting and Eating Disorders." *Monte Nido*. Retrieved ([https://www.montenido.com/pdf/montenido\\_statistics.pdf](https://www.montenido.com/pdf/montenido_statistics.pdf)).
- White, Francis Ray. 2013. "'We're Kind of Devolving': Visual Tropes of Evolution in Obesity Discourse." *Critical Public Health* 23(3):320–30.

## Appendix

### Appendix A – Form Organization and Eating Disorder Descriptions

#### Form Organization

- Form 1 - A,B,BE - T(5), F(2), T(3)
  - Josephine, Rene, Miranda
- Form 2 - A, B, BE - F(5), T(2), F(3)
  - Josephine, Rene, Miranda
- Form 3 - A, BE, B - F(6), F(3), T(1)
  - Josephine, Miranda, Rene
- Form 4 - A, BE, B - T(6), T(3), F(1)
  - Josephine, Miranda, Rene
- Form 5 - B, A, BE - T(3), T(2), F(4)
  - Rene, Josephine, Miranda
- Form 6 - B, A, BE - F(3), F(2), T(4)
  - Rene, Josephine, Miranda
- Form 7 - B, BE, A - F(4), T(5), T(6)
  - Rene, Miranda, Josephine
- Form 8 - B, BE, A - T(4), F(5), F(6)
  - Rene, Miranda, Josephine
- Form 9 - BE, A, B - T(6), T(1), F(2)
  - Miranda, Josephine, Rene
- Form 10 - BE, A, B - F(6), F(1), T(2)
  - Miranda, Josephine, Rene
- Form 11 - BE, B, A - F(5), T(4), F(1)
  - Miranda, Rene, Josephine
- Form 12 - BE, B, A - T(5), F(4), T(1)
  - Miranda, Rene, Josephine

This is Miranda

Miranda works as a flight attendant. She gets to be home every weekend, and then she tends to splurge on a very big dinner, ordering a number of take-out dishes from her favorite Chinese restaurant and a box of cupcakes or other pastries from her favorite local bakery. Usually Miranda's mother likes to drop off some homemade pie or turnover that she baked using the fruits from her yard. Even if she doesn't feel physically hungry, with all this yummy food and time to finally rest, Miranda feels like she can't stop eating until after she gets uncomfortably

This is Josephine.

Josephine works as a software engineer. She currently really wants to be in a romantic relationship. In the last few months, she has found herself often scared of gaining weight, and so has consumed less food than her body likely needs. When she wakes up every morning, she has a routine of weighing herself to check on her progress. She has a picture of Emma Watson next to the scale for motivation, because she is her favorite actress and she finds her beautiful. In the past month, she has managed to lose thirty pounds. Josephine is happy that she has lost weight, but believes she still has excess weight to lose for her body to be attractive - both in her eyes and in the eyes of the men she is interested in.

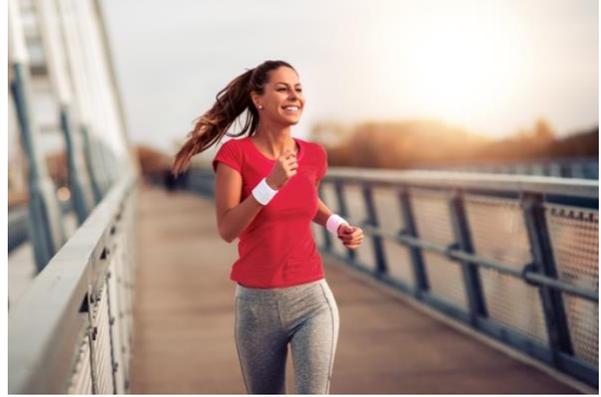
This is Rene

Rene works as a third-grade teacher. Once or twice a week, in the couple of hours after she gets home from a long day of work, Rene tends to overeat. She eats a few bowls of her favorite pasta, some donuts, and a pint of her favorite ice cream - Ben and Jerry's "Phish Food". Each time, the next morning, Rene feels ashamed as she gets ready in front of the mirror. She hates her body and feels disappointed in herself for lacking self control in her behavior the night before. She does an intensive two-hour workout to relieve her guilt.

full. She says that she feels disgusted with herself afterwards for acting out of control even though she knew that it was bad for her.

