



What is Cholesterol?

Cholesterol is a waxy, fat-like substance that your body uses to form cell membranes and certain hormones. It's essential for normal body function, but your body produces all the cholesterol it needs on its own. Any cholesterol in your diet is extra, and your body deposits this surplus in your blood vessels. This surplus can eventually lead to narrowing of the arteries, stroke and heart disease. In fact, high blood cholesterol is a major risk factor for heart disease, which is the leading cause of death in the United States. About 17 percent of American adults have high blood cholesterol, and even children can develop it.

LDL vs. HDL cholesterol

Cholesterol is carried through the bloodstream by particles called lipoproteins, which are made up of cholesterol on the inside and protein on the outside. There are two main types of lipoproteins:

Low-density lipoproteins (LDL), are the major type of lipoprotein carrying cholesterol through the body. LDL cholesterol is what can build up on the walls of your arteries, making them hard and narrow. Narrowing of the arteries can cause coronary artery disease, heart attack and stroke.

High-density lipoproteins (HDL), carry excess cholesterol back to the liver to remove it from the body. HDL cholesterol is what you've heard referred to as "good cholesterol."

Having too much LDL or total cholesterol puts you at risk for heart disease and narrowing of the arteries.

Silent danger

High cholesterol has no symptoms — only a blood test will tell you if you have a problem. However, there are several behavioral and genetic risk factors, including:

- **Weight.** Being overweight or obese tends to increase LDL cholesterol levels and decrease HDL cholesterol levels.
- **Physical activity.** If you don't get regular physical activity, the resulting weight gain can raise your LDL cholesterol level.
- **Diet.** A diet high in saturated fat, trans fatty acids or trans fats, which are primarily found in animal fat and hydrogenated vegetable oil, will raise your cholesterol level. Foods from animal sources, such as egg yolks, meat and dairy products, also add unnecessary dietary cholesterol.
- **Heredity.** A genetic condition called familial hypercholesterolemia results in very high LDL cholesterol levels.
- **Age and gender.** LDL cholesterol levels rise as people age, and men tend to have lower levels of the "good" HDL cholesterol than women.

What you can do

Everyone can take steps to lower their cholesterol. First, ask your doctor to check your blood cholesterol levels. The National Cholesterol Education Program recommends that healthy adults have their cholesterol levels checked every five years. Have your blood tested as early as possible to establish baseline levels.⁽¹⁾ Check the sidebar for guidelines on what

these levels mean. Regardless of what your test results show, keep your cholesterol levels healthy by eating a healthy diet, losing any excess weight, making time for regular physical activity and avoiding tobacco. If your doctor finds that you have high blood cholesterol, he or she may prescribe medications in addition to recommending lifestyle changes.

Lose any extra weight.

Even five or 10 pounds can make a difference in your cholesterol levels.

Eat heart-healthy foods.

Researchers say a fiber-rich diet can help as much as medicine to lower cholesterol for some people. Choose whole grains, lean meats, fish, skim milk, and fresh fruits and vegetables. Aim for less than 300 milligrams (mg) of cholesterol in your daily diet.

Exercise regularly.

As long as your doctor gives you the okay, try to work in up to an hour of exercise each day. Regular exercise can improve your cholesterol levels.⁽¹⁾

Quit smoking.

Quitting smoking can improve your HDL ("good") cholesterol level.

Optimal cholesterol levels for adults

Cholesterol levels are measured in milligrams (mg) of cholesterol per deciliter (dL) of blood.

Total cholesterol:
less than 200 mg/dL

LDL cholesterol ("bad" cholesterol):
less than 100 mg/dL

HDL cholesterol ("good" cholesterol):
40 mg/dL or higher

Triglycerides
(another kind of fat found in the blood):
less than 150 mg/dL

Resources

For more tools and information about how to lower your risk for high cholesterol and heart disease, visit Discovery Health at:

There, select Diseases and Conditions, and then choose "Cholesterol Center."

