

Cholesterol and Atherosclerosis

There are many factors that affect your blood **cholesterol** levels, including factors that can be controlled by lifestyle choices, such as your diet, your physical activity, and your weight.

It is important to control your cholesterol because high levels of blood cholesterol are a risk factor for heart disease and stroke—the major causes of death in the United States.

New guidelines in the May 16, 2001, issue of *JAMA* give recommendations for lowering your risk of heart disease and stroke by lowering the levels of cholesterol in the blood.

CHOLESTEROL AND BLOOD LIPIDS (FATS)

Cholesterol is a substance that plays an important role in many of the body's functions. Cholesterol that is not being used by the body builds up in the bloodstream. Having too much cholesterol in your blood puts you at risk of heart disease, including a heart attack.

Low-density lipoprotein (LDL) is made up of lipid (fat) and protein. LDL carries cholesterol to the body's tissues. LDL cholesterol is sometimes referred to as "bad cholesterol" because it is the source of cholesterol buildup in the walls of the arteries.

High-density lipoprotein (HDL) also contains lipid (fat) and protein. HDL cholesterol is sometimes referred to as "good cholesterol" because HDL helps carry cholesterol from the body's tissues to the liver for processing.

Triglycerides are a form of fat that is found in the blood and in foods. Excess levels of triglycerides in the blood can also increase your risk of heart disease.

TIPS FOR IMPROVING YOUR BLOOD CHOLESTEROL LEVEL

- Eat a diet low in saturated fats and cholesterol.
- Increase your physical activity. Talk to your doctor before making any major increases in your physical activity.
- Lose weight if you are overweight.

Even if you are taking the above measures, you should continue to have your cholesterol levels checked. If your cholesterol levels are still high, your doctor may prescribe cholesterol-lowering medication.

Classification of Total Cholesterol and LDL-Cholesterol Levels (mg/dL)

| Total Cholesterol | |
|-------------------|--------------------|
| Less than 200 | Desirable |
| 200-239 | Borderline high |
| 240 and above | High |
| LDL-Cholesterol | |
| Less than 100 | Optimal |
| 100-129 | Near/above optimal |
| 130-159 | Borderline high |
| 160-189 | High |
| 190 and above | Very high |

Sources: National Heart, Lung, and Blood Institute, American Heart Association, American College of Cardiology, The AMA Home Medical Library, The AMA Family Medical Guide, The AMA Complete Guide to Women's Health, The AMA Encyclopedia of Medicine

WHAT IS ATHEROSCLEROSIS?

Atherosclerosis is narrowing of the arteries caused by cholesterol and fatty deposits in the walls of the arteries. This narrowing can affect the arteries of the heart—the coronary arteries. When there is a complete blockage of the blood flow to the heart, death of part of the heart muscle may occur. This is known as **myocardial infarction** or "heart attack." Atherosclerosis can also increase your risk of experiencing a stroke.

FOR MORE INFORMATION

- National Cholesterol Education Program
NHLBI Health Information Center
PO Box 30105
Bethesda, MD 20824-0105
301/592-8573
www.nhlbi.nih.gov/chd
- American Heart Association
800/AHA-USA1
www.americanheart.org

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Brian Pace, MA, Writer

Cassio Lynn, MA, Illustrator

Richard M. Glass, MD, Editor

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