What Is Metabolic Syndrome?

Metabolic syndrome is a group of five risk factors that can lead to heart disease, diabetes, stroke and other health problems. Metabolic syndrome is diagnosed when someone has three or more of these conditions:

- High blood glucose (sugar)
- Low levels of HDL (“good”) cholesterol in the blood
- High levels of triglycerides in the blood
- Large waist circumference or “apple-shaped” body
- High blood pressure

Although each of these is a risk factor for cardiovascular disease, when a person has three or more and is diagnosed with metabolic syndrome, it increases the chance of developing a serious cardiovascular condition.

Who's at risk for metabolic syndrome?

In recent years this syndrome has become much more common in the United States. Over 34% of U.S. adults have it. It’s also increasing globally.

Although some people are genetically prone to developing metabolic syndrome, others get it as result of their lifestyle or other factors. Several things that increase your risk of metabolic syndrome are:

- **Obesity/overweight.** Excessive fat in and around the abdomen (stomach) is most strongly associated with metabolic syndrome.
- **Insulin resistance.** This is when the body can’t use insulin efficiently. Some people are genetically predisposed to insulin resistance.
- **Race and gender.** Although Black men are less likely than white men to have metabolic syndrome, Black women have a higher rate than white women.
- **Age.** Risk of developing metabolic syndrome increases with age.

How is it diagnosed?

Most of the conditions that make up metabolic syndrome have no signs or symptoms. But a large waistline is a visible sign of being overweight or obese.

You are diagnosed with metabolic syndrome if you have three or more of these conditions:

- **Central or abdominal obesity.** This is measured by waist circumference:
  - Men: greater than 40 inches
  - Women: greater than 35 inches
- **High triglycerides:** 150 mg/dL or more, or you’re taking medicine for high triglycerides
- **Low HDL cholesterol, or you’re taking medicine for low HDL cholesterol:**
  - Men: Less than 40 mg/dL
  - Women: Less than 50 mg/dL
- **High blood pressure:** 130/85 mmHg or more, or you’re taking medicine for high blood pressure
- **High fasting glucose (blood sugar):** 100 mg/dL or more, or you’re taking medicine for high blood glucose
How is metabolic syndrome treated?

Many of the conditions that contribute to metabolic syndrome can be addressed through lifestyle changes such as diet, exercise and weight loss.

These steps can help you manage metabolic syndrome and improve your overall heart health:

- Eat better. Adopt a diet rich in fruits, vegetables, whole grains, skinless poultry, fish, nuts, lean meats and vegetable protein. Limit processed foods, saturated and trans fats, red meat, sodium and added sugars.
- Get active. Aim for at least 150 minutes of moderate-intensity physical activity a week. Walking is the easiest place to start.
- Lose weight. Balance healthy eating with exercise to reach and maintain a healthy weight.
- Work with your health care team to manage your blood glucose, cholesterol and blood pressure.
- Take your medications as prescribed.

Do you have questions for your doctor or nurse?

Take a few minutes to write down your questions for the next time you see your health care professional.

For example:

**How can I reduce my weight?**

**Can physical activity improve my HDL cholesterol?**

We have many other fact sheets to help you make healthier choices to reduce your risk, manage your condition or care for a loved one. Visit heart.org/AnswersByHeart to learn more.