



# Obesity SURVEY RESULTS

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## Background

Obesity is a multi-factorial, chronic, relapsing disease that occurs when a person has an excessive amount of body fat (adipose tissue) that might increase health complications. Obesity is defined as having a body mass index (BMI) of 30 kg/m<sup>2</sup> or greater. Over the past few decades, obesity has become increasingly common in Canada and other developed nations. Health organizations around the world, including the Canadian Medical Association and the World Health Organization, classify obesity as a chronic disease.

While people might think that a poor diet and inadequate exercise causes obesity, it is more complex than that. There are several potential causes. Genetics, medications, poor sleep (including from sleep apnea), stress, mental health problems, socioeconomic status, hormones, endocrine disorders and more can all influence the development of obesity. Health complications can arise from obesity, especially in individuals who have the disease for a long time or those living with class III obesity (BMI of 40 kg/m<sup>2</sup> or greater). Excess weight influences biology in diverse ways, which can range from excess pressure in the abdominal region and in the joints, to hormonal effects since adipose tissue can increase certain hormone levels. These factors can lead to serious health conditions, including type 2 diabetes, high blood pressure, heart disease, sleep apnea, endocrine conditions, mental health problems, slower healing times,

and osteoarthritis. While these conditions can occur in individuals of any weight, they are more common in those living with obesity.<sup>1</sup>

## Methods

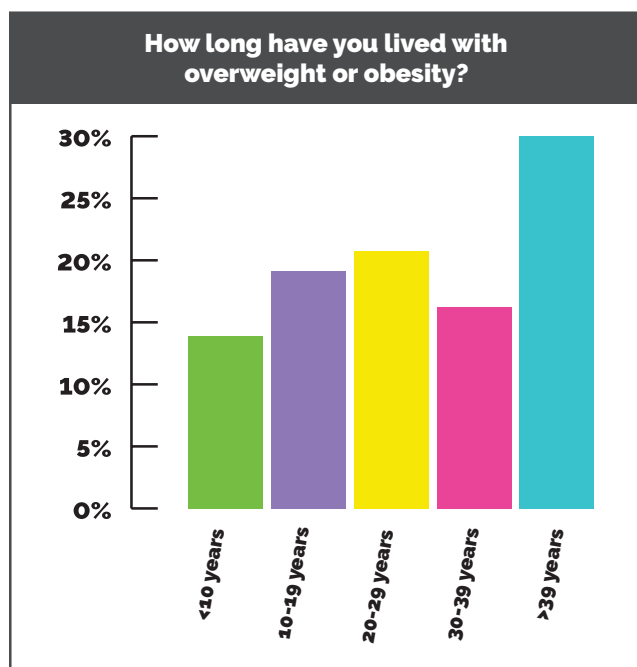
The Gastrointestinal Society and the Canadian Society of Intestinal Research conducted a survey from October 6, 2020, to January 10, 2021, hosting it on our website (badgut.org) and sharing it across a variety of social media platforms. The survey was open internationally to anyone 18 years of age or older. We designed the survey to help understand the experiences of individuals living with obesity and their outlook on living with and managing the disease.

## Results

### Demographics

In total, 1,864 respondents answered many questions and, of those, 1,550 individuals fully completed the survey. The survey was open internationally, but the majority (96%) of respondents were from Canada. The remainder were mostly from the US and Europe. Respondents were from all age groups: 36% were 55-64 years of age, 23% 45-54, 21% 65-74, 11% 35-44, 6% 18-34, and 4% over 75. While obesity rates are similar in males and females, with slightly higher rates in males,<sup>1</sup> 95% of our respondents were female.

