



Re-Visioning Success:
**How Stigma, Perceptions of Treatment, and
Definitions of Success Impact Obesity and
Weight Management in America**

**A Research Report for the
Strategies to Overcome and Prevent (STOP) Obesity Alliance
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Executive Summary

Affecting nearly two-thirds of adults, overweight and obesity is one of the most significant public health threats facing America. This research for the Strategies to Overcome and Prevent (STOP) Obesity Alliance* authored by the Department of Health Policy at The George Washington University School of Public Health and Health Services examines what may contribute to the disconnect between the scientific data demonstrating the harmful health and economic effects of overweight and obesity and the insufficient action to change the public and private sector systems that form barriers against effective weight management.

The report focuses on three interconnected dimensions of this issue that, with greater understanding and awareness, could lead to action with profound effects on the obesity epidemic in America: 1) how success is defined; 2) the perception that treatment is futile; and 3) the stigma against people who are overweight or obese.

While science proves the seriousness of overweight and obesity and its link to deadly conditions such as diabetes and heart disease, there is no consensus today among patients, providers and researchers on what constitutes successful weight loss. As described in this paper, overweight and obese people and their health care providers often have unrealistic weight-loss goals and very few succeed in achieving them. Promoting a more realistic approach that is based on improving health outcomes could be critical to changing obesity's hold on our society.

Another major barrier in the prevention and treatment of overweight and obesity is the perception or assumption that nothing works. When the effort required to treat overweight and obesity by the patient and physician is assessed alongside the results of what both professionals and consumers view as only modest amounts of weight loss, treatments seem hardly worth the effort. This sense of futility can be overcome by focusing on sustainable and realistic step-wise results.

Stigma against people with overweight and obesity is another pervasive trend and a reality for the lives of people with overweight and obesity. Research shows that as obesity increases in prevalence, so does stigma against the overweight and obese. Unquestionably, the role and responsibility of the individual is critical to successful weight loss and without it, lessening obesity will be unachievable. An emphasis on personal responsibility alone has not been enough to curb the epidemic. This paper



is designed to highlight other factors within our health care system and health policies that shape the environment for individual action and could encourage addressing obesity.

The gap between society's ability and success in responding to obesity and obesity's known serious economic and health consequences is wide. Whether rooted in the belief that overweight and obesity is a matter of personal responsibility or that treatments are ineffective, this paper looks at factors contributing to the disconnect and proposes possibilities for bridging it as a way of improving health and productivity in America.



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Overview

America's inability to reverse or stop the overweight and obesity epidemic has left obesity as the second leading cause of preventable death behind smoking and potentially the first condition to shorten the lifespan of the current generation of children as they grow to become obese adults.

There is no lack of scientific data showing the seriousness of overweight and obesity and its link to deadly conditions such as diabetes and heart disease.

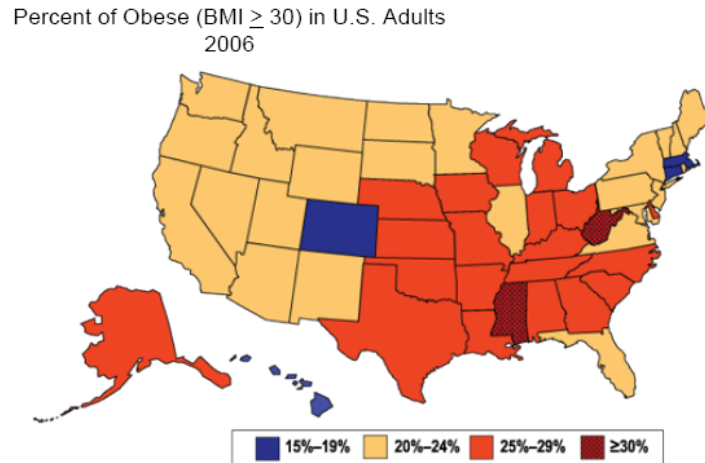
- The medical community accepts that excess fat increases the incidence of insulin resistance, dyslipidemia, hypertension and other health problems, including some cancers.
- Large, long-term studies have linked obesity with an increased risk of cardiovascular disease, diabetes and even death.
- There is increasing data about the costs of the epidemic. For example, it has been estimated that obesity and overweight costs \$75 billion dollars in medical expenditures annually in the U.S.¹

