

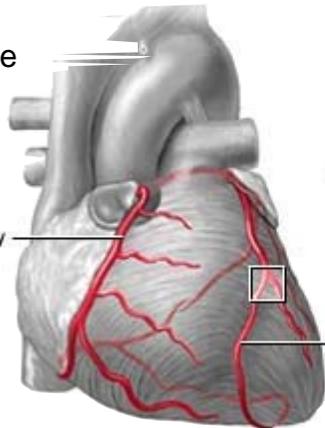
# Cholesterol

What is

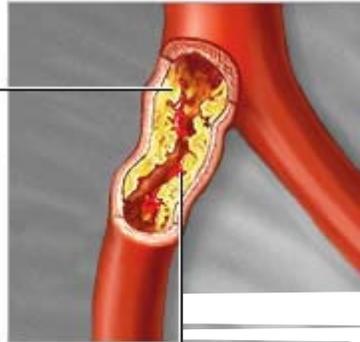
fat-like

Right coronary artery

more



Plaque in artery wall



Blood clot

Left anterior descending artery

cholesterol?

Cholesterol is a waxy, substance that is present in every cell in your body. Some cholesterol is needed for your body to function. Your liver produces enough cholesterol for your body to function properly.

Certain foods provide additional amounts of cholesterol, which may be more than your body needs.

ADAM

While some cholesterol in your blood is essential for health, too much can be harmful. If your cholesterol level is too high, it may increase your risk of heart disease. There are many reasons for a high cholesterol level, including diet, family history, obesity or some diseases such as diabetes.

## Are there different kinds of cholesterol?

Yes. Different types of cholesterol and fats have different effects. The most commonly known types are:

- **LDL-cholesterol** - Low-density lipoprotein cholesterol, is the bad cholesterol. Excess LDL builds up on your arteries and may lead to heart disease. The higher the level of LDL, the higher your risk for heart disease. Lowering high LDL-cholesterol can prevent heart attacks and save lives.
- **HDL-cholesterol** - High-density lipoprotein, or HDL-cholesterol, is the good cholesterol because it is believed to remove cholesterol from the blood. High levels of HDL in your blood may help to reduce your risk of coronary heart disease. A low level can increase your risk of heart disease.

- **Triglycerides** - Triglycerides are another type of fat in your bloodstream. Persons with a high blood triglyceride level may also have a high LDL. Those with a high triglyceride level in addition to an elevated LDL-cholesterol level may be at further risk of coronary heart disease.

## What is High Cholesterol?

High cholesterol can vary for each individual depending on other risk factors. Discuss with your healthcare professional what is considered high for you. A desirable cholesterol level consists of a total cholesterol level of less than 200 mg/dL and an LDL cholesterol level of less than 130 mg/dL.

## Why Is High Cholesterol a Health Risk?

High cholesterol is a serious health risk because it can lead to coronary heart disease. More than 13 million Americans have heart disease and each year, it kills more Americans than any other cause. These individuals have already had a heart attack or experienced chest pain (angina). The American Heart Association says an elevated LDL-cholesterol level is a major risk factor for heart disease.

## Risk Factors for Heart Disease

- High LDL-cholesterol
- Low HDL-cholesterol level (less than 35 mg/dL)
- High blood pressure
- Diabetes
- Increasing age
- Smoking

- A family history of early heart disease (a parent or sibling less than 55 years old, if male or 65 years old if female)

### **How does a high cholesterol level contribute to heart disease?**

A healthy artery has a smooth, even surface. When too much cholesterol builds up on the walls of your arteries, however, thick deposits called plaque form. The buildup of plaque narrows the artery, so your heart must work harder to force blood through. Plaques can limit or block the blood flow in the artery. They can also rupture and form blood clots. When either happens in a major artery supplying the heart or in a major artery supplying the brain, the blood flow can be completely blocked. The result can be a heart attack or stroke.

### **Can lowering my elevated cholesterol level help protect against heart disease?**

Yes. It has been shown that a 1% decrease in cholesterol levels leads to a 2% decrease in the risk of heart disease. Since high LDL-cholesterol is a major risk factor for heart disease, lowering it can help prevent heart attacks and save lives.

### **How Can High Cholesterol be Controlled?**

Sometimes changes in diet and lifestyle may be enough to lower cholesterol to a desirable level. Other times, diet and lifestyle changes must be combined with medication.

Once your cholesterol goal is reached, you must continue to maintain a healthy cholesterol level. Remember that high cholesterol cannot be cured, but it can be controlled. Your cholesterol level will likely increase again if you stop treatment. You will need to maintain a healthy lifestyle and keep your cholesterol at an acceptable level. With the help of your doctor, you can make a commitment to lower your high cholesterol forever.

### **How will I have to change my diet?**

Limit the amount of fat, especially saturated fat, in your diet. High-fat foods include fried foods, cheese, butter, whole milk and some meats. Many animal products are generally high in fat and cholesterol. Avoid saturated fats, such as

lard and hydrogenated oils. Organ meats such as kidney and liver also contain large amounts of cholesterol. Shellfish, including lobster, are high in cholesterol too, but tend to be lower in saturated fat. Egg yolk contains about 215 mg of cholesterol. A lean 4oz. piece of white-meat chicken, by comparison, has only 70 mg or so of cholesterol. High-fiber food from plants, such as green, leafy vegetables and fruits, as well as grains, do not contain any cholesterol. Choose low-fat or non-fat dairy products. Also, being overweight can increase your cholesterol level.

Polyunsaturated and monounsaturated fats are found in liquid oils from plants. Corn and soybean oils are examples of polyunsaturated fats; olive oil and canola oil have monounsaturated fats. Although fat in general should be limited, polyunsaturated or monounsaturated fat are better choices than saturated fats.

Drinking alcohol can also affect your cholesterol and triglyceride levels. Check with your healthcare professional to determine whether moderate alcohol intake is appropriate or whether alcohol should be avoided altogether.

### **How can exercise help improve my cholesterol levels?**

Regular aerobic exercise such as swimming, vigorous walking, biking, or playing tennis increases your HDL-cholesterol level, lowers your triglyceride level, and may lower your LDL-cholesterol level. A regular exercise plan can also help to reduce body weight and fat. You should always consult your doctor before beginning any exercise program. How Often Should I Get My Cholesterol Level Checked? Experts recommend that all adults over the age of 20 have their cholesterol measured at least once every 5 years. Based on the results and your overall risk for heart disease, your cholesterol should be checked every 1 to 5 years. Your blood cholesterol level is checked by a simple blood test and measured as milligrams of cholesterol per deciliter of blood (mg/dL).