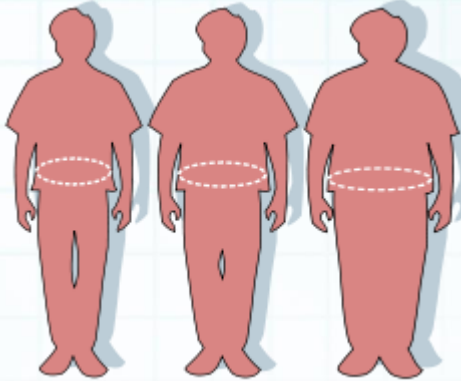


Obesity



Obesity means having too much body fat. It is different from being overweight, which means weighing too much. The weight may come from muscle, bone, fat, and/or body water. Both terms mean that a person's weight is greater than what's considered healthy for his or her height.

Obesity occurs over time when you eat more calories than you use. The balance between calories-in and calories-out differs for each person. Factors that might affect your weight include your genetic makeup, overeating, eating high-fat foods, and not being physically active.

Being obese increases your risk of diabetes, heart disease, stroke, arthritis, and some cancers. If you are obese, losing even 5 to 10 percent of your weight can delay or prevent some of these diseases. For example, that means losing 10 to 20 pounds if you weigh 200 pounds.

Causes

Why do people gain weight?

Our bodies need calories (energy) to keep us alive and active. But to maintain weight we need to balance the energy we take in with the energy we use. When a person eats and drinks more calories than he or she burns, the energy balance tips toward weight gain, overweight, and obesity. The tipping point at which the calories coming in and the calories going out become out of balance and lead to weight gain may differ from one person to another.

What other factors are involved?

Your genes, the world around you, and other factors may all affect weight gain. Learn how to address these factors in the section "How can I improve my health?"

Family

Research shows that obesity tends to run in families, suggesting that genes may contribute to obesity. Families also share diet and lifestyle habits that may affect weight. However, it is possible to manage your weight even if obesity is common in your family.

The World around You

Where people live, play, and work may also strongly affect their weight. Consider the fact that obesity rates were lower 30 years ago. Since that time, our genetic make-up hasn't changed, but our world has.

The world around us affects access to healthy foods and places to walk and be active in many ways:

- Many people drive rather than walk
- Living in areas without sidewalks or safe places to exercise may make it tough to be more active
- Many people eat out or get takeout instead of cooking, which may lead to eating more calories
- Most vending machines do not offer low-calorie, low-fat snacks

Overweight and obesity affect people in all income ranges. But people who live in low-income areas may face even greater barriers to eating healthy foods and being active than other people. High-calorie processed foods often cost less than healthier options, such as fruits and vegetables. There also may be few safe, free, or low-cost places nearby to be active on a regular basis. These factors may contribute to weight gain.

Does my body shape matter?

Health care providers are concerned not only with how much body fat a person has, but where the fat is located on the body.

- Women tend to collect fat in their hips and buttocks, giving them a "pear" shape.
- Men usually build up fat around their bellies, giving them more of an "apple" shape.
- Of course, some men are pear-shaped and some women are apple-shaped, especially after menopause.

Extra fat around your midsection may put you at greater risk for type 2 diabetes, heart disease, and other health problems—even if you have a normal weight. Your provider can help you assess your risk.

Culture

A person's culture may also affect weight:

- Some cultures have foods with a lot of fat or sugar, making it hard to manage weight.
- Family events at which people eat large amounts of food may make it tough to control portions.

Sleep

Research suggests that lack of sleep is linked to overweight and obesity. Recent studies have found that sleeping less may make it harder to lose weight. In these studies, adults who were trying to lose weight and who slept less ate more calories and snacked more.

For more on how obesity and sleep are related, see the Resources section at the end of this fact sheet for a link to the WIN fact sheet [Do You Know Some of the Health Risks of Being Overweight?](#)

Medicine

Certain drugs may cause weight gain. Steroids and some drugs to treat depression or other mental health problems may make you burn calories more slowly or feel hungry. Be sure your health care provider knows all the medicines you are taking (including over-the-counter drugs and dietary supplements). He or she may suggest another medicine that has less effect on weight.

