Cholestrol and Triglycerides

Cholesterol is a waxy substance that occurs naturally in all parts of the body and that your body needs to function normally. It is present in cell walls or membranes everywhere in the body, including the brainnerves, muscle, skin, liver, intestines, and heart. Your body uses cholesterol to produce many hormones, vitamin D, and the bile acids that help to digest fat. It takes only a small amount of cholesterol in the blood to meet these needs. However, if you have too much cholesterol in your bloodstream, it can lead to atherosclerosis, a condition in which fat and cholesterol are deposited in the walls of the arteries in many parts of the body, including the coronary arteries feeding the heart. In time, narrowing of the coronary arteries by atherosclerosis can produce the signs and symptoms of heart disease, including angina and heart attack. Cholesterol travels in the blood in packages called lipoproteins. Just like oil and water, cholesterol, which is fatty, and blood, which is watery, do not mix. In order to be able to travel in the bloodstream, the cholesterol made in the liver is combined with protein, making a lipoprotein. This lipoprotein then carries the cholesterol through the bloodstream. There are specific kinds of lipoproteins that contain cholesterol in your blood, and each affects your heart disease risk in a different way.

LDL "bad" Cholesterol - Low density lipoproteins

LDL carry most of the cholesterol in the blood, and the cholesterol from LDL is the main source of damaging buildup and blockage in the arteries. Thus, the more LDL-cholesterol you have in your blood, the greater your risk of heart disease. If you have heart disease or are at high risk for developing it and your LDL is 100 mg/dLor higher, your cholesterol may well be too high for you.

HDL "good" Cholesterol - High density lipoproteins

HDL carry cholesterol in the blood from other parts of the body back to the liver, which leads to its removal from the body. So HDL help keep cholesterol from building up in the walls of the arteries. If your level of HDL-cholesterol is below 40 mg/dL, you are at substantially higher risk for heart disease. The higher your HDL-cholesterol, the better. The average HDL-cholesterol for men is about 45 mg/dL, and for women it is about 55 mg/dL.

Triglycerides

Most of your body's fat is in the form of triglycerides stored in fat tissue. Only a small portion of your triglycerides is found in the bloodstream. High blood triglyceride levels alone do not necessarily cause atherosclerosis. But some lipoproteins that are rich in triglycerides also contain cholesterol, which causes atherosclerosis in some people with high triglycerides and high triglycerides are often accompanied by other factors (such as low HDL or a tendency toward diabetes) that raise heart disease risk. So high triglycerides may be a sign of a lipoprotein problem that contributes to heart disease.