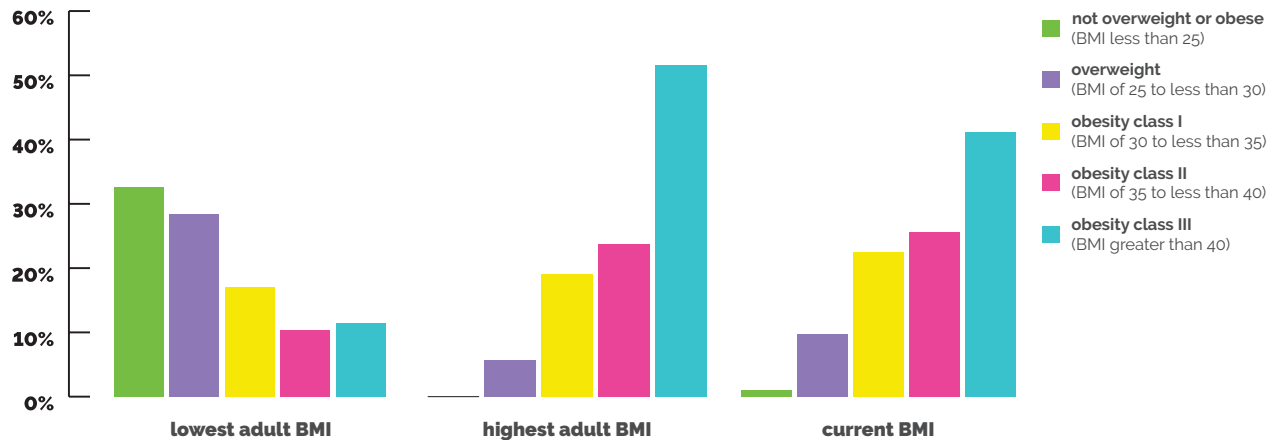
For 67% of the respondents, obesity is a disease that they struggled with for decades, with 30% having experienced obesity for more than 39 years and another 37% for 20-39 years.



## Body Mass Index (BMI)

BMI is a calculation that involves dividing a person's weight in kilograms by their height in metres squared. Because of the simplicity of this measurement, physicians are questioning its validity as a diagnostic tool. For example, someone who weighs 80 kg (176 lbs) and is 1.75 m (5'9") tall would have a BMI of about 27 (80/1.75<sup>2</sup>). Medical experts define overweight as a BMI of 25-29.9 kg/m<sup>2</sup> and obesity as a body mass index (BMI) of 30 kg/m<sup>2</sup> or greater. They also subdivide obesity into three primary categories: obesity class I (30-34.9 kg/m<sup>2</sup>), obesity class II (35-39.9 kg/m<sup>2</sup>), and obesity class III (≥40 kg/m<sup>2</sup>).

**Even though there is much more to obesity than body mass index, we are using it here for statistical purposes. Please indicate your current BMI as well as the lowest and highest BMI that you have experienced in adulthood.**



In our survey, respondents had to have been overweight or obese at some point. When asked to state their highest BMI class, 52% had obesity class III, 24% obesity class II, 19% obesity class I, and 6% overweight. Looking at respondents' lowest adult weights, 33% had been a healthy weight at some point, but only 1% of respondents were at a healthy weight at the time they took the survey. This shows how difficult it is to keep weight off in the long run.

## Stigma

Stigma is a commonly reported experience of those with obesity, and this can lead to mistreatment in countless areas of life. In our survey, 72% of respondents had experienced stigma due to their size. In those whose highest weight was obesity class III, this number climbed to 83%. Many of our survey respondents avoided getting medical care as they felt that their physician shames them for being fat, which can lead to more health problems because they don't get timely treatment for any conditions they might develop, including those that are not related to obesity. In the words of one respondent, "I don't go to the doctor as often as I should because I feel like a failure and that all my medical issues are caused by my obesity." According to another, "I've received the most shame about my weight from doctors to the point I'm scared to go. They should help, not shame."

