



Triglycerides

Cholesterol gets all the media attention, but the importance of triglycerides should not be minimized. Triglycerides circulate in the blood in small particles, and also contain cholesterol, adding to the total cholesterol burden. These particles, called Very Low Density Lipoproteins (VLDL), may deposit themselves on the artery walls. In this way they do play a part in artery blockage and are linked to heart attacks and strokes.

Triglycerides are fats. Lard and shortenings are triglycerides. The marbling of meat is the result of triglycerides – therefore the stuff clinging to waists and making belt tightening a tug of war is the result of triglycerides. Sugars - in particular table sugar, honey, molasses and syrups - raise triglyceride levels. Alcohol, like beer, wine, and hard liquor when drunk in excess are also major culprits in raising the triglyceride level. White flour also increases triglycerides!

High triglycerides in isolation can also cause some serious problems. A level over 500 can lead to pancreatitis (inflammation) or infarction (loss of blood supply) of the pancreas causing serious illness and even ultimately, death! Even higher levels, with a normal cholesterol level, can plaque arteries! High triglycerides also make our blood more likely to clot – a danger with narrow, clogged arteries – a heart attack waiting for a place to happen! **High triglycerides with a normal total cholesterol was a major risk factor** for heart disease in the **Framingham Heart Study**. The higher the triglycerides, and the lower the HDL, the higher the risk for heart attacks! Aim for a triglyceride level **under 160**.

New research is even more condemning of triglycerides. Elevated triglycerides, especially post-prandial (after eating) elevations are becoming a major risk factor marker for endothelial cell dysfunction. ECD is felt to underlie the blood vessel and organ damage seen in diabetes and intimately tied together with abnormal lipids - all of which lead to the damage to our bodies seen in cardiovascular disease, diabetes, kidney failure, and leading to strokes.

Triglyceride levels can be lowered far more easily than high cholesterol levels:

- **Weight loss** causes triglyceride levels to drop.
- **Exercise** can reduce the triglyceride count.
- **Reducing dietary intake of saturated fats** found in meats, lard, shortenings and dairy products helps lower the triglyceride count.

Nutritional Offerings:

- The **omega-3 fatty acids** of fish reduce triglycerides. Herring, salmon, cod, bluefish and mackerel are great sources for these beneficial fatty acids. For those who do not like fish, **Fish Oil Capsules** may be used, but excessive doses of capsules can actually RAISE the triglyceride level in some individuals - be cautious and have your doctor monitor your blood lipid levels regularly.
- Nicotinic acid (Niacin) may help – get the **No Flush Niacin** variety.

Prescription Medication Offerings:

These should be used only as a last resort if diet, exercise, and nutritional supplements do not help enough:

- Gemfibrozil (Lopid) or Fenofibrate (Tricor) will help. (These may be associated with higher death rates in the Framingham Study!)
- The "statin" drugs (Crestor, Zocor, Lipitor, Mevacor, etc.) are helpful but are expensive - \$80 or more per month to start for the name brands! The only good news here is that Mevacor is now available in generic form, but is not as effective with triglycerides as the newer name brand medications.