

High Cholesterol

Introduction

There are over 65 million Americans affected by high cholesterol. High cholesterol puts one at major risk for having a heart attack, stroke, or developing heart disease. *The higher the level of blood cholesterol, the greater one is at risk for developing heart disease, which is the number one cause of death among men and women in the United States.*

You will not be able to tell by appearance if you have high cholesterol, as there are no direct symptoms. Many people naturally have higher cholesterol based on their genetics. These people need to take extra precaution to monitor their blood cholesterol.

If you discover you have high cholesterol, I encourage you to make lifestyle changes in regard to diet, physical activity, and weight management. Anyone can develop unhealthy levels of cholesterol, but everyone can take the proper steps to control it.

Why Cholesterol Matters

Cholesterol is found in the walls of cells throughout all organs of the body. It is an important substance made by the body that is used to make hormones, and produce vitamin D, among other functions. The body naturally makes its own cholesterol. Blood cholesterol can be raised to unhealthy levels by the consumption of saturated fat, trans fat, and cholesterol found in food products. Cholesterol does not dissolve in the blood, and is circulated through the body by lipoproteins, a package consisting of fat and protein.

There are two types of lipoproteins that carry cholesterol through the blood stream:

1. Low density lipoprotein (LDL)
 - Known as the “bad” or “lousy” cholesterol
 - Distributes cholesterol throughout the body
 - A *high* level of LDL cholesterol increases risk for heart disease
2. High density lipoprotein (HDL)
 - Known as “good” or “healthy” cholesterol
 - Transports harmful cholesterol from tissues to the liver, where it is discarded
 - A *low* level of HDL cholesterol increases your risk for heart disease
 - High amounts help decrease your risk of a heart attack or stroke

An excess of LDL cholesterol can build up in artery walls and become known as “plaque.” This is known as atherosclerosis, or hardening of the arteries. The wall of the artery narrows and blood flow slows down. If a blood clot forms, and blood flow is stopped, a heart attack can occur. A stroke can happen if an artery leading to the brain is blocked.

What can I do to lower the bad cholesterol?

- Have your doctor check your cholesterol levels, especially if you have a family history of heart disease.
- Reduce consumption of foods from animals, including fatty meats, butter, whole-milk dairy products, and cheese.
- Exercise for at least 30 minutes a day 5 days a week.
- Eat foods low in saturated fat, trans fat and cholesterol, and high in fiber, including vegetables, fruits, whole grains, low-fat milk products, lean meats, fish and nuts.
- Develop a plan to reduce your body fat (if needed) in a healthy manner.
- Talk with your doctor to see if you are a candidate for medicines that can lower blood cholesterol.

Triglycerides and Fats

Triglycerides are the most common type of fat found in the body. People with heart disease or diabetes typically have high levels of triglycerides. Research shows that high levels of triglycerides coupled with low HDL cholesterol or high LDL cholesterol produce a risk factor for atherosclerosis, which in turn increases the risk for heart problems.

There are four other kinds of fats found in the foods we consume.

1. Saturated Fat
 - Tend to raise blood cholesterol
 - Found in animal fats
2. Trans fat
 - Formed by adding hydrogen to vegetable oils
 - Tend to raise blood cholesterol
 - Found in fried foods, baked goods, cookies, icings, crackers, packaged snack foods, microwave popcorn, and some stick margarines
3. Polyunsaturated fats
 - Tend to lower blood cholesterol
 - Found in vegetables, oils, and fish oils
4. Monounsaturated fat
 - Tend to lower blood cholesterol
 - found in olive, canola, peanut, and sunflower oil

Getting Your Cholesterol Tested

Your doctor will run a test where you will have a sample of blood drawn to be analyzed by a laboratory. Your report will show your cholesterol levels in milligrams per deciliter of blood (mg/dL). Your doctor will consider your other risk factors like age, family history, smoking and high blood

pressure. If your total cholesterol is 200 mg/dL or higher, or your HDL is 40 mg/dL or less you will need to establish a treatment plan or go in for further testing.