This stigma reaches beyond healthcare and into other

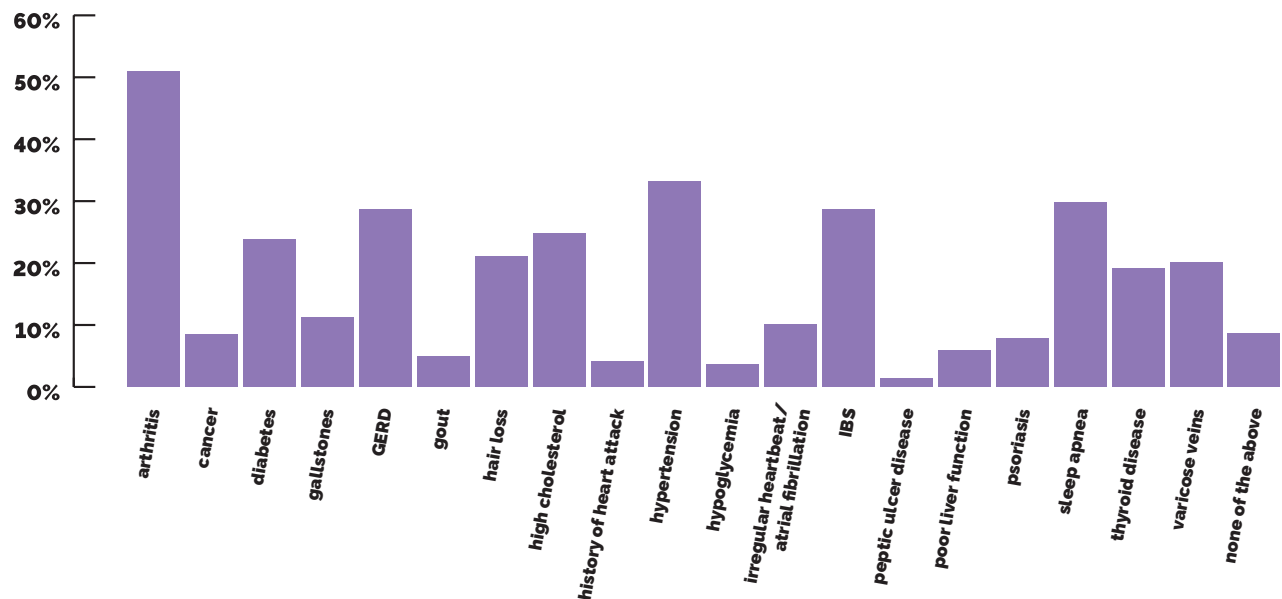
areas of life, including work and family. People are concerned that others see them as lazy, stupid, and less effective workers than slimmer people. One respondent wrote "The stigma and behind-my-back comments made by my own family are very disheartening." Another included "It makes me feel self conscious and as though I am constantly being judged by others."

## Comorbidities

When presented with a list of potentially-related conditions (see chart), only 9% of respondents did not have any of them. The most common comorbidities were arthritis (51%), hypertension (33%), sleep apnea (30%), gastroesophageal reflux disease (29%), irritable bowel syndrome (29%), high cholesterol (25%), and diabetes (24%). These conditions come with their own symptoms, risks, and treatments, which can further complicate the management of obesity.

When asked how much of an effect obesity has on their mental health, 64% of respondents chose from 7 to 10 on a ten-point scale, with ten being it completely affects them and one being it does not affect their mental health at all. "It affects my confidence, leading to poor mental health. It seeps into every aspect of my life and worsens my quality of life." Only 2% claimed that obesity does not affect their mental health.

## Do you have any of the following medical conditions?



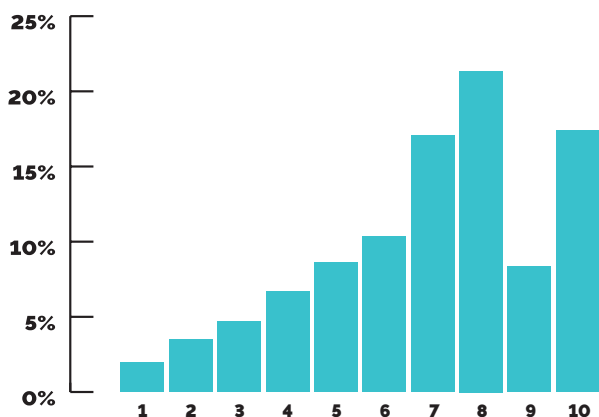
Mental health issues related to obesity can have a large impact on an individual's life, as one respondent put it, "My biggest concern about living with obesity is that not only must I deal with the physical and mental consequences of it but that myself and those like me will never be recognized as having a chronic disease or worthy of the time and money it would take to effectively manage it."

## Weight Loss Struggles

The most common treatment prescribed for individuals with obesity is weight loss, typically by dietary changes and exercise. It is a complex treatment that involves persistent effort to constantly monitor food intake and eat at a deficit while feeling hungry all the time. This puts a lot of pressure on individuals to cure their own disease and increases the stigma that diet alone can easily fix obesity. In reality, weight loss is much more difficult and complex. The body has hormonal influences and metabolic adaptations that fight hard to keep a person from losing weight long-term, and there are other barriers, such as mental health conditions or other illnesses. Many individuals with obesity are constantly yo-yoing in weight, often successfully losing, and then regaining, up to hundreds of pounds over and over in an endless cycle that can lead to feelings of hopelessness.

