A PATIENT'S GUIDE

Hypertriglyceridemia & Acute Pancreatitis

The National Pancreas Foundation

What is hypertriglyceridemia (HTG)?

- **Triglycerides are a type of fat (lipid) found in your blood.** They come from the food you eat, and your body also makes them.
- Your body gets them from food and makes triglycerides from excess calories, particularly from **sugar, refined carbohydrates, and alcohol.**
- **Hypertriglyceridemia (HTG)** means the level of triglycerides in your blood is higher than normal.

Triglyceride levels	FASTING
Normal	Less than 150 mg/dL
Mild / Moderate HTG	150–499 mg/dL
Very high (severe HTG)	500 mg/dL or higher
Very severe HTG	1,000 mg/dL or higher

Mildly high levels of triglycerides can increase the risk of heart disease over time. Very high triglyceride levels can inflame the pancreas, a condition called **pancreatitis.**

Signs, symptoms & causes

Mild to moderate HTG often has **no symptoms.**

HTG can be caused by:

- **Genetics**
- **Certain medical conditions (such as diabetes or obesity)**
- **Some medications**
- **Alcohol use**
- **A diet high in added sugars and unhealthy fats**

Managing severe HTG (sHTG)

Managing severe hypertriglyceridemia (sHTG), or very high triglyceride levels (≥500 mg/dL), involves:

- **Lifestyle changes**
- **Treating underlying conditions**
- **Often medication to reduce triglycerides**

How does severe hypertriglyceridemia (sHTG) relate to acute pancreatitis?

- Severe hypertriglyceridemia (sHTG) is an **important and sometimes underrecognized cause** of acute pancreatitis.
- Risk increases substantially when triglyceride levels reach **1,000 mg/dL or higher.** Pancreatitis can range from mild to severe and may require **hospitalization and urgent treatment.**

1,000+

mg/dL — the level at which pancreatitis risk rises substantially

Symptoms of sHTG may include

- Often no symptoms,
- Small yellowish skin bumps (eruptive xanthomas)
- Abdominal pain, nausea, or vomiting if pancreatitis develops

Symptoms of acute pancreatitis

- Severe upper abdominal pain
- Pain that may spread to the back
- Nausea and vomiting
- Fever

Seek medical attention if these develop.

Your healthcare provider may recommend

- Fasting lipid panel
- Blood sugar (glucose or A1C)
- Thyroid testing
- Kidney and liver function tests
- Genetic testing when appropriate

The good news: Keeping triglyceride levels under control through diet, lifestyle changes, medications (when needed), and treating underlying conditions can help reduce the risk of future pancreatitis attacks.

Living with HTG & Acute Pancreatitis

Managing sHTG and acute pancreatitis

The treatment of severe hypertriglyceridemia-induced acute pancreatitis has two goals:

1. **Treat the acute pancreatitis and manage symptoms**
2. **Rapidly lower triglyceride levels and prevent future episodes**

Inpatient Treatment May Include

Fluids and resting the pancreas: IV fluids and briefly avoiding food allow the pancreas to recover and help triglyceride levels fall.

Insulin therapy: Insulin may be used in some patients because it activates an enzyme called **lipoprotein lipase**, which helps the body break down and clear triglyceride-rich particles from the blood.

Pain management: Medications, including opioids when needed, may be used to control severe abdominal pain.

Nutrition support: Once able, patients resume eating with a low-fat diet to support recovery and lower triglycerides.

Therapeutic plasma exchange: For extremely severe cases, to rapidly "wash" the fat out of the blood.

Long-term Management May Include

Managing sHTG, or very high blood triglyceride levels (≥500 mg/dL), *involves lifestyle changes, treating underlying conditions, and often medication to lower triglycerides levels.*

Follow a low-fat or very low fat plan.
Your healthcare team or registered dietitian may recommend limiting the amount of fat you eat, especially if your triglyceride levels are very high. Some people may need to limit fat to about 20–30 grams per day, depending on their individual needs.

Managing underlying conditions
Conditions such as diabetes, obesity, thyroid problems, and genetic lipid disorders can contribute to high triglyceride levels.

Taking medications as prescribed

- Your provider may prescribe triglyceride- lowering medicines such as **fibrates** or **prescription omega-3 fatty acids.**
- For very high triglycerides that don't respond to standard treatment, or for genetic causes, newer injectable **APOC3 inhibitors** may be an option. These medications help your body remove triglycerides from your blood.
- A **lipid specialist** can help decide if these are right for you.

Avoiding or limiting alcohol
Alcohol can raise triglyceride levels and increase the risk of pancreatitis.

Monitoring triglyceride levels regularly
Blood tests can help track your progress and guide treatment decisions.

Planning for pregnancy
Triglyceride levels **can rise significantly during pregnancy.** Talk with your healthcare provider before becoming pregnant, if possible, or as early as possible during pregnancy. You may need care from a high-risk pregnancy specialist

Recognizing symptoms early
Seek medical attention if you develop symptoms of pancreatitis.

Understanding the role of genetics

- Some people have an inherited condition, such as **familial chylomicronemia syndrome (FCS)**, that causes extremely high triglycerides (≥880 mg/dL).
- FCS can be diagnosed by genetic testing or clinical evaluation. **Genetic testing is not always needed for treatment,** and a negative test does not necessarily rule out treatment options.
- If a genetic cause is suspected, you may be referred to a lipid specialist and sometimes a genetic counselor.
- Standard treatments and lifestyle changes may not be enough to control triglycerides in some people with FCS.

Learn more about FCS

Your care team

May include a **gastroenterologist, lipid specialist, endocrinologist, cardiologist, registered dietitian, primary care provider,** and specialists as needed.

Your team can help you:

- Identify the cause of high triglycerides
- Develop a personalized nutrition and treatment plan
- Monitor triglyceride levels and adjust medications
- Support your overall quality of life

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