Over the last 20 years, the U.S. has experienced a sharp increase in the number of people who are either overweight or obese. A recent analysis of the CDC's Behavioral Risk Factor Surveillance System for 1985 – 2006 examined the rise in the number of adults in the U.S. whose Body Mass Index (BMI) was 30 or greater and thus considered to be obese.¹ According to the CDC:

- In 1990, among states participating in the Behavioral Risk Factor Surveillance System, 10 states had a prevalence of obesity less than 10 percent and no states had prevalence equal to or greater than 15 percent.
- By 2006, only four states had a prevalence of obesity less than 20 percent. Twenty-two states had a prevalence equal to or greater than 25 percent; two of these states (Mississippi and West Virginia) had a prevalence of obesity equal to or greater than 30 percent.²



The following map illustrates the prevalence of obesity by state in 2006:



The consequences of overweight and obesity, both from an individual and societal health perspective, are sobering. The societal costs of overweight and obesity encompass direct medical costs – including the costs of preventive, diagnostic and treatment services – and indirect costs related to morbidity and mortality. The authors defined morbidity costs as the value of income lost from decreased productivity, restricted activity, absenteeism and bed days. They also defined mortality costs as the value of future income lost by premature death. A 2003 analysis to calculate aggregate overweight- and obesity-attributable medical spending for the United States used the 1998 Medical Expenditure Panel Survey (MEPS) and the 1996 and 1997 National Health Interview Surveys (NHIS). The researchers found that:

Combined, such expenditures accounted for 9.1 percent of total annual U.S. medical expenditures in 1998 and may have been as high as \$78.5 billion (\$92.6 billion in 2002 dollars). Medicare and Medicaid finance approximately half of these costs.³

Although we have gained greater insights into the many different contributors to overweight and obesity (e.g., diet, exercise, genetics, environmental and sociological factors), the development of a diverse array of clinical tools to assist people in successfully achieving and sustaining healthy weight loss has not kept pace.

“... except for the invasive option of bariatric surgery, there are even fewer clinical tools available for treating obesity than there are for treating addiction to smoking.” (Steven A. Schroeder, M.D.).⁴

A healthy diet and regular exercise have been the traditional cornerstones of weight counseling and management. However, the diet/exercise combination is often not successful for sustaining weight loss. Many people go through cycles of dieting and exercise regimens, often gaining back the same (and sometimes more) weight.⁵ As a result, an estimated \$60 billion a year is spent by consumers on weight-loss products but without an indication that these products have made a difference to the obesity epidemic.⁶



As a last resort for people trying to lose weight, bariatric surgery (e.g., procedures such as gastric bypass and lap-banding) has been successful in assisting people with obesity in losing and maintaining significant amounts of weight loss. These procedures are typically only available, however, to people who are morbidly obese (BMI that is equal to or greater than 40 or BMI equal to or greater than 35 with obesity-related medical comorbidities), i.e., after they are already suffering from diseases such as hypertension and diabetes.

“America needs to get healthier one small step at a time. Each small step does make a difference, whether it's taking the stairs instead of an elevator or snacking on fruits and vegetables. The more small steps we can take, the further down the road we will be toward better health for ourselves and our families.”
(Tommy Thompson, Secretary, DHHS).⁷

For the majority of Americans whose BMI is between 25 but less than 35, however, clinically effective weight management interventions that can be tailored to an individual's needs and circumstances are scarce.

Defining Overweight and Obese:

Although weight and fat are used almost interchangeably, they are not the same thing. The adverse consequences of obesity, including the health consequences, are related to excess adiposity – excess adipose tissue or fat, not weight. A person's weight includes the weight of muscle, water, and other tissues, in addition to fat. As a result, an individual can weigh a lot and have a BMI in the obese range, but not be at risk of obesity-related illnesses if their weight is related to a surplus of muscle, not fat.

For most adults, BMI is a reasonable approximation of adiposity or amount of fat; its ease of use has made it the standard for assessing obesity. BMI is falsely high in those with high muscle content (such as body builders) and falsely low in those that have lost muscle mass, such as the elderly. In adults whose height is unchanging, changes in weight or weight loss directly translate into changes in BMI.

