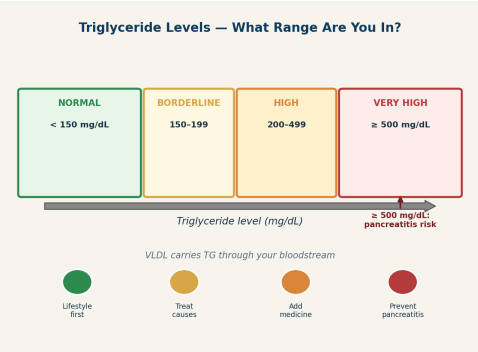
Triglycerides

The Blood Fat That Hides Behind Your Cholesterol

Triglycerides are a blood fat your doctor measures alongside cholesterol. High levels add heart risk — and very high levels can inflame the pancreas.



Online: https://go.riasalimd.com/triglycerides-guide

Rias KS Ali, MD FACC

Board Certified in Interventional Cardiology & Cardiovascular Disease

4740 Mile Stretch Drive, Holiday FL 34690 | Office: (727) 943-5200 | Fax: (727) 943-5201 | RiasAliMD.com

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Names & Terms You Will Hear

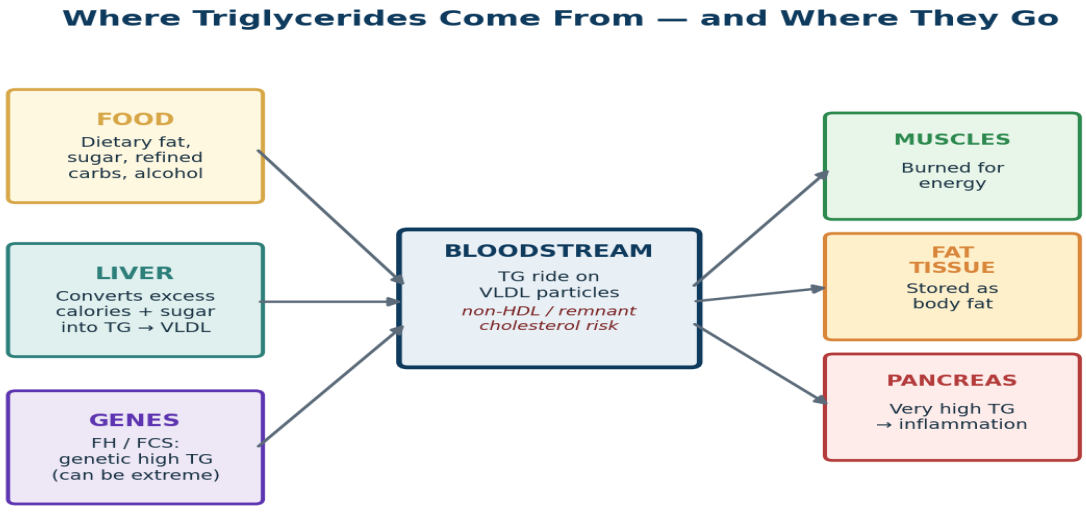
Term	Meaning
Triglycerides (TG)	Blood fats made from the calories your body does not use right away. Measured as part of a standard lipid panel.
VLDL	Very-low-density lipoprotein — the particle that carries triglycerides through the bloodstream. High VLDL raises heart risk.
Hypertriglyceridemia	The medical term for high triglycerides — any level at or above 150 mg/dL.
Remnant Cholesterol	Cholesterol left inside TG-rich particles after they release their fat. Drives plaque even when LDL looks normal.
Non-HDL Cholesterol	Total cholesterol minus HDL. Captures LDL plus all TG-rich remnants. Target is your LDL target plus 30 mg/dL.
Icosapent Ethyl (Vascepa)	A purified EPA omega-3 fish-oil prescription. Proven in REDUCE-IT to cut heart events — NOT the same as OTC fish oil.
Fibrate (Fenofibrate)	A medicine that activates the body's fat-burning enzyme (LPL). Lowers TG by 30 to 50 percent. Used mainly to prevent pancreatitis.
FCS (Familial Chylomicronemia Syndrome)	A rare genetic condition in which TG can exceed 1,000 mg/dL. Extremely high pancreatitis risk. Requires specialist care.
Familial Hypertriglyceridemia	An inherited tendency toward high TG (usually 200–500 mg/dL). More common than FCS. Responds well to lifestyle and medicines.
Pancreatitis	Sudden, severe inflammation of the pancreas. TG over 500 — especially over 1,000 — can trigger it. A medical emergency.