**Appendix B – Picture pairs in order from pair #1 – pair #6**







## Appendix C – Survey Part 1 Outline

### Section 1: Informed Electronic Consent

#### Health and Well-Being Survey

PLEASE ONLY PARTICIPATE IF YOU LIVE IN OR ARE FROM THE U.S.

**PARTICIPATION:** Your participation in this survey is voluntary, and should take less than 10 minutes. You may refuse to take part in the research or exit the survey at any time. You are free to decline to answer any particular question you do not wish to answer for any reason.

**BENEFITS:** You will receive no direct benefits from participating in this research study. However, your responses may help us learn more about the general perceptions that exist around eating disorders and weight issues.

**RISKS AND TRIGGER/CONTENT WARNING:** The possible risks or discomforts of the study are minimal. You may feel uncomfortable or you may be sensitive to questions about eating disorders or weight issues, which can be challenging topics.

**CONFIDENTIALITY:** Your responses will remain anonymous. Google Forms does not collect identifying information such as your name, email address, or IP address. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study. Your survey answers will be stored by Google Forms in an electronic format.

If you have any questions or would like to receive more information about the study after completion of the survey, please contact the researcher, Nivie Oron, at [noron@ucsc.edu](mailto:noron@ucsc.edu).

Thank you for your participation!

**\* Required**

#### ELECTRONIC CONSENT \*

By clicking the box below, you are affirming that you are voluntarily participating in this survey, and are 18 years of age or older.

I agree to voluntarily take this survey, and I am 18 years of age or older.



### Section 2: Demographic Questions



### Section 3: Survey Guidelines

#### Survey Guidelines

Do not complete this survey more than once.

Do not look anything up on the internet. Please only remain on this tab and on this device until the survey is submitted.

Do not talk about your experience taking the survey with someone else until after the survey is completed.

It is understandable if you do not know the answer, just answer each question to the best of your ability. There may not be one correct answer.

Answer one question at a time, and in order. Do not hit the "back" button to return to previous pages for the duration of the survey. It was not an option to disable the "back" button, so I must trust people to follow this rule on their own. Thank you!

By clicking the box below, you are affirming that you have read and agree to follow the survey guidelines. \*

I have read the guidelines and agree to follow them.



## Section 4: Instructions for Eating Disorder Descriptions



The following few sections will introduce you to a person along with a description of their relationship/habits with food. You will then be asked about the likelihood, in your opinion, that this person is experiencing an eating disorder.

## Appendix D – Survey Part 2 Outline: Likert Scale Questions

### Attractiveness

1. If I were single, I would date a fat person.
2. Fat people are less physically attractive than thin people.

### Weight Control/Blame

1. I would gain respect for a friend who lost weight.
2. Fat people give too many excuses for being fat.
3. Fat people tend to be fat pretty much through their own fault.
4. Most fat people eat too much unhealthy food.
5. Fat people, on average, are lazier than others.
6. Fat people should go on a diet.
7. Fat people, on average, have less willpower than others.
8. The idea that genetics causes people to be fat is used too frequently as an excuse.
9. Fat people should feel at least a little guilty about their weight so that they can be motivated to lose weight.
10. It bothers me when fat people take up more room than they should in a theater or on a bus or plane.
11. It bothers me that theaters, buses, and planes are often not designed to accommodate bodies of all sizes.
12. It is a good thing that our theaters, buses, and planes do not accommodate bodies of all sizes, because then people can be motivated to change their bodies for the better.
13. This may be unfortunate, but shame attached to fat does contribute to keeping people healthy.

### Thin Healthy

1. A thin person is most likely healthier than a fat person.
2. Losing weight is a good thing.
3. Fat people should be encouraged to accept their bodies the way they are.

### Weight Stigma as a Societal Issue

1. The existence of organizations to lobby for the rights of fat people in our society is a good idea.
2. Teachers and employers should be trained and taught about weight stigma.
3. Society is too tolerant of fat people.
4. Weight stigma interacts with different sources of oppression (race, gender, class, sexual orientation, etc.) to create unique life experiences and struggles.

