

High Cholesterol

Cholesterol is a waxy fat the body makes to help it build cells and make hormones. It is part of bile, which helps digest fats. It lets the body use vitamins A, D, E and K.

The liver makes cholesterol from stored sugars and fats. Animal-based foods we eat have cholesterol. These are things like meats, egg yolks, shrimp and dairy products.

When there is too much fat in your blood, it can build up inside blood vessels. This raises your risk of heart disease or problems with your pancreas.

Cholesterol is carried in the blood attached to lipoproteins. The best known are low-density and high-density lipoproteins (LDL and HDL).

Triglycerides are another type of fat found in blood. The extra food we eat but do not use right away becomes triglycerides. They are stored in our fat cells. Hormones release the triglycerides for energy between meals.

Symptoms

There are no symptoms for high cholesterol. A blood test can check your cholesterol.

A doctor will order a cholesterol test when a person starts HIV treatment. It may be done every three or four months to check for changes.

Causes

Most problems with cholesterol come from the foods you eat. Some HIV medications (meds) can raise the level of fats in the blood. This is more common with older meds.

Risk Factors

Many things raise the level of fat in your blood. Some can be controlled, but others cannot.

Some things you can control are:

- Limit how much alcohol you drink
- Be more active
- Eat less saturated fat and sugar. Saturated fat is fat that is solid at room temperature, such as butter or cheese. Fat raises cholesterol levels.
 Sugar and alcohol raise triglyceride levels.

These also raise cholesterol levels:

- Birth control pills
- Diabetes
- Genes
- · Low thyroid levels

How to Know You Have High Cholesterol

A blood test will tell you if you have high cholesterol. It is best not to eat or drink for 12 hours before this test.

The blood test measures:

- Total cholesterol. It should be 200 mg/dL or lower.
- Triglycerides. High triglycerides plus high LDL levels makes heart disease more likely. It should be less than 150 mg/dL.
- HDL. HDL helps remove fat from the body.
 Higher HDL levels mean a lower risk of heart disease. It should be more than 40 mg/dL in men and 50mg/dL in women.
- LDL. LDL carries fat to other parts of the body.
 The higher LDL levels are, the greater the risk of heart disease. It should be lower than 100 mg/dL.

Treatment

Changes in how you live are the first step to bring your levels of cholesterol under control:

- Avoid or limit alcoholic drinks
- Stay active
- Keep blood pressure under control
- Maintain a healthy weight
- Do not smoke
- Eat fewer fats and less sugar
- Eat more fiber. It absorbs cholesterol and removes it from the body.

You may need to take medications to bring your levels down. Statins and fibrates are common treatments.

Certain HIV meds raise the amount of some statins in the body. It is important that a doctor knows all the meds that a person with HIV takes.

Your doctor may need to change the doses of either the statin or the HIV meds to get the most good with the least side effects.

If a person on HIV meds has very high cholesterol, the doctor may need to change some of his or her meds. They might need to give up a whole class of HIV meds. This might change a person's drug routine. Talk to your doctor about the best treatment for you.

Prevention

You cannot always prevent high cholesterol. The risk of problems is higher if it runs in your family. Some HIV meds raise cholesterol. The benefits are greater than the side effects. Take your HIV meds unless your doctor tells you to stop.

There are many simple ways to help manage your risk factors:

- Eat a healthy balanced diet. Focus on low-fat meats such as chicken and fish. Get very little fat in your diet from animal sources such as milk, butter, cheese or fatty meats.
- Eat lots of fruits and vegetables.
- Stay active and exercise at least 30 minutes five days a week
- Maintain a healthy weight
- Drink little or no alcohol
- Manage stress. Stress raises cholesterol levels.

For more information:

Contact your Registered Nurse Care Manager, or call PHP Nurse Advice Line at: (800) 797-1717.

