

# Triglycerides

Triglycerides are a type of fat which is normally found in the body, and is an important intermediary substance for normal body function. Research has shown that when triglycerides become abnormally elevated they contribute to atherosclerosis and arteriosclerosis (clogging of the arteries and hardening of the arteries). The significance of this blood vessel change is very important to the future well-being of the person in whom it is developing.

It is unfortunate that many very debilitating and death-causing diseases develop for long periods of time before symptoms ever appear. In fact, the first symptomatic indication of long-term elevated triglyceride level may be a crushing chest pain – the first sign of “heart attack”. Equally ominous is the pain which develops rapidly in the head, with the following numbness and paralysis of a stroke. Oh, certainly there were some little tell-tale signs of these conditions developing – unfortunately the signs were not significant enough to warrant a consultation with a doctor. Or it’s possible that the doctor passed off the symptoms as something that would go away.

The early symptoms of circulatory disturbances, such as a clogging of the vessels from atherosclerosis and arteriosclerosis, can be as simple as numbness of the fingertips, ringing in the ears, and general coldness of the body. These symptoms should certainly indicate – to both the patient and the doctor – the necessity of examination for elevated triglycerides and/or cholesterol.

Excessive carbohydrate intake, especially refined carbohydrates, is one of the primary causes of an elevated triglyceride level. The three basic foodstuffs of the body are: carbohydrates (sugar) and starches, protein, and fat. Most people consume large quantities of refined carbohydrates, with today’s convenience foods and refined foods. This high level of sugar is rapidly absorbed into the body, providing the energy needed immediately and filling the sugar storehouses. Excess sugar is converted to fat (triglycerides); this is the body’s natural way of storing the product. Because sugar is immediately available, it is used. Hunger, and a drop in energy, develops; rather than waiting for the conversion of triglycerides back into sugar, many people fill their systems again with refined sugar with a soda pop, a candy bar, or snacks of all kinds. Again the cycle takes place, and additional sugar is converted into triglycerides. As this high triglyceride level continues to build, it – along with other substances – adheres to the blood vessel walls and forms a substance called “plaque”. The plaque ultimately hardens and continues building in thickness. The hardening of the plaques is what causes arteriosclerosis (hardening of the arteries); the thickness

of the plaque is what causes the narrowing of the arteries (atherosclerosis).

If this condition is found early enough, it can be stopped and brought under control. However, if the hardening of the arteries is allowed to progress too far, 100% correction will never be possible. For this reason it is extremely vital **not** to wait until significant symptoms develop before the condition is found. Periodic laboratory monitoring should be done by a doctor concerned with preventive health care. Some doctors today are so busy taking care of acute, crisis conditions – such as heart attack or stroke – that they have no time or interest in preventive health care.

Excessive alcohol intake is another cause of elevated triglycerides. The continuous use of alcohol causes a failure of triglyceride breakdown, very similar to the cycling effect present with excessive carbohydrate intake.

Adequate exercise is very important in the control of elevated triglycerides. Triglycerides are an energy store in the body. Daily physical activity, in the form of specific exercise or physical activity correlated with a person’s work or play, helps break down the stored triglycerides for use as energy in the body.

Weight control is very important in controlling triglyceride levels. If you are overweight, as determined by your doctor, it is very important to reduce to your “ideal” weight. Once your weight is brought to a normal level, it should be maintained there. If you start to gain weight, you are obviously taking in too many calories.

By observing the two primary causes of triglyceride elevation – too much sugar and starches, and excessive alcohol consumption – you can see that this major health problem originates with the refining of foods. Sugars and starches in their natural form cannot be eaten in as high a concentration, nor can they be absorbed as rapidly by the body, as refined sugars and starches. Natural foods, especially raw foods, must be chewed; they are, consequently, eaten more slowly. When food is eaten slowly, it is absorbed by the body and it satisfies a person’s hunger. Many times a person eats an excessive amount of refined carbohydrates because they go into the system so rapidly that there is no time for absorption, which would curb the appetite for more.

## **FOOD NOT PERMITTED**

Below is a list of foods which should be eliminated from your diet because of their high carbohydrate content.

These are not, generally, good quality foods – even for the individual with a normal triglyceride level. These foods contain the so-called “empty calories” which provide only energy; they do not provide the raw materials with which to build healthy tissues.

### General

Cakes	Candy Coated Fruits
Pies	Icings
Pastries	Glazes
Ice Cream	Jellies
Custards	Jams
Puddings	Marmalades
Flavored Gelatin	Cocoa
Fruit packed in Syrup	Corn Syrup
Donuts	Maple Syrup
Brownies	White Sugar
Chocolate Syrup	Brown Sugar
Candies	Powdered Sugar
Marshmallows	Sugared Peanut Butter
Candy Coated Nuts	Apple Butter

### Breads and Grains

Enriched White Bread	Muffins
Rolls	Noodles
Sugar Coated Cereals	Pretzels
Biscuits	Pancakes
Graham Crackers	Waffles
Saltines	Flour Tortillas
Soda Crackers	Croutons
Macaroni	

### Fruits

These fruits are not permitted primarily because of their high carbohydrate content.

