

CHOLESTEROL BY THE NUMBERS

Your total blood cholesterol is a measure of the cholesterol components LDL (low-density lipoprotein) cholesterol, HDL (high-density lipoprotein) cholesterol, and Triglycerides. Total cholesterol values cannot be interpreted in the absence of the cholesterol components listed above.

Kinds of Cholesterol

LDL (low density-lipoprotein) cholesterol is also called "bad" cholesterol [Remember it this way: **LDL**..the **L** stands for “Lousy”]. LDL can build up on the walls of your arteries and increase your chances of getting heart disease. If you do not have heart or blood vessel disease and are not at high risk for developing heart disease, the following guidelines apply.

Your LDL cholesterol number is:

- * Optimal if it is less than 100
- * Near optimal/above optimal if it is 100-129
- * Borderline high if it is 130-159
- * High if it is 160-189
- * Very high if it is 190 or above

The treatment goal for individuals with heart disease or blood vessel disease is to reach an LDL of less than 70. The treatment goal for high-risk individuals (those with diabetes or other multiple risk factors for heart disease) is to reach an LDL of less than 100.

HDL (high-density lipoprotein) cholesterol is also called "good" cholesterol [Remember it this way: **HDL**..the **H** stands for “Healthy”]. HDL protects against heart disease by taking the bad cholesterol out of your blood and keeping it from building up in your arteries. Your HDL cholesterol number is:

- * Low (and considered a risk factor) if it is less than 40 for men and less than 50 for women
- * Good (and able to help lower your risk of heart disease) if it is 60 or more

Triglycerides are the chemical form in which most fat exists in food and the body. Along with cholesterol, triglycerides form plasma lipids. Excess triglycerides in plasma have been linked to the occurrence of coronary artery disease in some people. Recent evidence suggests that lowering triglycerides are much more important than we previously realized in decreasing the risk of heart disease and many other chronic inflammatory medical conditions. Your triglyceride numbers are:

- * Normal if they are less than 150
- * Borderline high if they are 150-199
- * High if they are 200-499
- * Very high if they are 500 or higher

Cholesterol Ratios – Another Important Measure

The Total Cholesterol to HDL Cholesterol ratio is a number that is helpful in predicting an individual's risk of developing atherosclerosis. The number is obtained by dividing the total cholesterol value by the value of the HDL cholesterol. (High ratios indicate higher risks of heart attacks, low ratios indicate lower risk). High total cholesterol and low HDL cholesterol increases the ratio, and is undesirable. Conversely, high HDL cholesterol and low total cholesterol lowers the ratio, and is desirable. An average ratio would be about 4.5. Ideally we want to be better than average if we can. Thus the best ratio would be 2 or 3, or less than 4.

Triglyceride to HDL Cholesterol ratio is an indirect measure of insulin sensitivity. The number is obtained by dividing the triglyceride value by the value of the HDL cholesterol. High ratios are very predictive of insulin resistance, the metabolic syndrome and diabetes. Ideal ratios are 3 or less. The lower, the better.

What affects cholesterol levels?

A variety of factors can affect your cholesterol levels. They include:

- * Diet — A healthy diet is ALWAYS the place to start when trying to lower cholesterol and triglyceride levels. Read our **HEALTHY EATING PROTOCOL** found under the **Dr Paz's Articles** tab at www.drpez.com to get the most up-to-date information on diet.
- * Weight — In addition to being a risk factor for heart disease, being overweight can also increase your cholesterol. Losing weight can help lower your LDL and total cholesterol levels, as well as raise your HDL.
- * Exercise — Regular exercise can lower LDL cholesterol and raise HDL cholesterol. You should try to be physically active for 30 minutes on most days.
- * Age and gender — As we get older, cholesterol levels rise. Before menopause, women tend to have lower total cholesterol levels than men of the same age. After menopause, however, women's LDL levels tend to rise. *Hormones can play a major role in maintaining healthy cholesterol levels for men and women.*
- * Heredity — Your genes partly determine how much cholesterol your body makes. High blood cholesterol can run in families. However, you are not destined to become your parents! You can modify your genetic expression with lifestyle changes.