

What are overweight and obesity?

Overweight and obesity are conditions in which a person is carrying too much extra body fat. The two terms do not mean exactly the same thing: obesity is a more severe form of being overweight.

Women who are overweight or obese are more likely to develop conditions that put them at risk for [peripheral artery disease \(PAD\)](#) , including [high blood pressure](#) , [diabetes](#) , [high cholesterol](#)

and a high

[C-reactive protein](#)

level. Excess body fat also puts you at risk for many other heart and blood vessel problems, including

[coronary artery disease](#)

,
[stroke,](#)

[heart failure](#)

, and

[blood clots in the veins](#)

. On average, a woman who is overweight will die 3 years earlier than if she had a healthy weight, and an obese woman will die more than 7 years earlier.

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More than two-thirds of American women are overweight or obese.² The burden of excess weight affects certain races more than others: obesity is most common in African American women, followed by Hispanic and white women, with a lower rate in Asians.

3

It is also a growing problem among children.

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See also:

[Overweight, Obesity & Vein Disease Risk](#)

[Overweight, Obesity & Heart Risk](#)

[Overweight, Obesity & Stroke Risk](#)

[Overweight, Obesity & Heart Failure](#)

What causes overweight and obesity?

The main causes of being overweight or obese are eating too many calories and not being physically active enough. If you eat more calories than your body burns up, the extra calories are stored as fat. Other factors that may affect your weight include your genes (obesity tends to run in families),^{5,6} your metabolism (how your body processes food),⁷ and your age (your metabolism slows down as you get older). Sometimes an illness or medications (such as those used to treat mood disorders, seizures, migraines, high blood pressure, and diabetes) can contribute to weight gain. However, calories in (from food and drink) and calories out (burned during exercise) remain the keys to weight control.

How is obesity measured?

Because your ideal weight is related to how tall you are, the most commonly used way to evaluate your body weight and determine your ideal weight is called the Body Mass Index, or BMI. Your BMI is calculated by taking your weight in kilograms and dividing it by your height in meters squared. A woman with a BMI between 25 and 29 is considered overweight, and a woman with a BMI of 30 or more is considered obese.⁹

[Click here](#) to calculate your BMI.

BMI Categories		8
Category		BMI
Underweight		Less than 18.5
Normal		18.5 to 24.9
Overweight		25 to 29.9
Obese		30 or higher

Although the BMI is the most widely used tool to measure the health effects of weight, it does have limitations. For some people, the BMI may not be an accurate gauge of health risk. For example, BMI can overestimate body fat in women who have an athletic, muscular build, and

underestimate body fat in women who have lost muscle mass or in older women. Some races also have different natural amounts of body fat, and BMI may not be as accurate in Asians, Arabs, and mixed-race Africans.

Does where I carry my weight make a difference?

In terms of your health, where you carry extra fat may be just as important as how much excess weight you have. People with excess fat in their belly area, or *abdominal adiposity* (so-called "apple" shape), may have more health risks than people who carry their weight in their hips and thighs ("pear" shape).

Many different tools have been developed to attempt to measure where a woman carries her body fat and predict her risk of health problems caused by extra fat. The most common of these are waist circumference and waist-to-hip ratio.

Your **waist circumference** is the distance around your waist, measured at the level of your belly button. ⁹ A waistline greater than 35 inches for women and 40 inches for men increases the risk for having obesity-related risk factors and heart and blood vessel problems. However, these cutoffs may be too high for very short people (less than 5 feet tall) and people from Asia and East India. ^{9,10}

Waist Circumference	
Women	Men
High Risk	More than 35 inches (88 cm)
	More than 40 inches (102 cm)
Waist-to-Hip Ratio = Waist ÷ Hip	
Desirable	0.80 or less for women
At-risk	1.0 or more

Your **waist-to-hip ratio** is the distance around your waist divided by the distance around your hips. An ideal waist-to-hip ratio for women is 0.80 or less; a waist-to-hip ratio of 1.0 or more increases your risk for heart and blood vessel disease.

Another relatively new measure is the **waist-to-thigh ratio**, or WTR. This works in a similar way to the waist-to-hip ratio, but thigh circumference may be easier to measure accurately. There are not yet established levels for a desirable waist-to-thigh ratio.

Does obesity increase my risk of PAD?

Four out of five people with PAD are overweight or obese.¹¹ In the Framingham Heart Study (3,313 patients, 53% were women), each 5-point increase in BMI (equivalent to a change from being slightly overweight to being obese) made a person 40% more likely to develop PAD.

¹²

However, in this and other studies, researchers have found that obesity itself does not raise your risk of PAD.^{13,14} Instead, obese women are more likely to develop PAD than their healthy-weight counterparts because excess body fat causes many other conditions that raise a woman's PAD risk. These include:

- **High blood pressure** : Obese women are nearly 3 times as likely to have high blood pressure than those who are at a healthy weight. Overweight women are nearly twice as likely.

¹⁵

- **Diabetes** : Overweight women are more than twice as likely to develop type 2 diabetes as people who are not overweight.

- **High cholesterol** : Excess fat raises your LDL (bad) cholesterol and lowers your HDL (good) cholesterol. Low HDL cholesterol has been strongly linked to the risk of PAD in women.

Some studies have found that measuring abdominal fat, rather than overall BMI, can better predict a woman's risk of developing PAD. In one study of 5,057 patients (half were women), women with a very large waist circumference (more than 40 inches) were more than 3 times as likely to develop PAD as those with small waists, even after other PAD risk factors were taken into account.¹⁶ In addition, the larger a woman's waist-to-thigh ratio, the higher her risk of developing PAD.

Will losing weight reduce my risk of PAD?

All women should achieve and maintain a healthy weight (a BMI between 18.5 and 24.9) to prevent heart and blood vessel disease. Losing weight lowers your overall PAD risk through its beneficial effects on many PAD risk factors. Even losing as little as 10% of your body weight can:^{8,15,17}

- Lower your blood pressure
- Reduce your risk of developing diabetes, and help control your blood sugar if you already have diabetes
- Raise your HDL ("good") cholesterol level and lower your levels of total cholesterol and LDL ("bad") cholesterol

How can I lose weight?

To learn about your options for losing weight and reducing the associated PAD risks, see our [Weight Loss Guide](#)

In addition to helping you lose weight, regular exercise can relieve symptoms and increase independence in women with PAD. See [Exercise Therapy for PAD](#) to learn more.

What about weight gain during pregnancy?

When a woman is pregnant, it is normal for her to gain weight. If you have concerns about your weight, you should discuss them with your doctor; pregnant women should never try to lose weight. The recommended weight gain during pregnancy depends on your weight before you became pregnant. As a rough guide, women who are of normal weight should gain 25 to 35 pounds during pregnancy. Overweight women should only gain 15 to 25 pounds, and obese women should gain no more than 15 pounds.¹⁸

See also: [Pregnancy & Vein Disease Risk](#)

For More Information

[NHLBI Obesity Education Initiative](#)

[Centers for Disease Control and Prevention - Obesity and Overweight](#)

[American College of Sports Medicine – Physical Activity & Public Health Guidelines](#)

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