

# Cholesterol (Lipid Profile)

*This information is provided for informational purposes only and is not intended to diagnosis, treat, cure, or prevent disease. Abnormal test values falling outside the Normal Range will be printed in bold and noted in the "Flag" column. Abnormal values should be reviewed by your primary physician and a copy of all testing should be included in your medical record for future reference and comparison.*

## **What is Cholesterol?**

**Cholesterol** is a fat-like substance that is not a source of calories and present in all human beings. About 80% of your cholesterol is produced by your liver, with the other 20% coming from your diet. This test measures the amount of fats (or lipids) in the blood. Abnormal results are correlated to an increased risk of coronary artery disease, heart attack, and stroke. This test series is excellent for monitoring improvement in cholesterol levels with diet and exercise.

**Cholesterol, Total** - is a very important lipid which is used to build cell membranes and also serves as a precursor molecule for all of the steroid hormones made in the body. Although cholesterol is produced by the body, most of it comes from dietary sources.

**Triglycerides** - measures the concentration of fat molecules in the blood stream. Although triglycerides are the body's primary source of stored energy, high levels lead to fatty deposits and plaque formation in the walls of arteries (so-called "hardening of the arteries" or atherosclerosis).

**HDL (High Density Lipoprotein) Cholesterol** - the "good" cholesterol, helps remove bad (LDL) cholesterol from the body by binding with it in the bloodstream and carrying it back to the liver for disposal. A high level of HDL cholesterol is associated with a lower risk of developing heart disease and stroke.

**VLDL (Very Low Density Lipoprotein) Cholesterol** - the "very bad" cholesterol. Elevations of VLDL in the bloodstream are associated with an increased risk of atherosclerosis and coronary artery disease.

**LDL (Low Density Lipoprotein) Cholesterol** - sometimes called "bad" cholesterol, this molecule collects inside the walls of the arteries and often contributes to the formation of plaque. The higher the LDL concentration, the greater the risk of developing coronary heart disease. This value is calculated by taking the total cholesterol and subtracting the HDL component and a fraction of the triglycerides; if the triglycerides are too high then an accurate LDL value cannot be estimated. In these cases a follow-up VAP Cholesterol Profile is recommended.