

# An Obesity Manifesto: Debunking the Myths

The direct impact of excess body fat is most evident when the amount of fat directly impedes physical functioning. It may be harder to understand the relationship between excess or abnormal body fat and metabolic problems.

*It is the fairytale of 'choice' and the overly simplistic 'eat less, move more' propaganda that promote discriminatory stereotypes.*

In type 2 diabetes, the relationship between risk and visceral fat is almost linear. But that risk is greatly amplified with a family history of diabetes. Thus, the amount of visceral fat needed to impair glucose homeostasis varies from one person to the next and depends on other factors, including beta-cell capacity to produce insulin.

Note that I said "visceral" fat rather than body fat. This is because subcutaneous fat appears to have little, if any, effect on diabetes risk and may even be protective. Thus, it is not the total amount of body fat but rather its location and biological function that determine its effect on metabolic disease. That may partly explain the inconsistent relationship between body fat and risk for diabetes.

But in the end, a complex relationship between body fat and health does not provide an argument against defining obesity as a disease. Indeed, the health risk of many diseases can vary widely between individuals (eg, heart disease, depression), yet we still call them diseases.

### 3. Obesity is modifiable and preventable.

This argument is true for many other conditions that are accepted as diseases, including stroke and heart disease. Most strokes and the vast majority of heart attacks are both preventable and modifiable (once they occur), as are diabetes, osteoarthritis, obstructive lung disease, and many forms of cancer.

### 4. Labeling it a disease will detract from obesity prevention.

In no other instance has calling something a "disease" stopped us from doing the utmost to prevent it. Consider efforts to prevent heart disease (dietary recommendations, fitness, smoking cessation), cancers (physical activity, healthy diets, smoking cessation, sunlight exposure), or infectious diseases (vaccinations, food safety, hand washing, condom use).

In fact, if one embraces the concept that established obesity is a life-long problem for which we have no cure—the very definition of "chronic disease"—we should be redoubling our efforts at prevention. Governments, organizations, and individuals should be more committed to preventing a "real" disease that has become an epidemic.

### 5. The "disease" label would reduce personal responsibility.

Let's consider type 2 diabetes, another avoidable and modifiable condition. Calling diabetes a disease does not reduce the individual's ability to prevent it or to change the course of the disease. And what about heart disease or lung disease, or even cancer? We still expect patients to help manage these diseases.

There is even a term—"self-management"—for this key principle of chronic disease management. It includes diet and exercise, monitoring symptoms, taking medications, and returning for follow-up care—all a matter of personal responsibility if one wants to see it as such. Continue Reading

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Over the past year, I have been involved in countless discussions and debates about whether obesity should be declared a chronic disease (as it has been by numerous medical organizations). Therefore, I thought it might be helpful to review the common arguments made by those on either side of the debate.

## Arguments Against Labeling Obesity a Disease

### 1. BMI is not a good measure of health.

This is perhaps the most common argument made against calling obesity a disease, and I have long railed against the use of BMI (body mass index) as a clinical

definition of obesity, as it is neither a direct measure of body fatness nor does it directly measure health. In fact, its specificity and sensitivity to pick up health problems associated with obesity (such as type 2 diabetes or hypertension) are so limited, it would not meet the criteria commonly applied to most other diagnostic tests.

So, if not BMI, what should be used as the defining characteristic of obesity?

The World Health Organization (WHO) [defines obesity](#) as "...*abnormal or excessive fat accumulation that may impair health.*"

We can't determine whether excess or abnormal body fat is affecting someone's health simply by putting them on a scale or measuring their girth. It requires a medical exam and tests, at the end of which a clinician should be able to determine whether a patient has "obesity" or just "adiposity."

But the limitations of BMI measures do not represent a valid argument against calling obesity a disease; rather, they make an argument for finding a better definition of obesity in clinical practice. Perhaps diagnosing obesity in clinical practice should be more like diagnosing depression or attention-deficit/hyperactivity disorder (ADHD), where you do not have a numeric cut-off but rather a clinical symptom score.

## **2. The relationship between body fat and health is inconsistent.**

It is true that the impact of body fat on a person's health depends on a range of factors, from a genetic predisposition to the type of body fat. Some would argue that such variability refutes a causal relationship between fat and health.

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People living with obesity have no greater or lesser responsibility for contributing to self-management of their disease than do people living with hypertension, diabetes, depression, heart disease, or cancer. They all should do what they can; why would obesity be any different?

## **6. The "disease" label stigmatizes people living with obesity.**

Obesity is already a highly stigmatized condition, as are other diseases such as depression and HIV/AIDS. Refusing to call obesity a disease will not address this problem. We must help people understand the complex and multifactorial nature of this disorder and the rather limited treatment options that we currently have.

