# Childhood obesity

# Overview

Childhood obesity is a serious medical condition that affects children and adolescents. It's particularly troubling because the extra pounds often start children on the path to health problems that were once considered adult problems -- diabetes, high blood pressure and high cholesterol. Childhood obesity can also lead to poor self-esteem and depression.

One of the best strategies to reduce childhood obesity is to improve the eating and exercise habits of your entire family. Treating and preventing childhood obesity helps protect your child's health now and in the future.

# Symptoms

Not all children carrying extra pounds are overweight. Some children have larger than average body frames. And children normally carry different amounts of body fat at the various stages of development. So you might not know by how your child looks if weight is a health concern.

The body mass index (BMI), which provides a guideline of weight in relation to height, is the accepted measure of overweight and obesity. Your child's doctor can use growth charts, the BMI and, if necessary, other tests to help you figure out if your child's weight could pose health problems.

## When to see a doctor

If you're worried that your child is putting on too much weight, talk to his or her doctor. The doctor will consider your child's history of growth and development, your family's weight-for-height history, and where your child lands on the growth charts. This can help determine if your child's weight is in an unhealthy range.

## Causes

Lifestyle issues -- too little activity and too many calories from food and drinks -- are the main contributors to childhood obesity. But genetic and hormonal factors might play a role as well.

## **Risk factors**

Many factors -- usually working in combination -- increase your child's risk of becoming overweight:

- **Diet**. Regularly eating high-calorie foods, such as fast foods, baked goods and vending machine snacks, can cause your child to gain weight. Candy and desserts also can cause weight gain, and more and more evidence points to sugary drinks, including fruit juices and sports drinks, as culprits in obesity in some people.
- Lack of exercise. Children who don't exercise much are more likely to gain weight because they don't burn as many calories. Too much time spent in sedentary activities, such as watching television or playing video games, also contributes to the problem. TV shows also often feature ads for unhealthy foods.
- **Family factors**. If your child comes from a family of overweight people, he or she may be more likely to put on weight. This is especially true in an environment where high-calorie foods are always available and physical activity isn't encouraged.
- **Psychological factors**. Personal, parental and family stress can increase a child's risk of obesity. Some children overeat to cope with problems or to deal with emotions, such as stress, or to fight boredom. Their parents might have similar tendencies.
- **Socioeconomic factors**. People in some communities have limited resources and limited access to supermarkets. As a result, they might buy convenience foods that don't spoil quickly, such as frozen meals, crackers and cookies. Also, people who live in lower income neighborhoods might not have access to a safe place to exercise.

Certain medications. Some prescription drugs can increase the risk of developing obesity. They include prednisone, lithium, amitriptyline, paroxetine (Paxil), gabapentin (Neurontin, Gralise, Horizant) and propranolol (Inderal, Hemangeol).

# Complications

Childhood obesity often causes complications in a child's physical, social and emotional well-being.

#### **Physical complications**

Physical complications of childhood obesity may include:

- **Type 2 diabetes**. This chronic condition affects the way your child's body uses sugar (glucose). Obesity and a sedentary lifestyle increase the risk of type 2 diabetes.
- **High cholesterol and high blood pressure**. A poor diet can cause your child to develop one or both of these conditions. These factors can contribute to the buildup of plaques in the arteries, which can cause arteries to narrow and harden, possibly leading to a heart attack or stroke later in life.
- Joint pain. Extra weight causes extra stress on hips and knees. Childhood obesity can cause pain and sometimes injuries in the hips, knees and back.
- **Breathing problem**s. Asthma is more common in children who are overweight. These children are also more likely to develop obstructive sleep apnea, a potentially serious disorder in which a child's breathing repeatedly stops and starts during sleep.
- **Nonalcoholic fatty liver disease (NAFLD)**. This disorder, which usually causes no symptoms, causes fatty deposits to build up in the liver. NAFLD can lead to scarring and liver damage.

#### Social and emotional complications

Children who have obesity may experience teasing or bullying by their peers. This can result in a loss of self-esteem and an increased risk of depression and anxiety.

## Prevention

To help prevent excess weight gain in your child, you can:

- Set a good example. Make healthy eating and regular physical activity a family affair. Everyone will benefit and no one will feel singled out.
- Have healthy snacks available. Options include air-popped popcorn without butter, fruits with low-fat yogurt, baby carrots with hummus, or whole-grain cereal with low-fat milk.
- Offer new foods multiple times. Don't be discouraged if your child doesn't immediately like a new food. It usually takes multiple exposures to a food to gain acceptance.
- Choose nonfood rewards. Promising candy for good behavior is a bad idea.

