

Exercise & Diet to Reduce Cholesterol

By: Dr. Kim Lazarus, DC

Cholesterol is a substance that is important for every cell in the body. It helps the liver to digest fat, plays a role in sex hormones, and maintains supple skin. The liver makes what the body needs.

There are two types of cholesterol, low-density lipoproteins (LDL's) and high-density lipoproteins (HDL's). LDL's are the bad cholesterol proteins and HDL's are the good cholesterol proteins. If there is an abundance of LDL's, the ratio of LDL to HDL becomes imbalanced and can become a health risk.

HDL's have a function to secrete the LDL's out of the bloodstream. If there are not enough HDL's to secrete excess LDL's then a build up can form in the arteries.

An elevated concentration of cholesterol and triglycerides is associated with a high risk of atherosclerosis or plaquing of the arteries. Excess cholesterol can build up in the arteries, cause blockages, and potentially lead to heart problems.

When there is damage to the arterial walls, holes, or abrasions, cholesterol can stick to the walls and begin to choke the artery. Our bodies are trying to stop the leak by laying down this layer. Preventing the arterial walls from getting damaged will help reduce the build up of cholesterol on the lining.

What may have caused the damage are chemicals that oxidized the tissues. Research suggests that there are 4 chemicals that can cause the breakdown of the arterial wall. They are homocystein, trans fatty acids, chlorine, and homogenized milk.

The homogenization process in milk changes the surface area of fat by making it smaller molecules that can be consumed more readily than larger ones.

The chlorine added to our water supply kills biological organisms but also has been found to damage cells in arterial linings.

Trans fatty acids have adverse effects on LDL and HDL production. Trans fatty acids include margarine, shortening, and frying oils.

Homocysteine is produced within our body and can cause lesions on arterial walls. Consuming foods that will convert the homocysteine into a good amino acid called methionine will reduce the adverse effects of the homocysteine. Foods that are rich in B vitamins, choline, taurine, zinc, copper, and magnesium are the suggested ones.

To repair the arterial damage, fish oils, deep-sea minerals, and flaxseed oil are recommended.

Elevated cholesterol can occur as a result of poor diet, genetics, and lack of exercise. The prevention and reduction of high levels of cholesterol begin with diet and exercise.

The goal of the cholesterol reducing diet is to decrease LDL's and improve the ration of LDL's to HDL's.

A cholesterol reducing diet consists of soluble fiber, fresh fruits and vegetables, and fish. Limiting alcohol, smoking, red meats, fried foods, dairy, and caffeine are necessary in the reduction of cholesterol.

Soluble fiber may lower LDL's up to 5%. Good sources of fiber consist of oats, oranges, pears, apples, corn, broccoli, brussel sprouts, carrots, split peas, kidney beans, and brown rice. It is advisable to consume 5-10 grams per day. 1 gram is equivalent to an apple or ½ cup of oatmeal.

Omega 3 fatty acids are important dietary supplements. They replace the bad fats by reducing the production of LDL's. They include tuna, mackerel, salmon, soybeans, canola oil, and walnuts. These essential fatty acids are those that our bodies cannot produce. Eat 3 servings of fish per week, take omega 3 supplements, or 1 tablespoon of flaxseed, borage, or grape seed oil.

Soy protein foods include tofu, soymilk, and soybeans and contain substances called stanols and sterols. These substances help in the reduction of cholesterol.

One glass of red wine per day elevates the level of HDL's and acts to protect against heart disease.

Garlic improves the ratio as well. Several cloves daily or 2 tablets, 1-3 times per day is recommended.

Some new research is being conducted on blueberries because they contain a compound called pterostilbene, which lowers cholesterol. It has not yet been determined the amount of blueberries a person needs to consume to have a positive effect on cholesterol lowering. Pterostilbene is a powerful antioxidant.

Antioxidants are important in the prevention of tissue oxidation. Tissue oxidation can damage arterial linings. Adding a good antioxidant to your diet will be beneficial.

Bitters have been found to reduce cholesterol. Artichoke leaves contain bitters that can reduce cholesterol and promote liver function. Other bitters like Oregon grapes, dandelion, and burdock root can also be found at health food stores in various forms.

LDL and total cholesterol levels vary with exercise programs but tend to respond best to fat weight loss. Cardio conditioning is the recommended exercise. LDL reduction is responsive to endurance exercise training.

A net 800-calorie exercise expenditure per week is the recommended minimum. 10-12 miles of walking per week is the equivalent to 800 calories. Ideally 1200-1500 calories or more per week for 4-6 months is required for significant reductions in LDL cholesterol. 30-40 minutes on an elliptical trainer is equivalent to 400 calories. 20 minutes of low level cycling is equivalent to 100 calories. Walking 3 miles equals 200 calories. 45 minutes of aerobics equals 300 calories.

Before beginning an exercise program it is always recommended to discuss it with your doctor. Remember to have fun and choose activities that will be enjoyable for you.

Try different exercises so you won't get bored, wear comfortable clothes, and start out slowly and work your way up to higher levels of fitness. Your body needs time to adjust. Drink lots of water, and take breaks when needed.

Seek advice from a fitness professional to set up a program that will help you achieve your goals.

Don't be fooled and think you have low levels of cholesterol if you have a decent diet and exercise regularly. Get your blood levels checked and take the appropriate action necessary to reduce those levels down.

Your doctor may advise you to go on cholesterol reducing medications. Whether you are on medications or not you still need to adjust your diet and activity level.

Keeping stress levels down will also contribute to the reduction of cholesterol. Take care of yourself and be the healthiest person you can be.

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