BMI is a measure of an adult's weight in relation to his or her height, specifically the adult's weight in kilograms divided by the square of his or her height in meters. People whose BMI is equal to or greater than

“The BMI is not a good measure of adiposity. There are major differences in adiposity, i.e. the percentage of fat in the human body, depending on gender, muscle mass, mass, and ethnicity. The problem is that most consider a high BMI a measure of adiposity, but it is not; it is merely an indicator of mass, thus able to represent muscle or fat. Selecting the BMI of 35 as the critical index for surgical care is not based on fact. An Asian woman with a BMI of 32 has as much risk for co-morbidities as her Caucasian counterpart with a BMI of 35. We use the BMI because it is clinically efficient and correct most of the time, but we need to be aware of its serious limitations. With Tanita scales and dual energy X-ray absorptiometry (DEXA) becoming more widely available, we may be able to focus on adiposity and the co-morbidities as better indicators.” (Walter J. Pories, MD, FACS)⁸



30 are considered obese, and a BMI equal to or greater than 25 (but less than 30) is considered overweight. A BMI less than 25 is considered normal weight.

THE STOP OBESITY ALLIANCE

The alarming rate of growth in the levels of overweight and obesity and its impact on health, costs and productivity led to bringing together business, labor, health insurers, health quality

The Strategies to Overcome and Prevent (STOP) Obesity Alliance is a collaboration of consumer, provider, business, labor, health insurance and quality organizations united to drive innovative and practical strategies that combat obesity.

The Alliance's goal is to help reverse America's rising trend in obesity and related conditions such as diabetes, heart disease, and certain cancers by:

- *Identifying and breaking down cultural and systemic biases around obesity;*
- *Re-defining success as sustained weight loss based on health rather than societal norms;*
- *Highlighting research-based initiatives and technologies to improve prevention and care and;*
- *Identifying, recommending and promoting innovations in community, employer, and health care delivery and financing systems.*

The STOP Obesity Alliance will foster change in society's perceptions of, and approaches to, preventing and treating obesity in the context of the real-world environment in which we live.

organizations, clinicians and other health professionals, consumer advocacy groups and others to determine how best to help policy makers address this issue aggressively. These groups form the Steering Committee of the Strategies to Overcome and Prevent (STOP) Obesity Alliance. This is the first time these groups have come together to examine and overcome barriers in the systems surrounding overweight and obesity and its related conditions. The diversity of the organizations that have joined the Alliance reflects the complexity of obesity and overweight and need for a comprehensive and multi-faceted approach to solving the current epidemic.



Section I. Definitions of Success

Perhaps the most pivotal issue for the development of successful interventions in obesity and overweight is defining success. Defining success means clearly articulating the purpose of weight loss. For the purposes of this report we are focusing on weight loss in terms of its contribution to controlling or reducing health risks and costs rather than its potential impact on the other significant social and psychological consequences of obesity.

Perspectives of Overweight and Obese Individuals

Obese individuals are often unrealistic about weight loss; they define success as losing a large amount of weight and hope for unachievable results from obesity treatments. One study of severely obese patients whose average BMI was 40.7 described women hoping for a 42 percent weight loss and men a 29 percent weight loss from baseline or initial weight.⁹ These individuals' ideas about a "dream" weight loss corresponded to a weight loss of about 34 percent, a "happy" weight loss was 26 percent, "acceptable" weight loss was 20 percent and a "disappointing" weight loss – one that patients "could not view as successful in any way" – corresponded to a 10 percent weight loss. The "dream" weight loss resulted in a BMI of 25, the "happy" weight a BMI of 27 (overweight), and the "acceptable" a BMI of 30 kg/m². These goals surpass even what is usually achievable by bariatric surgery. Early treatment programs, as a result, traditionally included counseling to temper individuals' expectations of weight loss.

Further research has investigated factors important in choosing weight-loss goals.

