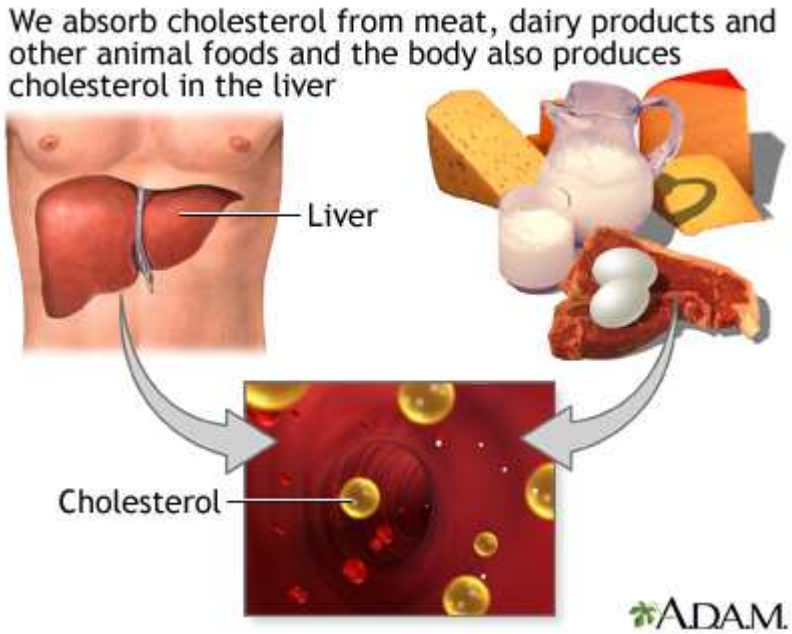
High blood cholesterol levels

Definition

Cholesterol is a fat (also called a lipid) that your body needs to work properly. Cholesterol levels that are too high can increase your chance of getting heart disease, stroke, and other problems.

The medical term for high blood cholesterol is lipid disorder, or hyperlipidemia.



Alternative Names

Lipid disorders; Hyperlipoproteinemia; Hyperlipidemia; Dyslipidemia; Hypercholesterolemia

Causes

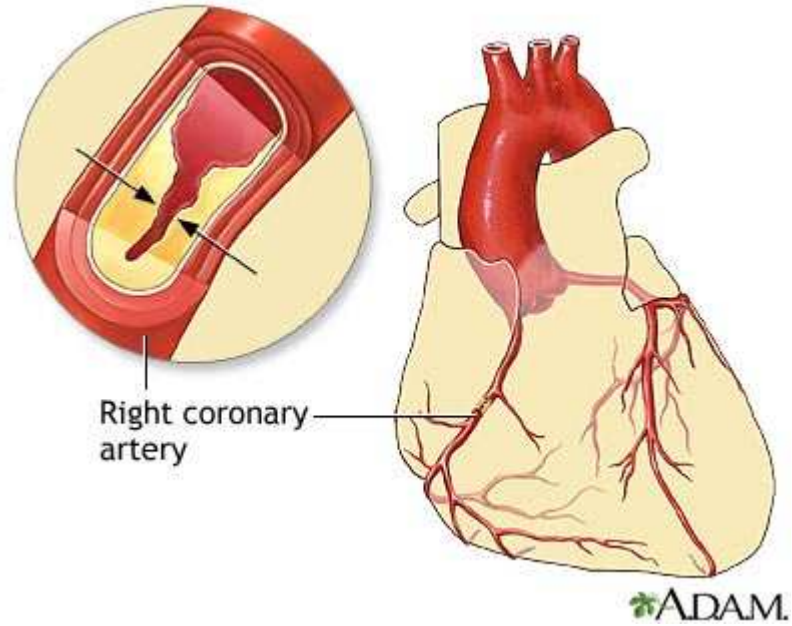
There are many types of cholesterol. The ones talked about most are:

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

For most people, abnormal cholesterol levels are the result of an unhealthy lifestyle -- most commonly, eating a diet that is high in fat. Other lifestyle factors are:

- Being overweight
- Heavy alcohol use
- Lack of exercise and leading an inactive lifestyle

Diabetes and an underactive thyroid gland may lead to high cholesterol levels. Other illnesses that may raise cholesterol levels include polycystic ovary syndrome and kidney disease.



Higher levels of female hormones increase or change cholesterol levels. This may include women who take birth control pills or estrogen, or who are pregnant,

Medicines such as certain 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. Some national guidelines recommend having your first screening cholesterol test at age 20. Everyone should have their first screening test by age 35 in men, and age 45 in women.

It is important to work with your health care provider to set your cholesterol goals. General targets are:

- LDL: 70-130 mg/dL (lower numbers are better)
- HDL: more than 40-60 mg/dL (high numbers are better)
- Total cholesterol: less than 200 mg/dL (lower numbers are better)
- Triglycerides: 10-150 mg/dL (lower numbers are better)

If your cholesterol results are abnormal, your doctor may also do:

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

Treatment

There are steps everyone can take to improve their cholesterol levels, and help prevent heart disease and a heart attack. Some key lifestyle changes are:

- Eat foods that are naturally low in fat. These include whole grains, fruits, and vegetables. Use low-fat toppings, sauces, and dressings.
- Look at food labels. Avoid foods that are high in saturated fat.
- Exercise regularly
- Lose weight if you are overweight

See also: Cholesterol and lifestyle

Quit smoking. This is the single most important change you can make to reduce your risk of heart disease and stroke.

Your doctor 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 or other blood flow 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, your LDL cholesterol should stay below 100
- If you are at risk for heart disease (even if you do not yet have any heart problems), your LDL cholesterol should be below 130
- Almost everyone else may get health benefits from LDL cholesterol that is lower than 160 to 190

There are several types of drugs to help lower blood cholesterol levels, and they work in different ways. Some are better at lowering LDL cholesterol, some are good at lowering triglycerides, while others help raise HDL cholesterol. Statins are one kind of drug that lower cholesterol.

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.

Lifestyle changes and medicines can lower cholesterol levels and prevent these problems in most people.

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

When to Contact a Medical Professional

If you have high cholesterol or other risk factors for heart disease, make appointments as recommended by your doctor.

Prevention

A healthy lifestyle can help prevent high cholesterol.

See also: Cholesterol and lifestyle

References

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