Symptoms

Assessing Your Weight and Health Risk

Assessment of weight and health risk involves using three key measures:

- 1.Body mass index (BMI)
- 2.Waist circumference
- 3.Risk factors for diseases and conditions associated with obesity

Body Mass Index (BMI)

BMI is a useful measure of overweight and obesity. It is calculated from your height and weight. BMI is an estimate of body fat and a good gauge of your risk for diseases that can occur with more body fat. The higher your BMI, the higher your risk for certain diseases such as heart disease, high blood pressure, type 2 diabetes, gallstones, breathing problems, and certain cancers.

Although BMI can be used for most men and women, it does have some limits:

- It may overestimate body fat in athletes and others who have a muscular build.

- It may underestimate body fat in older persons and others who have lost muscle.

Use the BMI Calculator or BMI Tables to estimate your body fat. The BMI score means the following:

BMI

Underweight	Below 18.5
Normal	18.5-24.9
Overweight	25.0- 29.9
Obesity	30.0 and above

Waist Circumference

Measuring waist circumference helps screen for possible health risks that come with overweight and obesity. If most of your fat is around your waist rather than at your hips, you're at a higher risk for heart disease and type 2 diabetes. This risk goes up with a waist size that is greater than 35 inches for women or greater than 40 inches for men. To correctly measure your waist, stand and place a tape measure around your middle, just above your hipbones. Measure your waist just after you breathe out.

The table Risks of Obesity-Associated Diseases by BMI and Waist Circumference provides you with an idea of whether your BMI combined with your waist circumference increases your risk for developing obesity-associated diseases or conditions.

Risk Factors for Health Topics Associated With Obesity

Along with being overweight or obese, the following conditions will put you at greater risk for heart disease and other conditions:

Risk Factors

- High blood pressure (hypertension)
- High LDL cholesterol ("bad" cholesterol)
- Low HDL cholesterol ("good" cholesterol)
- High triglycerides
- High blood glucose (sugar)
- Family history of premature heart disease
- Physical inactivity
- Cigarette smoking

For people who are considered obese (BMI greater than or equal to 30) or those who are overweight (BMI of 25 to 29.9) and have two or more risk factors, it is recommended that you lose weight. Even a small weight loss (between 5 and 10 percent of your current weight) will help lower your risk of developing diseases associated with obesity. People who are overweight, do not have a high waist measurement, and have fewer than two risk factors may need to prevent further weight gain rather than lose weight.

Talk to your doctor to see whether you are at an increased risk and whether you should lose weight. Your doctor will evaluate your BMI, waist measurement, and other risk factors for heart disease.

The good news is even a small weight loss (between 5 and 10 percent of your current weight) will help lower your risk of developing those diseases.

Treatment

Successful weight-loss treatments include setting goals and making lifestyle changes, such as eating fewer calories and being physically active. Medicines and weight-loss surgery also are options for some people if lifestyle changes aren't enough.

Set Realistic Goals

Setting realistic weight-loss goals is an important first step to losing weight.

For Adults

- Try to lose 5 to 10 percent of your current weight over 6 months. This will lower your risk for coronary heart disease (CHD) and other conditions.
- The best way to lose weight is slowly. A weight loss of 1 to 2 pounds a week is do-able, safe, and will help you keep off the weight. It also will give you the time to make new, healthy lifestyle changes.
- If you've lost 10 percent of your body weight, have kept it off for 6 months, and are still overweight or obese, you may want to consider further weight loss.

For Children and Teens

- If your child is overweight or at risk for overweight or obesity, the goal is to maintain his or her current weight and to focus on eating healthy and being physically active. This should be part of a family effort to make lifestyle changes.
- If your child is overweight or obese and has a health condition related to overweight or obesity, your doctor may refer you to a pediatric obesity treatment center.