Three numbers to know beyond your LDL:

1. **Triglycerides** — target < 150 mg/dL. Above 500 = urgent; above 1,000 = emergency.
2. **Non-HDL cholesterol** = Total minus HDL. Captures TG-remnant risk. Target = LDL target + 30.
3. **HDL** — target 40 or higher (men), 50 or higher (women). Low HDL + high TG = the metabolic syndrome pattern.

Triglycerides?

- Triglycerides are the most common fat in your body. After you eat, your body converts extra calories into triglycerides and stores them in fat cells.
- Your liver also makes triglycerides — mainly when you eat a lot of sugar, refined carbs, or alcohol. The liver packs these fats into VLDL particles and sends them into the blood.
- A lipid panel checks four numbers: total cholesterol, LDL, HDL, and triglycerides. All four matter. Triglycerides do not get a pass just because your LDL looks good.
- Normal triglycerides are below 150 mg/dL. Borderline is 150 to 199. High is 200 to 499. Very high is 500 or above. Above 500 raises the risk of acute pancreatitis. Above 1,000 is a near-emergency.
- Triglycerides ride on VLDL in the blood. When VLDL drops off its fat, it leaves a remnant packed with cholesterol. Those remnants build plaque in artery walls — even when LDL is normal.
- Most people with high triglycerides feel fine. There are no symptoms at lower levels. Pancreatitis causes severe upper-belly pain that goes to the back. Seek care right away if this happens.
- Fasting gives the most accurate triglyceride reading. If your non-fasting TG comes back above 175, your team may repeat the test after a 9 to 12 hour fast.



Where triglycerides come from and where they go. Dietary fat, sugar, and alcohol drive the liver to make TG, which are packed into VLDL and released into the bloodstream. Muscles burn them for energy; fat tissue stores the rest. At very high levels, TG can inflame the pancreas — the key acute danger. Remnant particles left after fat delivery carry cholesterol into artery walls, adding ASCVD risk. Sources: AHA 2021 TG Statement, EAS Consensus 2020.

Triglyceride categories — what each level means and what to do

Level (mg/dL)	Category	What it means	Action
< 150	Normal	Low risk from TG alone	Maintain with lifestyle; recheck every 4-6 years
150–199	Borderline High	Mild residual ASCVD risk; often lifestyle-driven	Diet and lifestyle intervention; address secondary causes
200–499	High	Elevated ASCVD risk via remnant cholesterol; may compound diabetes / metabolic syndrome risk	Lifestyle + treat secondary causes; consider statin; Vascepa if high ASCVD risk on statin
500 or higher	Very High	Significant pancreatitis risk; also high ASCVD risk	Urgent: stop alcohol, cut fat drastically; fibrate or Rx omega-3 to prevent pancreatitis
1,000 or higher	Severe (FCS / extreme)	Imminent pancreatitis risk; possible eruptive xanthomas	Specialist referral; may require IV insulin or plasmapheresis in acute pancreatitis setting

Why It Matters

- High triglycerides raise heart risk two ways. First: VLDL remnant particles carry cholesterol into artery walls, even when LDL looks normal. Second: very high TG can inflame the pancreas — a medical emergency.
- Non-HDL cholesterol (total minus HDL) captures LDL plus all the TG-rich remnants in one number. It predicts heart risk as well as LDL alone. Your non-HDL target is your LDL target plus 30 mg/dL.
- REDUCE-IT (2019) found that icosapent ethyl (Vascepa) 4 g/day in statin patients with TG 135 to 499 mg/dL cut major heart events by 25 percent. The benefit went beyond TG reduction alone.
- High triglycerides often signal insulin resistance — the same process that leads to type 2 diabetes. Lifestyle changes and better blood sugar control bring TG down too.
- High TG plus low HDL plus small dense LDL is called metabolic syndrome or atherogenic dyslipidemia. It is one of the highest-risk lipid patterns for heart attack and stroke.
- Pancreatitis from very high TG hits fast. TG can spike after one high-fat meal or a night of heavy drinking. Know your number — prevention is far easier than treatment.

Risk Factors

Some patients are more likely to develop this condition. Knowing your risk helps your care team take extra precautions.

