



# Lower blood triglycerides to ward off heart disease

Too often the good news of low total cholesterol is over-shadowed by the confusing bad news that blood triglycerides are elevated. Like cholesterol, high blood levels of TGs are associated with an increased risk of cardiovascular disease. However, unlike cholesterol, the guidelines for lowering blood TGs are not widely preached. So, what do you do?

First of all, a TG is a molecule of fat, consisting of three fatty acids bound to a molecule of glycerol (a type of alcohol that the body can convert to carbohydrate). Since there are many types of fatty acids, there are many types of TGs. They circulate in the blood, gradually releasing their fatty acids to be taken up primarily by fat cells for storage or by muscle cells for storage or energy needs.

The condition of high blood TGs is called hypertriglyceridemia in the medical world. It is common in those with poorly controlled diabetes.

Here are some tips for lowering blood TGs:

>> Smoking and obesity are linked to elevated TG levels -- more reasons to quit smoking and shed extra pounds.

>> Excessive alcohol consumption is associated with hypertriglyceridemia. Cutting down on drinking may be the first step to lowering TGs for some people.

>> A diet high in sugar can increase TG levels, so the obvious next step is to reduce intake by adding less sugar to food and cutting back on high-sugar foods. This includes those high in the fruit sugar fructose, such as soft drinks and fruit drinks.

>> Drinking four or more cups of green tea daily has been correlated with lower triglyceride levels. Interestingly, this effect was not seen in those drinking three cups per day or less.

>> Increasing consumption of the omega-3 fatty acids (EPA and DHA) found in fish oils helps decrease triglycerides and reduce the overall risk of cardiovascular disease. In many double-blind studies, fish-oil supplements containing about 3,000 mg of EPA and DHA lowered TG levels. Interestingly, the shorter omega-3 fatty acids found in vegetable oils such as flaxseed and canola have not been shown to lower TGs. Consequently, many physicians recommend consumption of salmon, herring, mackerel, sardines, anchovies,

albacore tuna and black cod. These fish are especially high in EPA and DHA.

>> Cod-liver oil's omega-3 fatty acids can help lower TGs, but cod-liver oil contains potentially toxic levels of vitamin A and D. Also, taking omega-3 fatty acids in fish oil and cod-liver oil supplement form has the possible negative side-effect of increasing LDL-cholesterol (the bad cholesterol). Some research shows that taking 900 mg of garlic extract daily can counter this, but the odiferous side effects of that approach may increase the number of people who want to keep their distance.

A non-dietary way to lower TGs was reported in the July issue of the journal *Arteriosclerosis, Thrombosis and Vascular Biology*. This research showed that endurance exercise correlates with lowering TGs. In men with low HDL-cholesterol levels, exercise increased this good form of blood cholesterol. The greatest positive effect was seen in men who had abdominal obesity, low HDL and elevated TG levels.

So again, our Health Option tips include exercise to promote yet another aspect of long-term health.

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