Lifestyle Changes

Lifestyle changes can help you and your family achieve long-term weight-loss success. Example of lifestyle changes include:

- Focusing on balancing energy IN (calories from food and drinks) with energy OUT (physical activity)
- Following a healthy eating plan
- Learning how to adopt healthy lifestyle habits

Over time, these changes will become part of your everyday life.

Calories

Cutting back on calories (energy IN) will help you lose weight. To lose 1 to 2 pounds a week, adults should cut back their calorie intake by 500 to 1,000 calories a day.

- In general, having 1,000 to 1,200 calories a day will help most women lose weight safely.

- In general, having 1,200 to 1,600 calories a day will help most men lose weight safely. This calorie range also is suitable for women who weigh 165 pounds or more or who exercise routinely.

These calorie levels are a guide and may need to be adjusted. If you eat 1,600 calories a day but don't lose weight, then you may want to cut back to 1,200 calories. If you're hungry on either diet, then you may want to add 100 to 200 calories a day.

Very low-calorie diets with fewer than 800 calories a day shouldn't be used unless your doctor is monitoring you.

For overweight children and teens, it's important to slow the rate of weight gain. However, reduced-calorie diets aren't advised unless you talk with a health care provider.

Healthy Eating Plan

A healthy eating plan gives your body the nutrients it needs every day. It has enough calories for good health, but not so many that you gain weight.

A healthy eating plan is low in saturated fat, trans fat, cholesterol, sodium (salt), and added sugar. Following a healthy eating plan will lower your risk for heart disease and other conditions.

Healthy foods include:

- Fat-free and low-fat dairy products, such as low-fat yogurt, cheese, and milk.
- Protein foods, such as lean meat, fish, poultry without skin, beans, and peas.

- Whole-grain foods, such as whole-wheat bread, oatmeal, and brown rice. Other grain foods include pasta, cereal, bagels, bread, tortillas, couscous, and crackers.

- Fruits, which can be fresh, canned, frozen, or dried.

- Vegetables, which can be fresh, canned (without salt), frozen, or dried.

Canola and olive oils, and soft margarines made from these oils, are heart healthy. However, you should use them in small amounts because they're high in calories.

You also can include unsalted nuts, like walnuts and almonds, in your diet as long as you limit the amount you eat (nuts also are high in calories).

The National Heart, Lung, and Blood Institute's "Aim for a Healthy Weight" patient booklet provides more information about following a healthy eating plan.

Foods to limit. Foods that are high in saturated and trans fats and cholesterol raise blood cholesterol levels and also might be high in calories. Fats and cholesterol raise your risk for heart disease, so they should be limited.

Saturated fat is found mainly in:

- Fatty cuts of meat, such as ground beef, sausage, and processed meats (for example, bologna, hot dogs, and deli meats)

- Poultry with the skin

- High-fat dairy products like whole-milk cheeses, whole milk, cream, butter, and ice cream

- Lard, coconut, and palm oils, which are found in many processed foods

Trans fat is found mainly in:

- Foods with partially hydrogenated oils, such as many hard margarines and shortening

- Baked products and snack foods, such as crackers, cookies, doughnuts, and breads

- Foods fried in hydrogenated shortening, such as french fries and chicken

Cholesterol mainly is found in:

- Egg yolks

- Organ meats, such as liver

- Shrimp

- Whole milk or whole-milk products, such as butter, cream, and cheese

Limiting foods and drinks with added sugars, like high-fructose corn syrup, is important. Added sugars will give you extra calories without nutrients like vitamins and minerals. Added sugars are found in many desserts, canned fruit packed in syrup, fruit drinks, and nondiet drinks.

Check the list of ingredients on food packages for added sugars like high-fructose corn syrup. Drinks that contain alcohol also will add calories, so it's a good idea to limit your alcohol intake.

Portion size. A portion is the amount of food that you choose to eat for a meal or snack. It's different from a serving, which is a measured amount of food and is noted on the Nutrition Facts label on food packages.