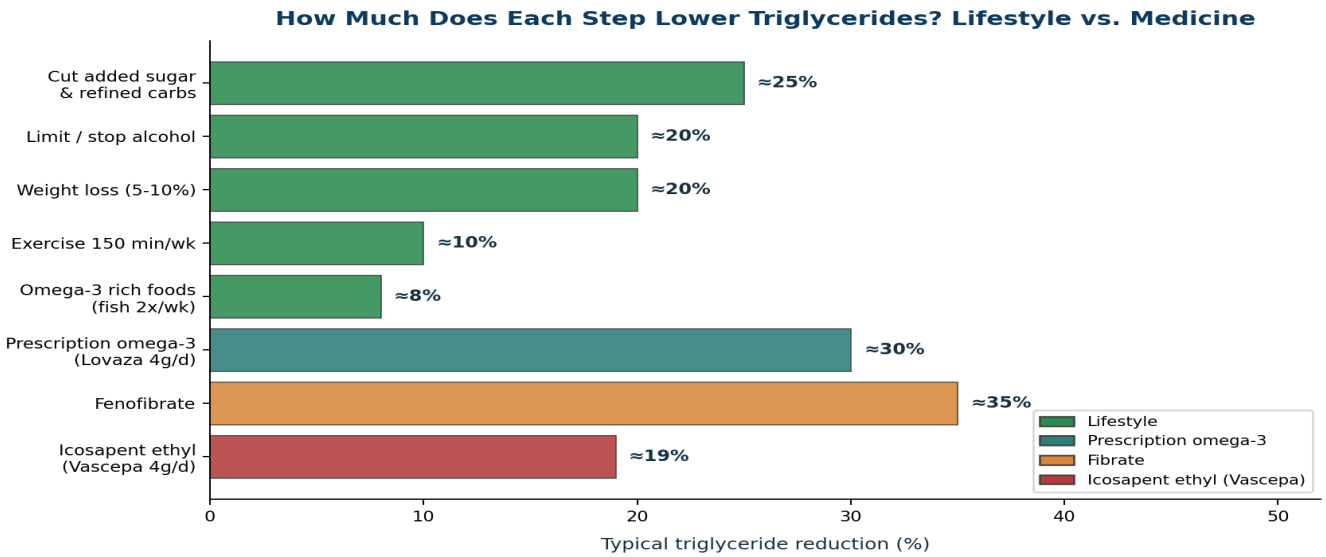
Risk Factor	Why It Increases Risk
Diet high in sugar, refined carbs, and alcohol	Excess carbohydrates and alcohol drive the liver to overproduce VLDL. Cutting these is the fastest way to lower TG without medicine.
Overweight or obesity	Excess body fat — especially around the belly — raises TG and lowers HDL. Losing even 5 to 10 percent of body weight can drop TG by 20 to 30 percent.
Type 2 diabetes and insulin resistance	Insulin resistance impairs the enzyme that clears TG from blood (lipoprotein lipase). High blood sugar also drives the liver to make more TG. Controlling glucose is part of the treatment.
Hypothyroidism (underactive thyroid)	Low thyroid slows TG clearance. A simple TSH blood test finds it; treating the thyroid often normalizes TG.
Chronic kidney disease	Impaired kidney function reduces TG clearance and can raise VLDL production. TG often improve if kidney disease is treated.
Medicines that raise TG	Corticosteroids, estrogen-containing pills, some beta-blockers, thiazide diuretics (at high doses), retinoids, and some antipsychotics can raise TG. Ask your doctor to review your full medicine list.
Genetic causes	Familial hypertriglyceridemia runs in families and causes moderate-to-high TG. Familial chylomicronemia syndrome (FCS) is rarer and causes extremely high TG — often over 1,000 mg/dL — with repeated pancreatitis.
Sedentary lifestyle	Physical activity activates the enzyme that clears TG from blood. 150 minutes per week of moderate exercise can lower TG by 10 to 20 percent.

Lifestyle: The First and Best Step

- No medicine lowers TG as broadly and safely as lifestyle change. Diet and exercise help TG, blood sugar, blood pressure, and weight — all at once.
- The most powerful dietary move: cut added sugar and refined carbs. Swap white bread for whole grain and drop sugary drinks. This alone can drop TG 20 to 25 percent in 4 to 8 weeks.
- Alcohol is a direct TG driver. If TG is above 200, limit to fewer than 7 drinks per week. Above 500, stop completely until TG comes down.
- Omega-3 rich foods — salmon, mackerel, sardines, herring, flaxseeds — lower TG about 5 to 10 percent. They are NOT a substitute for Vascepa if you are a REDUCE-IT candidate.
- Walking 30 minutes a day, 5 days a week, lowers TG on its own. A 10-minute walk after the biggest meal blunts the post-meal TG spike.
- Losing 5 to 10 percent of body weight drops TG by 20 to 30 percent and raises HDL. Even 10 pounds makes a real difference.
- For detailed meal planning see: go.riasalimd.com/heart-healthy-eating-guide.

