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HELPING YOU TO BUILD A HEALTHY FUTURE



Serum Cholesterol and Heart Disease: What is Your Risk?

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Heart disease kills more Americans than any other disorder. Most deaths resulting from heart disease are a result of occlusion of the coronary arteries due to atherosclerosis, often called coronary heart disease (CHD). Although there are many causes of CHD, including high blood pressure, smoking, obesity, and sedentary living, considerable evidence indicates that the chief cause of coronary heart disease is unhealthy cholesterol levels.

Cholesterol is a fat-like substance that is present in every cell of the body. Without cholesterol, our bodies could not function. However, when cholesterol levels in our blood are elevated, risk of coronary heart disease is greatly increased.

Most of the cholesterol in our bodies is produced in the liver. A small amount, perhaps 15 to 25 percent, is obtained through the food we eat. Because of genetic, hormonal, dietary, physical activity, and body composition differences, the amount of cholesterol in the blood varies widely among adults.

Cholesterol does not float freely through our blood streams, but is carried as part of small packages called lipoproteins. There are three main classifications of lipoproteins: high density lipoproteins (HDL), low density lipoproteins (LDL), and very low density lipoproteins (VLDL). These packages vary significantly in their size, weight, and density, and in their capacity to cause atherosclerosis and CHD.

Research shows that LDL cholesterol is the most atherogenic (atherosclerosis-causing) of the lipoproteins. It comprises about 65% of the typical Total Cholesterol level. Individuals with high levels of LDL cholesterol in their blood are much more likely to suffer from clogged arteries and to experience a heart attack or stroke. Hence, LDL cholesterol is often referred to as the "bad cholesterol."

Evidence suggests that HDL cholesterol is actually beneficial. It is called the "good cholesterol," and usually accounts for about 25% of the average Total Cholesterol level. Some research indicates that high density lipoproteins gather cholesterol molecules that have been deposited along our arteries and transport them back to the liver. In short, as HDL cholesterol levels increase, atherosclerosis decreases. Hence, individuals with high levels of HDL cholesterol in their blood have much lower rates of CHD than individuals with lower levels.

VLDL cholesterol is comprised mostly of triglycerides, and only represents a small proportion (10-15%) of the typical Total Cholesterol level. VLDL levels in the blood are not good predictors of CHD.

Because LDL and HDL cholesterol levels are highly predictive of the amount of atherosclerosis in our arteries and subsequent CHD, all adults should know their cholesterol levels and have these levels checked regularly. Individuals with elevated LDL levels and/or depressed HDL levels should work diligently to improve their lifestyles, because research shows that changes in diet, exercise, and body fat levels can significantly improve both LDL and HDL levels, and greatly reduce our risk of CHD. If meaningful changes in lifestyle over several months fail to improve an unhealthy cholesterol profile, then serious consideration should be given to taking a cholesterol modifying drug prescribed by a physician.

Ways to Lower Cholesterol*

- ❖ Eat foods with less fat, saturated fat, and cholesterol.
- ❖ Take off the skin and fat from meat, poultry, and fish.
- ❖ Broil, bake, roast, or poach instead of frying foods.
- ❖ Eat lots of cereals, breads, rice, and pasta made from whole grains, such as whole wheat bread or spaghetti.
- ❖ Eat less sausage, bacon, salami, bologna, other fatty sandwich meats, whole milk, cheese, butter, and oil.
- ❖ Drink skim or low-fat milk.
- ❖ Use skim or low-fat milk, cheese, and yogurt in cooking.
- ❖ Use liquid or soft margarine or vegetable oils.
- ❖ Eat more egg whites and less egg yolks.
- ❖ Read food labels to learn how much fat is in the food you eat. Also look for the amount of saturated fat and cholesterol in food.
- ❖ Get lots of exercise everyday.

*National Women's Health Information Center

