

Understanding Cholesterol

Why Do You Have Cholesterol?

Cholesterol is made by your body. The body needs cholesterol to make cell membranes and certain hormones and to ensure proper functioning of the nervous system. Cholesterol particles also help transport fat molecules to the cells. However, the body makes all the cholesterol it needs. You don't need to eat cholesterol to supply your needs.

What Is Cholesterol?

Cholesterol is found in three kinds of particles in your body:

VLDL—very low-density lipoprotein—particles that carry fats called triglycerides to your body cells. When you measure your triglyceride level, you're also measuring your VLDL level.

LDL—low-density lipoprotein—a harmful kind of cholesterol that's simply VLDL after it has dropped off its fat portion in a cell of the body

HDL—high-density lipoprotein—a beneficial form of cholesterol that actually helps break down and recycle LDL particles

Your total cholesterol is the sum of all these particles. When there's too much cholesterol, the excess LDL attaches itself to the walls of blood vessels. Cholesterol deposits can cause heart disease, because of clogged coronary arteries, and other diseases related to the obstruction of blood vessels by cholesterol deposits. High blood cholesterol is linked to about one-third of all deaths in middle age.

How Much Cholesterol Is OK?

The American Heart Association recommends these blood concentrations measured by cholesterol blood tests:

- ✓ total cholesterol: below 200 mg/dl
- ✓ HDL: at least 35 mg/dl
- ✓ LDL: no more than 130 mg/dl

Ways to Increase HDL and Decrease LDL

- ✓ Exercise regularly.
- ✓ When preparing food, switch from saturated fats such as butter, hard margarine and meat drippings to monounsaturated and polyunsaturated oils such as olive oil and safflower oil.
- ✓ Eat less fat.
- ✓ Eat more complex carbohydrates.
- ✓ Eat more foods containing soluble fiber, such as oat bran and beans.
- ✓ Lose excess weight.
- ✓ Quit smoking. (Nonsmokers have higher levels of HDL.)
- ✓ Consume only moderate amounts of alcohol and caffeine.
- ✓ Eat fewer cholesterol-containing foods, such as eggs, meats, poultry, fish and dairy products (except nonfat dairy products).

How Much Fat Can You Eat?

The American Heart Association recommends that no more than 30 percent of your total food calories come from fat and no more than 10 percent from saturated fats such as butter, tropical oils and meats.

Check Your Understanding

1. What kind of cholesterol is "good cholesterol"?
2. How can you raise your level of good cholesterol?
3. If your total daily calories are 2,000 and you want to stay within the American Heart Association guidelines, how many of your calories can come from fat? From saturated fat?
4. If each gram of fat you eat has 9 calories, how many grams of fat can you eat in a day? Of saturated fat?

Answers: 1.) HDL 2.) exercise; lose weight; eat less fat, saturated fat and cholesterol; eat more fiber and complex carbohydrates; quit smoking; restrict alcohol and caffeine 3.) 600; 200 4.) 67; 22