Treatment Options

- **Step 1 — Cut added sugar and refined carbs.** White bread, white rice, sugary drinks, candy, and pastries raise TG fast. Swap them for whole grains, vegetables, and beans. This single change can drop TG 20 to 30 percent.
- **Step 2 — Limit or stop alcohol.** Even moderate drinking raises TG in some people. Stopping can drop TG 20 percent or more within weeks. If TG are above 500, stop completely.
- **Step 3 — Lose weight if needed.** Losing 5 to 10 percent of body weight drops TG 20 to 30 percent. Any eating plan that cuts calories works. See go.riasalimd.com/heart-healthy-eating-guide.
- **Step 4 — Exercise regularly.** 150 minutes per week of brisk walking or cycling turns on the enzyme that clears TG from blood. Lowers TG about 10 percent and helps insulin sensitivity.
- **Step 5 — Treat secondary causes.** Control blood sugar (see Diabetes & the Heart). Treat low thyroid. Review any medicines that raise TG.
- **Step 6 — Add a statin if ASCVD risk warrants it.** Statins lower TG 10 to 20 percent as a side benefit. The main reason: they cut heart attack and stroke risk. See go.riasalimd.com/statins-guide.
- **Step 7 — Icosapent ethyl (Vascepa) 4 g/day** if TG stay 135 to 499 on a statin and your heart risk is high. REDUCE-IT showed a 25 percent cut in major heart events. This is purified EPA — NOT the same as OTC fish oil. Prescription only.
- **Step 8 — Prescription omega-3 (Lovaza)** for very high TG (over 500) to lower pancreatitis risk. Lowers TG 25 to 30 percent. It contains mixed EPA + DHA — not like Vascepa. Not proven to cut heart events in major trials.
- **Step 9 — Fenofibrate** mainly to prevent pancreatitis when TG exceed 500 and lifestyle is not enough. Lowers TG 30 to 45 percent. ACCORD-Lipid showed a possible benefit in diabetes + high TG + low HDL, but PROMINENT (2022) was neutral on heart events. Use fenofibrate for pancreatitis prevention, not heart protection.
- **Niacin** (nicotinic acid) lowers TG but is rarely used now. Large trials (AIM-HIGH, HPS2-THRIVE) showed no heart benefit added to a statin. It causes flushing, high blood sugar, and liver stress.



Typical triglyceride reduction by treatment step. Lifestyle changes (green) — cutting sugar and alcohol, weight loss, exercise — can drop TG by 20 to 40 percent combined. Prescription omega-3 (Lovaza) and fenofibrate add another 25 to 35 percent. Icosapent ethyl (Vascepa, red) is shown at its TG-lowering effect (~19%) but its cardiovascular benefit from REDUCE-IT goes beyond TG reduction alone. Note: OTC fish oil effect on TG is variable and its heart-event benefit is unproven. Sources: AHA 2021 TG Statement, REDUCE-IT, Endocrine Society 2012 guideline.

OTC fish oil vs. Vascepa — the key difference.
OTC omega-3 capsules (fish oil) contain a mix of EPA + DHA and have not been proven to reduce heart events. Vascepa (icosapent ethyl) is **purified EPA only** — a prescription medicine proven in REDUCE-IT to cut major heart events by 25% in the right patient. They are not interchangeable. If your doctor recommends Vascepa, get the prescription — do not substitute OTC fish oil.

Comfort Measures at Home (No Medication Needed)

These simple steps support healing and ease symptoms. Use them alongside any medication your doctor prescribes.

- Make vegetables and whole grains the center of every meal — not a side dish. Beans and lentils several times a week.
- Replace sugary drinks with water or unsweetened sparkling water. Juice and soda are among the fastest ways to raise TG.
- Choose whole fruit over fruit juice. The fiber slows the sugar absorption and has far less impact on TG.
- Eat fish twice a week — salmon, mackerel, sardines, tuna, or trout. These contain omega-3 fats that lower TG naturally.
- Limit alcohol to no more than 1 drink per day for women, 2 for men. If TG are above 500, stop completely until they come down.
- Walk 30 minutes a day, 5 days a week. A 10-minute walk after meals blunts the post-meal TG spike.
- Lose weight slowly — even 5 to 10 percent of body weight makes a big difference. Crash diets are not sustainable.
- Read food labels for added sugar. Look for 'cane sugar,' 'high-fructose corn syrup,' 'dextrose,' or 'maltose' — all raise TG just as fast.
- Sleep 7 to 8 hours per night. Poor sleep raises TG, blood pressure, and blood sugar all at once.

