

# Childhood obesity

[Request an Appointment](#)[Symptoms & causes](#)[Diagnosis & treatment](#)[Doctors & departments](#)

## Overview

Childhood obesity is a serious health condition that involves having excess body fat early in life. The extra weight often starts children on the path to other health conditions such as diabetes and high blood pressure. Childhood obesity also can lead to poor self-esteem and depression.

The symptoms of childhood obesity aren't straightforward or simply based on how children look. And various factors can play a part in causing this condition. Some factors may be within a family's ability to change, such as eating and physical activity habits. Many other possible factors can't be changed, such as those related to genes and hormones.

You can help manage or prevent childhood obesity by having your whole family regularly eat balanced meals and snacks. It also helps for the whole family to lead an active lifestyle. Steps such as these help protect your child's health now and in the future.

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# Symptoms

The symptoms of childhood obesity aren't clear-cut. Not all children who carry extra pounds are overweight. Some children have larger than average body frames. And it's typical for children to carry different amounts of body fat at the various stages of development. So you might not know if weight is a concern based on how your child looks.

A measurement called the body mass index (BMI) helps healthcare professionals check for overweight status and obese status. A child's BMI is based on the child's weight and height compared with those of other children the same age and sex using growth charts. Speak with your child's healthcare professional about how your child's BMI fits with other clues of children's health. For instance, growth patterns, eating and activity habits, stress, sleep, and family history also play a key role in health. Other tests also can help your child's healthcare professional figure out if your child's weight might pose health risks.

## When to see a doctor

If you're worried that your child is putting on too much weight, talk with your child's healthcare professional. Get a healthcare checkup right away if your child also has any of the following symptoms:

- Headaches that don't go away for a long time.
- High blood pressure.
- Extreme thirst and frequent urination.
- Breathing that starts and stops many times during sleep.
- Poor growth compared with other children of the same sex and age.

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## Causes

Childhood obesity is a complex condition. Various factors can play a part in causing it. These include:

- Genetic and hormonal factors.
- Food access.
- Stress.
- Sleep.
- Social and economic factors.
- Eating and physical activity habits.

#### More Information

[Mayo Clinic Minute: Out of shape kids and diabetes](#)

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## Risk factors

Many risk factors make childhood obesity more likely. Some factors that might be within your family's ability to change include the following:

- **Eating habits.** Frequently eating foods that have lots of added sugar, saturated fat or sodium can cause your child to gain weight. These include fast foods, baked goods and vending machine snacks. Candy and desserts also can cause weight gain. So can sugary drinks such as sodas, fruit juices and sports drinks. These types of foods and drinks are found everywhere, and they're designed to appeal to the taste buds. It's OK to enjoy treats such as these once in a while. Try to eat or drink them slowly and mindfully,

paying attention to each bite or sip. And be sure to look at the serving sizes listed on the labels. Try not to have more than those amounts in one sitting.

- **Not enough movement.** Children who don't get enough daily movement are more likely to gain weight. So encourage your child or teen to get at least 60 minutes of physical activity a day. Too much time spent being inactive also plays a part in weight gain. Examples of being inactive include sitting to watch TV, play video games or use lots of social media. TV and online shows also may feature junk food commercials or ads. If your child is age 2 or older, try to limit leisure screen time not used for schoolwork to no more than two hours a day. If your child is younger than 2, don't let your child have any screen time.
- **Mental health factors.** Personal stress and family stress can raise a child's risk of obesity. Ongoing stress can cause the body to make high amounts of hormones such as cortisol. High levels of these hormones can cause feelings of increased hunger. They also can trigger cravings for foods that have lots of fat and added sugar. If you think your child has too much stress, talk with your child's healthcare professional. You may be referred to a counselor or another mental healthcare professional who can test your child and offer treatment if needed.
- **Certain medicines.** Some prescription medicines can raise the risk of obesity. They include prednisone, lithium, amitriptyline, paroxetine (Paxil), gabapentin (Neurontin, Gralise, Horizant), propranolol (Inderal LA, Hemangeol), quetiapine (Seroquel), carbamazepine (Carbatrol, Tegretol, others), medroxyprogesterone (Depo-Provera), olanzapine (Zyprexa) and risperidone (Risperdal). Your child's healthcare professional can review the medicines that your child takes. If a certain medicine might be causing weight gain, the healthcare professional might change the dose or switch medicines.