Anyone who has eaten out lately is likely to notice how big the portions are. In fact, over the past 40 years, portion sizes have grown significantly. These growing portion sizes have changed what we think of as a normal portion.

Cutting back on portion size is a good way to eat fewer calories and balance your energy IN. Learn how today's portions compare with those from 20 years ago at the National Heart, Lung, and Blood Institute's Portion Distortion Web pages([link is external](#)).

Food weight. Studies have shown that we all tend to eat a constant "weight" of food. Ounce for ounce, our food intake is fairly consistent. Knowing this, you can lose weight if you eat foods that are lower in calories and fat for a given amount of food.

For example, replacing a full-fat food product that weighs 2 ounces with a low-fat product that weighs the same helps you cut back on calories. Another helpful practice is to eat foods that contain a lot of water, such as vegetables, fruits, and soups.

Physical Activity

Being physically active and eating fewer calories will help you lose weight and keep weight off over time. Physical activity also will benefit you in other ways. It will:

- Lower your risk for heart disease, heart attack, diabetes, and cancers (such as breast, uterine, and colon cancers)
- Strengthen your heart and help your lungs work better
- Strengthen your muscles and keep your joints in good condition
- Slow bone loss
- Give you more energy
- Help you relax and better cope with stress
- Allow you to fall asleep more quickly and sleep more soundly
- Give you an enjoyable way to share time with friends and family

The four main types of physical activity are aerobic, muscle-strengthening, bone strengthening, and stretching. You can do physical activity with light,

moderate, or vigorous intensity. The level of intensity depends on how hard you have to work to do the activity.

People vary in the amount of physical activity they need to control their weight. Many people can maintain their weight by doing 150 to 300 minutes (2 hours and 30 minutes to 5 hours) of moderate-intensity activity per week, such as brisk walking.

People who want to lose a large amount of weight (more than 5 percent of their body weight) may need to do more than 300 minutes of moderate-intensity activity per week. This also may be true for people who want to keep off weight that they've lost.

You don't have to do the activity all at once. You can break it up into short periods of at least 10 minutes each.

If you have a heart problem or chronic disease, such as heart disease, diabetes, or high blood pressure, talk with your doctor about what types of physical activity are safe for you. You also should talk with your doctor about safe physical activities if you have symptoms such as chest pain or dizziness.

Children should get at least 60 minutes or more of physical activity every day. Most physical activity should be moderate-intensity aerobic activity. Activity should vary and be a good fit for the child's age and physical development.

Many people lead inactive lives and might not be motivated to do more physical activity. When starting a physical activity program, some people may need help and supervision to avoid injury.

If you're obese, or if you haven't been active in the past, start physical activity slowly and build up the intensity a little at a time.

When starting out, one way to be active is to do more everyday activities, such as taking the stairs instead of the elevator and doing household chores and yard work. The next step is to start walking, biking, or swimming at a slow pace, and then build up the amount of time you exercise or the intensity level of the activity.

To lose weight and gain better health, it's important to get moderate-intensity physical activity. Choose activities that you enjoy and that fit into your daily life.

A daily, brisk walk is an easy way to be more active and improve your health. Use a pedometer to count your daily steps and keep track of how much you're walking. Try to increase the number of steps you take each day. Other examples of moderate-intensity physical activity include dancing, gardening, and water aerobics.

For greater health benefits, try to step up your level of activity or the length of time you're active. For example, start walking for 10 to 15 minutes three times a week, and then build up to brisk walking for 60 minutes, 5 days a week.

For more information about physical activity, go to the Department of Health and Human Services "2008 Physical Activity Guidelines for Americans" and the Health Topics Physical Activity and Your Heart article.

Behavioral Changes

Changing your behaviors or habits related to food and physical activity is important for losing weight. The first step is to understand which habits lead you to overeat or have an inactive lifestyle. The next step is to change these habits.

Below are some simple tips to help you adopt healthier habits.

