



FATS IN THE BODY

CHOLESTEROL AND TRIGLYCERIDES



CHOLESTEROL is a waxy, fatty (lipid) substance found in the blood, which helps in fat digestion, nerve development and hormone production. The body (*the liver*) produces its own cholesterol but the amount is influenced by diet, exercise and heredity. The body transports cholesterol through the blood by attaching it to proteins to make it water-soluble. These transport vehicles are called lipoproteins. The two lipoproteins we refer to are **High Density Lipoproteins (HDL)** and **Low Density Lipoproteins (LDL)**.

😊 **HIGH DENSITY LIPOPROTEIN (HDL)** is the fraction of cholesterol, which is involved in the removal of cholesterol from the body. Higher HDL levels mean greater protection against heart disease. Exercise, healthy body weight, and use of monounsaturated fats in place of saturated fats may increase HDL. Smoking, obesity, insulin resistance and diabetes may decrease the amount of HDL in the blood. **The ratio of total cholesterol/HDL cholesterol is one determinant of the risk for atherosclerosis.**

☹️ **LOW DENSITY LIPOPROTEIN (LDL)** is the fraction of cholesterol, which carries cholesterol to the cells of the body and is directly involved with the formation of arterial plaque deposits. People with diabetes have a smaller denser form of LDL that causes more depositing of cholesterol into arterial plaques. An increase in LDL has been shown to increase the incidence of atherosclerosis. **Foods high in saturated and trans fats may increase LDL levels. Foods high in unsaturated fats, soluble fiber, soy protein and stanol esters (*certain margarines*) and exercise help lower LDL levels.**

TRIGLYCERIDES are another type of fat (lipid) found in the blood. High levels of triglycerides are linked to an increased risk of heart disease. Triglycerides usually go down with lower calorie, alcohol, and carbohydrate intake. Risk factors for high triglycerides levels are excess body weight, lack of exercise and excess alcohol intake. **Diets high in saturated and trans fats and concentrated sugars can also raise triglycerides levels. Diets high in monounsaturated fats lower triglyceride levels.**

HOW DO YOU COMPARE...

YOUR RESULTS

GOAL

Total cholesterol

Less than 200

LDL level

Less than 100

HDL level

Men > 45; Women > 55

Cholesterol: HDL ratio

Less than 4.4

Triglycerides

Less than 150

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