We asked the survey participants to tell us what their greatest difficulties were in dieting. The two most common obstacles were keeping the weight off (55%) and sticking to it (54%). Others found that it was too difficult to adhere to a specific diet (40%), they missed their favourite foods (29%), dieting led to bingeing (28%), it was too expensive (25%), or they hated the food they could eat (13%). They could also write in specific challenges they faced, some of

## To what degree does living with obesity have an impact on your mental health?



which included feeling hungry constantly, having no time or feeling too tired to prepare meals, emotional eating or stress, losing motivation, having gastrointestinal (GI) conditions that limit which foods they can eat, being surrounded by unsupportive family, or that dieting just doesn't seem to help.

However, respondents were still eager to lose weight, with less than 1% saying they did not wish to lose any weight. Each person's struggle with obesity is different, and with varied reasons why they do or do not want to lose weight. In our survey, respondents typically wanted to lose weight for health reasons (89%), to ease joint pain (69%), to feel more attractive (43%), or to have more confidence (43%).

In addition, when asked how their life would be different at their ideal weight, only 2% thought that it wouldn't change at all, whereas 85% believed that they would have more energy, 73% an overall sense of wellbeing, 53% would be happier, 50% would be able to fit in clothes they like, 42% would be able to walk up stairs, and 26% felt that they would have more advantages.

## GI Conditions and Obesity

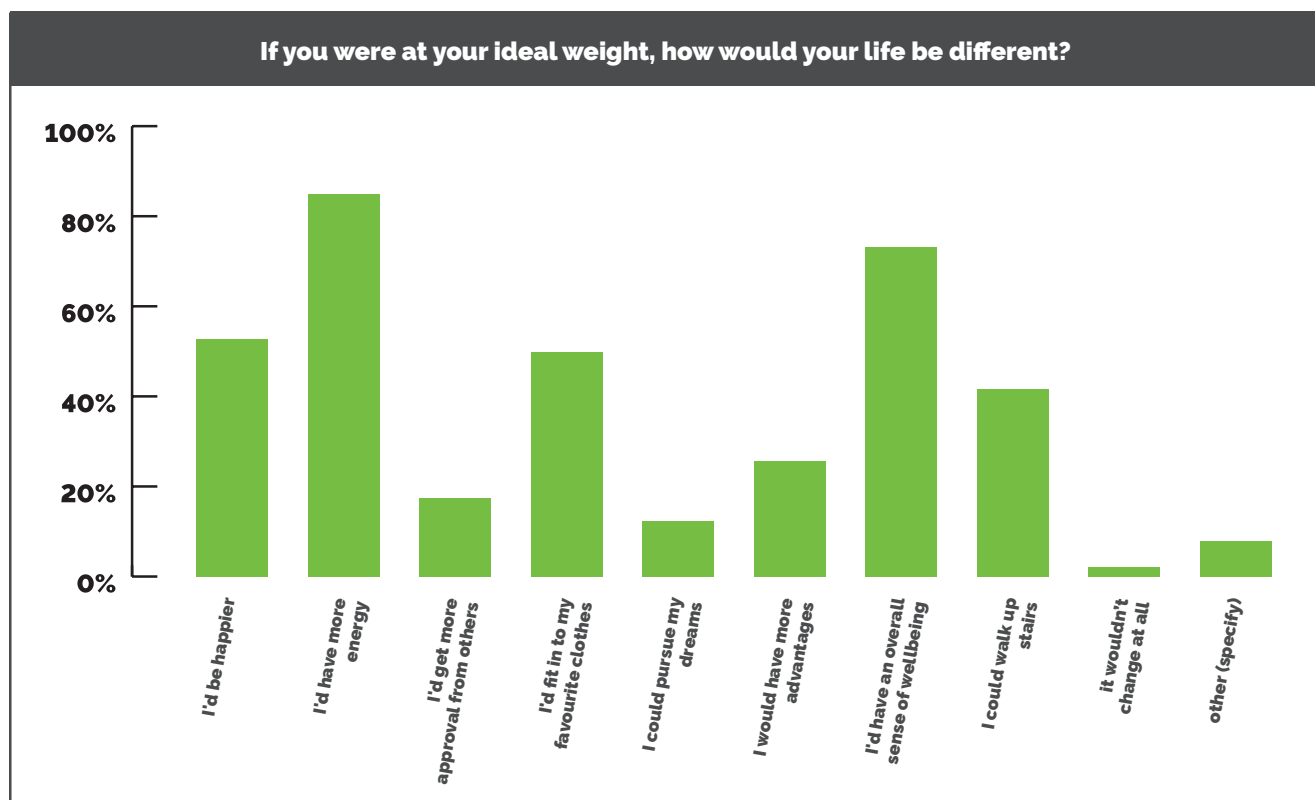
When asked what their greatest difficulties were in losing

