

## Effect of Food on Triglyceride Level in Blood (A Review)



### CHEMISTRY

**KEYWORDS :** Triglycerides, Trans fat, Saturated fat, polyunsaturated fat

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### ABSTRACT

*Triglycerides are the type of fat present in blood stream. A portion of them come from food, and body also makes them. High levels of blood triglycerides causes, heart problems (Do et al., 2013) overweight or diabetes. Elevated levels are defined as greater than 150 mg/dl of blood. They are energy providers at rest and during low-intensity Exercise. The body fat is stored in the form of triglycerides. High fat food and certain medicines such as Taxocifen, Steroids, Beta blockers, Diuretics, Estrogens, Birth control pills can raise triglyceride level.*

In our food four different type of fats are present these are saturated fat, Trans fat, polyunsaturated fat, monounsaturated fat.

Saturated fat such as animal fat, coconut oil, palm oil and kernel oil .these raises blood cholesterol, so it's not good for health.

Trans fat are formed by adding hydrogen to vegetable Oils, these are one of the worst fats which we consume in food. Bakeries and restaurants use Trans fats. It's also found naturally in milk and beef.

Polyunsaturated fats are found in vegetable oils and fish oils (omega 3 fatty acids) these tend to lower blood cholesterol when eaten in moderation and used to replace saturated or Trans fats.

Monounsaturated fats are found in olive, canola, peanut, sunflower and safflower oils. In a low saturated-fat diet, they may lower blood cholesterol

Two types of lipids, cholesterol and triglycerides are transported in the blood by lipoprotein particles. Each particle contains a combination of protein, cholesterol, triglyceride, and phospholipid molecules. The particles measured with a lipid profile are classified by their density into high-density lipoproteins (HDL), low-density lipoproteins (LDL), and very low-density lipoproteins (VLDL).

Studies (Dai et al., 2009) have revealed that lipid Patterns of change with age, in blood lipid components vary significantly among gender and racial groups. Increase in body fatness among children is consistently associated with adverse change in blood lipids.

#### Triglyceride range in blood;

Less than 150mg/dl is considered to be normal range, between 200-499mg/dl is high level and above 500 mg/dl is considered to be very high

Overall, 30-40% of patients with diabetes have triglyceride levels > 200 mg/dl, and 10% have triglycerides > 400 mg/dl (Cowie & Harris, 1995).

#### Controlling triglyceride levels by changing food habits;

Diet plays an important role in managing triglyceride levels following changes in the food can bring down the increased level of triglycerides

#### 1. Reduce carbohydrate consumption

- Avoid alcohol consumption.
- Stop consuming White bread, white pasta, and white rice, they can increase triglycerides in sensitive individuals.
- Foods rich in omega 3 fatty acids may be added in diet. The two servings of fish weekly increase the consumption of these beneficial fats. In addition to fish consumption of nuts such as almonds and walnut help to control elevated level of triglycerides.
- Healthy weight must be maintained by exercise and by consuming healthy food
- Adopt an eating plan low in saturated and hydrogenated fats.
- Use olive oil, canola oil, rice bran, walnut oil, and flax oil instead of more saturated fats like butter, shortening, lard, or margarine
- High fibre foods control triglycerides and LDL ("bad") cholesterol. Examples include: beans, whole grains, ground flaxseed, pumpkin seeds, rice bran, oat, bran, fruits and vegetables.
- Vegetable proteins such as dried beans, peas, and soy products may be used.

#### Difference between triglycerides and cholesterol

Triglycerides and cholesterol are separate types of lipids that circulate in your blood. Triglycerides store unused calories and provide your body with energy, and cholesterol is used to build cells and certain hormones. Because triglycerides and cholesterol can't dissolve in blood, they circulate throughout your body with the help of proteins that transport the lipids (lipoproteins).

#### CONCLUSION

Elevated Triglycerides can be controlled by developing certain healthy eating habits.

### REFERENCE

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