### Other - Out of Scale Statements

1. Obesity is a serious public health issue.
2. Obesity is mostly a result of excess calories consumed relative to those expended.
3. Certain neighborhoods are built in a way that discourages physical activity and promotes the consumption of unhealthy foods, leading to higher obesity rates (e.g., more access to fast food or liquor stores, less access to fresh food, less physical opportunities to walk or bike)
4. I have previously heard of the term “fatphobia”, and feel that I can explain it to someone.

### Appendix E – Overall Scores Across Groups

|     |      |    |               | AgeGroup       |                  |           |                  |
|-----|------|----|---------------|----------------|------------------|-----------|------------------|
|     |      |    |               | Age 18-39      |                  | Age 40-88 |                  |
|     |      |    |               | (A)            |                  | (B)       |                  |
|     |      |    |               | Count          | Column Valid N % | Count     | Column Valid N % |
| JBT | Thin | JS | Total         | 139            | 100.0%           | 119       | 100.0%           |
|     |      |    | Very Unlikely | 0 <sup>1</sup> | 0.0%             | 3         | 2.5%             |
|     |      |    | Unlikely      | 8              | 5.8%             | 14        | 11.8%            |
|     |      |    | Likely        | 35             | 25.2%            | 34        | 28.6%            |
|     |      |    | Very Likely   | 96 B           | 69.1%            | 68        | 57.1%            |
|     | Fat  | JS | Total         | 138            | 100.0%           | 128       | 100.0%           |
|     |      |    | Very Unlikely | 7              | 5.1%             | 23 A      | 18.0%            |
|     |      |    | Unlikely      | 30             | 21.7%            | 38        | 29.7%            |
|     |      |    | Likely        | 46             | 33.3%            | 44        | 34.4%            |
|     |      |    | Very Likely   | 55 B           | 39.9%            | 23        | 18.0%            |
| RBT | Thin | RS | Total         | 147            | 100.0%           | 121       | 100.0%           |
|     |      |    | Very Unlikely | 4              | 2.7%             | 5         | 4.1%             |
|     |      |    | Unlikely      | 26 B           | 17.7%            | 9         | 7.4%             |
|     |      |    | Likely        | 40             | 27.2%            | 44        | 36.4%            |
|     |      |    | Very Likely   | 77             | 52.4%            | 63        | 52.1%            |
|     | Fat  | RS | Total         | 130            | 100.0%           | 126       | 100.0%           |
|     |      |    | Very Unlikely | 0 <sup>1</sup> | 0.0%             | 3         | 2.4%             |
|     |      |    | Unlikely      | 14             | 10.8%            | 14        | 11.1%            |
|     |      |    | Likely        | 55             | 42.3%            | 46        | 36.5%            |
|     |      |    | Very Likely   | 61             | 46.9%            | 63        | 50.0%            |
| MBT | Thin | MS | Total         | 130            | 100.0%           | 126       | 100.0%           |
|     |      |    | Very Unlikely | 2              | 1.5%             | 9 A       | 7.1%             |
|     |      |    | Unlikely      | 31             | 23.8%            | 25        | 19.8%            |
|     |      |    | Likely        | 59             | 45.4%            | 44        | 34.9%            |
|     |      |    | Very Likely   | 38             | 29.2%            | 48        | 38.1%            |
|     | Fat  | MS | Total         | 147            | 100.0%           | 121       | 100.0%           |
|     |      |    | Very Unlikely | 4              | 2.7%             | 2         | 1.7%             |
|     |      |    | Unlikely      | 16             | 10.9%            | 16        | 13.2%            |
|     |      |    | Likely        | 54             | 36.7%            | 37        | 30.6%            |
|     |      |    | Very Likely   | 73             | 49.7%            | 66        | 54.5%            |