Banana	Prune Juice
Cherries	Maraschino Cherries
Figs	Dates
Prunes	Any Dried Fruit
Persimmons	Grapes

### Beverages

Artificial Fruit Drinks	Cocoa
Soda Pop	Cola Drinks
Milk Shakes	Grape Juice
Malts	Root Beer
Instant Breakfast Drinks	Wine
Chocolate Milk	Cordials
Sweetened Fruit Juices	Cocktails
Any drink which contains white sugar	

### Miscellaneous

Read labels for sugar content. Sugar in a list of ingredients may be found as:

Dextrose	Fructose
Sucrose	Corn Sweeteners
Maltose	Galactose

Items frequently found with high sugar content:

Chile Sauce	Cranberry Sauce
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Barbeque Sauce	Ketchup
Bottled Salad Dressing	Mustard
Steak Sauce	

### PERMITTED FOODS

#### Protein

An adequate amount of protein must be supplied each day. This can be obtained from fish, eggs, and meat in their many forms. Meat should be lean, with excess fat trimmed.

The type of fat you eat is important in controlling triglyceride levels. Fat should not be eliminated from your diet, as it is an essential food product. The type of fat to limit is saturated fat; use polyunsaturated fat, which apparently helps to control elevated cholesterol levels.

In most instances, saturated fat is of animal origin. Saturated fat is present in such foods as butter, cream, whole milk, and cheese made from whole milk or cream.

The polyunsaturated fats are of vegetable origin. There are only a few exceptions to this rule, such as coconut oil and palm oil (used in non-dairy cream substitutes, some frozen desserts, etc.) and cocoa butter (the fat in chocolate).

In the processing of foods, there is a system to make previously polyunsaturated fats into saturated fats. This is usually seen in a vegetable fat that is solid at room temperature, such as margarine, shortening, etc. Many foods which are not primarily fat are hardened this way, such as peanut butter. The label will state that the product has been hydrogenated or “hardened”.

#### Fruits

Avocado	Apricots	Papaya
Cantaloupe	Blueberries	Strawberries
Honeydew	Pineapple	Tangerines
Muskmelon	Huckleberries	Apple
Watermelon	Kumquat	Orange
Blackberries	Lime	Peach
Cranberries	Loganberries	Pear
Currants	Mulberries	Quince
Gooseberries	Nectarines	Raspberries
Grapefruit	Lemon	

#### Breads, Grains, Miscellaneous

Whole wheat bread or products  
 Jerusalem artichoke flour  
 Wheat flour                      Oat flour  
 Soya flour                      Corn meal  
 Cracked wheat                      Oatmeal  
 Shredded Wheat                      Nuts and seeds  
 Whole wheat cereal                      Decaffeinated coffee  
 Milkshakes, using natural ingredients  
 For cooking – ground raisins, molasses  
 Homemade breads and noodles

Carob chips or carob powder  
Unflavored gelatin (flavor with juice, not water)  
Cornstarch for thickening  
Yeast                                  Cream of tartar  
Baking Powder                      Baking Soda

**Vegetables**

Asparagus	Artichoke
Sauerkraut	Spinach
String Beans	Tomatoes & Juice
Beet grass	Turnips
Broccoli	Watercress
Brussels sprouts	Soybeans
Cabbage	Beets
Cauliflower	Carrots
Celery	Celery Root
Collard	Chicory
Cucumber	Chives
Eggplant	Endive
Dandelion greens	Kohlrabi
Onions	Escarole
Kale	Peas
Leeks	Red Peppers
Lettuce	Rutabaga
Beans	Mushrooms
Lentils	Mustard Greens
Okra	Sweet Potatoes
Green Peppers	Lima beans
Pickles	Pumpkin
Squash, summer & winter	Radishes
Zucchini squash	Rhubarb

Potatoes, preferably baked

Frequently, nutritional supplements are of value in lowering elevated triglyceride levels. Your doctor will evaluate you for need of liver support, items to help break down the triglycerides, and/or for general body improvement; he will make appropriate prescriptions.

A very important aspect in the control of your triglycerides is a periodic re-check to determine improvement and, after improvement has been made, to be sure the condition does not recur. An important re-evaluation is of your weight level, especially if your weight has elevated to begin with and you needed a weight-reduction program. An increase in weight usually indicates that the triglycerides are also increasing.