- Women chose more weight loss (lower weights and thus more unrealistic goals) compared to men.¹⁰
- Heavier people wanted to lose more weight than those who were less severely obese.¹¹
- Appearance and physical comfort were more important than health outcomes in choosing goal weights, although health improvement was a stated goal of weight loss.¹²
- People trying to lose weight who had higher self-esteem and a more positive body image chose goal weights that were more realistic.¹³
- Race/ethnicity, age, mood, previous diet history and weight-loss history were unimportant factors in choosing weight-loss goals.¹⁴
- Having a physician or other health professional suggest weight loss to a patient did not seem to impact the patient's goal weights.¹⁵

The critical issue about unrealistic goals is understanding whether and/or when they are harmful or in some way impede weight-loss success. Although one study found that patients with less realistic weight-loss goals had higher rates of dropping out of the program, this study did not control for actual weight lost; lack of early weight loss may have caused patients to drop out prematurely.¹⁶ Another study reported less satisfaction with weight-loss results when goal weights were less realistic. Overall, most work has not supported the hypothesis that unrealistic weight-loss goals are harmful or impede weight loss. Moreover, people engaged in weight-loss efforts themselves report health benefits even when they consider their actual weight-loss results "disappointing." One pilot study aimed at making goals realistic found no benefit of the counseling and concluded that resources *not* be directed towards counseling patients to set realistic goals.¹⁷ Another found that



unrealistic weight goals were associated with more, not less, actual weight lost; suggesting that setting the bar high may be motivating for some patients.

Perspectives of Health Professionals

Health professionals have generally endorsed larger weight losses than professional organizations as defining the “successful” treatment of obesity. In one study of physicians, 75 percent agreed that a 10 percent weight loss was sufficient to improve health but revealed higher expectations on further questioning.¹⁸ Physicians called an “ideal” weight loss as about 31 percent, a successful weight loss as 20 percent and an acceptable weight loss as 14 percent of baseline weight. It is unclear if these were based upon notions about the health effects of obesity or other more cosmetic goals.

Research Studies and Clinical Trials

Effect Size

The gold standard for research studies to determine the effectiveness of an intervention is the randomized, controlled trial. In these trials, one treatment is tested against another or against placebo, and the patients followed forward or prospectively over time. At the end of the study, the results between the treated group and the control group are compared. This difference is the effect size. Ideally, the effect size should be both clinically meaningful and statistically significant. It often happens that the result is one or the other, rather than both. For example, the group receiving treatment A may have lost 20 lbs more weight compared to the control group, but there weren't enough patients in the study to say for sure that this didn't just happen by chance. Or, alternatively, one group lost ½ lb more than the other group, and the result was statistically significant, but ½ lb weight loss after an intensive intervention was too small to be clinically meaningful.

At the outset of a study, researchers hypothesize the effect size they are likely to see in the study, and design the study accordingly to test their hypothesis. The decisions about effect size—in obesity studies, the amount of weight loss or change in BMI in the treated group compared to the control or untreated group—may be based upon prior research from pilot studies or be an educated best guess based on theoretical information, such as the treatment's mechanism of action. Irrespective of the basis for the *a priori* estimate of effect size, investigators should not undertake a study unless they have a good reason to expect a clinically significant outcome.

Upon determining the expected effect size, researchers perform a power calculation to determine the minimum number of patients needed in the study in order to reliably test their hypothesis. The larger the effect size, the greater the number of patients needed to participate in the study to ensure a statistically valid result. In turn, the larger the study in terms of numbers of participants, the easier it is to ensure a statistically valid result.

Published reports of clinical trials often do not include information about power calculations or clinically important effect sizes. Space limitations and the documented pressure to publish studies with positive findings have yielded a plethora of studies that report statistical significance far more frequently than clinical significance.



As a result, readers of the medical studies often cannot tell if the intervention actually achieved the effect that was hoped for at the outset of the study. The large numbers of studies that show small positive effects after intensive weight-loss interventions may reflect the discordance between what is clinically meaningful and statistically accurate.

For studies of obesity, where established treatments are few and weight changes often small despite intensive treatment, it is especially important to understand a reported weight loss denotes a clinically significant effect size rather than just a statistically significant one.

Definitions of Effectiveness in Research Studies

Unfortunately, there is little uniformity in how the clinical outcomes of obesity treatments are reported. Outcomes include BMI, change in BMI, percent change in BMI, weight lost, percent of patients losing five percent of weight and percent of patients losing 10 percent of weight.