Some other factors for childhood obesity may be out of a parent's ability to control. They include the following:

- **Family factors.** If your child comes from a family of people who tend to gain weight easily, your child may be more likely to put on weight.
  - **Genes and hormones.** Sometimes, changes to certain genes can play a part in childhood obesity. So can conditions linked with hormones and many other processes that happen inside the body.
  - **Social and economic factors.** People in some communities have limited resources and limited access to supermarkets. As a result, their main access to foods may be convenience foods that don't spoil quickly. These include frozen meals, crackers and cookies. Access to fresh produce, meats and other proteins, and whole grain foods may be limited. And access to safe places for movement activities and outdoor hobbies also may be limited.
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## Complications

Childhood obesity often causes health concerns and conditions known as complications. These can affect a child's physical, social and mental well-being.

### Physical complications

Physical complications of childhood obesity can include:

- **Type 2 diabetes.** This long-term condition affects the way the body uses sugar, also called glucose. Obesity and an inactive lifestyle raise the risk of type 2 diabetes.
- **High cholesterol and high blood pressure.** A poor diet can cause one or both of these conditions. High cholesterol and high blood pressure can play a part in the buildup of plaques in the arteries. The buildup can cause arteries to narrow and harden. And that may lead to a heart attack or stroke later in life.
- **Joint pain.** Extra weight causes more stress on hips and knees. Childhood obesity can cause pain and sometimes injuries in the hips, knees and back.

- **Breathing conditions.** Asthma is more common in children who are overweight. These children also are more likely to develop obstructive sleep apnea. Obstructive sleep apnea can be a serious condition in which breathing stops and starts many times during sleep.
- **Metabolic dysfunction-associated steatotic liver disease.** This condition causes fatty deposits to build up in the liver. It usually causes no symptoms. But it can lead to liver scarring and damage. The condition used to be known as nonalcoholic fatty liver disease.

## Social and mental health complications

Children who have obesity may get teased or bullied by their peers. As a result, they may lose self-esteem. They also can have a higher risk of depression, anxiety and eating disorders.

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## Prevention

To help prevent childhood obesity, take the following steps:

- **Set a good example.** Make healthy eating and regular physical activity a family affair. That way, everyone benefits and no one feels singled out. It's ideal for your child to get an hour of physical activity a day at least five days a week.
- **Offer balanced meals and snacks each day.** To serve a balanced meal, think of the space for food on a plate. Fruits and vegetables should take up half of the plate. Grains such as bulgur, brown rice and whole-wheat pasta should take up a quarter of the plate. Proteins such as lean meat, poultry, seafood and lentils should take up the other quarter of the plate. Between meals, offer snacks that have lots of nutrients and little added sugar, saturated fat and sodium. Examples of balanced snacks include yogurt with berries, an apple with nut butter, and whole grain crackers with turkey and avocado. Feel free to get creative when you combine different foods.

- **Keep offering new foods.** Your child might not like a new food right away. But if you offer it again, your child may learn to enjoy it over time.
- **Support a healthy relationship with junk food.** Some foods such as fast food, cookies and chips are tasty, but they don't have much nutrition. Many junk foods also have high levels of saturated fat, sodium or added sugar. Sweet drinks and fruit juices also tend to have lots of sugar with little to no nutrition. Explain to your children that they can enjoy these tasty foods on occasion, such as ice cream during a family day out. But help them understand that junk foods don't give the all-day energy that nutritious foods provide. Think about keeping junk foods off the grocery list and out of the home. Doing so could help the family focus on nutritious foods for meals and snacks.
- **Limit screen time.** Don't let your family watch TV during meals, and have family members put phones and tablets away. Since your child likely will use screens at other times, think about setting a time limit that everyone in the home follows. Encourage children to have fun doing things that don't involve a screen.
- **Choose rewards that aren't food.** Try not to promise your child snacks for good behavior. Suggest a fun activity reward instead. Examples include playing a game together or taking a trip to the park or the zoo.
- **Be sure your child gets enough sleep.** Too little sleep may raise the risk of obesity. How much sleep children need depends on their age. For instance, children ages 6 to 12 need about 9 to 12 hours of sleep a day. Teens ages 13 to 18 need about 8 to 10 hours. Try to help your child go to sleep and wake up at the same times each day.
- **Breastfeed your baby.** Breastfeeding your infant from birth to 6 months old may lower the risk of obesity later in life.

Be sure that your child gets well-child checkups at least once a year too. During this visit, a healthcare professional measures your child's height and weight and figures out your child's **B.M.I.** If your child's **B.M.I.** rises a lot over one year, your child may be at risk of becoming overweight.