In fact, it is the fairytale of "choice" and the overly simplistic "eat less, move more" propaganda that promote discriminatory stereotypes and the notion that people with obesity are simply not smart or motivated enough to change their slovenly ways.

In contrast, acknowledging that obesity is a disease with a complex psychosociobiology can help destigmatize it, much as depression has been destigmatized by reframing it as a matter of "chemicals in the brain" (which, incidentally, would also apply to most cases of obesity).

## **7. The "disease" label essentially medicalizes a behavior.**

The underlying assumption here is that the root cause of obesity is a behavior, which may be true on the most superficial level. Yes, behaviors such as eating too much and being too sedentary can promote weight gain. But nowhere in the WHO definition of obesity is there any mention of behavior.

Many people understand that the relationship between behavior and weight gain is not straightforward.

No matter what behavior you pick, it will never explain all (or even most) cases of obesity.

Take physical activity: Although 95% of Canadians do not meet the minimum criteria for daily physical activity, only 20% of them have obesity. So if behavior (not moving enough) is a root cause of obesity, why don't 95% of Canadians have obesity?

The simple answer is that, for any given level of physical activity, some people gain weight while others do not. Similarly, some people who eat fast food have obesity and others do not.

No matter what behavior you pick, it will never explain all (or even most) cases of obesity; there will always be individuals employing that same behavior who do not develop obesity. In fact, many behaviors

associated with obesity or weight gain are merely symptoms of underlying issues that can be related to a wide range of psychological, social, and/or biological factors.

### **8. The "disease" label promotes helplessness and hopelessness.**

There are many people living with chronic diseases (eg, diabetes, hypertension) who are well controlled, who do just fine with treatment, and who go on to live long and productive lives.

We do need better treatments for obesity, but even now, people living with obesity can change the course of their disease (often with professional help) by identifying and addressing the root causes of their weight gain (eg, depression, emotional eating) and by adopting behaviors which, even if not resulting in any noticeable weight loss, can markedly improve their health and well-being.

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In fact, the management of obesity must shift to a chronic disease strategy rather than an acute weight-loss intervention that is generally unsustainable.

### **9. Obesity is just a risk factor for disease, not a disease itself.**

This is only true if one (wrongly) considers elevated BMI as the definition of obesity, because no doubt, people with higher BMI levels carry a higher risk for obesity-related complications such as type 2 diabetes, sleep apnea, fatty liver disease, and hypertension.

However, when you use the WHO definition of obesity—namely, "accumulation of excess or abnormal fat that impairs health"—obesity is far more than just a risk factor. Using that definition, a person with a BMI of 35 may be at risk of developing obesity (but may not yet have it); only when their excess fat starts impairing their health does it become a disease in its own right.

Even then, one might argue that obesity itself is not the disease, but rather the complications of obesity are the real diseases.

This notion is both right and wrong.

Many other conditions are both diseases as well as risk factors for other diseases or complications. Again, take type 2 diabetes: It is both a disease and a risk factor for coronary heart disease or end-stage kidney disease. Hypertension is also a disease and a risk factor for strokes and heart attacks. Similarly, gastroesophageal reflux disease is also a risk factor for esophageal cancer; fatty liver disease is also a risk factor for cirrhosis; gallbladder stones raise the risk for pancreatitis. The list goes on and on.

When excess or abnormal body fat affects health, it's a disease. When it does not affect health, it is at best a risk factor. That is perhaps a subtle but important distinction.

### **10. Obesity affects too many people to be characterized as a disease.**

Some critics have warned that declaring obesity a disease would instantly turn millions of people into "patients," overwhelming the healthcare system. I hear from payers and policy makers that providing medical treatments for obesity is simply not practical because of the number of people who have it.

That didn't stop us from calling diabetes a disease, or depression, or the flu, all of which affect millions of people.

In fact, even if a disease affected 100% of the population, we would not shy away from calling it a disease.

Obesity is already costing us plenty. We have to pay for all of the health issues directly related to people having obesity, from diabetes to heart disease to joint replacements to cancers. It's costing billions of healthcare dollars, except that we are now spending those dollars on complications rather than on preventing and treating obesity itself.

## **Arguments for Calling Obesity a Disease**

### **1. It impairs health.**

There are indeed folks across a wide range of body shapes and sizes who are perfectly healthy and who therefore do not have obesity (despite what the BMI scale says). On the other hand, even the most vehement

"fat acceptance" advocates would be hard-pressed to deny that there is a direct link between excess body fat and health in many people, whether that be functional limitations or medical complications.

Thus, excess weight with sleep apnea is obesity, excess weight with type 2 diabetes is obesity, excess weight with hypertension is obesity, excess weight with reflux disease is obesity, and so on.

## **2. Once obesity is established, it is a lifelong problem.**

When people accumulate excess or abnormal fat that affects their health, there is no known "cure." Effective treatment can't be stopped without the problem reappearing.