A few studies included secondary outcomes (outcomes the study was not designed to assess) such as quality of life, or disease-related outcomes such as the prevalence of cardiovascular markers and hypertension.¹⁹

Most common was the reporting of relative weight loss in pounds or kilograms between the treated group compared to the untreated group. Because weight lost in pounds can have different values depending on baseline weight—e.g., a 10 pound weight loss means more for someone who weighs 180 pounds compared to someone who weighs 300 pounds — it was often difficult to assess how clinically important the outcome turned out to be.²⁰

Because of increased attention to both the patient and their weight problems, both the control group and the treatment group tend to lose weight in studies, so changes from baseline tend to be greater than differences between treatment groups. Longer follow-up usually results in less weight loss; suggesting weight is at least partially regained after discontinuing treatment or as the treatment becomes less intensive. Females and Caucasians tend to be overrepresented in clinical trials and other groups underrepresented.²¹

Research Indicates Positive Health Outcomes with Moderate Weight Loss

Contrary to popular notions that substantial weight decline is needed to change health outcomes for obese individuals, the research suggests that a small or moderate decrease in baseline weight may be enough to result in a significant improvement. In general, as little as a five to 10 percent weight drop could reduce risk factors for some diseases, particularly cardiovascular diseases.²² Some studies have found losing a minimal amount of weight reduces the risk for premature mortality. One study found that among individuals attempting to lose weight, an average of 15.6 pound weight loss correlated to a 29 percent lower mortality rate.²³ Another found that a median weight loss of 5 pounds among those attempting to lose weight was associated with a 23 percent lower mortality rate, though it was unclear if the improvement was due to the weight change. This study found that the lower mortality rate was approximately the same for all weight-loss attempters, including those



who did not actually lose any weight. Thus, it may be more accurate to attribute the results to the method of attempting weight loss rather than actual weight loss.²⁴

The National Heart, Lung, and Blood Institute (NHLBI), part of the National Institutes of Health, examining a wide-array of randomly controlled studies, recommended a 10-percent reduction in weight to lower blood pressure, lower blood glucose levels and incidence of Type-2 diabetes, lower LDL-cholesterol and triglycerides, and increase HDL-cholesterol.²⁵ Diabetes incidence was found to be reduced by 58 percent in two studies, one with weight loss ranging between 5.9-7.5 pounds,²⁶ and another with an average weight loss of 12.3 pounds.²⁷ Research also found a 23 percent improvement in blood pressure control associated with a net weight loss of only 4.4 – 8.8 pounds, suggesting that even a modest weight loss can help maintain a normal blood pressure.²⁸

One paper stated that a 10 percent decline in weight among people with obesity obese corresponded with a 30 percent loss of intra-abdominal fat, and was associated with several positive metabolic health outcomes, including blood insulin and glucose, risk factors for thrombosis, endothelial (blood vessel) function, and risk of coronary heart disease.²⁹ Another study found that each 2.2 pounds (1 kg) of weight lost lowered C-reactive protein (a measure of blood sugar control) levels by 0.13 mg/L.³⁰ Finally, one study found that an average weight loss of 11.2 pounds decreased osteoarthritis of the knee in women by 50 percent.³¹



Section II. Perceptions of Treatment

A second major hurdle in the prevention and treatment of obesity is the perception or assumption that nothing works. A critical element of perceiving that no treatments are effective is related to how we define “clinically significant” or “meaningful” weight loss, as discussed in the previous section. Certainly the lack of an agreed-upon definition of success contributes to the widespread belief among physicians that the current array of treatments, including pharmacologic interventions and lifestyle modification, do not result in clinically significant, sustained weight loss. In addition, interventions are perceived as time-intensive and costly. When the considerable time and effort needed to treat obesity is assessed alongside the results of what both professionals and consumers view as only modest amounts of weight loss, treatments seem hardly worth the effort. A sense of futility and pessimism is the result.

Bariatric surgery is perhaps the exception to the perception that nothing works, resulting in dramatic amounts of weight loss relatively quickly. Bariatric surgery is, however, reserved for the severely obese and associated with significant side effects, including surgical complications, frequent re-operations, vomiting, vitamin deficiencies, and pain with eating; some of these may be permanent. It may be important to ask, what kind of “effectiveness” or “effect size” is it realistic to expect from non-surgical treatments? Might treating obesity successfully be an incremental process that begins with weight maintenance and modest amounts of weight loss?

