



NUTRI-FACTS: CHOLESTEROL

Cholesterol is a waxy-substance found in the bloodstream that is vital to many bodily functions, such as hormone production.¹ Due to its thick consistency, cholesterol must be transported through the blood by carriers known as low-density lipoproteins (LDL) and high-density lipoproteins (HDL).¹ LDL is considered “bad” cholesterol because it can build-up in the arteries causing them to narrow.^{1,2} Blocked arteries may lead to heart disease or stroke.¹ HDL is considered “good” cholesterol because it removes LDL from the blood.²

Sources and Guidelines

Cholesterol comes from two sources: your body and your diet.² Your liver naturally produces cholesterol and then circulates it through your blood.² You also ingest cholesterol when you eat foods from animal products, such as meat, poultry, egg yolks, whole milk, and foods that contain these ingredients.² Because animal products may further increase your cholesterol levels, existing Dietary Guidelines for Americans recommend consuming less than 300 milligrams of cholesterol from food per day.³ The guidelines, which are updated every five years, are currently in review and revised recommendations are expected in late 2015. To determine the amount of cholesterol that you are consuming daily, consult the Nutrition Facts label on the foods you regularly eat.

Know Your Numbers

It is recommended that adults, ages 20 and older, have their cholesterol levels checked at least once every five years.⁴ Talk to your doctor about getting a blood test known as a lipoprotein panel. The test will measure: LDL cholesterol, HDL cholesterol, triglycerides, which are a form of fat in your blood, and total cholesterol, which includes LDL, HDL, and a portion of your triglycerides.⁴

Cholesterol levels are measured in milligrams (mg) per deciliter (dL) of blood.⁴ Normal levels are^{4,6}:

Lipoprotein Panel	Normal Level
LDL cholesterol	Less than 100mg/dL
HDL cholesterol	Greater than 40mg/dL
Triglycerides	Less than 150mg/dL
Total cholesterol	Less than 200mg/dL

Risk Factors

There are several risk factors that may increase your LDL cholesterol, triglycerides, and total cholesterol levels and lower your HDL cholesterol level, which may lead to heart disease or stroke.⁴ Factors, such as age, gender, and family history are outside your control.⁴ Excess weight, poor diet, lack of activity, and cigarette smoking are controllable, and entirely preventable in some cases, with lifestyle changes.⁴

Age and Gender

Total cholesterol levels naturally rise as you get older due to physiological changes in your body.⁴ Men, ages 45 and older, and women, ages 55 and older, are at greater risk of developing high cholesterol than those who are younger.⁴

Family History

Genetics may play a role in determining how much cholesterol your liver produces.⁴ That means that some people may be prone to high cholesterol based on their family history even if they have healthy behaviors.⁴ If your father or brother had heart disease before age 55 or your mother or sister did before age 65, then you are at greater risk of developing heart disease.⁴ Notify your health care provider of your family history and have your cholesterol levels checked regularly.

Body Weight

Excess weight may cause your LDL cholesterol, triglycerides, and total cholesterol levels to increase and your HDL cholesterol level to decrease.⁴ Any of these factors individually, or in combination, may lead to heart disease or stroke.⁴

Diet

Foods that are high in cholesterol, saturated fat, and trans fat may raise your LDL cholesterol, triglycerides, and total cholesterol levels.⁴ A diet that regularly includes many of these foods may also increase your risk of being overweight, which is another risk factor for high cholesterol and heart disease.⁴

Physical Activity

Inactivity may elevate your LDL cholesterol and lower your HDL cholesterol levels.⁴ It may also increase your body weight, which may lead to high cholesterol and heart disease.⁴



Smoking

Smoking damages your arteries due to the chemicals in cigarettes.⁵ It may also lower your HDL cholesterol level, which may cause heart disease.⁵

Tips for Lowering Cholesterol

Unhealthy lifestyle choices, such as being overweight, poor eating habits, lack of physical activity, and cigarette smoking may lead to high cholesterol. By making healthy choices, you can help control some of the risk factors that contribute to heart disease and stroke.

Weight Management

Weight management is critical to living a healthy lifestyle. Even a modest weight loss of 5 – 10 percent of your total body weight can improve your cholesterol levels.⁷ To lose weight, follow these tips^{7,8}:

- › Eat a balanced diet and avoid oversized portions
- › Reduce your caloric intake by 500 – 1000 calories a day to lose 1 – 2 pounds per week
- › Aim for 250 – 300 minutes of moderate intensity exercise every week to lose weight and keep it off
- › Check out [HPW Weight Management](#) for more tips on how to obtain and maintain a healthy weight

Healthy Eating

In order to perform at your peak and reduce your risk of chronic disease, you have to eat healthy. Processed and prepared foods often contain high amounts of cholesterol, saturated fat, and trans fat, which may contribute to high cholesterol and heart disease. To eat a healthy diet, read the Nutrition Facts label and follow these tips³:

- › Switch to fat-free or low-fat milk and milk products
- › Select lean cuts of meat and poultry
- › Choose foods with less cholesterol and less saturated fat
- › Avoid foods with trans fat
- › Check out [HPW Healthy Eating](#) for more nutrition tips

Active Living

Physical activity is also part of living a healthy lifestyle. By engaging in a combination of moderate to intense aerobic exercise, muscle strengthening, and functional body movement activities, you may decrease LDL cholesterol and increase HDL cholesterol levels, as well as manage your weight and strengthen your heart.⁸ To improve your health, follow these tips⁸:

- › Aim for 150 – 250 minutes of moderate intensity exercise every week to reduce chronic disease factors and prevent weight gain
- › Include a variety of activities to get the most health benefits out of your physical activity program
- › Check out [HPW Active Living](#) for more exercise tips

Tobacco Free Living

Within three months of quitting smoking, your blood circulation improves, which reduces the amount of cholesterol that could get trapped in your arteries.⁹ After one year of being smoke-free, your risk of heart disease is cut in half.⁹ In order to live a healthy lifestyle, you need to be tobacco free. Follow these START tips to help kick the cigarette habit¹⁰:

- › **S**et a date to quit smoking
- › **T**ell your friends and family about your plan to quit
- › **A**nticipate challenges and develop plans for meeting them
- › **R**emove cigarettes from your home, car, or work environment
- › **T**alk to your health care provider for guidance and support
- › Check out [HPW Tobacco Free Living](#) for more tips on quitting

Not all risk factors can be avoided, but making healthy lifestyle choices can reduce your risks. Make sure you do your part to improve your cholesterol levels, protect your heart, and enhance your overall health.

To view the references for the Nutri-Facts series, visit:

[HTTP://WWW.MED.NAVY.MIL/SITES/NMCPHC/HEALTH-PROMOTION/PAGES/NUTRI-FACTS_REFERENCES.ASPX](http://www.med.navy.mil/sites/nmcphc/health-promotion/pages/nutri-facts_references.aspx)