

Blood Fats:

Cholesterol is a fat-like substance in the blood which, if elevated, has been associated with heart disease.

- **Total Cholesterol:** A high cholesterol in the blood is a major risk factor for heart and blood vessel disease. Cholesterol in itself is not all bad; in fact, our bodies need a certain amount to function properly. However, when the level gets too high, it can result in vascular disease. A total cholesterol of less than 200, and an LDL Cholesterol of 100 or less is considered optimal by the National Heart, Lung and Blood Institute. The levels that your doctor will recommend depend upon whether you are at high risk for cardiovascular disease.

As the level of blood cholesterol increases, so does the possibility of plugging the arteries due to cholesterol plaque build-up. Such a disease process is called "hardening of the arteries" or atherosclerosis. When the arteries feeding the heart become plugged, a heart attack may occur. If the arteries that go to the brain are affected, then the result is a stroke.

There are three major kinds of cholesterol: High Density Lipoprotein (HDL), Low Density Lipoprotein (LDL), and Very Low Density Lipoprotein (VLDL).

- **LDL Cholesterol** is considered "bad cholesterol" because cholesterol deposits form in the arteries when LDL levels are high. An LDL level of less than 130 is recommended, 100 is optimal, and values greater than 160 are considered high risk and should be followed up by your physician. Those persons with established coronary or vascular disease may be instructed by their doctor to get their LDL Cholesterol well below 100. You should ask your doctor which LDL target is best for you.

There are two ways to report LDL. The most common is simply an estimate calculated from the Total Cholesterol, HDL, and triglycerides results. This may say "LDL Calc." A directly measured LDL Cholesterol is usually more accurate but more expensive, and may require that your doctor specify the direct LDL.

- **Triglyceride** is fat in the blood which, if elevated, has been associated with heart disease, especially if over 500 mg. High triglycerides are also associated with pancreatitis. Triglyceride levels over 150 mg/dl may be associated with problems other than heart disease.

Ways to lower triglycerides:

1. Lose weight
2. Reduce animal fats in the diet: eat more fish
3. Take prescription medication
4. Get regular aerobic exercise
5. Decrease alcohol and sugar consumption. While alcohol and sugar are not fats, the body can convert them into fats then dump those fats into your blood stream.
6. Restrict calories. The body converts carbohydrates into triglycerides when eaten to excess.

HDL cholesterol is a "good cholesterol" because it protects against heart disease by helping remove excess cholesterol deposited in the arteries. High levels seem to be associated with low incidence of coronary heart disease.

VLDL (very low density lipoprotein) is another carrier of fat in the blood.