Currently, a vicious cycle is perpetuated by the lack of effective treatments for the people with moderate obesity until it becomes severe and refractory to non-surgical treatment as well as associated with significant and costly co-morbidities such as diabetes, hypertension and heart disease.

Part of untangling the dilemma involves understanding perceptions about obesity treatment among health professionals and patients as well as addressing both the valid and unfounded reasons for these perceptions in order to approach weight loss both realistically and optimistically.

Perceptions and Beliefs among Health Professionals

Even before the current obesity epidemic, the treatment of obesity was surrounded by a sense of futility. Dr. Albert Stunkard, one of the pioneers in describing, understanding and treating obesity, stated in a 1958 paper: “Most obese patients will not stay in treatment for obesity. Of those who stay in treatment, most will not lose weight and, of those who do lose weight, most will regain it.” Thirty-five years later, in 1993, Dr. Stunkard noted the duty of physicians to treat patients with respect: “As with any chronic illness, we rarely have an opportunity to cure, but we do have an opportunity to treat the patient with respect. Such an experience may be the greatest gift that a doctor can give an obese patient.”³²



There are probably many reasons physicians perceive that treating obesity is not beneficial. Traditional medicine and medical training emphasize treating acute and infectious diseases which are responsive to medication. This has been considered the model for the practice of medicine. However many chronic diseases are partially ameliorated by medications but often require sustained behavior change. The practice of medicine has not yet fully embraced its role in health behavior change, a still-developing field of scientific study itself.

While chronic diseases have been recognized as the main sources of mortality and morbidity, it is only recently that payers and providers have begun to explore the need to treat, manage and pay for them differently.

A 2003 survey of 620 physicians confirmed the sense of futility many physicians may feel in treating obesity.³³ They described a lack of confidence in treating obesity, and think treatments are ineffective. They expected patients to be unmotivated and non-compliant with treatment. Forty percent of primary care physicians expected no significant weight loss among their patients with obesity, and only 22 percent thought maintaining weight loss was possible. They believed patients do not want to discuss their weight; coupled with their own preference to avoid the topic, a lack of addressing obesity until it becomes severe is the common result.

Although time constraints and the lack of reimbursement for obesity treatment were also cited as barriers to treatment, they were considered lesser factors compared to the lack of confidence in treating obesity as described by physicians.

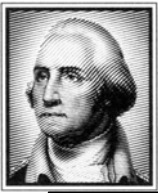
Perceptions and Beliefs among People Who are Overweight or Obese

The few studies available that describe consumers' perspectives on weight loss have painted a different picture. People who are overweight or obese recognize that doctors do not often adequately address obesity. They describe wanting more intensive treatments than physicians typically offer and as a result turn to non-medical sources for help with weight management.³⁴

Americans spend about \$60 billion dollars on weight-loss products. It would not be an exaggeration to say that most of America is on a diet. At least two-thirds of obese people are actively trying to lose weight, with an average of almost three attempts to diet per year, and 1-1/2 attempts to lose weight by exercising annually.³⁵

The weight-loss industry is perhaps the best testament to the fact that people who are overweight or obese do not feel that trying to lose weight is completely futile. It may be that successful weight loss

This study revealed several principal findings about the factors that may affect physicians' reluctance to treat obesity. The first is that physicians view obesity largely as a behavioral problem, with physical inactivity as the most important cause. [...] In our sample, obesity also seemed to be attributed to negative stereotypes. Nearly one-half of physicians rated "psychological problems" as very or extremely important causes of obesity. These data suggest that obesity will be seen as a matter of behavioral management or psychological disturbance. Traditional medical training has placed a greater emphasis on the biological basis of disease rather than on the principles of behavioral science. As such, physicians may not feel fully equipped to address behavioral issues. (G. D. Foster, T. A. Wadden, et al, 2003)



is actually more common than is represented in clinical studies. The National Weight Control Registry (NWCR) is a research study of 5,000 adults who have lost at least 30 pounds and maintained this weight loss for one year or more. The NWCR shows that 45 percent of people who lose weight do it on their own without help from a clinical program and weight maintenance becomes easier after 2-5 years. The majority of NWCR participants report maintaining weight loss through a low-calorie, low-fat diet and doing high levels of physical activity.³⁶