Risks, Benefits, and Alternatives

Every choice has trade-offs. Use this table to start the shared decision conversation.

Option	Risks	Benefits	Alternatives
Lifestyle only (diet, exercise, weight loss)	Requires sustained effort. May not be enough if TG are very high or causes are genetic. Takes 8 to 12 weeks to see numbers shift.	Lowers TG 20 to 40 percent. Also improves blood sugar, blood pressure, and weight. No side effects. Benefits every organ system.	Add medicine if TG stay above 500 or if ASCVD risk is high.
Icosapent ethyl (Vascepa) 4 g/day	Prescription-only, often expensive (prior auth required). Minor: fishy taste, GI upset, small rise in atrial fibrillation risk (REDUCE-IT: +5 vs. +3.9 per 100 patients). NOT a substitute for lifestyle change.	REDUCE-IT: 25% relative reduction in major heart events (heart attack, stroke, CV death, unstable angina) in statin-treated high-risk patients with TG 135-499. Beyond just TG lowering.	OTC fish oil (not proven for events). Prescription Lovaza (lowers TG but no proven MACE benefit). Fibrate if TG over 500.
Fenofibrate	May raise creatinine (check kidney function). Rare muscle risk if combined with high-dose statin. Does NOT reliably cut heart events (PROMINENT with pemafibrate was neutral in 2022).	Lowers TG 30 to 45 percent. Primarily used to prevent pancreatitis when TG exceed 500. ACCORD-Lipid showed a possible benefit in patients with diabetes + high TG + low HDL.	Icosapent ethyl if MACE reduction is the goal and TG are 135-499 on a statin. Prescription omega-3 for TG lowering alone.

Option	Risks	Benefits	Alternatives
Doing nothing	VLDL remnants continue building plaque over years. If TG are above 500, risk of acute pancreatitis — a painful, potentially life-threatening emergency — remains elevated.	No cost or side effects today.	Lifestyle change costs nothing and carries only benefit. Even cutting one sugary drink per day can move the number.

Common Misconceptions

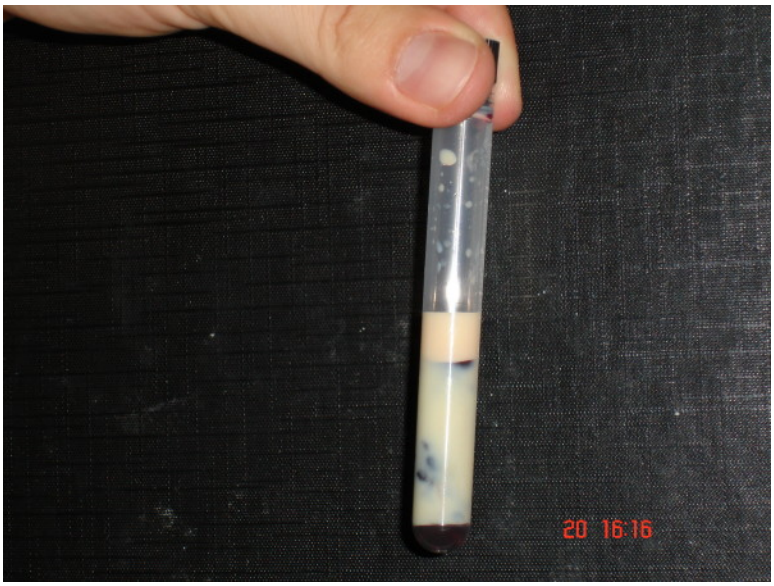
Myth	Reality
"My LDL is fine, so my triglycerides do not matter."	FALSE. Triglycerides travel on VLDL. When VLDL delivers its fat, it leaves remnant particles packed with cholesterol — and those remnants drive plaque. You can have a 'normal' LDL and still have a high-risk lipid profile if TG and non-HDL are elevated.
"OTC fish oil is the same as Vascepa."	FALSE — this is one of the most important distinctions in lipid medicine. Vascepa is purified EPA (icosapent ethyl). OTC fish oil is a mixture of EPA + DHA, with many impurities, and has NOT been shown to cut heart events in major trials. REDUCE-IT proved Vascepa works — not OTC fish oil.
"High triglycerides only come from eating too much fat."	Actually, added sugar, refined carbohydrates, and alcohol are bigger drivers than dietary fat. The liver converts excess carbohydrates and alcohol into TG and packs them into VLDL. A low-fat diet rich in white rice and fruit juice can still push TG up.
"If TG is high, fibrates will protect my heart."	Not proven across the board. Fenofibrate is used mainly to prevent pancreatitis when TG exceeds 500 mg/dL. The 2022 PROMINENT trial of pemafibrate showed no reduction in heart events despite lowering TG. The only agent with proven MACE reduction for high TG is icosapent ethyl (Vascepa) in statin-treated patients.
"High triglycerides are always my fault — it is just my diet."	Genetics play a real role. Familial hypertriglyceridemia and familial chylomicronemia syndrome (FCS) cause high TG regardless of diet. Certain medicines (steroids, estrogen, thiazides) and medical conditions (hypothyroidism, diabetes, kidney disease) are also major causes that are not lifestyle-related.

