

# CONTROLLING CHOLESTEROL NATURALLY

According to the US Government Center for Disease Control (CDC), approximately 100 million Americans have elevated cholesterol. Beyond a cholesterol level of 200 mg/dl, the level becomes a key contributing risk factor for future heart disease. While cholesterol is necessary for many bodily functions such as hormonal production and cellular health, inside the lining of an artery, it is bad news. By controlling cholesterol, and especially LDL (low density lipoprotein) cholesterol, the risk for future heart attacks and strokes can be reduced. A healthy diet is essential for controlling cholesterol and preventing heart disease. Dietary supplements can also be effective in addition to the diet. If your cholesterol is elevated, it is important to seek professional advice. Here are a few ways that cholesterol can be lowered in a natural way. This article is not intended to give medical recommendations.



## **Eat the Mediterranean Way**

The prevalence of cardiovascular disease is considerably less in Mediterranean countries than in the U.S. This diet is high in fruits, vegetables, beans, whole-grain carbohydrates, nuts, fish and monounsaturated fats like olive oil, avocado and nuts. Dairy products are consumed in low-to-moderate amounts and little red meat is eaten. Alcohol is consumed in moderation. A Mediterranean-type diet can reduce cardiovascular events by 72% and 60% lower all-cause mortality. For an excellent review of the Mediterranean diet as well as recipes, go to <http://oldwayspt.org/health-studies>.

## **Reduce your consumption of saturated fats**

Studies have shown that saturated fat raises levels of LDL “bad” cholesterol and may make the lining of blood vessels less flexible. Saturated fat is found in fatty cuts of beef, pork and lamb. It is also found in poultry skin, chicken wings, and dark meat chicken. High fat dairy products like cheese, butter, whole milk, 2% reduced fat milk, cream, cream cheese, sour cream and ice cream are also high in saturated fats. A few oils have a very high saturated fat content even though they are vegetable oils, namely coconut and palm oil. Choose lower fat options when choosing foods in this group.

## **Eliminate your consumption of trans fats**

Trans fats are chemically processed foods. Trans fats increase LDL “bad” cholesterol and decrease HDL “good” cholesterol. Look for the words “partially hydrogenated” on food labels and try to avoid these fats. The goal is “0” grams of trans fats. Listing of trans fats on nutrition labels is now mandatory, but don’t be fooled. A manufacturer can get under the radar screen by adjusting the serving size to bring the trans fat below 0.5 gm per serving. Cookies are an example. Be sure to check serving size. Trans fat free on a label does not guarantee the product is without trans fats.

## **Fruits/Vegetables**

Fruits and vegetables not only add antioxidants like vitamin C and E to the diet but magnesium, potassium and calcium as well. Antioxidants help slow LDL oxidation and prevent plaque rupture in the arteries. Magnesium helps regulate blood pressure. Potassium also helps regulate blood pressure and is a central feature of the DASH diet –

Dietary Approaches to Stop Hypertension,  
[https://www.nhlbi.nih.gov/files/docs/public/heart/new\\_dash.pdf](https://www.nhlbi.nih.gov/files/docs/public/heart/new_dash.pdf)



### **Add plant stanols and sterols**

Plant stanols/sterols block the absorption of cholesterol in the intestine. Do not confuse these substances with fat blockers or artificial fat substitutes which have several side effects. Studies have shown that plant stanols/sterols will help lower LDL cholesterol by up to 14% with consumption of approximately 2-3 grams (or 2,000-3,000 mg) per day. You can also take them while taking a statin since they work synergistically to lower cholesterol. Many food products contain plant sterols: Margarine-like spread Benecol, and Benecol Light are available at most grocery stores. Other products are listed at [www.corowise.com/wheretobuy](http://www.corowise.com/wheretobuy). Step One Foods at [www.steponefoods.com](http://www.steponefoods.com) has several food products: bars and smoothie mixes and sprinkles that all contain plant sterols. Plant sterols are also available in capsule form: Nature Made Cholest-off is available at Walgreens and Walmart, Cholesterol Success by Twin Labs is available at Amazon.com. Bulk supplements Pure Plant Sterol Powder is also available at [Amazon.com](http://Amazon.com): ½ tsp twice a day can be added to foods like yogurt, salad dressing, protein shake, etc. Plant sterols work best if taken before a meal. Just remember, whatever product you decide works best for you, it is important to take the correct dose: at least 2,000 mg and up to 3,000 mg per day.