If success is defined as resulting in a five to 10 percent weight loss, a nationally representative study of Americans suggests that about two-thirds of overweight people have had one successful weight-loss attempt.³⁷ Of these, one-third had maintained 10 percent weight loss for over a year and more than 10 percent had achieved a normal weight. Of the adults who had lost weight successfully, over 90 percent report previous unsuccessful weight-loss attempts. Overall, 21 percent of obese people could be counted as successful at losing weight.



Section III. Stigma Against Overweight and Obese People

Stigma against people with obesity has been called the “last socially acceptable form of prejudice.” In this final section, we provide an analysis of a third interconnected dimension that may be a contributing factor to rising trends of overweight and obesity in America: stigma against overweight and obese people – what it is, its prevalence and consequences and what it means for U.S. health policy at a time when two-thirds of the adult population is overweight or obese and childhood obesity is increasing at epidemic proportions.

As a society, we are ambivalent about stigmatizing obesity. Many people, including people who are obese themselves, think obesity happens because of a lack of motivation, willpower or self-discipline, and is, therefore, a matter of individual, not societal, responsibility.³⁹ By contrast, studies of people who are obese show that they, almost universally, want to lose weight and have tried to do so but have been unsuccessful.⁴⁰ Although the health risks of obesity are considerable and costly, they are often not the primary motivation to lose weight. For most people with obesity, the negative social and psychological consequences of being obese far outweigh its future adverse health effects.

A thorough understanding of weight stigma and its impact may be important to document the social and psychological consequences of obesity, and may be central to revealing the totality of effects of excess weight on health and well-being. Those most exposed to stigma, for instance, may be vulnerable to psychological effects such as depression and social effects such as economic hardship and isolation, which in turn may link obesity with a health outcome like heart disease. Consequences of bias such as isolation or social withdrawal could contribute to the exacerbation of obesity through psychological vulnerabilities that increase the likelihood of over-eating and sedentary activity. While such links with health can only be postulated at present, it is clear that bias, prejudice, and discrimination are part of everyday life for overweight individuals. This has real effects on real people and merits further attention. (R. M. Puhl and K. D. Brownell, 2003).³⁸

So, where does stigma fit in? Is the societal stigma against obesity actually a motivator for people to want to lose weight? Would decreasing stigma improve the quality of life for obese people and thereby result in less interest in and motivation to lose weight? In this section, we review the research about obesity and stigma to assess and address its impact on health and the successful treatment of obesity.

What is Stigma?

For this report, we are defining stigma narrowly—as a set of negative attitudes towards people with obesity simply and solely based on their weight, including beliefs that are unfounded or unjust. Note that in this context, it is not considered stigmatizing for one to not want to be obese or to think someone who is obese may be at risk for health conditions compared to someone of normal weight. However, it is stigmatizing to assume a person with obesity is lazy or slow, or to believe someone is less competent or productive simply because of their weight.

Bias and prejudice are similarly defined—where someone is judged negatively in a context that has no objective relation to their weight. For instance, it is not biased or prejudicial to believe that an obese person is at risk for developing diabetes, but it is biased to assume they are depressed, or alternatively, jolly. Similarly, discrimination is defined as behaviors (as a result of attitudes) that denote the unfair treatment of people with obesity, such as denying a qualified person a job simply



because of their excessive weight or failing to promote an obese person relative to an equally qualified person who is not overweight.

Why Do We Stigmatize?

Many diseases and characteristics, that are controllable or changeable and those that are inalterable, have been associated with stigma in human beings. Medical research has documented stigma against people suffering from a variety of conditions including mental illness, substance abuse, epilepsy, HIV/AIDS and tuberculosis, in addition to obesity. Several theories suggest reasons for stigmatizing attitudes and behaviors or the origins of stigma.