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05

|  |      |    |               | EthnicityGroup |                  |                |                  |
|--|------|----|---------------|----------------|------------------|----------------|------------------|
|  |      |    |               | White          |                  | Non-white      |                  |
|  |      |    |               | (A)            |                  | (B)            |                  |
|  |      |    |               | Count          | Column Valid N % | Count          | Column Valid N % |
| JBT  | Thin | JS | Total         | 237            | 100.0%           | 51             | 100.0%           |
|  |      |    | Very Unlikely | 3              | 1.3%             | 0 <sup>1</sup> | 0.0%             |
|  |      |    | Unlikely      | 21             | 8.9%             | 5              | 9.8%             |
|  |      |    | Likely        | 62             | 26.2%            | 18             | 35.3%            |
|  |      |    | Very Likely   | 151            | 63.7%            | 28             | 54.9%            |
|  | Fat  | JS | Total         | 235            | 100.0%           | 55             | 100.0%           |
|  |      |    | Very Unlikely | 30             | 12.8%            | 2              | 3.6%             |
|  |      |    | Unlikely      | 68 B           | 28.9%            | 7              | 12.7%            |
|  |      |    | Likely        | 76             | 32.3%            | 23             | 41.8%            |
|  |      |    | Very Likely   | 61             | 26.0%            | 23 A           | 41.8%            |
| RBT  | Thin | RS | Total         | 237            | 100.0%           | 54             | 100.0%           |
|  |      |    | Very Unlikely | 7              | 3.0%             | 3              | 5.6%             |
|  |      |    | Unlikely      | 27             | 11.4%            | 11             | 20.4%            |
|  |      |    | Likely        | 81             | 34.2%            | 12             | 22.2%            |
|  |      |    | Very Likely   | 122            | 51.5%            | 28             | 51.9%            |
|  | Fat  | RS | Total         | 235            | 100.0%           | 52             | 100.0%           |
|  |      |    | Very Unlikely | 2              | 0.9%             | 1              | 1.9%             |
|  |      |    | Unlikely      | 31             | 13.2%            | 5              | 9.6%             |
|  |      |    | Likely        | 88             | 37.4%            | 23             | 44.2%            |
|  |      |    | Very Likely   | 114            | 48.5%            | 23             | 44.2%            |
| MBT  | Thin | MS | Total         | 235            | 100.0%           | 52             | 100.0%           |
|  |      |    | Very Unlikely | 13             | 5.5%             | 0 <sup>1</sup> | 0.0%             |
|  |      |    | Unlikely      | 50             | 21.3%            | 10             | 19.2%            |
|  |      |    | Likely        | 93             | 39.6%            | 23             | 44.2%            |
|  |      |    | Very Likely   | 79             | 33.6%            | 19             | 36.5%            |
|  | Fat  | MS | Total         | 237            | 100.0%           | 54             | 100.0%           |
|  |      |    | Very Unlikely | 5              | 2.1%             | 1              | 1.9%             |
|  |      |    | Unlikely      | 32             | 13.5%            | 5              | 9.3%             |
|  |      |    | Likely        | 83             | 35.0%            | 19             | 35.2%            |
|  |      |    | Very Likely   | 117            | 49.4%            | 29             | 53.7%            |
| Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05 <sup>2</sup> |      |    |               |                |                  |                |                  |