### **Omega-3 fatty acids**

Different fats can have significantly different effects on your health. One of the beneficial fats is omega-3 fatty acids. Omega-3 fats found in fatty fish like salmon, sardines, trout, tuna and herring as well as plant foods like flaxseed, canola oil, pumpkin seed, walnuts and soybean oil decrease triglyceride levels. They also help to make the blood platelets less “sticky” (aspirin-like effect). Try to substitute the saturated and trans fats in your diet with omega-3 fats for heart health. Fish oil capsules make it easy to get your omega-3 fats daily. Talk with your health care provider about the proper dosage to take.

### **Eat more high fiber foods**

Americans are not getting enough dietary fiber, especially soluble fiber, found in oats, vegetables, fruits, beans and lentils. Fiber absorbs fats in the gastrointestinal tract and helps the body absorb less fat and cholesterol from the foods you eat. Large epidemiologic studies have demonstrated a reduced risk for heart attack and death from heart disease in both men and women who consume higher amounts of dietary fiber. In addition to the foods mentioned above, adding psyllium (Metamucil) to your diet can help reduce cholesterol. Patients who consume 10-12 grams soluble fiber per day, in the form of oats, psyllium, fruits/vegetables, beans and lentils can reduce total cholesterol by 3-14% and LDL by 5-10%. Try for 25 to 40 grams of total (soluble and nonsoluble) fiber per day. Fiber also helps with weight loss by filling you up on fewer calories. It helps slow the absorption of food by the body so blood sugar is stabilized and you stay fuller longer.

### **Eat more fish**

Salmon, tuna, mackerel and sardines are loaded with omega-3 fats, the good fat. Omega 3- fats have been shown to reduce the risk of heart disease by increasing HDL “good” cholesterol as well as decreasing triglycerides by 20-50%. They also act as an anti-inflammatory in the body and have an anti-arrhythmic effect on the heart. Fish oil capsules can be a good alternative when eating enough fish is difficult. Talk with your health-care provider about the best dosage. Plant sources of omega-3 fats include flaxseeds, soybeans, canola oil and walnuts.

### **Enjoy Nuts and Nut Butters**

In July 2003 the FDA approved a qualified health claim for nuts stating that as part of a diet low in saturated fat and cholesterol, nuts may reduce the risk of heart disease. Nuts are a staple of the traditional Mediterranean diet, one of the healthiest diets in the world. Studies have consistently shown an inverse relationship between nut consumption and coronary risk in the neighborhood of 40-50% risk reduction with an intake of 5 oz. of nuts per week. Nuts, especially walnuts and almonds, are high in arginine, magnesium, folate, plant sterols, vitamin E and soluble fiber. Walnuts also contain high levels of omega-3 fats.

### **Have more soy**

The FDA has approved a health claim for soy stating that diets low in saturated fat and cholesterol that contain 25 grams of soy protein a day may reduce the risk of heart disease. You can get about 10 grams of soy protein from 1-2 cups or soymilk, 4 oz. of tofu, 1 oz of soy flour or 1 soy burger. Total & LDL cholesterol can be decreased by 9% and 13% respectively after 1-2 months and triglyceride levels by 10.5%, accompanied by an increase of 2.5% in HDL cholesterol. Look for the FDA approved claim on packaging of soy products such as soymilk, soy yogurt, soybeans, tofu, tempeh, edamame, soy protein smoothies, and soy burgers. Be sure to buy organic soy products since this is a high GMO type crop. Find soy food recipes at [www.eatwell.com](http://www.eatwell.com)

## **Flaxseed Power**

Milled or ground flaxseed contains omega-3 fatty acids, phytoestrogens, lignans and fiber with anti-inflammatory, anti-arrhythmic and anti-hypertensive qualities. The soluble fiber content of the lignans may reduce total and LDL cholesterol. Two tablespoons ground flaxseed a day. Flaxseed is available in grocery stores as well as health food stores. Whole flax seed is not effective, it must be ground, ideally two tablespoons of ground flaxseed a day should be taken. Mix it into smoothies, yogurt or sprinkle on salads.