Change your surroundings. You might be more likely to overeat when watching TV, when treats are available at work, or when you're with a certain friend. You also might find it hard to motivate yourself to be physically active. However, you can change these habits.

- Instead of watching TV, dance to music in your living room or go for a walk.
- Leave the office break room right after you get a cup of coffee.
- Bring a change of clothes to work. Head straight to an exercise class on the way home from work.
- Put a note on your calendar to remind yourself to take a walk or go to your exercise class.

Keep a record. A record of your food intake and the amount of physical activity that you do each day will help inspire you. You also can keep track of your weight. For example, when the record shows that you've been meeting your physical activity goals, you'll want to keep it up. A record also is an easy way to track how you're doing, especially if you're working with a registered dietitian or nutritionist.

Seek support. Ask for help or encouragement from your friends, family, and health care provider. You can get support in person, through e-mail, or by talking on the phone. You also can join a support group.

Reward success. Reward your success for meeting your weight-loss goals or other achievements with something you would like to do, not with food. Choose rewards that you'll enjoy, such as a movie, music CD, an afternoon off from work, a massage, or personal time.

Weight-Loss Medicines

Weight-loss medicines approved by the Food and Drug Administration (FDA) might be an option for some people.

If you're not successful at losing 1 pound a week after 6 months of using lifestyle changes, medicines may help. You should only use medicines as part of a program that includes diet, physical activity, and behavioral changes.

Weight-loss medicines might be suitable for adults who are obese (a BMI of 30 or greater). People who have BMIs of 27 or greater, and who are at risk for heart disease and other health conditions, also may benefit from weight-loss medicines.

Sibutramine (Meridia®)

As of October 2010, the weight-loss medicine sibutramine (Meridia®) was taken off the market in the United States. Research showed that the medicine may raise the risk of heart attack and stroke.

Orlistat (Xenical® and Alli®)

Orlistat (Xenical®) causes a weight loss between 5 and 10 pounds, although some people lose more weight. Most of the weight loss occurs within the first 6 months of taking the medicine.

People taking Xenical need regular checkups with their doctors, especially during the first year of taking the medicine. During checkups, your doctor will check your weight, blood pressure, and pulse and may recommend other tests. He or she also will talk with you about any medicine side effects and answer your questions.

The FDA also has approved Alli®, an over-the-counter (OTC) weight-loss aid for adults. Alli is the lower dose form of orlistat. Alli is meant to be used along with a reduced-calorie, low-fat diet and physical activity. In studies, most people taking Alli lost 5 to 10 pounds over 6 months.

Both Xenical and Alli reduce the absorption of fats, fat calories, and vitamins A, D, E, and K to promote weight loss. Both medicines also can cause mild side effects, such as oily and loose stools.

Although rare, some reports of liver disease have occurred with the use of orlistat. More research is needed to find out whether the medicine plays a role in causing liver disease. Talk with your doctor if you're considering using Xenical or Alli to lose weight. He or she can discuss the risks and benefits with you.

You also should talk with your doctor before starting orlistat if you're taking blood-thinning medicines or being treated for diabetes or thyroid disease. Also, ask your doctor whether you should take a multivitamin due to the possible loss of some vitamins.

Lorcaserin Hydrochloride (Belviq®) and Qsymia™

In July 2012, the FDA approved two new medicines for chronic (ongoing) weight management. Lorcaserin hydrochloride (Belviq®) and Qsymia™ are approved for adults who have a BMI of 30 or greater. (Qsymia is a combination of two FDA-approved medicines: phentermine and topiramate.)

These medicines also are approved for adults with a BMI of 27 or greater who have at least one weight-related condition, such as high blood pressure, type 2 diabetes, or high blood cholesterol.

Both medicines are meant to be used along with a reduced-calorie diet and physical activity.

