**Reducing High Cholesterol, Triglycerides & Lp(a) levels**



**Diet Tips for Lowering Cholesterol**

1. **Reduce overall fat,** especially trans-fat commonly found in fried foods and margarine. Use oil or food that are high in Omega-3 fatty acid, such as olive, rapeseed oil, flaxseed and flaxseed oil. Omega-3 fatty acid increase serum HDL Cholesterol. Avoid polyunsaturated and saturated oil, as they increase the cholesterol and triglycerides levels. Stay with mono-unsaturated fat such as olive oil for all cooking needs.
2. **Eliminate refined carbohydrates and sugar from your diet** and substitute complex carbohydrates that have lots of fiber. Fruit should be the major source of sweetness in your diet. Fruits are filled with pectin and fiber, which work wonders in lower serum cholesterol.
3. **Oat bran, oatmeal, and dry beans out of a can** are foods that have been shown to lower LDL cholesterol. Oat bran has been shown to **reduce LDL cholesterol by up to 20%** and to **increase HDL cholesterol by up to 20%.** Grapefruit - segments and membranes, not the juice - drives down cholesterol.  Also fresh oranges, apples, garlic, onions, barley, ginger, and shitake mushrooms.
4. **If tolerated eat lots of raw onion - at least half a medium onion a day.** This has been shown to raise the good HDL cholesterol by up to 30%.

**Supplements for Lowering Cholesterol and Triglycerides**

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| **Common Name**  | **Common Use For/MOA** | **Dose** |
| Beta Sitosterol | * Found in soybeans, wheat germ and corn oil helps stop the absorption of cholesterol
 | Follow directions on bottle |
| Copper  | * Lowers LDL, clotting disorders, heart function
 | 1 mg/day |
| **Chromium**  | * Lowers LDL, and triglycerides, and raises HDL
 | 500-1000 mcg/day |
| Fish oil/krill oil omega 3 | * Lowers LDL
 | 1-4 grams/day |
| Flaxseed |  | ¼ cup freshly ground seed QD |
| **Niacin** | * The form that improves cholesterol levels is called **nicotinic acid**.

**Three categories based on the rate of release of the niacin:** * **Immediate-release niacin** is effective and least expensive, but causes more flushing. It has to be taken two or three times a day.
* **Sustained-release/extended-release niacin** causes less flushing. However, some over-the-counter formulations may be less effective and increase the risk of liver toxicity. The **extended-release form** sold by prescription (**Niaspan** is the best-known brand) is effective, least likely to cause in­­tense flushing and safer for the liver—but it costs even more than brand-name statins. **An over-the-counter sustained-release preparation called Slo-Niacin is similar to Niaspan but much less expensive.**
* **No-flush niacin** (inositol hexanicoti­­nate) **has no “free” nicotinic acid,** so it has little or no effect on cholesterol. Still, some labels say “supports normal cholesterol.”
 | 1–3 grams/day **There are basically 3 different types of niacin.*** **Niacin** (also called nicotinic acid) **the right one to get**
* \*Niacinamide (also called nicotinamide)
* \*Hexaniacinate

**Niacin (Nicotinic acid) Lowers LDL, raises HDL, lowers total cholesterol, lowers triglycerides****Niacinamide** and **Inositol hexanicotinate,** have little or no effect on cholesterol |
| Plant sterols |  | 1,500–2,000 mg/day |
| Phosphatidylcholine | * antioxidants that support healthy microcirculation at the cellular level
 | 900 mg/day 3 (softgels) Phoschol |
| Tomato Extract (10% lycopene)  | * a potent, easily absorbed antioxidant that keeps LDL cholesterol from becoming oxidized
 | Follow directions on bottle |
| Policosanol | * from rice bran, this compound helps the liver to capture LDL cholesterol and increase HDL
 | Follow directions on bottle |
| Seanol | * derived from a brown seaweed called Ecklonia cava
* 40 percent lipid (fat) soluble, so it stays in your body much longer
* sea-based antioxidant
* maintain healthy LDL cholesterol levels, increases healthy levels of protective HDL cholesterol
* helps generate nitric oxide, decreases B/P
* support the endothelial lining of your blood vessels
 | 300 mg/day |
| **Grape seed extract**  | * helps relax arteries
* it helps to prevent LDL cholesterol oxidation
 | 150–300 mg/day |
| Garlic (allicin) | * decreases triglyceride level
* supports healthy blood pressure
* increases immune power
 | 500 mg concentrated form/day |
| Green Tea | * lowers LDL and prevents blood vessel constriction
 |  |
| Guggulipid | * Indian herb shown to reduce LDL even better than modern drugs on several trials
 | Follow directions on bottle |

**Elevated Lipoprotein A**

Lipoprotein A, commonly called Lp(a), is a major independent risk factor for cardiovascular disease,and **high Lp(a) is genetically linked.** The optimum laboratory level should be **under 20 mg/dl and preferably under 14 mg/dl.** Currently, there are **no medications or drugs** that can effectively lower your Lp(a).

