

## **Information from Your Family Doctor**

# **Improving Your Cholesterol with Diet and Exercise**

*Am Fam Physician.* 2010 May 1;81(9):1103-1104.

**What are the good and bad types of cholesterol?** Low-density lipoprotein (LDL) is “bad” cholesterol. The more LDL you have in your blood, the higher your risk of heart disease. High-density lipoprotein (HDL) is “good” cholesterol. This type lowers your risk of heart disease.

Triglycerides are another type of fat in your blood. People with diabetes and those who are at risk of diabetes tend to have high triglycerides. When you make changes in your lifestyle to improve your cholesterol levels, you want to lower LDL, raise HDL, and lower triglycerides.

**What are the best ways to improve my cholesterol?** There are many things you can do to improve your cholesterol, but some things work better than others. These are some of the best changes you can make:

- **Eat less saturated fats.** There are two kinds of saturated fat. One occurs naturally in animal products and some plant foods (such as coconut and palm kernel oil). The other kind is a man-made saturated fat called trans fat. Trans fats are used in margarine and many snack foods. You should limit the amount of natural saturated fats you eat, but completely avoid trans fats. Read the ingredients on food labels. If you see “partially hydrogenated” or “hydrogenated” oils, that means it has trans fats. It is important to remember that a food can have small amounts of trans fats even if the label says it doesn't. The only way to be sure is to read the ingredients.
- **Eat more unsaturated fats.** Most fats in vegetables, grains, and tree nuts are unsaturated. The two kinds of unsaturated fats are monounsaturated and polyunsaturated. These are better for you than saturated fats and should be used to replace the saturated fats you use in cooking as much as possible. For example, you can use olive oil or canola oil in cooking instead of butter.
- **Eat more nuts.** Have a small handful (1 to 2 oz) of almonds, walnuts, hazelnuts, brazil nuts, or pecans once a day instead of some other snacks. Peanuts are not as good for you as these tree nuts. Nuts are high in calories, so be careful not to eat too many.
- **Eat more high-fiber foods.** Good sources include vegetables and whole grains, such as oat bran, whole oats, beans, peas, and flax seed.
- **Eat more soy protein.** Get more protein from plant sources, such as soy, instead of from meat. Tofu and soy protein shakes are two easy ways to add soy to your diet.
- **Eat more fish.** Oily fish, such as salmon, tuna, mackerel, and sardines, are best. Fish that are caught in the wild are better for you than fish that are raised on farms. Have one or two 6-oz servings each week.
- **Drink alcohol in moderation.** Men should have up to two drinks per day, and women should have one. More than this can be bad for you. A drink is 1.5 oz of 80-proof liquor, 5 oz of wine, or 12 oz of beer or wine cooler.

**What about the Mediterranean diet?** The Mediterranean diet is an eating plan that improves cholesterol and lowers your risk of dying early. A big change for most people is to use olive oil instead of other fats and oils. Other parts of the Mediterranean diet include:

- Eating less red meat, dairy products, eggs, and poultry
- Eating more fish, tree nuts, vegetables, and whole grains
- Drinking wine in moderation.

**Can supplements help?** Yes, there are other things you can add to your diet that can help your cholesterol:

- **Plant sterols and stanols.** These can be found in fortified spreads, such as Promise Activ. Use up to two tablespoons per day instead of margarine or butter. Benecol chews are another way to add plant stanols to your diet. Benecol spreads contain small amounts of trans fats in addition to stanols, so it's best to make other choices.
- **Fish oil.** If you don't eat fish regularly, you can take fish oil supplements with at least 1,000 mg of the fatty acids EPA and DHA.

**Does exercise help?** Yes. Aerobic exercise is one of the few things proven to raise HDL. You need to exercise for at least 120 minutes each week to get the most benefit.

Lifestyle change	Improves LDL	Improves HDL	Improves triglycerides
Replace saturated and trans fats with monounsaturated and polyunsaturated fats	✓		✓
Eat more tree nuts	✓		
Eat more high-fiber foods	✓		
Replace some red meat and other animal proteins with soy protein	✓		
Drink alcohol in moderation		✓	
Eat more fish or take fish oil supplements			✓
Eat a Mediterranean diet	✓	✓	✓
Use spreads with plant sterols or stanols instead of margarine or butter	✓		
Get at least 120 minutes of aerobic exercise per week		✓	