

Understanding Cholesterol

People with high cholesterol are about twice as likely to develop heart disease as those with healthier cholesterol levels. That's why knowing your cholesterol numbers is so important. If you have high cholesterol, lowering it can reduce your risk of having a heart attack, needing coronary-artery bypass surgery, or dying from heart disease.



What Is Cholesterol?

Cholesterol is a substance that helps your body produce hormones, digestive substances, and vitamin D. Molecules called lipoproteins carry cholesterol around your body through your bloodstream. These lipoproteins are made of lipid (fat) on the inside and protein on the outside.

Your liver makes all the cholesterol your body needs to function. Some foods—including meat, liver, poultry, and full-fat dairy products—provide extra cholesterol. Eating foods high in saturated fats and trans fats may also stimulate your liver to make more cholesterol than it normally would.

Excess cholesterol can combine with fat, calcium, and other substances in your blood to form a fatty deposit called plaque. Over time, plaque can build up inside your arteries and impede the flow of blood. When this occurs in an artery to the heart, it may lead to angina (chest pain) or a heart attack. When it occurs in an artery to the brain, it may lead to a stroke.

What Is a Lipoprotein Profile?

A blood test called a lipoprotein profile provides the most complete information about your cholesterol levels. If your doctor recommends this test, you may need to fast for several hours beforehand. The test report will show four numbers:

- **LDL (“bad”) cholesterol.** This form of cholesterol is the main contributor to plaque buildup in your arteries. The lower your LDL level is, the better.
- **HDL (“good”) cholesterol.** This form of cholesterol carries excess LDL away from your arteries and to your liver, which clears it from your body. The higher your HDL level is, the better.
- **Triglycerides.** This type of blood fat is often measured along with cholesterol. Research indicates that high triglycerides may increase the risk for heart disease, particularly in women.
- **Total cholesterol.** This number is calculated from your LDL, HDL, and triglyceride levels.

Cholesterol By the Numbers

Your doctor can consider your cholesterol numbers in the context of your overall risk for cardiovascular disease and help you interpret the results. Traditionally, these numbers have been considered ideal:

- **LDL cholesterol:** less than 100 mg/dL, or less than 70 mg/dL for people with heart disease or diabetes.
- **HDL cholesterol:** 60 mg/dL and above.
- **Total cholesterol:** less than 200 mg/dL.
- **Triglycerides:** less than 150 mg/dL.

Lowering Your Risk with Lifestyle Changes

These healthy habits can have a positive impact on your cholesterol numbers:

- **Be physically active.** Aim for at least 150 minutes of moderate physical activity every week. Getting regular physical activity helps lower LDL (“bad”) cholesterol, decrease triglycerides, and raise HDL (“good”) cholesterol.
- **Make smart food choices.** Eating wisely is another way to improve LDL, triglyceride, and HDL levels. Limit saturated fats, trans fats, and foods high in cholesterol (such as fatty meats and liver). Emphasize fruits, vegetables, and foods high in fiber (such as oatmeal and beans).
- **Maintain a healthy weight.** If you are in the overweight or obese BMI range, losing weight can help prevent or control high cholesterol.
- **Drink alcohol in moderation, or not at all.** Excessive alcohol use can raise triglyceride levels.
- **Don’t smoke.** Smoking compounds your risk for heart disease, and it can also reduce HDL (“good”) cholesterol.

Reducing Your Risk with Medication

If your cholesterol numbers are not optimal or if you have a history of a heart attack, stroke, angina, peripheral artery disease, transient ischemic attack (TIA, or “mini-stroke”), or certain cardiovascular procedures, cholesterol-lowering medication may be indicated.

Other factors may also come into play, including age, family history, and other medical conditions. Talk with your healthcare provider about treatment options, including the pros and cons of cholesterol-lowering medication.

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