Myth	Reality
"I only need to check TG if I have heart disease."	TG should be part of every routine lipid panel starting at age 20 (or earlier with family history or obesity). High TG often accompanies insulin resistance, which starts silently years before diabetes is diagnosed.
"Pancreatitis from high TG is just abdominal pain — not serious."	Acute pancreatitis is a medical emergency. It can cause life-threatening complications including organ failure, infected tissue death (necrotizing pancreatitis), and prolonged ICU stays. TG above 1,000 mg/dL make this a realistic risk after a single high-fat meal or alcohol episode.

Possible Complications

Knowing what can go wrong helps you spot problems early. Most complications are uncommon, especially with treatment.

Where / What	What Can Happen
Atherosclerosis (plaque buildup)	VLDL remnants carry cholesterol into artery walls. Even with normal LDL, persistently high TG raises non-HDL and drives silent plaque accumulation over years.
Heart attack and stroke	ASCVD events are the most common long-term complication. High TG compound risk — especially when combined with low HDL, high blood pressure, or diabetes (metabolic syndrome pattern).
Acute pancreatitis	At TG above 500 mg/dL, fat particles can block tiny pancreatic vessels and trigger inflammation. Risk rises sharply above 1,000 mg/dL. Symptoms: severe upper-belly pain radiating to the back, nausea, vomiting. Call 911 or go to the ER immediately.
Type 2 diabetes	High TG is often an early sign of insulin resistance, which precedes type 2 diabetes by years. Treating TG and improving lifestyle may slow or prevent progression to diabetes.
Non-alcoholic fatty liver disease (NAFLD)	The same processes that cause high TG — excess calories, insulin resistance — also deposit fat in the liver. NAFLD can progress to cirrhosis in some patients.
Eruptive xanthomas	At very high TG levels (over 1,000), fat can deposit under the skin as small yellow bumps called eruptive xanthomas, typically on the buttocks, shoulders, and thighs. They resolve when TG comes down.



A real blood sample from a patient with severe hypertriglyceridemia. The thick, creamy top layer is lipemic ("lactescent") serum — fat particles so dense they turn the sample milky white instead of clear yellow. This is a classic sign of extreme triglyceride elevation (often over 1,000 mg/dL) and the same fat overload that can trigger acute pancreatitis. Image: Michalakis et al., Cases Journal 2009 (CC BY 2.0).

Very High Triglycerides and Pancreatitis

- When TG exceed 500 mg/dL, pancreatitis risk rises sharply. Above 1,000, a single high-fat meal or a night of drinking can set it off.
- Symptoms: sudden, severe pain in the upper belly or back, nausea, and vomiting. Go to the ER right away. Do not drive yourself.
- Hospital treatment: IV fluids, nothing by mouth, pain medicine, and sometimes IV insulin or plasmapheresis to pull TG out of the blood fast.
- Prevention: stop alcohol if TG are above 500. Cut dietary fat below 15 percent of calories short-term — this cuts the chylomicron load. Restart fenofibrate or prescription omega-3 if you have been prescribed them.
- Familial chylomicronemia syndrome (FCS) is the genetic extreme. FCS patients lack the enzyme that clears TG from blood. TG can exceed 5,000 mg/dL. These patients need a lipid specialist.
- If you have had TG-induced pancreatitis before, wear a medical alert bracelet. Carry a letter from your doctor for ER staff.
- For more on FCS and genetic high TG: www.fightfcs.com.