Obesity behaves like every other chronic disease: We can modify the course or even ameliorate the condition with behavioral, medical, or surgical treatments; but when the treatment stops, the weight generally comes back, sometimes with a vengeance.

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A man recently told me that he lost 50 pounds about 5 years earlier, simply by watching what he eats and maintaining a regular exercise program. He argued that he had "conquered" his obesity and considered himself "cured."

I responded that I considered him "in remission," because his biology is still that of someone living with obesity. And this is how I proved my point.

No one is ever 'cured' of their obesity.

Imagine if he and I each tried to gain 50 pounds in the next 6 weeks; I would face a real upward battle, whereas he would have no problem putting the weight back on. In fact, if he simply adopted my usual eating habits, those 50 pounds would be back before he knew it.

His body is just waiting to regain the weight he lost, whereas my biology will actually make it difficult for me to gain that much initially. That is because his weight "set-point" is still 50 pounds higher than mine, which is at my current weight (the heaviest I have ever been).

By virtue of having been 50 pounds heavier, his biology has been permanently altered.

Today, we understand much of this biology. We understand what happens when people try to lose weight and how hard the body fights to resist weight loss and to put the weight back on. That is why obesity requires ongoing treatment. No one is ever "cured" of their obesity, not even people who have bariatric surgery; reverse the surgery and the weight comes back.

## **3. Lifestyle treatments have a limited impact on obesity.**

The Internet abounds with before-and-after pictures of people who lost weight through diet and exercise, but in reality, long-term success in lifestyle management of obesity is rare. Even in clinical trials of highly motivated volunteers receiving more support than anyone could expect in routine clinical care, the average weight loss at 12-24 months is often modest.

For most people living with obesity, lifestyle treatment is simply not effective enough—at least not as a long-term strategy in real life.

While this may be disappointing to many (especially those who have dedicated their lives to promoting healthy lifestyles as the solution to obesity), it is similar to what we've seen with other "lifestyle" diseases such as diabetes and hypertension. While diet and exercise are important cornerstones for managing those conditions, many people with diabetes or hypertension still need medical care.

The same is true for obesity. Diet and exercise remain a cornerstone of treatment, but they are simply not effective enough to control obesity in most people who have it.

## **4. Calling obesity a disease will improve access to care.**

Unfortunately, few healthcare systems feel obliged to provide obesity treatments, and few health plans provide coverage for it. Although bariatric surgery is the only evidence-based long-term treatment for severe obesity, it is still woefully underprovided.

Healthcare providers are part of the problem too. Many of them limit their role in obesity management to

warning their patients about the risk of carrying excess weight. They do not see it as their job to directly treat the obesity.

This is in stark contrast with our approach to diabetes or hypertension. Most doctors would agree that simply telling patients to lower their blood glucose or blood pressure would hardly qualify as adequate care. Helping patients in those areas is an important part of our job description.

But a colleague recently asked me, "Why should this be my job? Why can't they just eat less and move more—how difficult can that be?"

### **5. Diseases demand empathy.**

Our normal response to people affected by a disease—including smokers with lung cancer and those with sexually transmitted diseases—is at least some measure of empathy. Even if the disease was entirely preventable and the patient hastened its development, once the diagnosis is made for diabetes, or heart disease, or stroke, or cancer, the expected social response is empathy, and not just from family, friends, and colleagues.

### **6. Obesity treatment would be taught in medical school.**

Unfortunately, we learn little about obesity in medical school. Any medical graduate can recite the role and function of ADH, ATP, ANP, TSH, and a host of other biochemistry related to even the most obscure physiology and function. But few medical students and doctors have ever heard of [POMC](#), [alpha-MSH](#), [PYY](#), [AgRP](#), [CART](#), [MC4R](#), or any of the other well-studied molecules involved in appetite regulation.

The point is that, even today, we are graduating medical doctors who have only a layman's understanding of the complex biology of appetite and energy regulation, let alone a solid grasp of the clinical management of obesity.

Elevating obesity to a disease would eliminate medical schools' excuse to avoid teaching students about the complex sociopsychobiology of obesity and its complications, prognosis, and treatments.

## **Epilogue**

Clearly, I am convinced that the rationale for calling obesity a disease outweighs any arguments against it. That said, I would like to acknowledge that the term "disease" is a societal construct; to my knowledge, there is no legal or scientific definition of what warrants the term.

As all societal constructs are subject to change, our definitions of disease also are subject to change. Conditions that may once have been deemed normal features of aging (eg, type 2 diabetes or dementia) have long since risen to the status of diseases. This recognition has had a profound impact on everything from human rights legislation to health insurance to the inclusion of conditions in medical education and practice.

People living with obesity deserve no less.

*This was adapted from posts on the blog [Dr. Sharma's Obesity Notes](#).*

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