

Obesity



Medically reviewed by [Alana Biggers, M.D., MPH](#) — Written by Danielle Moores — Updated on July 31, 2020

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What is obesity?

Body mass index (BMI) is a calculation that takes a person's weight and height into account to measure body size.

In adults, obesity is defined as having a [BMI of 30.0 or more](#) ✓, according to the Centers for Disease Control and Prevention (CDC).

Obesity is associated with a higher risk for serious diseases, such as type 2 diabetes, heart disease, and cancer.

Obesity is common. The CDC estimates that [42.4 percent](#) ✓ of Americans 20 years old and older had obesity in 2017 to 2018.

But BMI isn't everything. It has some limitations as a metric.

According to the [CDC](#) ✓: "Factors such as age, sex, ethnicity, and muscle mass can influence the relationship between BMI and body fat. Also, BMI doesn't distinguish between excess fat, muscle, or bone mass, nor does it provide any indication of the distribution of fat among individuals."

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How is obesity classified?

The following [classes](#) are used for adults who are at least 20 years old:

BMI	Class
18.5 or under	underweight
18.5 to <25.0	“normal” weight
25.0 to <30.0	overweight
30.0 to <35.0	class 1 obesity
35.0 to <40.0	class 2 obesity
40.0 or over	class 3 obesity (also known as morbid , extreme, or severe obesity)

What is childhood obesity?

For a doctor to diagnose a child over [2 years old or a teen](#) with obesity, their BMI has to be in the [95th percentile](#) for people of their same age and biological sex:

Percentile range of BMI	Class
>5%	underweight
5% to <85%	“normal” weight
85% to <95%	overweight

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What causes obesity?

Eating more calories than you burn in daily activity and exercise — on a long-term basis — can lead to obesity. Over time, these extra calories add up and cause weight gain.

But it's not always just about calories in and calories out, or having a sedentary lifestyle. While those are indeed causes of obesity, some causes you can't control.

Common specific causes of obesity include:

- genetics, which can affect how your body processes food into energy and how fat is stored
- **growing older**, which can lead to less muscle mass and a slower metabolic rate, making it easier to gain weight
- **not sleeping enough**, which can lead to hormonal changes that make you feel hungrier and crave certain high-calorie foods
- **pregnancy**, as weight gained during pregnancy may be difficult to lose and might eventually lead to obesity

Certain health conditions can also lead to weight gain, which may lead to obesity. These include:

- **polycystic ovary syndrome (PCOS)**, a condition that causes an **imbalance** of female reproductive hormones
- Prader-Willi syndrome, a rare condition present at birth that causes excessive hunger
- **Cushing syndrome**, a condition caused by having **high cortisol levels** (the stress hormone) in your system
- **hypothyroidism** (underactive thyroid), a condition in which the **thyroid gland** doesn't produce enough of certain important hormones

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A complex mix of factors can increase a person's risk for obesity.

Genetics

Some people have genes that make it difficult for them to lose weight.

Environment and community

Your environment at home, at school, and in your community can all influence how and what you eat, and how active you are.

You may be at a higher risk for obesity if you:

- live in a neighborhood with [limited healthy food options](#) or with [many](#) high-calorie food options, like fast-food restaurants
- haven't yet learned to cook healthy meals
- [don't think you can afford healthier foods](#)
- [haven't found](#) a good place to play, walk, or exercise in your neighborhood

Psychological and other factors

[Depression](#) can sometimes lead to weight gain, as some people may turn to food for emotional comfort. Certain [antidepressants](#) can also increase

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Medications, such as [steroids](#) or [birth control pills](#), can also raise your risk for weight gain.

How is obesity diagnosed?

BMI is a rough calculation of a person's weight in relation to their height.

Other more accurate measures of [body fat](#) and body fat distribution include:

- skinfold thickness tests
- [waist-to-hip comparisons](#)
- screening tests, such as [ultrasounds](#), [CT scans](#), and [MRI scans](#)

Your doctor may also order certain tests to help diagnose obesity-related health risks. These may include:

- [blood tests](#) to examine [cholesterol](#) and [glucose](#) levels
- [liver function tests](#)
- [a diabetes screening](#)
- [thyroid tests](#)
- heart tests, such as an [electrocardiogram](#) (ECG or EKG)

A measurement of [the fat around your waist](#) is also a good predictor of your risk for obesity-related diseases.