How often should I be tested for high cholesterol?

The American Heart Association suggests that adults aged 20 and older should have a lipoprotein profile evaluated every five years. The profile measures total cholesterol, LDL, HDL and triglycerides. This test requires a nine to twelve hour fast before it is done.

You are more at risk for health problems, and may need to have your lipoprotein profile evaluated more than every five years if:

- Your total cholesterol is 200 mg/dL or greater
- You are a male over age 45 or a female over age 50
- Your HDL or “good” cholesterol is less than 40 mg/dL
- You have risk factors for heart disease, heart attack and stroke
 - High blood pressure
 - Smoking
 - Age
 - Obesity
 - Family history

Common Misconceptions

- *My choices about diet and physical activity are responsible for my cholesterol level.*
 - While diet and physical activity do affect overall blood cholesterol levels, the body also produces some LDL (bad) cholesterol naturally, which may not be controlled by diet and exercise alone. For many people a heart-healthy diet and exercise are enough to maintain healthy levels of cholesterol. For others, medication may be necessary.
- *Using margarine instead of butter will help lower my cholesterol.*
 - Both margarine and butter are high in fat and should be used in moderation. Choose a product low in saturated and *trans* fat to promote healthy levels of blood cholesterol.
- *Thin people don't have to worry about high cholesterol.*
 - Anyone can have high cholesterol, regardless of body type. Adults should have their blood cholesterol checked regardless of weight, diet, or level of physical activity.
- *My doctor hasn't said anything about my cholesterol, so I don't have to worry.*
 - Take responsibility for your health and be proactive. Ask your doctor to have your cholesterol tested and educate yourself about how to interpret the results of your test.
- *Since the nutrition label on my favorite food says there's no cholesterol, I can be sure that it's a “heart-healthy” choice.*
 - It is important to know what to look for when you read nutrition labels. A food that is low in cholesterol may contain high levels of saturated fat and/or *trans* fat. Be sure to check for saturated fat, *trans* fat, cholesterol, and total calories per serving of the product.

- *Since I started taking medication for my high cholesterol, I don't have to worry about what I eat.*
 - Sometimes medications can target the cholesterol your body makes naturally. It is important to maintain a heart healthy diet and get at least 30 minutes of exercise five days a week while taking medication. If you are prescribed medication, this is the best plan to help prevent heart disease.
- *I recently read that eggs are not so bad for your cholesterol after all, so I guess I can go back to having my two eggs for breakfast every morning.*
 - One egg has about 213 mg of dietary cholesterol. The daily recommendation for people with healthy levels of LDL cholesterol is less than 300 mg per day. If a person limits their cholesterol intake from meat, poultry and dairy products throughout the day, the egg could fit into the heart healthy guidelines. Also consider that many other foods, particularly baked goods are prepared with eggs.
- *I'm a woman so I don't have to worry about high cholesterol. It's a man's problem.*
 - The female hormone estrogen tends to raise HDL (good) cholesterol levels in premenopausal women, which in turn helps lower LDL cholesterol. However, as we age, cholesterol levels tend to increase and postmenopausal women may experience an increase in cholesterol levels despite a heart healthy lifestyle.
- *You don't need to have your cholesterol checked until you reach middle age.*
 - Everyone should start getting their cholesterol tested regularly around age 20. For children from families with a history of heart disease, it may be a good idea to have cholesterol checked at an earlier age. Children are not exempt from having high cholesterol.

Learn More

- Get your cholesterol tested by your doctor. Evaluate your cholesterol levels and come up with a treatment plan that's right for you.
- Go to www.americanheart.org for valuable tools and information regarding cholesterol and other health topics

Resources

The American Heart Association

http://www.heart.org/HEARTORG/Conditions/Cholesterol/AboutCholesterol/About-Cholesterol_UCM_001220_Article.jsp