Be sure your child gets enough sleep. Some studies indicate that too little sleep may increase the risk of obesity. Sleep deprivation can cause hormonal imbalances that lead to increased appetite.

Also, be sure your child sees the doctor for well-child checkups at least once a year. During this visit, the doctor measures your child's height and weight and calculates his or her BMI. A significant increase in your child's BMI percentile rank over one year may be a possible sign that your child is at risk of becoming overweight.

## Diagnosis

As part of regular well-child care, the doctor calculates your child's BMI and determines where it falls on the BMI-for-age growth chart. The BMI helps indicate if your child is overweight for his or her age and height.

Using the growth chart, your doctor determines your child's percentile, meaning how your child compares with other children of the same sex and age. For example, if your child is in the 80th percentile, it means that compared with other children of the same sex and age, 80% have a lower BMI.

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- BMI between 85th and 94th percentiles -- overweight
- BMI 95th percentile or above -- obesity
- BMI 99th percentile or higher -- severe obesity

Because BMI doesn't consider things such as being muscular or having a larger than average body frame and because growth patterns vary greatly among children, your doctor also factors in your child's growth and development. This helps determine whether your child's weight is a health concern.

In addition to BMI and charting weight on the growth charts, the doctor evaluates:

- Your family's history of obesity and weight-related health problems, such as diabetes
- Your child's eating habits
- Your child's activity level
- Other health conditions your child has

• Psychosocial history, including incidences of depression, sleep disturbances, and sadness and whether your child feels isolated or alone or is the target of bullying

#### **Blood tests**

Your child's doctor might order blood tests that may include:

- A cholesterol test
- A blood sugar test
- Other blood tests to check for hormone imbalances or other conditions associated with obesity

Some of these tests require that your child not eat or drink anything before the test. Ask if your child needs to fast before a blood test and for how long.

# Treatment

Treatment for childhood obesity is based on your child's age and whether he or she has other medical conditions. Treatment usually includes changes in your child's eating habits and physical activity level. In certain circumstances, treatment might include medications or weight-loss surgery.

#### Treatment for children with BMIs between the 85th and 94th percentiles (overweight)

The American Academy of Pediatrics recommends that children older than 2 whose weight falls in the overweight category be put on a weight-maintenance program to slow the progress of weight gain. This strategy allows the child to add inches in height but not pounds, causing the BMI to drop over time into a healthier range.

#### Treatment for children with BMIs at the 95th percentile or above (obesity)

Children ages 6 to 11 whose weight falls into the obesity category might be encouraged to modify their eating habits for gradual weight loss of no more than 1 pound (or about 0.5 kilogram) a month. Older children and adolescents who have obesity or severe obesity might be encouraged to modify their eating habits to aim for weight loss of up to 2 pounds (or about 1 kilogram) a week.

The methods for maintaining your child's current weight or losing weight are the same: Your child needs to eat a healthy diet -- both in terms of type and amount of food -- and increase physical activity. Success depends largely on your commitment to helping your child make these changes.

# Healthy eating

Parents are the ones who buy groceries, cook meals and decide where the food is eaten. Even small changes can make a big difference in your child's health.

- **Prioritize fruits and vegetables**. When food shopping, cut back on convenience foods -- such as cookies, crackers and prepared meals -- which are often high in sugar, fat and calories.
- Limit sweetened beverages. This includes beverages that contain fruit juice. These drinks provide little nutritional value in exchange for their high calories. They can also make your child feel too full to eat healthier foods.
- Avoid fast food. Most of the menu options are high in fat and calories.
- Sit down together for family meals. Make it an event -- a time to share news and tell stories. Discourage eating in front of a TV, computer or video game screen, which can lead to fast eating and lowered awareness of the amount eaten.
- Serve appropriate portion sizes. Children don't need as much food as adults do. Start with a small portion and your child can ask for more if they're still hungry. Allow your child to eat only until full, even if that means leaving food on the plate. And remember, when you eat out, restaurant portion sizes are often way too large.

# **Physical activity**

A critical part of achieving and maintaining a healthy weight, especially for children, is physical activity. It burns calories, strengthens bones and muscles, and helps children sleep well at night and stay alert during the day.

Good habits established in childhood help adolescents maintain healthy weights And active children are more likely to become fit adults.