What are the complications of obesity?

Obesity can lead to more than simple weight gain.

Having a high ratio of body fat to muscle puts strain on your bones as well as your internal organs. It also increases [inflammation](#) in the body, which is thought to be a risk factor for cancer. Obesity is also a [maior risk factor](#)

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- [fatty liver disease](#)
- [high cholesterol](#)
- [sleep apnea](#) and other breathing problems
- [arthritis](#)
- [infertility](#)

How is obesity treated?

If you have obesity and been unable to lose weight on your own, medical help is available. Start with your [primary care physician](#), who may be able to refer you to a weight specialist in your area.

Your doctor may also want to work with you as [part of a team](#) helping you lose weight. That team might include a [dietitian](#), [therapist](#), or other healthcare staff.

Your doctor will work with you on making needed lifestyle changes. Sometimes, they may recommend medications or weight loss surgery as well. [Learn more about treatment for obesity.](#)

Which lifestyle and behavioral changes can help with weight loss?

Your healthcare team can educate you on food choices and help develop [a healthy eating plan](#) that works for you.

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Lifestyle and behavioral changes are the preferred weight loss methods for children, unless they're extremely overweight.

Which medications are prescribed for weight loss?

Your doctor may also prescribe certain prescription weight loss medications in addition to eating and exercise plans.

Medications are usually prescribed only if other methods of weight loss haven't worked and if you have a BMI of 27.0 or more in addition to obesity-related health issues.

Prescription weight loss medications either prevent the absorption of fat or suppress appetite. The following are approved for long-term use (at least 12 weeks) by the Food and Drug Administration (FDA):

- [phentermine/topiramate](#) (Qsymia)
- [naltrexone/bupropion](#) (Contrave)
- [liraglutide](#) (Saxenda)
- [orlistat](#) (Alli, Xenical), the only one that's FDA-approved for use in children 12 years old and older

These drugs can have unpleasant side effects. For example, orlistat can lead to oily and frequent bowel movements, bowel urgency, and gas.

Your doctor will monitor you closely while you're taking these medications.

What are the types of weight loss surgery?

Weight loss surgery is commonly called bariatric surgery.

This type of surgery works by limiting how much food you can comfortably eat or by preventing your body from absorbing food and

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However, nonsurgical options aren't always effective at helping people with obesity lose weight and reduce their risk for comorbidities.

Types of weight loss surgery include:

- **Gastric bypass surgery.** In this [procedure](#), your surgeon creates a small pouch at the top of your stomach that connects directly to your small intestine. Food and liquids go through the pouch and into the intestine, bypassing most of the stomach. It's also known as Roux-en-Y gastric bypass (RYGB) surgery.
- **Laparoscopic adjustable gastric banding (LAGB).** LAGB separates your stomach into two pouches using a band.
- **Gastric sleeve surgery.** This [procedure](#) removes part of your stomach.
- **Biliopancreatic diversion with duodenal switch.** This procedure removes most of your stomach.

Candidates for surgery

For decades, experts recommended that adult candidates for weight loss surgery have a BMI of at least 35.0 (classes 2 and 3).

However, in 2018 guidelines, the [American Society for Metabolic and Bariatric Surgery \(ASMBS\)](#) endorsed weight loss surgery for adults with BMIs of 30.0 up to 35.0 (class 1) who:

- have related comorbidities, especially type 2 diabetes
- haven't seen sustained results from nonsurgical treatments, such as eating and lifestyle modifications

For individuals with class 1 obesity, surgery is most effective for those between the ages of 18 and 65 years old.

People will often have to lose some weight before undergoing surgery.

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How can you prevent obesity?

There's been a dramatic increase in obesity and in obesity-related diseases in the last couple decades. This is the reason why communities, states, and the federal government are putting an emphasis on healthier [food choices](#) and [activities](#) to help turn the tide on obesity.

On a personal level, you can help [prevent weight gain and obesity](#) by making healthier lifestyle choices:

- [Aim for moderate exercise](#) like [walking](#), [swimming](#), or [biking](#) for 20 to 30 minutes every day.
- [Eat well](#) by choosing nutritious foods, like [fruits](#), [vegetables](#), [whole grains](#), and [lean protein](#).
- Eat high-fat, high-calorie foods in moderation.

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