

# Triglycerides and Coronary Artery Disease

**E**levated triglycerides, along with low HDL is the most common lipid abnormality in Indian population. This combination is a particularly high risk for developing Coronary Artery Disease in Indians. Triglycerides are the most common form of fat, both in the food and in your bloodstream .

The level of triglycerides increase after you eat, and therefore triglyceride levels must be measured after at least eight hours of fasting. Triglycerides in your blood come from fat in your food. But extra calories your body does not use such as those from sugar and alcohol also transformed into triglycerides.

That is why a healthy diet that limits sugar and refined carbohydrates such as white bread and white rice can help to lower triglyceride levels. Minimizing alcohol also helps as does exercise and maintaining healthy weight.

Normal level of triglycerides is less than 150 mg/dL. When the values are between 151 to 200 mg/dL, it is considered borderline high, those between 201 and 499 are high and those above 500 are considered very high. Very high level of triglycerides are often associated with pancreatic inflammation called pancreatitis.

When does risk start to increase? Several studies have shown high triglyceride levels is associated with risk of heart disease. Often, high triglycerides are associated with low HDL, pre-diabetes or type 2 diabetes, and abdominal obesity, and all of these are part of metabolic syndrome.

Study published in American heart journal in 2024, which included more than 14,000 adults who were followed for an average of 11 years showed that risk of heart related problems starts to rise with triglyceride level greater than 89 mg/dl- a level far lower than the 150 mg/dL value considered to be normal

Anyone with a triglyceride level of greater than 150 should be checked and treated for other underlying health problems which include diabetes, obesity, low thyroid level called hypothyroidism, and liver or kidney disease.

How to lower triglycerides Lifestyle changes can have a significant benefit in decreasing the triglyceride level. If people with high triglycerides follow a healthy diet, exercise regularly and lose weight, they can lower the triglyceride levels more than 50% 1. Choose carbohydrate wisely.

Cut back on easily digested carbohydrates like white bread, white rice, chips, sugar laden breakfast cereals, and beverages with lots of added sugar. 2. Watch your fat intake- Decrease your saturated fat intake from meat and butter, both of which can elevate triglycerides.

Try to eat more unsaturated fats from plants, use vegetable oils like olive oil, and consume fatty fish which bring down triglycerides. 3. Avoid excess alcohol- avoid alcohol consumption if your triglycerides are high 4. Regular exercise will help to lower triglyceride. 5. Weight reduction- if you're obese or overweight, reaching a healthy body weight can lower your triglycerides.

Dropping even just 5 to 10% of your weight can help.

Medication for high triglycerides - Many patients with high Triglycerides are already taking cholesterol lowering statin drugs, which lowers the triglycerides by about 30%. Drugs known as Fibrates which include fenofibrate( Antare, Tricor) and gemfibrozil ( Lopid) can lower triglyceride level by about 50%. Unfortunately, they do not lower the risk of heart attack or stroke.

But a drug made from a highly purified form of EPA (an omega 3 fat from fish), called icosapent ethyl ( Vascepa ) can lower Triglycerides by about 30%. When people with diabetes or heart disease take this medication along with the statins, it can lower the risk of heart attack/and death from cardiac disease by about 25%.

Icosapent Ethyl which is a prescription only drug and is very different from over-the-counter fish oil supplements found in stores and online. Those non-prescription products also contain EPA , but often in combination with DHA, which is another omega fatty acid. The amount of EPA in these over-the-counter medications are much lower than the prescription one.

Also, these over-the-counter fish supplements are not regulated for purity or quality control. So best option will be to go for prescription form of fish oil or for non-vegetarians, consume fatty fish like salmon or mackerel 2 to 3 times per week.

Very high triglyceride levels, that is 500 mg/mL or above, sometimes have a genetic component. An extreme example is familiar hyperchylomicronemia syndrome, which affects just one to two in 1 million population. In people with very high triglycerides, blood appears milky from high fat levels, and people are prone for inflammation of the pancreas called pancreatitis.

So, bottom line is, if you have high triglycerides, please do not ignore. It can be easily treated with lifestyle measures and medications.

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