Icosapent Ethyl (Vascepa) — the REDUCE-IT Evidence

- Vascepa (icosapent ethyl) is a purified EPA prescription medicine. Take 4 capsules (4 g) per day with meals.
- REDUCE-IT enrolled 8,179 patients already on a statin with TG between 135 and 499 mg/dL and either known ASCVD or diabetes plus one more risk factor.
- Result: Vascepa cut the primary endpoint (CV death, heart attack, stroke, unstable angina, or bypass) by 25 percent vs. placebo over 4.9 years (Bhatt et al., NEJM 2019).
- The benefit likely goes beyond TG lowering. Vascepa has anti-inflammatory and membrane effects. OTC fish oil and Lovaza have NOT shown this same benefit in trials.
- One caution: REDUCE-IT found more atrial fibrillation hospitalizations with Vascepa (5.3% vs. 3.9%). Discuss this with your doctor if you have a history of AF.
- Good candidate: high-risk patient on a statin, TG 135 to 499, with prior ASCVD or diabetes plus one more risk factor.
- Not the right choice: if your goal is TG lowering to prevent pancreatitis (use fenofibrate), or if you want an OTC supplement (that is a different product entirely).

Points to Know

If you remember nothing else, remember these key points.

- Triglycerides are checked on every standard lipid panel — you do not need a separate test.
- Normal is below 150 mg/dL. High is 200 to 499. Very high (500 or higher) raises pancreatitis risk — tell your doctor immediately.
- High TG adds heart risk through VLDL remnants — even when LDL looks normal. Check your non-HDL cholesterol too.
- Lifestyle is the first and most powerful step: cut sugar and refined carbs, limit alcohol, lose weight, and exercise.
- OTC fish oil is NOT the same as Vascepa (icosapent ethyl). Only Vascepa has been proven in a large trial to cut heart events.
- Fibrates (fenofibrate) lower TG well but are used mainly to prevent pancreatitis — not proven to cut heart events on their own.
- Very high TG (above 500 mg/dL) is an urgent medical situation — do not wait for your next appointment if your level is in this range.
- Genetics, thyroid disease, diabetes, kidney disease, and some medicines all cause high TG — it is not always a lifestyle issue.

When to Call Us - and When to Call 911

If you are not sure, call. We would rather hear from you twice than miss a real problem.

- **Call 911 or go to the ER** if you have sudden, severe upper-belly pain (especially radiating to the back) with nausea or vomiting. This could be pancreatitis — a medical emergency if TG are very high.
- **Call our office (727-943-5200)** if your triglycerides are above 500 mg/dL. Do not wait for your next scheduled visit — very high TG requires urgent management.
- **Call us** if your last lipid panel was more than a year ago and you have diabetes, obesity, or a family history of high TG.
- **Call us** before starting any new medicine — corticosteroids, estrogen, certain blood-pressure medicines, and retinoids can all push TG higher.
- **Call us** if you have been prescribed Vascepa (icosapent ethyl) and develop irregular heartbeat symptoms (palpitations, racing heart, shortness of breath). REDUCE-IT showed a small rise in atrial fibrillation risk.
- **Ask us about repeat testing** 8 to 12 weeks after any major diet change, new medicine, or dose adjustment. TG respond quickly to lifestyle — seeing the number improve is motivating.
- **Ask about a non-HDL cholesterol target.** If your LDL is at goal but non-HDL is still high, you may have residual TG-remnant risk worth treating.

Office: (727) 943-5200

See also: our companion guides.
Understanding Cholesterol · Statin Therapy · Diabetes & the Heart · Heart-Healthy Eating.

Trusted Resources

The links below are the trusted resources Dr. Ali used to write this guide and that he recommends you visit for more information. Each is a clickable link in the digital version and a Short.io tracked URL on the printed version.

