September 2011

Health & Wellness

September is Cholesterol Education Month

Cholesterol is a waxy substance that's found in the fats (lipids) in your blood. While your body needs cholesterol to continue building healthy cells, having high cholesterol can increase your risk of heart disease. When you have high cholesterol, you may develop fatty deposits in your blood vessels. Eventually, these deposits make it difficult for enough blood to flow through your arteries.

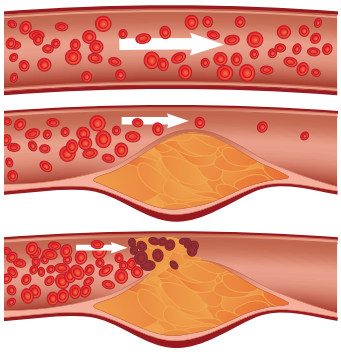
High cholesterol can be inherited, but is often preventable and treatable. A healthy diet, regular exercise and sometimes medication can go a long way toward reducing high cholesterol.

Read this newsletter to learn more about managing your cholesterol.

Sources:
MedicineNet.com
Mayoclinic.com

CHOLESTEROL

Cholesterol is a fatty chemical that is an important part of the outer lining (membrane) of cells in the body. Cholesterol is found mainly in foods that come from animals. LDL lipoprotein is the major carrier of cholesterol in the blood. LDL cholesterol is called "bad" cholesterol, because elevated LDL cholesterol is associated with an increased risk of coronary heart disease. LDL lipoprotein deposits cholesterol on the artery walls, causing the formation of a hard, thick substance called cholesterol plaque. Over time, cholesterol plaque causes thickening of the artery walls and narrowing of the arteries, a process called atherosclerosis.



Top artery is healthy. Middle & bottom arteries show plaque formation, rupturing, clotting and blood flow occlusion.

Atherosclerotic disease of coronary arteries is called coronary heart disease. Coronary heart disease is the most common cause of death in the United States, accounting for about 600,000 deaths annually. Atherosclerosis can also lead to brain damage from stroke. In addition to smoking and blood pressure, blood cholesterol is a major controllable risk factor for coronary heart disease.

Your blood cholesterol level is affected not only by what you eat but also by how quickly your body makes LDL ("bad") cholesterol and disposes of it. In fact, your body makes all the cholesterol it needs, and it is not necessary to take in any additional cholesterol from the foods you eat.

Many factors help determine whether your LDL cholesterol level is high or low. The following factors are the most important:

- Heredity
- What you eat
- Weight
- Physical activity/exercise
- Age and sex
- Alcohol
- Stress

HEREDITY

Your genes influence how high your LDL ("bad") cholesterol is by affecting how fast LDL is made and removed from the blood. One specific form of inherited high cholesterol that affects 1 in 500 people is familial hypercholesterolemia, which often leads to early heart disease. Even if you do not have a specific genetic form of high cholesterol, genes play a role in influencing your LDL cholesterol level.

WHAT YOU EAT

Two main nutrients in the foods you eat make your LDL ("bad") cholesterol level go up: saturated fat, a type of fat found mostly in foods that come from animals, and cholesterol, which comes only from animal products. Saturated fat raises your LDL cholesterol level more than anything else in the diet. Eating too much saturated fat and cholesterol is the main reason for high levels of cholesterol and a high

rate of heart attacks in the United States. Reducing the amount of saturated fat and cholesterol in your diet is a very important step in reducing your blood cholesterol levels.

WEIGHT

Excess weight tends to increase your LDL ("bad") cholesterol level. If you are overweight and have a high LDL cholesterol level, losing weight may help you lower it. Weight loss also helps to lower triglycerides and raise HDL ("good") cholesterol levels.

PHYSICAL ACTIVITY/EXERCISE

Regular physical activity may lower LDL ("bad") cholesterol and raise HDL ("good") cholesterol levels.

AGE AND SEX

Before the age of menopause, women usually have total cholesterol levels that are lower than those of men the same age. After the age of about 50, women often have higher total cholesterol levels than men of the same age. As women and men get older, their blood cholesterol levels rise until about 60 to 65 years of age.

ALCOHOL

Alcohol intake increases HDL ("good") cholesterol but does not lower LDL ("bad") cholesterol. Doctors don't know for certain whether alcohol also reduces the risk of heart disease. Drinking too much alcohol, however, can damage the liver and heart muscle, lead to high blood pressure, and raise triglycerides. Because of the risks, alcoholic beverages should not be used as a way to prevent heart disease and should be used in moderation.

STRESS

Stress over the long term has been shown in several studies to raise blood cholesterol levels. One way that stress may do this is by affecting your habits. For example, when some people are under stress, they console themselves by eating fatty foods. The saturated fat and cholesterol in these foods contribute to higher levels of blood cholesterol.

Lifestyle changes to lower LDL cholesterol involve losing excess weight, exercising regularly, and following a diet that is low in saturated fat and cholesterol.

Medications are prescribed when lifestyle changes cannot reduce the LDL cholesterol to desired levels. The most effective and widely used medications to lower LDL cholesterol are called statins. Most of the large controlled trials that demonstrated the heart attack and stroke prevention benefits of lowering LDL cholesterol used one of the statins. Other medications used in lowering LDL cholesterol and in altering cholesterol profiles include fibrates, such as gemfibrozil (Lopid), resins, such as cholestyramine (Questran), and ezetimibe, such as Zetia.

As always, if you have any questions or would like to discuss your cholesterol levels, consult your physician. Your physician will assist you in developing a program to help reduce your LDL and reduce your risk of associated complications.

For more health-related information, visit your Health & Wellness Department.