

Understanding Cholesterol

We hear a lot about cholesterol and its reputation as the evil-doer to our heart and arteries. Cholesterol certainly affects our overall health – in good ways and bad ways – and knowing the difference can help you better manage it and stay healthy.

Cholesterol Serves a Purpose

Cholesterol is vital to our health. It helps the body to:

- Develop cell membranes
- Protect nerve fibers
- Maintain cell temperature
- Digest food
- Convert sunlight into vitamin D through the skin
- Produce hormones

Where Does Cholesterol Come From?

We get cholesterol from two sources: the body and food. About 85% of cholesterol is produced by the body – mainly in the liver – and circulates through the bloodstream. Blood cholesterol can be measured by taking a blood sample.

Dietary cholesterol makes up the remaining 15% and comes from eating foods from animal sources like meats, seafood and dairy products. Even if you could possibly avoid eating all foods containing cholesterol, **your body will still be able to make all the cholesterol it needs every day.**

“Good” and “Bad” Cholesterol: What’s The Difference?

If you could touch cholesterol, it might feel like very soft wax. It’s actually a fatty substance that doesn’t dissolve in water or in the blood. When you have your blood cholesterol checked, your doctor looks at three things:

- **Low-Density Lipoprotein (LDL)** is the bad stuff. Think of it as the bacon grease of cholesterol. When bacon is cooked, the remaining liquid fat turns solid. If you poured hot bacon grease down a drain pipe, eventually it would completely clog. It’s the same with LDL. When LDL levels are high, it develops thick plaque that sticks to artery walls. The plaque blocks blood flow to and from the heart, thereby increasing the risk of a heart attack.



- **High-Density Lipoprotein (HDL)** is the good stuff and can be thought of as the drain “de-clogger”. HDL helps to unblock plaque from artery walls to allow smoother blood flow to and from the heart. The excess cholesterol removed by HDL is carried through the bloodstream to the liver where it is disposed.
- **Triglycerides** are another form of fat in your blood that, at high levels, raises your risk for heart disease.

How Much Cholesterol Is Too Much?

Guidelines developed by the American Heart Association (AHA) suggest keeping total blood cholesterol levels below 200 mg/dL (measured as milligrams per deciliter of blood). The chart below lists total cholesterol and LDL (bad cholesterol) levels to help you understand what your measurements mean:

Total Cholesterol Level	Category
Less than 200 mg/dL	Desirable
200-239 mg/dL	Borderline high
240 mg/dL and above	High

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

As part of a healthy eating plan, the AHA also recommends limiting daily intake of cholesterol to 300 milligrams. People with already high levels of blood cholesterol should consume even less.

How to Reduce LDL (Bad Cholesterol)

The key to lowering LDL levels is to follow a low-fat/low-cholesterol eating plan every day and stay physically active. The American Dietetic Association recommends eating less saturated fat and opting for foods with healthier fats like nuts, olives, canola oil, etc. These foods can actually help to increase HDL - the good cholesterol.

The soluble fiber that comes from eating foods from plant sources can have cholesterol-lowering benefits. Some good choices of soluble fiber include oats, beans, barley, grapefruits, apples and oranges. Try leaner meats, fish, poultry and low-fat dairy foods to help cut out some extra fat and cholesterol too.

Remember that because of certain genetic factors, some people who exercise and eat a low-cholesterol diet may still have high LDL levels. In this case, it's important to continue those good habits and also work with your doctor to keep LDL at a healthy level.

How Often Should Cholesterol Levels Be Measured?

The AHA recommends that everyone age 20+ should get their cholesterol measured at least once every 5 years. Typically, this blood test is taken after fasting for 9 to 12 hours.

You can find more information on cholesterol and healthy eating by visiting anthem.com.

Additional Links:

"Live Healthier, Live Longer" – information on lowering cholesterol - <http://www.nhlbi.nih.gov/chd/index.htm>

"Aim For A Healthy Weight" - http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/index.htm

"Your Guide To Lowering Blood Pressure" - <http://www.nhlbi.nih.gov/hbp/index.html>

<http://www.nutrition.gov/>

<http://www.fitness.gov/>

<http://www.cdc.gov/tobacco/>

<http://www.nlm.nih.gov/medlineplus/>

Sources:

- National Heart, Lung and Blood Institute - <http://www.nhlbi.nih.gov/health/public/heart/chol/wyntk.htm>
- American Heart Association – www.americanheart.org
- American Dietetic Association – www.eatright.org

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