Department of Human Nutrition

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High Triglycerides - How, and Why, to Lower these Blood Fats

Triglycerides (pronounced try-GLIH-sur-rides) are the most common form of fat in the diet and the body. Fats in the form of triglycerides enter the blood after the digestion of foods and drinks that contain fat. Even foods that contain no fat, such as sugar and alcohol, affect the blood levels of these fats, since triglycerides are also made in the body by the liver.

Why are they important

to health? An August 2009 study concluded that even slightly increased triglyceride levels yield a higher risk of a cardiovascular event, such as a heart attack, stroke or hospitalization for heart disease problems. Triglycerides can contribute to clogging of the arteries in the heart, even when blood cholesterol levels are normal. Too many triglycerides in the blood can lead to the serious condition of pancreatitis, or inflammation of the pancreas.

How high is high? Normal levels of blood triglycerides are 150 mg/dl or less. Having excess blood triglyceride levels is called "hypertriglycerid-emia." In order to accurately measure the triglycerides in your bloodstream, you must fast for 12-14 hours before having a blood test. Having any food or drink, other than water, during that time can elevate triglycerides. If your triglyceride levels are elevated after a proper measurement, it is appropriate to make some lifestyle changes. Recheck every four months until your triglycerides reach a safe level.

Lifestyle recommendations for reducing high blood triglycerides: Triglyceride levels can often be reduced without medication by changing eating and physical activity habits. Follow the specific plans recommended by your physician and registered dietitian. Six general guidelines are described below.

1) Other risk factors for heart disease multiply the hazard of having high blood fat levels. Many people with high triglycerides have some or all of these heart disease risk factors. They include cigarette smoking, high blood pressure, high blood sugar and low levels of highdensity lipoproteins (also known as HDLs, or "good cholesterol"). Reduce your risk by not using tobacco. Recommended changes for controlling high triglycerides may also correct high blood pressure and high blood sugars. If they don't, take extra corrective measures. Anything you do to lower triglycerides will likely increase HDLs, especially losing weight and being more physically active. HDLs help protect against heart disease, so the higher they are, the better.

2) Weight reduction usually lowers triglycerides. If you are overweight, cut down on calories in order to lose weight. This includes all sources of calories: fats, proteins, carbohydrates and alcohol. A healthful diet to help reduce triglycerides includes plenty of vegetables, cooked dry beans, whole grains, no-sugar-added fruits, and dairy and protein foods that are low in saturated fats.

3) Reduce the saturated and trans fat content of your diet. People with high triglycerides may need to substitute monounsaturated fats — such as those found in nuts, canola oil, olive oil or liquid margarine — for saturated fats. Several times a week, substitute fish high in omega 3 fats (such as tuna, salmon, mackerel, rainbow trout, herring, sardines and anchovies) for meats high in saturated fat (such as sausage or hamburger). Compare the Nutrition Facts portion of food labels and select foods that have no trans fat most of the time.

4) Sugar and alcohol each have a great influence on blood triglyceride levels.

- Eating less sugar 0 and concentrated sweets is an important step in lowering triglycerides. Foods to limit or avoid include: sweetened beverages. candy, most baked goods, syrup, table sugar, jelly and honey. A high intake of fruit juice can also raise triglycerides, because of the natural sugar content.
- People with elevated triglycerides who drink alcohol should discuss this with their health care providers. Reducing alcohol intake or not drinking alcohol at all may be advised Even small amounts of alcohol can lead to large increases in blood triglyceride levels. Just one drink can increase triglycerides in susceptible people

5) Increased physical activity can help lower triglycerides by as much as 40%. Aim for at least 30 minutes of moderateintensity physical activity, such as walking, swimming, gardening and biking, on five or more days each week. If you are starting an exercise program, ask your health care provider for safe, appropriate choices.

6) If you have diabetes, keep your blood sugars as close to normal levels as possible. Elevated blood fat levels, such as high triglycerides, are often seen in people with diabetes. Achieving safe blood sugar levels will help improve your triglycerides. A personalized meal plan and physical activity are the first steps, along with any medications that may be prescribed, to controlling blood sugar.

Check for other medical conditions: Elevated triglycerides may be a consequence of other disease, such as undiagnosed or untreated diabetes mellitus. Other diseases that can cause the liver to produce too many triglycerides include hypothyroidism, kidney and liver disease, alcoholism and lupus. Your health care provider may check you for these conditions if high triglycerides are discovered. Medication: If your triglycerides are still elevated after you have changed your lifestyle habits as recommended by your health care provider, medication may be needed. If medicines are used to treat high triglyceride levels, dietary management, physical activity and other healthy habits are still important in controlling your triglyceride levels and reducing your risk for heart disease. Sources: 1) Plasma triglycerides and cardiovascular events in the treating to new targets and incremental decrease in end-points through aggressive lipid lowering trials of statins in patients with coronary artery disease. 2009. Faergeman O, et al. *The American J of Cardiology* 104(4):459-463. 2) Dietitians in General Clinical Practice, a dietetic practice group of The American Dietetic Assoc. 3) The American Heart Association, *www. americanheart.org*

For more information about healthy eating, contact your local extension office. The Food Assistance Program can help people of all ages with low income buy nutritious foods for a better diet. To find out more, call toll-free 1-888-369-4777.

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