|  |      |    |               | Gender |                  |                |                  |                         |                  |
|--|------|----|---------------|--------|------------------|----------------|------------------|-------------------------|------------------|
|  |      |    |               | Female |                  | Male           |                  | Neither male nor female |                  |
|  |      |    |               | (A)    |                  | (B)            |                  | (C)                     |                  |
|  |      |    |               | Count  | Column Valid N % | Count          | Column Valid N % | Count                   | Column Valid N % |
| JBT  | Thin | JS | Total         | 234    | 100.0%           | 48             | 100.0%           | 12                      | 100.0%           |
|  |      |    | Very Unlikely | 3      | 1.3%             | 0 <sup>1</sup> | 0.0%             | 0 <sup>1</sup>          | 0.0%             |
|  |      |    | Unlikely      | 17     | 7.3%             | 9 A            | 18.8%            | 0 <sup>1</sup>          | 0.0%             |
|  |      |    | Likely        | 61     | 26.1%            | 16             | 33.3%            | 2                       | 16.7%            |
|  |      |    | Very Likely   | 153    | 65.4%            | 23             | 47.9%            | 10                      | 83.3%            |
|  | Fat  | JS | Total         | 228    | 100.0%           | 55             | 100.0%           | 11                      | 100.0%           |
|  |      |    | Very Unlikely | 24     | 10.5%            | 8              | 14.5%            | 1                       | 9.1%             |
|  |      |    | Unlikely      | 55     | 24.1%            | 20             | 36.4%            | 1                       | 9.1%             |
|  |      |    | Likely        | 82     | 36.0%            | 15             | 27.3%            | 3                       | 27.3%            |
|  |      |    | Very Likely   | 67     | 29.4%            | 12             | 21.8%            | 6                       | 54.5%            |
| RBT  | Thin | RS | Total         | 231    | 100.0%           | 56             | 100.0%           | 8                       | 100.0%           |
|  |      |    | Very Unlikely | 7      | 3.0%             | 3              | 5.4%             | 0 <sup>1</sup>          | 0.0%             |
|  |      |    | Unlikely      | 24     | 10.4%            | 13 A           | 23.2%            | 1                       | 12.5%            |
|  |      |    | Likely        | 75     | 32.5%            | 16             | 28.6%            | 2                       | 25.0%            |
|  |      |    | Very Likely   | 125    | 54.1%            | 24             | 42.9%            | 5                       | 62.5%            |
|  | Fat  | RS | Total         | 231    | 100.0%           | 47             | 100.0%           | 15                      | 100.0%           |
|  |      |    | Very Unlikely | 2      | 0.9%             | 1              | 2.1%             | 0 <sup>1</sup>          | 0.0%             |
|  |      |    | Unlikely      | 27     | 11.7%            | 8              | 17.0%            | 1                       | 6.7%             |
|  |      |    | Likely        | 83     | 35.9%            | 22             | 46.8%            | 6                       | 40.0%            |
|  |      |    | Very Likely   | 119    | 51.5%            | 16             | 34.0%            | 8                       | 53.3%            |
| MBT  | Thin | MS | Total         | 231    | 100.0%           | 47             | 100.0%           | 15                      | 100.0%           |
|  |      |    | Very Unlikely | 9      | 3.9%             | 4              | 8.5%             | 0 <sup>1</sup>          | 0.0%             |
|  |      |    | Unlikely      | 44     | 19.0%            | 14             | 29.8%            | 5                       | 33.3%            |
|  |      |    | Likely        | 92     | 39.8%            | 17             | 36.2%            | 7                       | 46.7%            |
|  |      |    | Very Likely   | 86     | 37.2%            | 12             | 25.5%            | 3                       | 20.0%            |
|  | Fat  | MS | Total         | 231    | 100.0%           | 56             | 100.0%           | 8                       | 100.0%           |
|  |      |    | Very Unlikely | 6      | 2.6%             | 0 <sup>1</sup> | 0.0%             | 0 <sup>1</sup>          | 0.0%             |
|  |      |    | Unlikely      | 27     | 11.7%            | 10             | 17.9%            | 0 <sup>1</sup>          | 0.0%             |
|  |      |    | Likely        | 82     | 35.5%            | 18             | 32.1%            | 4                       | 50.0%            |
|  |      |    | Very Likely   | 116    | 50.2%            | 28             | 50.0%            | 4                       | 50.0%            |
| Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05 <sup>2</sup> |      |    |               |        |                  |                |                  |                         |                  |

