



The American College of
Obstetricians and Gynecologists



FREQUENTLY ASKED QUESTIONS

FAQ101

WOMEN'S HEALTH

Cholesterol and Your Health

- **What is cholesterol?**
- **What is the function of cholesterol in the body?**
- **What are the three kinds of lipoproteins?**
- **What happens when I eat too much fat?**
- **How are cholesterol levels measured?**
- **Who should have their cholesterol levels tested?**
- **What are the risk factors for atherosclerosis?**
- **How can I decrease my cholesterol levels?**
- **What changes to my diet can I make to lower my cholesterol levels?**
- **How does exercise help lower cholesterol levels?**
- **How does smoking affect cholesterol levels?**
- **When is medical treatment necessary to help lower cholesterol levels?**
- **Glossary**

What is cholesterol?

Cholesterol is a natural substance that serves as a building block for cells and hormones. Most of the cholesterol in your body is made by the liver. A small amount also comes from certain foods, such as meat, dairy products (such as butter, whole milk, and cheese), and eggs. The amount of cholesterol in your body depends partly on your diet and partly on factors passed on from your parents (heredity).

What is the function of cholesterol in the body?

The fat in the foods you eat is digested and sent to the liver. The liver then changes the fat into **lipoproteins**. Lipoproteins are made of cholesterol, other fats, and protein. Lipoproteins carry fat through your blood vessels for use or storage in other parts of the body.

What are the three kinds of lipoproteins?

There are three kinds of lipoproteins:

1. Very-low-density lipoprotein (VLDL)
2. Low-density lipoprotein (LDL)
3. High-density lipoprotein (HDL)

Each lipoprotein has a job to do. First, the liver changes the fat into VLDL, which carries the fat through your blood vessels to your fat tissue. After the VLDL drops off some of the fat, but not its cholesterol, it becomes LDL. It is LDL, sometimes called “bad cholesterol,” that can stick to the sides of blood vessels and even block arteries in vital organs such as the heart and brain.

HDL, sometimes called “good cholesterol,” keeps cholesterol from building up in artery walls. It attaches to cholesterol and takes it back to the liver. The liver then breaks it down so that it can be passed out of the body. A high level of HDL helps to lower the level of LDL. The goal of a healthy diet is to keep HDL high and LDL low.

What happens when I eat too much fat?

A high-fat diet causes too much LDL, or bad cholesterol, in the bloodstream. High levels of LDL can make it hard for the HDL, or good cholesterol, to do its job.

Too much cholesterol can clog blood vessels and cause deposits that form a substance called plaque. Over the years, the plaque narrows and hardens the arteries. This is called **atherosclerosis**.

How are cholesterol levels measured?

The amount of total cholesterol in your blood can be measured with a simple blood test. Total cholesterol is the sum of LDL and HDL. In general, the lower your cholesterol level, the better.

A lipoprotein analysis is another way to measure cholesterol levels. This test breaks down the total cholesterol into LDL and HDL. Levels of VLDL and triglycerides (a type of fat) may be tested, too.

Who should have their cholesterol levels tested?

All women aged 45 years and older should have their cholesterol levels checked every 5 years. Women with any of the following risk factors may need to be tested more often and at a younger age:

- Have had high cholesterol or heart disease
- Have a family history of high cholesterol or heart disease
- Smoke
- Have diabetes

What are the risk factors for atherosclerosis?

The amounts of total cholesterol and LDL cholesterol in the blood are the best ways to predict whether a person will develop atherosclerosis. Other risk factors, however, also have an effect:

- Age 55 years or older in women
- Heart attack or sudden death before age 55 years in father or brother or before age 65 years in mother or sister
- Cigarette smoking
- High blood pressure
- Levels of HDL below 35 mg/dL
- Diabetes
- Lifestyle that is not active
- Obesity

How can I decrease my cholesterol levels?

You can lower your cholesterol levels by eating foods low in fat and cholesterol and by losing weight (see the FAQ [Weight Control: Eating Right and Keeping Fit](#)). Exercise helps as well. It raises the level of good (HDL) cholesterol in your blood, helps you lose weight, and lowers your blood pressure. There is a two-for-one benefit: your risk of heart disease goes down by 2% for each 1% that your cholesterol level goes down.

What changes to my diet can I make to lower my cholesterol levels?

Making changes in your diet can help lower your cholesterol levels (see the FAQ [Healthy Eating](#)). You should eat more fiber (oats, beans, and fruit) and starches (grains and root vegetables like carrots, turnips, and potatoes).

You also should eat foods low in saturated fat because this type of fat affects how cholesterol breaks down in the body. Saturated fat is solid at room temperature. It includes animal fats (butter and lard) and some vegetable fats (coconut, palm, and those listed on labels as “partially hydrogenated” oils).

How does exercise help lower cholesterol levels?

Aerobic exercise (such as walking, jogging, or swimming) raises your HDL (good cholesterol) level. It is best to exercise regularly, at least three times a week (see the FAQ [Exercise and Fitness](#)).

How does smoking affect cholesterol levels?

Smoking lowers your HDL level and increases your risk of heart attack, heart disease, and stroke (see the FAQ [It's Time to Quit Smoking](#)). It also increases your risk of lung cancer. If you smoke and are older than age 35 years, you should not use birth control pills. The combination greatly increases the risk of heart attacks, particularly in women older than 35 years.

When is medical treatment necessary to help lower cholesterol levels?

If after a few months of eating a healthy diet, exercising, and quitting smoking your cholesterol levels do not decrease, your health care provider may prescribe medication to lower your cholesterol. While you are taking medication, you still should keep eating a low-fat and low-cholesterol diet.

Glossary

Atherosclerosis: Narrowing and clogging of the arteries by a buildup of plaque deposited in vessel walls; also called hardening of the arteries.

Cholesterol: A natural substance that serves as a building block for cells and hormones and helps to carry fat through the blood vessels for use or storage in other parts of the body.

Lipoproteins: Substances that transport cholesterol to and from the liver throughout the blood.

If you have further questions, contact your obstetrician–gynecologist.

FAQ101: Designed as an aid to patients, this document sets forth current information and opinions related to women's health. The information does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

Copyright June 2013 by the American College of Obstetricians and Gynecologists