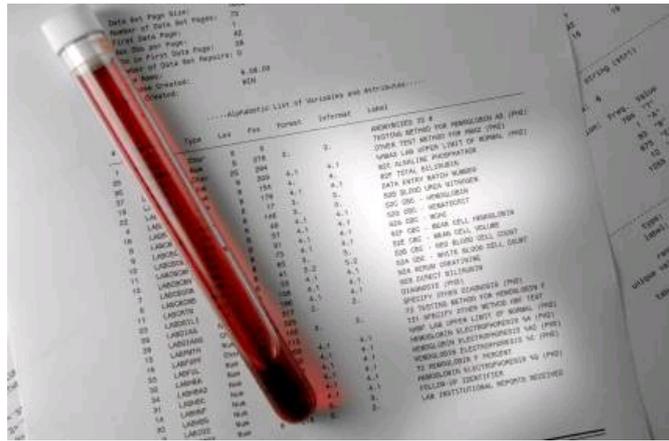# About Blood Lipids

By Allen Smith, eHow User

One of the most important parts of an annual physical examination is a complete blood lipid profile. A blood lipid profile is a simple blood test that provides valuable information about one's risk for contracting heart disease.

Blood lipid profiles measure blood lipids, or fats circulating in the bloodstream. Blood lipids are measured in cholesterol and triglycerides. Both can be precursors for atherosclerosis or hardening of the arteries. Here's why it's so important to monitor the blood lipids.

Total Cholesterol

Cholesterol performs a number of important functions in the body. It helps to build cell walls and manages how fluids move in and out of them. It also plays a critical role in creating hormones that control things like metabolic rate and sex drive. But, the cholesterol that typically puts people at risk for heart disease is a lipid that is taken in through the diet as cholesterol and saturated fat. Too much can cause narrowing of the arteries, leading to heart disease. Measuring the total cholesterol as part of a lipid profile only tells part of the picture. In fact, there are several components to the blood lipid profile that are important: low density lipoprotein (or LDL), high density lipoprotein (or HDL) and triglycerides. Each is an important indicator of how well the patient is managing their health.

The Bad Type of Cholesterol

Cholesterol is so important to the body that it generally makes all that it needs. When more is taken in through the diet, cholesterol can become a problem. Cholesterol enters the body through the food we eat. It is digested and broken down by the small intestines into chylomicrons by lipoprotein lipase and transported to the liver.
After the liver processes chylomicrons, it breaks them down into very low density lipoproteins, or VLDL that eventually ends up as LDL, or the "bad" type of cholesterol. The LDL circulates throughout the body where it often ends up on the inside lining of the arterial walls, causing atherosclerosis.

Good Cholesterol

High density lipoprotein (HDL) can lower the risk for heart disease and atherosclerosis. HDL is a type of cholesterol that scavenges excess very low density lipoproteins (LDL) from inside arterial walls and excretes it from the body.

Triglycerides

Triglycerides are a third type of blood lipid that is often associated with heart disease. Like cholesterol, triglycerides are blood lipids that are made up of long chains of free fatty acids and glycerol. Similar to cholesterol, triglycerides are typically consumed through the food we eat.
Unlike LDL and HDL cholesterol, it's more difficult to understand the role triglycerides play in heart disease. Researchers do know, however, that high levels of triglycerides are typically found in people who are obese or have high blood pressure and diabetes. High levels of triglycerides are also associated with low levels of HDL cholesterol.

Blood Lipids and the Risk for Heart Disease

It's difficult to evaluate your risk for heart disease by looking at just one blood lipid. More important are how all three values rank together.
The American Heart Association recommends that healthy adults maintain a

total blood cholesterol level below 200 mg/dl. LDL level should be below 40 mg/dl, HDL should be higher than 50 mg/dl and triglycerides should be less than 150 mg/dl. More important however, are the ratios between the HDL and LDL cholesterol.

To maintain an average risk for heart disease, men should have a HDL/LDL ratio of 5.0 or lower. Women should maintain a ratio of 4.5 or lower.

How to Manage Blood Lipids

Blood lipid levels are an important indicator of how well patients are managing their health. Fortunately, they're also one of the easiest ways to reduce risk for heart disease.

Eating a low-calorie diet that is high in fiber and low in saturated fat is a good place to start. Managing body weight, quitting smoking and increasing [exercise](#) are other effective ways to improve blood lipid levels.