

Cholesterol & Women's Health

High blood cholesterol is a major women's health issue. Over 50 million American women have borderline-high to high cholesterol levels that may put them at greater risk for heart disease—the number one killer of women—and stroke. That's about half of all women in the United States today.¹

Questions to Ask Your Health Care Professional

1. What is my overall risk for heart disease? Can we review my risk factors?
2. What are sources of cholesterol?
3. Is high cholesterol a condition that can be inherited? Can we talk about my family health history?
4. Why do I keep hearing about "good" and "bad" cholesterol? What are they?
5. What are triglycerides? What do they have to do with cholesterol?
6. What type of test best measures my cholesterol levels?
7. Will you explain the results of my cholesterol test?
8. If I have high LDL cholesterol, what lifestyle and dietary changes can I make to lower it?
9. What types of food should I avoid or add to my diet? What types and how much exercise do you recommend?
10. When and how often should I have my cholesterol level checked from now on?
11. Based on my cholesterol and other risk factors, is there a cholesterol-lowering plan that you would recommend?
12. Am I a good candidate for medication? What are the risks and benefits?
13. If I have high blood cholesterol, are my children at risk for developing high blood cholesterol?

It's important to have your cholesterol checked, to talk to your doctor about your risk factors for heart disease and stroke and to understand what your cholesterol test results mean. Then, if you have high cholesterol, you'll be ready to work with your health care professional to develop a cholesterol-lowering plan that is right for you.

It's also important to understand that there are two sources of cholesterol. Cholesterol does come from the food you eat, but the majority of cholesterol is produced naturally in the body based on family history.

Types of Blood Cholesterol

There are two main types of cholesterol:

- **LDL cholesterol.** Often called "bad" cholesterol, too much LDL can lead to cholesterol buildup and blockage in the arteries. LDL carries most of the cholesterol in the blood.
- **HDL cholesterol.** Often called "good" cholesterol, HDL works as a kind of garbage truck, transporting LDL cholesterol from other parts of the body to the liver for disposal.

Understanding Cholesterol

Cholesterol is a waxy, fat-like substance that the body needs (and produces naturally) to make hormones, vitamin D and the bile acids that aid in the digestion of fat. It is found in all of the cells and membranes throughout the body. Your body needs a certain amount of cholesterol to function. It's when LDL

cholesterol levels are too high or HDL cholesterol levels are too low that your risk for heart disease is increased.

Because the majority of cholesterol is produced naturally in the body, your cholesterol levels are greatly influenced by your family history. Many people are genetically predisposed to make more cholesterol than they need.

Your diet is another source that adds cholesterol to your body. The typical American diet is full of cholesterol-rich foods. These include whole dairy products, eggs, animal fats and red meat.

Over the years, excess cholesterol and fat are deposited in the inner walls of the arteries that supply blood to your heart. Eventually, these deposits can make your arteries narrower and less flexible, a condition known as atherosclerosis. Left unchecked, this buildup can lead to heart attack, stroke and death.

Getting Your Cholesterol Measured

All women should have their blood cholesterol checked beginning at age 20 and then at least once every five years. If your blood cholesterol test results are in the moderate or high-risk range (see page 2), you should have another cholesterol screening within two years, or sooner if your health care professional recommends it.²

Schedule routine cholesterol screenings to measure your total cholesterol profile and LDL levels. This is a blood test taken after you haven't eaten for at least twelve hours. It measures total cholesterol, LDL, HDL and triglyceride levels.

If your LDL cholesterol level is high, it's time to act! Talk to your doctor about creating a cholesterol-lowering plan tailored for your risk factors and your family history.

Know These Cholesterol Facts

- Blood cholesterol is measured in milligrams per deciliter (mg/dL; a deciliter is one-tenth of a liter).
- You may reduce your high cholesterol risk by limiting foods with saturated fats, eliminating foods with trans fats and by consuming low- and non-fat dairy products instead of whole-milk products.
- You may have high cholesterol because of your family health history.³ Even if you are at a healthy weight, get plenty of exercise and eat a heart-healthy diet.
- For most women, cholesterol levels stay in the healthy or “desirable” range until middle age.
- At about age 45, more women than men have total blood cholesterol of 200 mg/dL or higher, significantly increasing their risk for heart disease.⁴

Resources

American Heart Association
1-800-242-8721
www.americanheart.org
Provides heart disease prevention, treatment and management information.

American Diabetes Association
1-800-342-2383 (English and Spanish)
www.diabetes.org
Offers diabetes-related information in a variety of formats.

National Heart, Lung and Blood Institute Information Center
301-592-8573
www.nhlbi.nih.gov
Offers information on diseases of the heart, blood vessels, lungs and blood, and sleep disorders.

WomenHeart
The National Coalition for Women with Heart Disease
202-728-7199
www.womenheart.org
Provides women-specific heart disease information.

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- As menopause approaches for women, LDL (bad) cholesterol tends to rise and HDL (good) cholesterol tends to fall.

Know Your Numbers

The general blood cholesterol guidelines shown below are meant for healthy people who have few or no risk factors for heart disease. If you have a history of heart attack or diabetes, any LDL level equal to or greater than 100 mg/dL is considered too high. Talk to your health care professional to set your cholesterol goal number.

LDL Level	What it Means
Less than 100 mg/dL	Optimal
100-129 mg/dL	Near optimal
130-159 mg/dL	Borderline high
160-189 mg/dL	High
190 mg/dL and above . . .	Very high

Your LDL (bad) cholesterol levels are just one part of the equation. You also need to know your HDL (good) cholesterol level. Here, you want your HDL levels to be high; the higher the better for your heart.

HDL Level	What it Means
Less than 40 mg/dL	Higher Risk
40-59 mg/dL	Average
60 mg/dL and above	Protective

The average HDL cholesterol level for women is 55 mg/dL. Both the American Heart Association and the National Cholesterol Education Program (NCEP) recommend an HDL cholesterol level greater than 50 mg/dL for women.

References

- 1 Heart Disease and Stroke Statistics—2004 Update. American Heart Association.
- 2 Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. Executive Summary of The Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, And Treatment of High Blood Cholesterol In Adults (Adult Treatment Panel III). JAMA. 2001 May 16;285(19):2486-97. No abstract available.
- 3 Austin MA, Hutter CM, Zimmern RL, Humphries SE. Familial hypercholesterolemia and coronary heart disease: a HuGE association review. Am J Epidemiol. 2004 Sep 1;160(5):421-9. Review.
- 4 High Blood Cholesterol and Other Lipids—Statistics. American Heart Association.

Treatment

Diet, increased physical activity and weight control are generally recommended first steps to lowering LDL cholesterol. Updated NCEP guidelines, however, have called for more intense treatment of elevated cholesterol levels in many people with other risks for heart disease. Generally, the more risk factors you have, the lower your LDL level should be.

For some women, simply cutting back on high-cholesterol foods and increasing physical activity will lower both total and LDL cholesterol. Still, many people who eat right and exercise have not been able to reach the cholesterol goals set by their health care professional.

If lifestyle modifications, such as diet and exercise, don't work to get you to your cholesterol goal, your health care professional may recommend a cholesterol-lowering medication. In coordination with your health care professional, regular exercise, eating a diet low in saturated fat and weight control will continue to be part of your overall cholesterol-management plan.

For more information about heart disease, cholesterol and women's health, visit www.healthywomen.org.