Other Medicines

Some prescription medicines are used for weight loss, but aren't FDA-approved for treating obesity. They include:

- Medicines to treat depression. Some medicines for depression cause an initial weight loss and then a regain of weight while taking the medicine.
- Medicines to treat seizures. Two medicines used for seizures, topiramate and zonisamide, have been shown to cause weight loss. These medicines are being studied to see whether they will be useful in treating obesity.
- Medicines to treat diabetes. Metformin may cause small amounts of weight loss in people who have obesity and diabetes. It's not known how this medicine causes weight loss, but it has been shown to reduce hunger and food intake.

Over-the-Counter Products

Some OTC products claim to promote weight loss. The FDA doesn't regulate these products because they're considered dietary supplements, not medicines.

However, many of these products have serious side effects and generally aren't recommended. Some of these OTC products include:

- Ephedra (also called ma huang). Ephedra comes from plants and has been sold as a dietary supplement. The active ingredient in the plant is called ephedrine. Ephedra can cause short-term weight loss, but it also has serious side effects. It causes high blood pressure and stresses the heart. In 2004, the FDA banned the sale of dietary supplements containing ephedra in the United States.
- Chromium. This is a mineral that's sold as a dietary supplement to reduce body fat. While studies haven't found any weight-loss benefit from chromium, there are few serious side effects from taking it.
- Diuretics and herbal laxatives. These products cause you to lose water weight, not fat. They also can lower your body's potassium levels, which may cause heart and muscle problems.
- Hoodia. Hoodia is a cactus that's native to Africa. It's sold in pill form as an appetite suppressant. However, no firm evidence shows that hoodia works. No large-scale research has been done on humans to show whether hoodia is effective or safe.

Weight-Loss Surgery

Weight-loss surgery might be an option for people who have extreme obesity (BMI of 40 or more) when other treatments have failed.

Weight-loss surgery also is an option for people who have a BMI of 35 or more and life-threatening conditions, such as:

- Severe sleep apnea (a condition in which you have one or more pauses in breathing or shallow breaths while you sleep)
- Obesity-related cardiomyopathy (KAR-de-o-mi-OP-ah-thee; diseases of the heart muscle)
- Severe type 2 diabetes

Types of Weight-Loss Surgery

Two common weight-loss surgeries include banded gastroplasty and Roux-en-Y gastric bypass. For gastroplasty, a band or staples are used to create a small pouch at the top of your stomach. This surgery limits the amount of food and liquids the stomach can hold.

For gastric bypass, a small stomach pouch is created with a bypass around part of the small intestine where most of the calories you eat are absorbed. This surgery limits food intake and reduces the calories your body absorbs.

Weight-loss surgery can improve your health and weight. However, the surgery can be risky, depending on your overall health. Gastroplasty has few long-term side effects, but you must limit your food intake dramatically.

Gastric bypass has more side effects. They include nausea (feeling sick to your stomach), bloating, diarrhea, and faintness. These side effects are all part of a condition called dumping syndrome. After gastric bypass, you may need multivitamins and minerals to prevent nutrient deficiencies.

Lifelong medical followup is needed after both surgeries. Your doctor also may recommend a program both before and after surgery to help you with diet, physical activity, and coping skills.

If you think you would benefit from weight-loss surgery, talk with your doctor. Ask whether you're a candidate for the surgery and discuss the risks, benefits, and what to expect.

Weight-Loss Maintenance

Maintaining your weight loss over time can be a challenge. For adults, weight loss is a success if you lose at least 10 percent of your initial weight and you don't regain more than 6 or 7 pounds in 2 years. You also must keep a lower waist circumference (at least 2 inches lower than your waist circumference before you lost weight).

After 6 months of keeping off the weight, you can think about losing more if:

- You've already lost 5 to 10 percent of your body weight
- You're still overweight or obese

The key to losing more weight or maintaining your weight loss is to continue with lifestyle changes. Adopt these changes as a new way of life.

If you want to lose more weight, you may need to eat fewer calories and increase your activity level. For example, if you eat 1,600 calories a day but don't lose weight, you may want to cut back to 1,200 calories. It's also important to make physical activity part of your normal daily routine.

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