weight, several respondents indicated that their digestive condition limited what they could eat. This included conditions such as irritable bowel syndrome, celiac disease, inflammatory bowel disease, and various allergies and intolerances. Some GI conditions make it difficult to eat lower-calorie, higher-fibre, nutritious foods, such as fruits, vegetables, and legumes, which can increase symptoms like abdominal pain, bloating, and diarrhea. Instead, these individuals find it more comfortable to eat foods such as white bread and rice that tend to digest easier, but aren't very filling or nutritious, which can lead to weight gain in individuals who also suffer from nutrient deficiencies.

Some conditions can also be worsened by obesity, such as GERD and constipation, as a result of extra pressure on organs from increased abdominal fat.

## Experience with Medications

For a disease that affects 26.8% of Canadians,<sup>1</sup> there are very few medication options, and those that are available do not have public or full private coverage. Available medications include naltrexone and bupropion (Contrave®), which suppresses appetite, liraglutide (Saxenda®), which



regulates appetite level, and orlistat (Xenical®), which prevents the body breaking dietary fat into absorbable components.

Despite decades of struggling with obesity, most of the survey respondents had never used a medication to treat their disease. However, respondents expressed concerns over both obtaining prescriptions for medications and paying for the costs of these drugs. We received comments about these difficulties, including “My doctor refused to try any weight loss drugs for me,” and “Obesity has been classed as a chronic disease yet there is no funding for medications in the same manner as other chronic diseases.”

For other chronic diseases, such as high blood pressure, diabetes, and arthritis, there are many available medications, and numerous healthcare professionals willing to prescribe them. Yet, there are so few options for those living with the chronic disease of obesity.

## Experience with Bariatric Surgery

Bariatric surgery often leads to significant weight loss and reversal of several obesity-related diseases, such as type 2 diabetes and high blood pressure, but many individuals and their physicians prefer to keep it a last resort because it can also have serious side effects. There are four types of surgery currently available in Canada: gastric sleeve, gastric bypass, gastric band, and intragastric balloons.

In our survey, 32% indicated that they would never consider bariatric surgery to treat their obesity; however, 36% would consider bariatric surgery and 11% had already had bariatric surgery. Another 20% of respondents were not sure if they would or would not consider it. For those who want bariatric surgery, the waiting lists are often very long, and it can be out of reach financially.

## Conclusions

Obesity is a complex disease with countless potential causes and experiences. It can have a significant effect on mental health and influence the development of various other conditions, yet people with obesity are often afraid to seek medical help due to stigma and poor treatment. While most physicians simply tell those with obesity to eat less and exercise more, weight loss is much more complex, and we need more effective treatment options to reduce the prevalence of this disease.

## About the GI Society

As the Canadian leader in providing trusted, evidence-based information on all areas of the gastrointestinal tract, the GI (Gastrointestinal) Society is committed to improving the lives of people with GI and liver conditions, supporting research, advocating for appropriate patient access to healthcare, and promoting gastrointestinal and liver health. We have been covering obesity-related issues for years.

## Acknowledgements

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<sup>1</sup> Statistics Canada. Health Fact Sheets: Overweight and obese adults, 2018. Available at: <https://www150.statcan.gc.ca/n1/pub/82-625-x/2019001/article/00005-eng.pdf>. Accessed 2021-05-18.

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### Please Note

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