



Use Your Kitchen to Lower Your Cholesterol

A Nutritional Approach to Lowering Your Cholesterol

Statins are medications that lower LDL cholesterol levels and reduce inflammation in the body. But did you know that there are foods and supplements that can also help to lower LDL cholesterol and inflammation, whether you are taking a statin or not? Here are some research-based ways to lower your cholesterol and support your heart health:

Plant Sterols or Phytosterols:

Phytosterols are the plant version of cholesterol and when eaten, block the absorption of dietary cholesterol which assists in lowering LDL cholesterol. Research shows that 2,000 to 3,000 mg per day can lower LDL cholesterol by up to 14%. Products with plant sterols include: Metagenics UltraMeal Cardio 360 (available at Wise Pharmacy in Littleton, Colorado and online Or through dietitian Susan Buckley RDN, Cholestoff (available at Walgreen's or Walmart), Moduchol (vitacost.com), Benecol Spread available at grocery stores and Step One foods available at Steponefoods.com

Soy Protein:

Phytoestrogens contained in soy products, known as isoflavones, are plant-derived chemicals that are structurally very similar to the hormone estrogen (men can take with no negative side effects). Estrogen has been known to prevent heart disease in premenopausal women by increasing effectiveness and number of LDL cholesterol receptors on the liver. This chemical is also a strong antioxidant. Eat edamame, tofu, soynuts, and unsweetened soymilk on a regular basis. Studies show that consuming 25 grams of soy protein a day (10 ounces of tofu or 2 1/2 cups of soy milk) can lower LDL by 5% to 6%.

Eat Garlic:

Research has found that garlic helps stop artery-clogging plaque at its earliest stage (called nano-plaque). How? Garlic keeps individual cholesterol particles from sticking to artery walls. Garlic also lowers LDL cholesterol through decreasing HMG-CoA reductase activity, which is an enzyme used in cholesterol synthesis in the liver. It also reduces the number of cholesterol and fat carrying lipoproteins (chylomicrons) that are formed in intestinal cells and transport cholesterol from cells to the liver. 2-4 fresh garlic cloves daily or 600 mg Kyolic® Aged Garlic Extract™ can be found at vitacost.com and also at health food stores. Can interact with some medications so check with your health care provider before starting, i.e. Coumadin.

Take Metamucil or Konsyl (Psyllium Husk):

Psyllium husk, the active ingredient in Metamucil and Konsyl, is one of the most powerful LDL-lowering soluble fibers in existence. A high fiber diet has been shown to reduce the risk of heart disease. Psyllium also traps undesirable bile acids within the intestine, which means the liver must pull more LDLs in from the bloodstream to compensate. It also prevents cholesterol and fat from entering the intestinal cells. Slowly work up to 1 tsp psyllium in 8 oz of water before meals. Available at Walmart, Target, Walgreens and grocery stores.

Eat Oatmeal and/or Barley:

Whole grains are so beneficial because they contain naturally occurring components and plant hormones that help lower cholesterol. The key element is beta-glucan, which is a soluble fiber and acts as an intestinal sponge, soaking up and driving out LDLs within the body. (Examples: steel-cut oats, groats, rolled oats, oat bran). Barley and oats have been shown to decrease LDL cholesterol by up to 7%. Barley may be even more effective at lowering cholesterol when compared to oats due to the higher beta-glucan content. Aim for ½ cup of oats or barley per day.

Eat Flaxseeds:

Omega-3 fatty acids contained in flaxseeds have an anti-inflammatory property that decreases risk of atherosclerosis and heart disease. Flaxseeds also contain lignans, which are an extremely powerful antioxidant that inhibits the process of atherosclerosis. Be sure to use ground or milled flaxseeds– 2 tablespoons per day.

Eat Apples:

Pectin, the soluble fiber contained in apples, works through a similar pathway as the other soluble fibers. It forms a thick, gel-like matter in the intestine and is consumed in the colon by healthy bacteria. This activity might decrease blood clotting as well. Apples also contain antioxidants, which help prevent atherosclerosis. 1 apple per day.



Eat Beans, Peas, Lentils:

Beans are an excellent source of fiber, plant protein, and are virtually fat-free. Beans' soluble fibers and sugars feed healthy bacteria in the colon, which hinders cholesterol production in the liver. Beans also act in a similar way as Metamucil and Konsyl. Beans also play an important role in decreasing glucose absorption, which yields a decreased amount of insulin and, in turn, a decreased production of bad cholesterol from the liver. Aim for ½ to 1 cup per day.