Fortunately, Mother Nature has provided us a much better non-toxic alternative. **It consist of large doses of vitamin C, L-lysine, and L-proline.** Vitamin C, L-Lysine and L-proline are the basic building blocks of collagen. When these vitamins enter our bodies, they form collagen in large amounts. This is necessary, as **collagen must be replenished in blood vessels** to remain healthy and plaque free over periods of time. The reason is simple – Lp(a) is manufactured in the liver in response to aging vascular system and “micro-fissures” in the endothelial vascular wall. The body, in its attempt to patch up these fissures, produce cholesterol and its relative Lp(a). Unfortunately, **both cholesterol and Lp(a) are sticky, making them perfect for the job. Lp(a)** is many times **more potent than** cholesterol in its patching ability and has a tendency to attract other Lp(a) particles. The aggregation of Lp(a) forms a plaque that leads to vascular occlusion.

Supplements **for Lowering Lipoprotein A**

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| **Common Name**  | **Common Use For/MOA** | **Dose** |
| vitamin E (Alpha-tocopherol) | intercept free radicals and thus prevent a chain reaction of lipid destruction | 400 IU or 800 IU |
| Vitamin C (ascobyl palmitate) |  | 1-5 grams/day |
| **Niacin (Nicotinic acid)** |  | 1-4 grams/day |
| **Coenzyme Q10 (CoQ10)****(Ubiquinol is preferred active ingredient)** | Enhances mitochondrial function. **CoQ10** supports healthy HDL and prevents the excess oxidation of LDL | 100-300 mg/day |
| **L-carnitine** | works synergistically with CoQ10 to support healthy cholesterol and improves transportation of nutrients from the extra-cellular space to the intra-cellular space | 500-1000 mg/day |
| **Digestive** [**Enzymes**](http://www.drlam.com/articles/2002-No1-Detoxificaton.asp?page=4#DEnzymeSupplementation) | Including lipase and amylase help breakdown food and aid in digestion. Bowel transit time is also reduced, resulting in less stasis and absorption of fat. | Follow directions on bottle |
| **Probiotics** | "Friendly bacteria" such as [**L. Acidophilus**](http://www.drlam.com/articles/2002-No1-Detoxificaton.asp?page=4#BFloraSupplementation) help promote healthy cholesterol by converting it into a less absorbable form and sending it down the gastro-intestinal tract for emptying. It also increase enzyme production such as proteases that digest proteins and lipases that digest fats.  | Dosage: 1- 2 capsules a day, between meals.**Look for products that include (DDS-1) L. Bacillus Acidophilus** |
| **Pantethine and pantothenic acid,** | The use of pantethine to reduce total cholesterol, LDL cholesterol, and triglyceride level, while raising the good HDL cholesterol at the same time | **400 to 900 mg each per day** |
| Milk Thistle (*[Silybum marianum](http://www.drlam.com/articles/2002-No1-Detoxificaton.asp?page=4" \l "AHerbalSupplementation)* | Is a group of flavonoid compounds. **Silymarin prevents damage to the liver by acting as an antioxidant. It is much more effective than vitamin E and vitamin C.**  Liver is the major detoxification center of the bodySilymarin also works by preventing the depletion of glutathione. The higher the glutathione content, the greater the liver's capacity to detoxify harmful chemicals.  | 70 to 200 mg/day |
| Herb Tea  | Enhanced intestinal motilitySenna leaf, peppermint leaf, stevia leaf, buckthorn bark, damiana leaf, RED peel, chamomile flower, and uva ursi leaf. | **To fortify your regular meals with digestive enzymes (to enhance the breakdown of food in the gastro intestinal tract).  After your evening meal, you can begin drinking tea.** Start slowly. You should begin by steeping the tea 2 minutes (in 1-2 cups of water) for the first 3-5 days. As your system adjusts, you may increase steeping to 5 minutes. Most individuals will experience increased bowel movements, or slight cramping, during the first few days. This is due to the initial cleansing of the body system and is normal. |

\*Highlighted supplements are my first place I usually start with