## **Garlic**

The studies on garlic are mixed, but on average cholesterol can be cut by 0-4%. Garlic may have an antioxidant and anti-hypertensive effect as well. Fresh uncooked garlic...1-2 cloves a day, is best. Supplements have been shown to be effective as well. 200 – 400 mg three times a day standardized powder (1.3% allin content). Kwai is one product that has all the components of the raw bulb.

## **Tea**

Tea drinking appears to be protective against coronary heart disease in a number of epidemiologic studies. Tea contains flavonoids that have antioxidant properties. Consider antioxidants as “rust inhibitors” for arteries. Green tea appears to have the most, but all teas are protective. Regular tea consumption of 3 cups per day is most beneficial.

## **Portfolio Eating Plan**

From the University of Toronto comes research showing a change in diet to be as effective as taking a starting dose of drugs such as statins without the side effects. The three published trials show the diet can lower LDL cholesterol by as much as 35%. The eating plan included the following each day as part of a 2,000 calorie diet: [www.portfolioeatingplan.com](http://www.portfolioeatingplan.com)

- 30 grams (about 1 oz) of almonds – about 23 almonds
- 20 grams of fiber from foods such as oats, barley, psyllium
- 50 grams of soy protein from foods such as tofu, soy meat alternatives and soy milk
- 2 grams (2,000 mg) of plant sterols from foods like Benecol spread

## **Consider adding supplements:**

### **Red Yeast Rice**

Red yeast rice contains chemicals that are similar to prescription statin medications. One of these, called monacolin K, has the same makeup as the drug lovastatin (Mevacor). Several studies have shown that red yeast rice lowers LDL ("bad") cholesterol levels. It is essentially an over-the-counter statin. Do NOT take Red Yeast Rice if you are already taking a statin. However, some people who do not tolerate statins are able to tolerate Red Yeast Rice. A study presented to the American Heart Association showed that red yeast rice lowered LDL cholesterol. In the study, 187 people had mild-to-moderately high levels of total cholesterol and LDL cholesterol. The study showed that taking red yeast rice reduced total cholesterol by more than 16%, LDL cholesterol by 21%, and triglycerides by 24%. HDL cholesterol also went up by 14%. Most studies have used a standardized extract: 600 mg, 2 to 4 times daily. Consumerlab.com rated Thorne Research Choleast (available at Amazon.com) as a high quality supplement.

### **Coenzyme Q 10 (CoQ10)**

CoQ10 is involved in energy production in the body as well as acting as a free radical scavenger. CoQ10 is depleted in the body by the HMG-CoA reductase inhibitors (statins). 100-200 mg per day of CoQ10/ Ubiquinol added to traditional statin therapy may help patients avoid myalgias (muscle pain). You can find CoQ10 at most drug store as well as health food stores. Be sure to get the Ubiquinol form of CoQ10. Check [consumerlab.com](http://consumerlab.com) for highly rated brands.

**Note:** Always communicate with your healthcare provider about any supplement use.

**Exercise:**

Staying fit helps to lower cholesterol. Restricting calories and losing weight has a major impact on cholesterol reduction as well. Exercise improves the good cholesterol, HDL.

Remember, if your cholesterol is high, seek good professional advice to get levels in acceptable ranges. If it is necessary to add a medication, all the more reason to stay on a healthy diet as your lifestyle can augment the effects of the medicine.

**Resources:**

Barbara J. Goldman MS, RD, CDE, Sandy Couvillon MS, RD, CNM, Christian Calaguas MPH, RD & Esther Trepal MS, RD. Nutrition in Complementary Care, A Dietetic Practice Group of the American Dietetic Association. Ready References – Cardiovascular Disease (Botanicals, Nutritional Supplements and Functional Foods).

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Natural Medicines Comprehensive Database. [www.naturaldatabase.com](http://www.naturaldatabase.com). 3120 W. March Lane, Stockton, CA 95208. Therapeutic Research Faculty.