|        |      |    |               | IBTsimplified   |                  |                      |                  | EBTsimplified   |                  |                      |                  |       |
|--------|------|----|---------------|-----------------|------------------|----------------------|------------------|-----------------|------------------|----------------------|------------------|-------|
|        |      |    |               | Thin or Average |                  | Fat/Overweight/Obese |                  | Thin or Average |                  | Fat/Overweight/Obese |                  |       |
|        |      |    |               | (A)             |                  | (B)                  |                  | (A)             |                  | (B)                  |                  |       |
|        |      |    |               | Count           | Column Valid N % | Count                | Column Valid N % | Count           | Column Valid N % | Count                | Column Valid N % |       |
| JBT    | Thin | JS | Total         | 179             | 100.0%           | 97                   | 100.0%           | 205             | 100.0%           | 76                   | 100.0%           |       |
|        |      |    | Very Unlikely | 1               | 0.6%             | 1                    | 1.0%             | 1               | 0.5%             | 1                    | 1.3%             |       |
|        |      |    | Unlikely      | 15              | 8.4%             | 9                    | 9.3%             | 16              | 7.8%             | 8                    | 10.5%            |       |
|        |      |    | Likely        | 53              | 29.6%            | 22                   | 22.7%            | 62              | 30.2%            | 16                   | 21.1%            |       |
|        |      |    |               | Very Likely     | 110              | 61.5%                | 65               | 67.0%           | 126              | 61.5%                | 51               | 67.1% |
|        | Fat  | JS | Total         | 167             | 100.0%           | 113                  | 100.0%           | 186             | 100.0%           | 89                   | 100.0%           |       |
|        |      |    | Very Unlikely | 18              | 10.8%            | 13                   | 11.5%            | 21              | 11.3%            | 9                    | 10.1%            |       |
|        |      |    | Unlikely      | 41              | 24.6%            | 28                   | 24.8%            | 52              | 28.0%            | 17                   | 19.1%            |       |
| Likely |      |    | 59            | 35.3%           | 39               | 34.5%                | 60               | 32.3%           | 35               | 39.3%                |                  |       |
|        |      |    | Very Likely   | 49              | 29.3%            | 33                   | 29.2%            | 53              | 28.5%            | 28                   | 31.5%            |       |
| RBT    | Thin | RS | Total         | 172             | 100.0%           | 105                  | 100.0%           | 191             | 100.0%           | 83                   | 100.0%           |       |
|        |      |    | Very Unlikely | 6               | 3.5%             | 3                    | 2.9%             | 6               | 3.1%             | 3                    | 3.6%             |       |
|        |      |    | Unlikely      | 24              | 14.0%            | 11                   | 10.5%            | 29              | 15.2%            | 7                    | 8.4%             |       |
|        |      |    | Likely        | 56              | 32.6%            | 35                   | 33.3%            | 61              | 31.9%            | 27                   | 32.5%            |       |
|        |      |    |               | Very Likely     | 86               | 50.0%                | 56               | 53.3%           | 95               | 49.7%                | 46               | 55.4% |
|        | Fat  | RS | Total         | 174             | 100.0%           | 105                  | 100.0%           | 200             | 100.0%           | 82                   | 100.0%           |       |
|        |      |    | Very Unlikely | 2               | 1.1%             | 1                    | 1.0%             | 2               | 1.0%             | 1                    | 1.2%             |       |
|        |      |    | Unlikely      | 22              | 12.6%            | 11                   | 10.5%            | 25              | 12.5%            | 9                    | 11.0%            |       |
| Likely |      |    | 69            | 39.7%           | 40               | 38.1%                | 80               | 40.0%           | 31               | 37.8%                |                  |       |
|        |      |    | Very Likely   | 81              | 46.6%            | 53                   | 50.5%            | 93              | 46.5%            | 41                   | 50.0%            |       |
| MBT    | Thin | MS | Total         | 174             | 100.0%           | 105                  | 100.0%           | 200             | 100.0%           | 82                   | 100.0%           |       |
|        |      |    | Very Unlikely | 6               | 3.4%             | 6                    | 5.7%             | 8               | 4.0%             | 4                    | 4.9%             |       |
|        |      |    | Unlikely      | 42              | 24.1%            | 18                   | 17.1%            | 49              | 24.5%            | 12                   | 14.6%            |       |
|        |      |    | Likely        | 71              | 40.8%            | 36                   | 34.3%            | 82              | 41.0%            | 31                   | 37.8%            |       |
|        |      |    |               | Very Likely     | 55               | 31.6%                | 45               | 42.9%           | 61               | 30.5%                | 35 A             | 42.7% |
|        | Fat  | MS | Total         | 172             | 100.0%           | 105                  | 100.0%           | 191             | 100.0%           | 83                   | 100.0%           |       |
|        |      |    | Very Unlikely | 4               | 2.3%             | 1                    | 1.0%             | 4               | 2.1%             | 1                    | 1.2%             |       |
|        |      |    | Unlikely      | 24              | 14.0%            | 11                   | 10.5%            | 27              | 14.1%            | 8                    | 9.6%             |       |
| Likely |      |    | 56            | 32.6%           | 38               | 36.2%                | 62               | 32.5%           | 32               | 38.6%                |                  |       |
|        |      |    | Very Likely   | 88              | 51.2%            | 55                   | 52.4%            | 98              | 51.3%            | 42                   | 50.6%            |       |

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05