Eat Almonds:

Almonds contain a high amount of monounsaturated fat which may increase LDL removal from the body. Also, almonds are high in fiber, which is linked to lower cholesterol and a reduced risk for heart disease. Antioxidants contained in almonds help to prevent atherosclerosis as well. One ounce or one handful per day.

****Supplements:***

Microbiome Plus+ GI is a natural probiotic that contains *Lactobacillus reuteri* 2.5 billion CFU. This particular good bacteria has been shown to work with the digestive tract to reduce LDL cholesterol and

C reactive protein without lowering HDL. One capsule with food twice a day is recommended . Available at Amazon.com

Bergamot is a plant that lowers LDL cholesterol almost as effectively as cholesterol-lowering statin drugs but it also raises HDL cholesterol. It can also lowers triglycerides by up to 39%. The suggested dose of bergamot is 500–1,000 mg of a standardized extract, taken once or twice a day 20–30 minutes before meals and can be taken with statins. BergaMet or Jarrow Formulas are available at Amazon.com. Bergamot is also available through Wise Pharmacy in Littleton.

Berberine is a compound found in several different plants that can help lower LDL cholesterol. Studies show that berberine supplementation significantly lowered triglycerides (35%), LDL cholesterol (21%), and total cholesterol (18%). The usual dose is 500 mg 2–3 times a day and can be taken with statins. Thorne Berberine, Vital Nutrients, Dr. Whittaker Berberine at Amazon.com

Artichoke Leaf Extract (ALE) from the globe artichoke plant can lower cholesterol in otherwise healthy individuals with moderately raised levels. Research has shown that 1,300-1,800 mg per day of dry artichoke leaf extract for six weeks, has an 18.5% reduction in total cholesterol, while the LDL fell 23%. The ratio of LDL to HDL decreased 20%. Can be taken with statins. Jarrow Formulas available at Amazon.com or local health food store.

Walk:

The act of walking lowers LDL cholesterol, prevents diabetes, helps increase longevity, reduces the risk of contracting certain types of cancer, enhances later life ability and will dramatically decrease risk of senility. It is equally unhealthy to avoid exercise as it is to smoke cigarettes! It increases the resistance of LDLs to oxidation, which protects against atherosclerosis. Walking also decreases likelihood of obesity, coronary artery disease, diabetes mellitus, hypertension, osteoporosis, arthritis, Alzheimer's and certain types of cancer. Physical activity also can assist with depression and anxiety



Sample Day:

Breakfast:

Metagenics UltraMeal Cardio 360 protein shake made with 8 oz unsweetened soy milk (22 grams soy protein and 900 mg plant sterols), 1 cup strawberries, 2 Tbsp ground flaxseed, 1 tsp Konsyl and 1 cup fresh spinach. Take with one tab Cardioiva and 500 mg Bergamot and 500 mg Berberine

Snack:

¼ cup soy nuts: 14 grams soy protein

Lunch:

1 tsp Konsyl in 8 oz water or Vitamin water Zero. Large green salad with 4 oz salmon or tuna and ½ cup garbanzo beans drizzled with extra virgin olive oil dressing. Take with 1,300 mg Artichoke Leaf Extract and 1 Cardioiva

Snack:

1 oz almonds and 1 apple

Dinner:

1 tsp Konsyl in 8 oz water or Vitamin water Zero. 4-5 oz chicken, 1 ½ cups roasted vegetables served over ½ cup barley

Take with 2 ModuChol plant sterol tablets (1300 mg plant sterols), 500 mg Bergamot and 500 mg Berberine and 1 Kyolic® Aged Garlic Extract™

Dessert:

Bowl of fresh berries drizzled with dark chocolate

Things to consider before you get started:

- If you are unsure how to proceed with adding these foods and supplements, please set up an appointment with our registered dietitian, Susan Buckley RDN, CLT at 303-744-1065.
- *Always check with your healthcare provider before adding supplements and only add one at a time to see how your body responds.

If you would like to learn more on how to reduce your lipids with diet or reverse heart disease, check out the following links.

<https://www.ornish.com>

<https://www.drmcDougall.com>

<https://www.pritikin.com>



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Eat Well, Live Well