



[Home](#) → [Medical Encyclopedia](#) → High blood cholesterol levels

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High blood cholesterol levels

Cholesterol is a fat (also called a lipid) that your body needs to work properly. Too much bad cholesterol in your blood can increase your chance of getting heart disease, stroke, and other problems.

Common medical terms for high blood cholesterol are lipid disorder, hyperlipidemia, or hypercholesterolemia, with the last being the most precise.

Causes

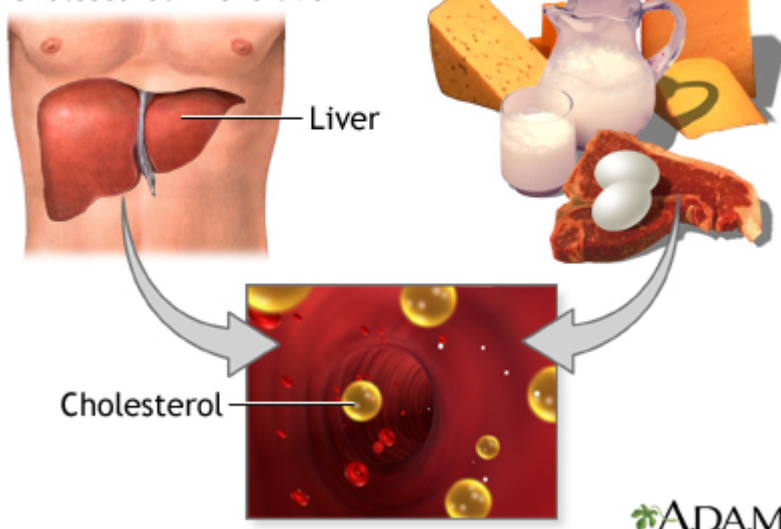
There are many types of cholesterol. The ones talked about most are:

- Total cholesterol -- all the cholesterol combined
- High density lipoprotein (HDL) cholesterol -- often called good cholesterol
- Low density lipoprotein (LDL) cholesterol -- often called bad cholesterol

For many people, abnormal cholesterol levels are partly due to lifestyle choices. This often includes eating a diet that is high in fat. Other lifestyle factors are:

- Being overweight
- Lack of exercise

We absorb cholesterol from meat, dairy products and other animal foods and the body also produces cholesterol in the liver



Some health conditions can also lead to abnormal cholesterol, including:

- Diabetes
- Kidney disease
- Polycystic ovary syndrome
- Pregnancy and other conditions that increase levels of female hormones
- Underactive thyroid gland

Medicines such as certain birth control pills, diuretics (water pills), beta-blockers, and some medicines used to treat depression may also raise cholesterol levels. Several disorders that are passed down through families lead to abnormal cholesterol and triglyceride levels. They include:

- Familial combined hyperlipidemia
- Familial dysbetalipoproteinemia
- Familial hypercholesterolemia
- Familial hypertriglyceridemia

Smoking does not cause higher cholesterol levels, but it can reduce your HDL (good) cholesterol.

Exams and Tests

A cholesterol test is done to diagnose a lipid disorder. Different experts recommend different starting ages for adults.

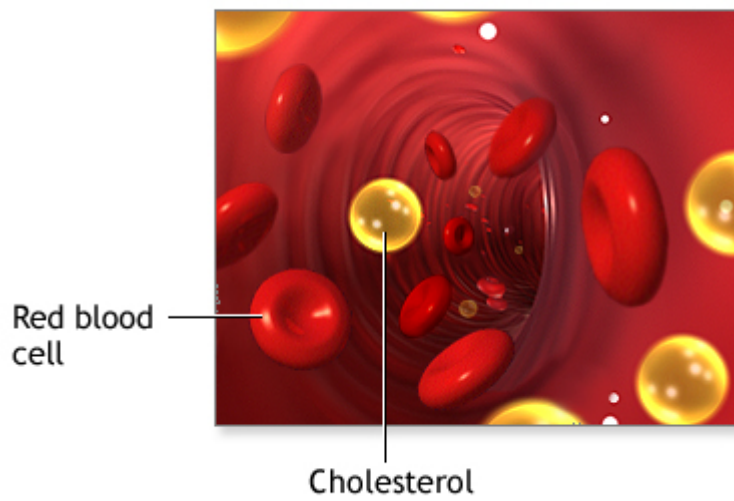
- Recommended starting ages are between 20 to 35 for men and 20 to 45 for women.
- Adults with normal cholesterol levels should have the test repeated every 5 years.
- Repeat testing sooner if changes occur in lifestyle (including weight gain and diet).
- Adults with a history of elevated cholesterol, diabetes, kidney problems, heart disease, and other conditions require more frequent testing.

