

Triglycerides

What are triglycerides?

Triglycerides are the chemical form in which most fat exists in food as well as in the body. They're also present in blood plasma and, in association with cholesterol, form the plasma lipids. Triglycerides in plasma are derived from fats eaten in foods or made in the body from other energy sources like carbohydrates. Calories ingested in a meal and not used immediately by tissues are converted to triglycerides and transported to fat cells to be stored. Hormones regulate the release of triglycerides from fat tissue so they meet the body's needs for energy between meals.

How is an excess of triglycerides harmful?

Excess triglycerides in plasma is called hypertriglyceridemia. It's linked to the occurrence of coronary artery disease in some people. Elevated triglycerides may be a consequence of other disease, such as untreated diabetes mellitus. Like cholesterol, increases in triglyceride levels can be detected by plasma measurements. These measurements should be made after an overnight food and alcohol fast.

The National Cholesterol Education Program guidelines for triglycerides are:

Normal	Less than 150 mg/dL
Borderline-high	150 to 199 mg/dL
High	200 to 499 mg/dL
Very high	500 mg/dL or higher

AHA Recommendation — Dietary treatment goals

Changes in lifestyle habits are the main therapy for hypertriglyceridemia. These are the changes you need to make:

1. If you're overweight, cut down on calories to reach your ideal body weight. This includes all sources of calories, from fats, proteins, carbohydrates and alcohol.
2. Reduce the saturated fat, trans fat and cholesterol content of your diet.
3. Reduce your intake of alcohol considerably. Even small amounts of alcohol can lead to large changes in plasma triglyceride levels.
4. Eat fruits, vegetables and nonfat or low-fat dairy products most often.
5. Get at least 30 minutes of moderate-intensity physical activity on five or more days each week.
6. People with high triglycerides may need to substitute monounsaturated and polyunsaturated fats —such as those found in canola oil, olive oil or liquid margarine — for saturated fats. Substituting carbohydrates for fats may raise triglyceride levels and may decrease HDL ("good") cholesterol in some people.
7. Substitute fish high in omega-3 fatty acids instead of meats high in saturated fat like hamburger. Fatty fish like mackerel, lake trout, herring, sardines, albacore tuna and salmon are high in omega-3 fatty acids. Because other risk factors for coronary artery disease multiply the hazard from hyperlipidemia, control high blood pressure and avoid cigarette smoking. If drugs are used to treat hypertriglyceridemia, dietary management is still important.
8. **Start taking a fish oil supplement, over the counter, 1 gram tablets, 2 pills twice a day**

