High Triglycerides

Many people have elevated blood levels of triglycerides (TGs). TGs are composed of three fatty chains linked together. This is the way most fat exists in both food and the human body. People with diabetes often have elevated TG levels; see the section on Diabetes for further information. Successfully dealing with diabetes will, in some cases, lead to normalization of TG levels. Most studies indicate that people with elevated triglycerides are at higher risk of heart disease; see the sections on elevated cholesterol and atherosclerosis.

**Dietary changes that may be helpful:** While moderate drinking does not affect TG levels, heavy drinking is believed to be the second most prevalent cause (after diabetes) of hypertriglyceridemia. Alcoholics with elevated TG levels should deal with the disease of alcoholism first.

Sugar increases TG levels as well. It makes sense for people with elevated TGs to reduce intake of sugar, sweets, and other sugar-containing foods.

Diets high in fiber have lowered TGs in several studies, although many researchers have not seen this effect. Water-soluble fibers, such as pectin found in fruit, guar gum and other gums found in beans, and beta-glucan found in oats, may be particularly helpful in lowering triglycerides.
Low-fat, high-carbohydrate diets have lowered TGs in some, but not all, studies. Suddenly switching to a high-carbohydrate, low-fat diet will generally increase TGs temporarily, but making the switch gradually protects against this short-term problem. Cardiologists and most nutritionally oriented doctors recommend a diet low in saturated fat (meaning avoidance of red meat and all dairy except non-fat dairy) to reduce TGs and the risk of heart disease.

Some, but not all, studies report that fish eaters have a lower risk of heart disease. Significant amounts of TG-lowering omega-3 oils EPA and DHA can be found in the fish oil of salmon, herring, mackerel, sardines, anchovies, albacore tuna, and black cod. Many doctors of natural medicine recommend that people with elevated TGs increase their intake of these fatty fish.

**Lifestyle changes that may be helpful:** Exercise lowers TG levels. People who have diabetes, heart disease, or are over the age of forty, should talk with a doctor before beginning an exercise program.

Smoking has been linked to elevated TG levels. As always, it makes sense for smokers to quit.

Obesity increases TG levels. Maintaining ideal body weight helps protect against elevated TG levels. Many nutritionally oriented doctors encourage people who have
elevated TGs and who are overweight to lose the extra weight.

**Nutritional supplements that may be helpful:** Many double blind studies consistently demonstrate that the fish oils EPA and DHA, mentioned above, lower TG levels. The amount used in much of the research is 3,000 mg per day of omega-3 fatty acid. To calculate how much omega-3 fatty acid is in a supplement, add together the amounts of EPA and DHA. For example, if a given fish oil capsule contains 1,000 mg of fish oil, of which 180 mg is EPA and 120 mg is DHA, then the total omega-3 oil content is 300 mg. At this level, ten capsules per day would be required to reach 3,000 mg. Other forms of omega-3 oil, such as flaxseed oil, do not lower TGs; while they have other benefits, they should not be used for this purpose.

Cod liver oil will also lower TGs. Cod liver oil is less expensive than omega-3 fish oil. However, most cod liver oil contains large amounts of vitamin A and vitamin D; too much of either can cause side effects. Doctors will often order blood work for people who take high doses of vitamins A or D, and the cost of the blood work may exceed the savings in using cod liver oil. Those wishing to use cod liver oil instead of omega-3 fish oil should consult a nutritionally oriented doctor.

Omega-3 oil from fish oil and cod liver oil has been reported to affect blood in many other ways which might lower the risk of heart disease. However, it sometimes increases LDL—the bad form of cholesterol. A doctor can
check to see if fish oil has this effect on an individual. Research shows that when 900 mg of garlic extract is added to fish oil, the combination still dramatically lowers TG levels but no longer increases LDL. Therefore, it appears that taking garlic supplements may be a way to avoid the increase in LDL cholesterol sometimes associated with taking fish oil. People who take omega-3 fish oil may also need to take vitamin E to protect the oil from oxidative damage in the body.

Carnitine is another supplement that has lowered TGs in several studies. Some nutritionally oriented doctors recommend 1–3 grams of carnitine per day.

Pantethine is a special form of the B vitamin pantothenic acid. Several studies show that 300 mg of pantethine taken three times per day will lower TG levels. The form found in most B vitamins—pantothenic acid—does not have this effect. Some nutritionally oriented doctors recommend supplementing with pantethine to reduce TG levels.

The niacin form of vitamin B3 is used by both cardiologists and nutritionally oriented doctors to lower cholesterol levels, but niacin also lowers TG levels. The amount of niacin needed to lower cholesterol and TGs is several grams per day. Such quantities often have side effects and should not be taken without the supervision of a cardiologist or nutritionally oriented doctor. Rather than using niacin (and risking side effects), doctors of natural
medicine increasingly use inositol hexaniacinate in the amount of 500 mg three times per day.27 28

**Are there any side effects or interactions?** Refer to the individual supplement for information about any side effects or interactions.

**Herbs that may be helpful:** More than thirty-two human studies, mostly double blind, have demonstrated garlic’s ability to lower serum triglycerides levels. Common garlic intakes in these studies range from 600 to 900 mg per day for four to sixteen weeks. Reports that have analyzed the results of all studies performed to date on the TG-lowering effect indicate that over a one-to-four-month period, garlic supplements reduce triglyceride levels by 8–27%.29 30

People with no aversion to the odor can chew one whole clove of raw garlic daily. Otherwise, odor-controlled, enteric-coated tablets standardized for allicin content can be taken in the amount of 900 mg daily (providing 5,000 mcg of allicin), divided into two daily doses. For health maintenance, half of the therapeutic regimen is adequate.

Guggul, the mixture of ketonic steroids from the gum oleoresin of *Commiphora mukul*, is an approved treatment of hyperlipidemia in India and has been a mainstay of Ayurvedic herbal approaches to preventing atherosclerosis. Clinical studies indicate that guggul is effective in the treatment of high triglycerides; one study found total serum triglycerides to drop by 30.3%.31
Daily intake of guggul is typically based on the amount of guggulsterones in the extract. The recommended amount of guggulsterones is 25 mg three times per day. Most extracts contain 5–10% guggulsterones, and nutritionally oriented doctors often recommend taking it for twelve to twenty weeks.

Wild yam has been shown to lower blood triglycerides in humans.32 Typical amounts used are 2–3 ml of tincture three to four times per day or one or two capsules or tablets of the dried root three times each day.

Reishi, a type of mushroom, contains several constituents that seem to help decrease triglyceride levels based on preliminary reports.

Other herbal supplements that may help lower serum triglycerides include psyllium, fenugreek, and green tea.

Are there any side effects or interactions? Refer to the individual herb for information about any side effects or interactions.

References:


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