To increase your child's activity level:

• Limit TV time. Recreational screen time -- in front of a TV, computer, tablet or smart phone -- should be limited to no more than two hours a day for children older than 2. Children younger than 2 should have no screen time at all.

- Emphasize activity, not exercise. Children should be moderately to vigorously active for at least an hour a day. Your child's activity doesn't have to be a structured exercise program -- the object is to get him or her moving. Free-play activities -- such as playing hide-and-seek, tag or jump-rope -- can be great for burning calories and improving fitness.
- Find activities your child likes. For instance, if your child is artistically inclined, go on a nature hike to collect leaves and rocks that your child can use to make a collage. If your child likes to climb, head for the nearest neighborhood jungle gym or climbing wall. If your child likes to read, then walk or bike to the neighborhood library for a book.

## **Medication**

Medication might be prescribed for some children and adolescents as part of an overall weight-loss plan.

# Weight-loss surgery

Weight-loss surgery might be an option for adolescents with severe obesity, who have been unable to lose weight through lifestyle changes. However, as with any type of surgery, there are potential risks and long-term complications. Discuss the pros and cons with your child's doctor.

Your doctor might recommend this surgery if your child's weight poses a greater health threat than do the potential risks of surgery. It's important that a child being considered for weight-loss surgery meet with a team of pediatric specialists, including an obesity medicine expert, psychologist and dietitian.

Weight-loss surgery isn't a miracle cure. It doesn't guarantee that an adolescent will lose their excess weight or be able to keep it off long term. And surgery doesn't replace the need for a healthy diet and regular physical activity.

# Coping and support

Parents play a crucial role in helping children feel loved and in control of their weight. Take advantage of every opportunity to build your child's self-esteem. Don't be afraid to bring up the topic of health and fitness. Talk to your kids directly, openly, and without being critical or judgmental.

In addition, consider the following:

- Avoid weight talk. Negative comments about your own, someone else's or your child's weight -- even if well intended -- can hurt your child. Negative talk about weight can lead to poor body image. Instead, focus your conversation on healthy eating and positive body image.
- **Discourage dieting and skipping meals**. Instead, encourage and support healthy eating and increased physical activity.
- Find reasons to praise your child's efforts. Celebrate small, incremental changes in behavior but don't reward with food. Choose other ways to mark your child's accomplishments, such as going to the bowling alley or a local park.
- Talk to your child about his or her feelings. Help your child find ways other than eating to deal with emotions.
- Help your child focus on positive goals. For example, point out that he or she can now bike for more than 20 minutes without getting tired or can run the required number of laps in gym class.
- **Be patient**. Realize that an intense focus on your child's eating habits and weight can easily backfire, leading a child to overeat even more or possibly making him or her prone to developing an eating disorder.

## Preparing for an appointment

Your child's family doctor or pediatrician will probably make the initial diagnosis of childhood obesity. If your child has complications from being obese, you might be referred to additional specialists to help manage these complications.

Here's some information to help you get ready for your appointment.

#### What you can do

When you make the appointment, ask if there's anything your child needs to do in advance, such as fast before having certain tests and for how long. Make a list of:

- Your child's symptoms, if any, and when they began
- Key personal information, including a family medical history and history of obesity
- All medications, vitamins or other supplements your child takes, including doses

- What your child typically eats in a week, and how active he or she is
- Questions to ask your doctor

Bring a family member or friend along, if possible, to help you remember all the information you're given.

For childhood obesity, some basic questions to ask your doctor include:

- What other health problems is my child likely to develop?
- What are the treatment options?
- Are there medications that might help manage my child's weight and other health conditions?
- How long will treatment take?
- What can I do to help my child lose weight?
- Are there brochures or other printed material I can have? What websites do you recommend?

Don't hesitate to ask other questions.

#### What to expect from your doctor

Your child's doctor or other health care provider is likely to ask you a number of questions about your child's eating and activity, including:

- What does your child eat in a typical day?
- How much activity does your child get in a typical day?
- What factors do you believe affect your child's weight?
- What diets or treatments, if any, have you tried to help your child lose weight?
- Are you ready to make changes in your family's lifestyle to help your child lose weight?
- What might prevent your child from losing weight?
- How often does the family eat together? Does the child help prepare the food?
- Does your child, or family, eat while watching TV, texting or using a computer?

#### What you can do in the meantime

If you have days or weeks before your child's scheduled appointment, keep a record of what your child eats and how active he or she is.

