

Cholesterol

“For God bought you at a great price. So use every part of your body to give glory back to God, because he owns it.”
1 Corinthians 6:20

Most of us think of cholesterol as something bad that we must avoid. However, it's not that simple. Let's try to break it down so we can make intelligent decisions. First, **what is cholesterol?** The fat we eat is absorbed by the intestines and then goes to the liver. Our liver changes this fat into cholesterol and triglycerides. These two combine to make:

1. VLDL-very low density lipoprotein
2. LDL-low density lipoprotein (bad cholesterol)
3. HDL-high density lipoprotein (good cholesterol)

The body needs cholesterol to produce some hormones, Vitamin D, and bile acids which digest fat. The problems occur when we have too much cholesterol.

When is cholesterol a problem? LDL allows cholesterol to be deposited inside the blood vessels. This narrowing is called arteriosclerosis, and can lead to a heart attack or brain attack (stroke). HDL, on the other hand, collects “bad” cholesterol and takes it back to the liver-hence the label: good cholesterol. In general, the higher the HDL, the lower a person's risk of arteriosclerosis.

Cholesterol is found only in fats that come from animals. While high cholesterol levels tend to run in families, the main reason levels are too high is the intake of too many saturated fats. Saturated fats are solid at room temperature (ex: butter, fat from meat) while unsaturated fats are liquid at room temperature (vegetable oil). There are many ways to control our levels of cholesterol. Lifestyle adjustments are a major factor in managing cholesterol amounts. A limit of 300mg of cholesterol (the amount in one egg) a day is the current recommendation for healthy people, and for those with heart disease the limit is 200mg. No more than 18 grams of fat a day is also advised. A large order of french fries has 16 grams of fat. This is why reading labels and asking questions is so important for maintaining health. Physical activity might help lower HDL levels, but it **definitely** reduces the risk of heart disease. Smoking lowers HDL levels (the good stuff) and increases the blood's tendency to clot.

When diet and exercise are not enough to keep your levels within an optimal range, medication can be valuable. The commonly used ones are statins, such as Lipitor and Pravochol, which slow the production of LDL, the bad cholesterol, and speed up the rate at which the liver destroys LDL. Another type of medication is a resin (Questran and Colestid), which reduces the amount of fat and cholesterol absorbed by the intestines. Care must be taken as it also can interfere with the absorption of other medications and nutrients.

Many people prefer natural products to treat medical conditions. According to Tufts University, garlic has little or no effect on cholesterol levels, and fish oil supplements can lower triglycerides only, not cholesterol. Niacin (from the vitamin B family) can help cholesterol levels if the daily dose is between 500-2000 mg per day. However, the highest recommended level is 35 mg per day. Too much niacin can cause digestive problems and liver or kidney damage. Foods high in water soluble fiber, such as oatmeal and raw fruits and vegetables can bind with cholesterol in the digestive tract before it is absorbed.

Test your knowledge of cholesterol facts taken from the American Heart website: True or False (key below)

1. **Only adults need to have their cholesterol checked. Children can't have high cholesterol.**

2. **High cholesterol levels put me at risk for Atherosclerosis (narrowing of the arteries)**
3. **If I have high cholesterol, the only thing I can do about it is take medication.**
4. **Bran muffins and other baked goods may hold a "hidden" source of cholesterol-raising fat.**
5. **Postmenopausal women should be on hormone therapy to lower their cholesterol and decrease risk for heart disease.**

Answers: *Even numbers are true, odds are false.*

Cholesterol can be our friend or our foe. It's up to you to try and keep levels at a healthy point, and work with your doctor to monitor levels and get timely medical advice.

You can do it! Knowledge is power.

For more information:

www.americanheart.org

www.medlineplus.org