

# Learning About Cholesterol

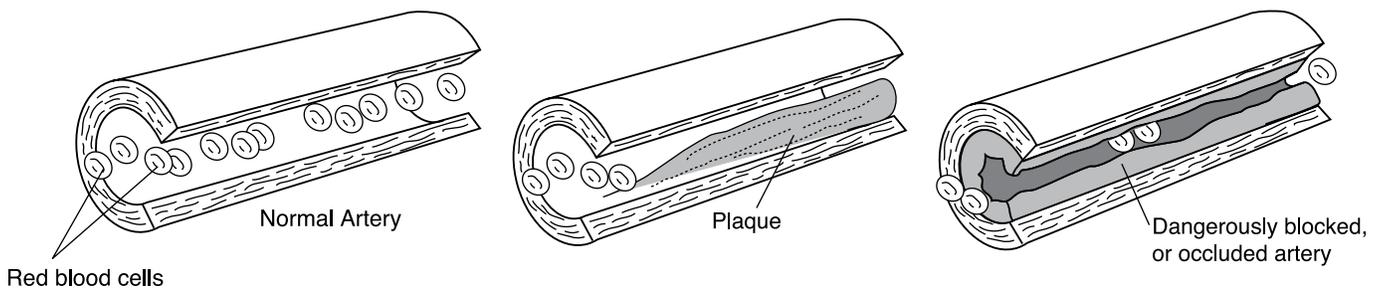


THE OHIO STATE UNIVERSITY  
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## What is cholesterol?

Cholesterol is a fatty wax-like substance found in the cells of your body. Your liver makes cholesterol. It is also in some foods, such as meat and dairy products. Your body needs some cholesterol to protect your nerves, make some hormones, and make new cells.

Too much cholesterol can combine with other things in the blood to form a build up, called plaque. Plaque sticks to the walls of your arteries, called **atherosclerosis**. It can lead to heart disease, where your heart's arteries become narrow or even blocked. If plaque builds up in the carotid arteries in your neck, it can put you at risk for a stroke.



## How is cholesterol measured?

A blood test is used to measure your cholesterol level, called a lipoprotein panel. You may need to fast for 9 to 12 hours before this test is done. It includes:

- **Total cholesterol** is a measure of the total amount of cholesterol in your blood. **A healthy level is below 200.**
- **LDL cholesterol**, or low density lipoproteins, makes up most of your body's cholesterol. It is known as "bad" cholesterol because it causes plaque to build up on artery walls, making it hard for blood to flow. The higher the level of LDL cholesterol in your blood, the greater your risk of heart disease and stroke. **A healthy level is less than 70.**
- **HDL cholesterol**, or high density lipoproteins, carries extra cholesterol away from your arteries and back to your liver, which flushes it from your body. It is known as "good" cholesterol because having high levels can reduce your risk of heart disease and stroke. **A healthy level is at least 40 for men and at least 50 for women. HDL above 60 is best for your heart health.**
- **Triglycerides** are another type of fat found in the blood that your body uses for energy. It is measured with your cholesterol because it can also impact your heart health. Having high triglycerides with low HDL cholesterol or high LDL cholesterol can increase your risk for heart disease and stroke. High triglycerides can also be caused by poorly controlled diabetes. **A healthy level is less than 150.**

Your doctor will go over your test results with you and explain their meaning.

## Causes of high cholesterol

### Family History

High blood cholesterol tends to run in families. If you have a family history of premature death from heart disease, you are more at risk.

### Eating Habits

Having high cholesterol can be caused by the foods you eat. Foods with large amounts of saturated and trans fats can raise your cholesterol levels, especially LDL cholesterol.

- Saturated fats come from high-fat animal products, such as fatty meats and high fat dairy products.
- Trans fats are partially hydrogenated oils and are found in some cookies, crackers, commercially baked goods (pies, biscuits, etc.) and many deep fried foods.

Eating many foods high in these saturated and trans fats is not healthy. Healthier fats are those from vegetable sources, such as olives, nuts, soybeans, corn, and safflowers.

### Not Being Active

Not being physical activity can put you at risk because it lowers HDL (good) cholesterol.

### Smoking

Smoking lowers HDL (good) cholesterol and raises LDL (bad) cholesterol.

### Other Health Conditions

Other conditions, such as diabetes, hypothyroidism, and certain kidney diseases may cause high blood cholesterol.

Your doctor may not always be able to find a reason for your high cholesterol.

## How to lower your cholesterol and triglycerides

- Eat a heart healthy diet that is low in fat and cholesterol and high in fiber.
  - Limit foods that contain high amounts of cholesterol, such as beef, pork, butter, cheese, egg yolks, and whole milk.
  - Eat foods high in fiber, such as whole grains, beans, fruit, and vegetables. Fiber helps to block cholesterol and fats from being absorbed through the wall of your intestines and into your blood stream.
  - Bake, grill, or roast foods instead of frying them.
- Take your cholesterol lowering medicine as ordered by your doctor.
- Exercise at least 30 minutes a day, 5 days a week.
- Lose weight if you are overweight. Work to keep a normal body weight for your height.
- If you smoke, stop!
- Limit alcohol intake.

## When to get tested

Talk to your doctor about how often you should have your cholesterol level checked, based on your risk factors. If you are taking medicines to lower your cholesterol, your doctor may want you to be tested at least every year.

Source: U.S. National Library of Medicine, MedlinePlus, <https://medlineplus.gov/cholesterol.html>

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**Talk to your doctor or health care team if you have any questions about your care.**

For more health information, contact the Library for Health Information at **614-293-3707** or e-mail **health-info@osu.edu**.