It is important to work with your health care provider to set your cholesterol goals. Newer guidelines steer providers away from targeting specific levels of cholesterol. Instead, they recommend different treatments or medicines and doses depending on a person's history and risk factor profile. These guidelines change from time to time as more information from research studies becomes available.

General targets are:

- LDL: Less than 100 mg/dL (2.59 mmol/L) - lower numbers are better
- HDL: 60 mg/dL (1.55 mmol/L) or higher - higher numbers are better
- Total cholesterol: Less than 200 mg/dL (5.18 mmol/L) - lower numbers are better
- Triglycerides: Less than 150 mg/dL (1.69 mmol/L) - lower numbers are better

Normal interior view of artery



ADAM.

If your cholesterol results are abnormal, you may also have other tests such as:

- Blood sugar (glucose) test to look for diabetes
- Kidney function tests
- Thyroid function tests to look for an underactive thyroid gland

Treatment

Steps you can take to improve your cholesterol levels and to help prevent heart disease and a heart attack include:

- Quit smoking. This is the single biggest change you can make to reduce your risk of heart attack and stroke.
- Eat foods that are naturally low in fat. These include whole grains, fruits, and vegetables.
- Use low-fat toppings, sauces, and dressings.
- Avoid foods that are high in saturated fat.
- Exercise regularly.
- Lose weight if you are overweight.

Your provider may want you to take medicine for your cholesterol if lifestyle changes do not work. This will depend on:

- Your age
- Whether or not you have heart disease, diabetes, or other blood vessel problems
- Whether you smoke or are overweight
- Whether you have high blood pressure or diabetes

You are more likely to need medicine to lower your cholesterol:

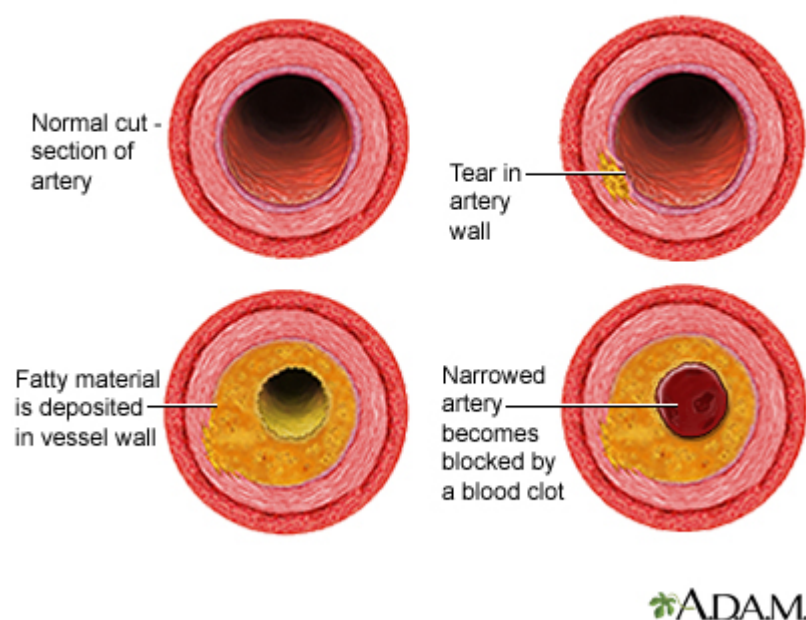
- If you have heart disease or diabetes
- If you are at high risk for heart disease (even if you do not yet have any heart problems)
- If your LDL cholesterol is 190 mg/dL (4.92 mmol/L) or higher

Almost everyone else may get health benefits from LDL cholesterol that is lower than 160 to 190 mg/dL (4.14 mmol/L to 4.92 mmol/L).

There are several types of medicines to help lower blood cholesterol levels. The medicines work in different ways. Statins are one kind of drug that lowers cholesterol and has been proven to reduce the chance of heart disease. Other medicines are available if your risk is high and statins do not lower your cholesterol levels enough. These include ezetimibe and PCSK9 inhibitors.

Outlook (Prognosis)

High cholesterol levels can lead to hardening of the arteries, also called atherosclerosis. This occurs when fat, cholesterol, and other substances build up in the walls of arteries and form hard structures called plaques.



Over time, these plaques can block the arteries and cause heart disease, stroke, and other symptoms or problems throughout the body.

Disorders that are passed down through families often lead to higher cholesterol levels that are harder to control.

Alternative Names

Cholesterol - high; Lipid disorders; Hyperlipoproteinemia; Hyperlipidemia; Dyslipidemia; Hypercholesterolemia

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Updated by: Michael A. Chen, MD, PhD, Associate Professor of Medicine, Division of Cardiology, Harborview Medical Center, University of Washington Medical School, Seattle, WA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

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