

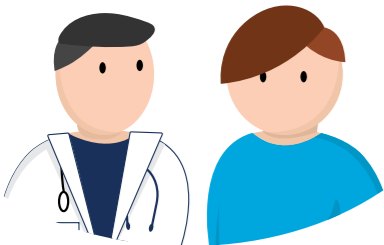
## Struggling to lose weight and keep it off? Science can help explain why.

Science has shown us what we long suspected: after losing weight, our body's biological response is to try to regain it. Scientists found that after weight loss, the levels of a variety of vitamins, minerals, peptides, and hormones involved in the regulation of body weight were disrupted for at least 1 year after losing weight. These changes can alter appetite regulation, leading to increased hunger and eating more food than our bodies need.

The challenge we face is that **biological responses** to weight loss can lead to **weight regain**. As it turns out, losing and maintaining weight isn't just about willpower.



That is why it is so common for people to regain the weight they lost and it is one of the challenges you may face when trying to maintain your weight.

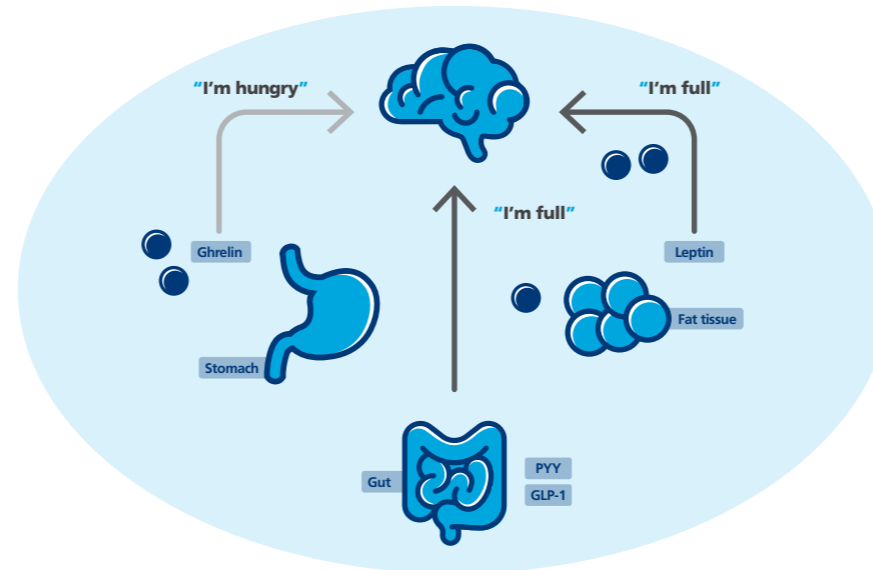


This is changing how doctors approach the management of obesity, so it's important to have a new conversation with your doctor about your weight.

## What are the hormones that control your appetite?

Our bodies have a complex system which regulates appetite and food intake. It is controlled by interactions that occur between your nervous system, vitamins and minerals, physical sensations, sleep-wake cycle, and **hormones**—chemical messengers that carry signals or messages to different organs in your body.

Changes in our appetite hormone levels can make us feel hungry or full. Organs in our bodies such as the stomach, gut, and fat tissue use hormones to send messages to the brain to let us know if we are "feeling hungry" or "feeling full".



GLP-1, glucagon-like peptide 1; PYY, peptide YY.  
Simplified overview of hormones involved in appetite regulation.

There is more to overcoming our feelings of hunger and our cravings for food we enjoy than just willpower. There are other factors and biological processes beyond our control that can influence our ability to manage our weight.

It's not that you haven't tried hard enough or aren't motivated. The truth is, there are other factors that can affect our ability to manage our weight including:

Appetite signals | Genetics | Behaviour | Environment

## The benefits of weight loss

The good news is you don't have to lose as much weight as you may think to see an impact on your health. Losing even 5%–10% of your weight can help you to take part in physical activities you enjoy more often and may improve weight-related health conditions such as:

- ✓ High blood pressure
- ✓ Type 2 diabetes
- ✓ Sleep apnea
- ✓ High cholesterol
- ✓ Heart disease

**The good news:**  
5% to 10% weight loss may help improve your health.

## What is the current approach to obesity management?

The long-term management of obesity may involve a combination of treatment options:

### Treatments:



#### Behavioural intervention:

- Includes nutrition, physical activity, and cognitive-behavioural therapy



#### Pharmacotherapy added to behavioural intervention:

- BMI  $\geq 27$  kg/m<sup>2</sup> + risk factors or BMI  $\geq 30$  kg/m<sup>2</sup>
- If 0.5 kg per week has not been lost by 3–6 months after behavioural and lifestyle changes



#### Bariatric surgery:

- BMI  $\geq 35$  kg/m<sup>2</sup> + risk factors or BMI  $\geq 40$  kg/m<sup>2</sup>
- If other weight loss attempts have been unsuccessful
- Requires lifelong medical monitoring

BMI, body mass index.

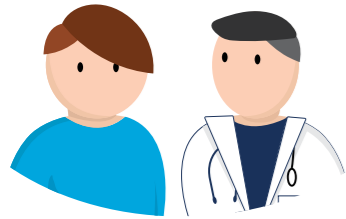
## What's next?

It's important to remember that you haven't failed if you don't lose the amount of weight you initially expected and it's normal for weight loss to plateau. Managing your weight is a lifelong process, so it's important to have regular conversations with your doctor about it, just as you would about other conditions or concerns you may have about your health.

### Let's start the conversation.

#### Questions to ask my doctor

- Why am I able to lose weight, but have trouble keeping it off?
- Is my current weight putting me at risk for other medical conditions or diseases?
- What can I start doing to help manage my weight?



I thought losing weight was about willpower

### Turns out, it's about science.

There is more to weight management than just diet and exercise.

Obesity is a chronic medical condition that requires ongoing management. If your goal is to lose weight and maintain it in the long term, start the conversation. Talk to your doctor about managing your weight and your health to determine the treatment option that is right for you.

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