



Understanding

A **Lipid Profile** is a detailed measure of the fats in your blood. It consists of measuring your total cholesterol, HDL cholesterol, and triglycerides and calculating your LDL cholesterol. NCEP (National Cholesterol Education Program—a study by a panel of experts) ATP III Guidelines recommend a complete lipid profile as the initial test and testing every 6 weeks until lipid goals are met and every 4-6 months thereafter.

Cholesterol is one of several components that form your lipid profile. **Total Cholesterol (TC)** is a measure of the total amount of both “good” and “bad” cholesterol in your blood at a given time

- TC is measure in milligrams/deciliter (mg/dl). A TC of less than 200 mg/dl is desirable.

The “good” cholesterol is call **High Density Lipoprotein (HDL)** cholesterol. It removes excess cholesterol from your arteries and moves it to the liver for further processing and elimination from the body.

- The higher your HDL, the better. An HDL greater than 45 mg/dl is desirable in women.
- A TC/HDL Ratio less than 4.5 is associated with lower heart disease risk

Your Test

Triglycerides (TRG) are composed of fatty acids and glycerol. Like cholesterol, they circulate in the blood, but are stored in body fat and used when the body needs extra energy. While your triglyceride level can be significantly affected by how recently you’ve eaten, total cholesterol and HDL are only slightly affected.

- *After eating, your triglyceride level increases significantly. If your body processes the fat efficiently, the level of TRGs will decrease naturally. Your fasting TRG level should be below 150 mg/dl.*

The ‘bad/cholesterol is call **Low Density Lipoprotein (LDL)** cholesterol. It contributes to the buildup of fat deposits in your arteries (atherosclerosis), which can cause decreased blood flow and heart attack.

- *About 65% of the cholesterol in your blood is LDL. An LDL of less than 130 mg/dl is desirable. If you have a personal history of CHD or if you have multiple risk factors, your LDL should be below 100 mg/dl.*

Your healthcare provider will carefully examine your lipid profile to fully assess your risk for coronary heart disease (CHD).

Results

Other Important Tests:

Alanine Aminotransferase (ALT) and **Aspartate Aminotransferase (AST)** are enzymes that measure liver function. A normal ALT is 10-40 U/L (units/liter) and a normal AST is 10-30 U/L. Your ALT and AST levels are monitored if you are on cholesterol lowering medications or medications to control diabetes.

Glucose (GLU) is a measure of the sugar level in your blood. Fasting glucose levels should be below 100 mg/dl. If you are overweight or have a family history of diabetes, your glucose levels hould be checked periodically.

- Total Cholesterol _____ (TC < 200)
- HDL Cholesterol _____ (HDL > 45)
- LDL Cholesterol _____ (LDL < 130)
- TC/HDL Ratio _____ (< 4.5)
- Triglycerides _____ (TRG < 150)
- Glucose _____ (GLU < 100)
- Blood Pressure _____ (< 140/90)
- ALT _____ (10-40 U/L)
- AST _____ (10-30 U/L)