- AHA — Triglycerides (heart.org) - AHA's plain-language overview of TG, what the numbers mean, and how diet and medicines help.
- Cleveland Clinic — High Triglycerides - Comprehensive patient guide covering causes, ranges, and treatment options including when medicines are needed.
- Mayo Clinic — Triglycerides - Clear explanation of TG ranges, lifestyle steps, and what the numbers mean for your heart health.
- NIH MedlinePlus — Triglycerides - Federal patient resource with TG basics, screening information, and links to Spanish-language materials.
- FCS Alliance — Familial Chylomicronemia Syndrome - Patient-focused nonprofit for those with genetic extreme TG. Resources, support groups, and specialist referrals.
- REDUCE-IT Trial Summary (AHA Journals) - AHA 2021 scientific statement on triglycerides — the evidence base for treatment decisions including Vascepa.
- ASCVD Risk Estimator Plus (ACC) - Free AHA/ACC online tool to estimate your 10-year heart-attack and stroke risk — important context for treatment decisions.

Sources Used to Build This Guide

Every recommendation in this guide is grounded in one or more of the studies, guidelines, or trusted resources below. Short links are tracked so Dr. Ali can see which references patients are reading; nothing personally identifying is captured.

- AHA 2021 Triglycerides Scientific Statement *[Guideline]*
  AHA primary source for TG categories, ASCVD risk, treatment targets, and lifestyle recommendations
- REDUCE-IT Trial — Bhatt et al., NEJM 2019 *[Trial]*
  Landmark RCT: icosapent ethyl 4g/day in statin-treated patients with TG 135-499 reduced MACE by 25% relative risk
- PROMINENT Trial — Das Pradhan et al., NEJM 2022 *[Trial]*
  Pemafibrate RCT — neutral on MACE despite TG lowering; important honest framing of fibrate ASCVD evidence
- ACCORD-Lipid Trial — Ginsberg et al., NEJM 2010 *[Trial]*
  Fenofibrate + statin in T2D; subgroup signal in high TG/low HDL; cited for fibrate evidence context
- Endocrine Society Hypertriglyceridemia Guideline 2012 *[Guideline]*
  Foundational guideline for TG categories, pancreatitis thresholds, and medication indications including FCS
- ACC/AHA 2018 Cholesterol Guideline *[Guideline]*
  Non-HDL and remnant cholesterol guidance; TG context within ASCVD risk management
- ADA Standards of Medical Care in Diabetes 2024 *[Guideline]*
  Diabetes-TG relationship; TG as marker of insulin resistance; treatment targets in T2D
- Cleveland Clinic — High Triglycerides *[Patient Resource]*
  Plain-language patient overview; benchmarked for scope and reading level
- Mayo Clinic — Triglycerides *[Patient Resource]*
  Patient-friendly overview; lifestyle recommendations language benchmarked
- AHA Patient Page — Triglycerides *[Patient Resource]*
  AHA-endorsed patient-facing TG content; LDL-HDL-TG framing reference
- NIH MedlinePlus — Triglycerides *[Patient Resource]*
  Federal patient resource; bilingual access; screening and normal range definitions
- Familial Chylomicronemia Syndrome (FCS) Alliance *[Patient Resource]*
  Patient-facing FCS resource; genetic causes of severe hypertriglyceridemia; trusted resource for patients
- European Atherosclerosis Society TG Consensus 2020 *[Guideline]*
  Remnant / non-HDL cholesterol ASCVD risk framing; residual risk evidence base

4740 Mile Stretch Drive, Holiday FL 34690 | Office: (727) 943-5200 | Fax: (727) 943-5201 | RiasAliMD.com

About This Guide

Rias KS Ali, MD FACC | Board Certified in Interventional Cardiology & Cardiovascular Disease

4740 Mile Stretch Drive, Holiday FL 34690 | Office: (727) 943-5200 | Fax: (727) 943-5201 | RiasAliMD.com

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Reviewer note: Reviewed Cleveland Clinic, Mayo Clinic, AHA, and NIH MedlinePlus triglyceride pages. This guide adds: a TG-range spectrum cover diagram; a sources-and-destinations schematic showing diet + liver to VLDL to muscle/fat/pancreas; a treatment waterfall chart for lifestyle vs. medicines; honest trial-by-name framing of Vascepa (REDUCE-IT), pemafibrate (PROMINENT neutral), and ACCORD-Lipid fenofibrate subgroup; OTC vs. prescription omega-3 distinction; and pancreatitis-threshold subsection missing from most patient pages.

Disclaimer

This guide is for educational purposes only and does not replace medical advice from your physician. Recommendations may not apply to every patient. Always follow the specific instructions of Dr. Ali and your care team. In an emergency call 911 or go to the nearest emergency department.

Take This Guide With You

Scan or visit: go.riasalimd.com/triglycerides-guide

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