- ***Associations between socioeconomic status and obesity:*** In human societies, characteristics associated with being wealthy or attained through wealth are often considered desirable, while characteristics or diseases associated with poverty are stigmatized. Indeed, in the past and in some cultures today, obesity has been considered desirable because of its association with wealth and the ability to afford to eat plentifully in places where food may be scarce. Medical historians have, however, documented stigma against individuals with obesity, even in times when food was scarce and obesity was associated with wealth.⁴¹

In the United States and other developed countries, the association between low socioeconomic status and obesity is a relatively recent phenomenon, partially a result of an abundance of inexpensive foods with poor nutritional value as well as limited opportunities to exercise in poor communities. In the developing world, both obesity and its associated morbidities, such as diabetes and heart disease, are becoming increasingly prevalent among communities that suffer from other forms of malnutrition including under-nutrition.

Today in America, being thin, and often underweight, is associated with wealth and high status, and part of the stigma against people suffering from obesity may be due to its association with poverty. The dual stigmas of being obese and belonging to a group with low socioeconomic status may further reinforce each other contributing to a group for which stigma is especially severe.⁴²

- ***Attributional theory:*** Perhaps the dominant cause of stigma against the obese is explained by “Attributional Theory” – where stigma and blame are a result of what we believe is the cause of a characteristic or condition, irrespective of the scientific explanations about cause. In other words, we stigmatize the obese because we think they caused their own obesity.

Applied to obesity, attributional reasons for stigmatizing obesity are based on several inter-related assumptions: 1) that weight is controllable; 2) that obesity results from a lack of discipline or willpower; and 3) that thinness is preferable. Medical and psychological research supports these assumptions as a source of stigma. For example, one study found that when obesity was attributed to a thyroid or glandular problem, stigma lessened.⁴³

The belief that obesity results from a lack of willpower is pervasive in our culture, irrespective of educational status and weight status. The term “willpower” itself has definite moral undertones,



echoing historical notions of gluttony and sloth as sinful, and the need to reward the “good” characteristics of asceticism, discipline, and self-determination.⁴⁴

Expressions of Stigma

The health consequences of obesity are considerable, including an average life-span that is shorter than people of normal weight and an increased likelihood of having high blood pressure, abnormal lipids, type 2 diabetes, coronary artery disease, strokes, gallbladder disease, skeletal problems, sleep apnea and cancers of the breast, uterus, prostate and colon. Despite this impressive and serious list of conditions, the social and psychological consequences of being obese may outweigh the health effects in terms of their importance to quality of life.

In general, people with obesity state they have a poorer quality of life than that described by those who are not obese.⁴⁵ Most assessments of quality of life include the measurement of a person’s self-perception or views about their own well-being. Studies that measure stigma and bias against people with obesity document high levels of stigmatizing attitudes amongst every group, including obese people themselves.

Stigma in health care settings: The health care setting has not been shown to be a haven from stigmatizing attitudes and behaviors against people with obesity. On the contrary, health professionals often view their obese patients negatively.⁴⁶ One qualitative study describes a physician ridiculing a woman for being concerned about a scar on her belly, the physician stating she “wouldn’t be wearing a bikini anytime soon.”⁴⁷ Even after losing weight, the focus is often on the need to lose additional weight rather than maintaining the successful weight loss.

One study of nurses found that they rated highly their own abilities to counsel patients about diet and activity, but instead blamed patients for the lack of weight loss, and thought willpower played a crucial role.⁴⁸

In surveys, health professionals specializing in obesity revealed a lesser degree of stigmatizing attitudes, yet bias was still present nevertheless.⁴⁹ More systematically within health care, obesity may be a stated or unstated contraindication to particular treatments or clinical trials such as hip replacement or organ transplant whether or not there is medical justification for the exclusion.⁵⁰ Obese women are screened less often for breast and cervical cancer than non-obese women, despite being at higher risk.^{51,52}

Effects of Stigma

Only a few studies have described the views of people with obesity in terms of how stigma is experienced by them and the effect it has on their self-perception and their health. Overall, people with obesity describe a strong sense of personal responsibility for their weight, which sometimes results in a lack of seeking assistance or health services to address obesity.⁵³ Self-esteem and mood are both negatively affected by stigma. One study compared obese and normal weight counterparts in terms of personality traits as assessed by telephone conversations, where weight status was unknown. Definite differences were found, with the obese people having more negative personality

