# Elevated triglyceride (TG) levels correlate with a 26% increased risk for CV events in patients with *well-controlled LDL-C levels on statin therapy.*[1]

**ASPC** The American Society for Preventive Cardiology
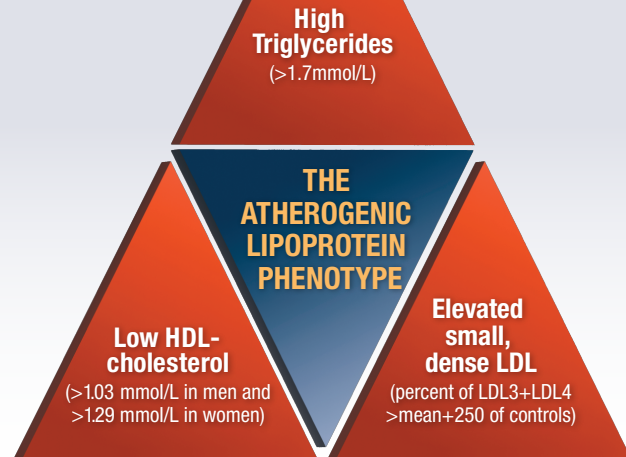
## The Risk of ⬆ TGs

**32%** in relative risk (RR) for CVD for every 88.5 mg/dL increase in TGs[2]

1 out of 3 statin users have TGs >150 mg/dL[1]

### THE ATHEROGENIC LIPID TRIAD*[1]

- **High Triglycerides** (>1.7mmol/L)
- **THE ATHEROGENIC LIPOPROTEIN PHENOTYPE**
- **Low HDL-cholesterol** (>1.03 mmol/L in men and >1.29 mmol/L in women)
- **Elevated small, dense LDL** (percent of LDL3+LDL4 >mean+250 of controls)

## The Reason to Manage CV Risk Associated with ⬆ TGs
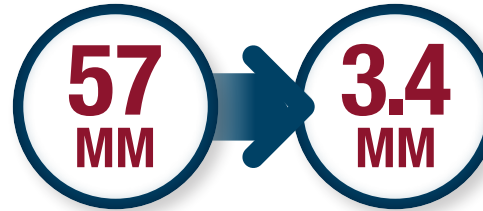
**57 MM** US adults have hypertriglyceridemia (TGs >150mg/dL)[1]

➜

**3.4 MM** ASCVD events will occur over the next 10 years in this population[1]

## The Results When Managing CV Risk Associated with ⬆ TGs

**Analyses of clinical data demonstrating reduced CV risk[1]**

**26%** ⬇ in MACE for patients receiving statins plus Rx icosapent ethyl versus those receiving statins alone.[3]

**31%** ⬇ relative risk for patients receiving statins plus Rx icosapent ethyl compared with SC in a prespecified subgroup of 3146 patients.[3]

## The Recommendations[4,5]

**2023 AHA/ACC/ACCP/ASPC/NLA/PCNA** In patients with CCD on maximally tolerated statin therapy with an LDL-C level <100 mg/dL and persistent fasting TG levels of 150 to 499 mg/dL, after addressing secondary causes, icosapent ethyl may be considered to further reduce risk of MACE and CV death

**2021 ESC** Icosapent ethyl in combination with statin in high-risk patients with TGs >135 mg/dL despite Statin and lifestyle measures

**2020 ADA** Icosapent ethyl to reduce CV risk for patients on statins and well controlled LDL-C but TGs 135 - 499 mg/dL

**2019 NLA** Icosapent ethyl for ASCVD risk reduction in patients > 45 yrs with clinical ASCVD or > 50 yrs with diabetes, and on statins and TGs 135 - 499 mg/dL

## 🚫 Dietary Supplements[5,6]

The use of nonprescription or dietary supplements, including fish oil and omega-3 fatty acids or vitamins, is not recommended in patients with CCD given the lack of benefit in reducing cardiovascular events.

In a study of omega-3 dietary supplements available in the US, all three evaluated had oxidation product levels that exceeded recommended levels.

OM-3 dietary supplements are associated with myriad quality and purity concerns.

**TG:** Triglyceride; **CV:** Cardiovascular; **MI:** Myocardial Infarction; **SD:** Standard Deviation; **LDL:** Low Density Lipoprotein; **ASCVD:** Atherosclerotic Cardiovascular Disease; **ESC:** European Society of Cardiology; **ADA:** American Diabetes Association; **NLA:** National Lipid Association; **MACE:** Major Adverse Cardiovascular Events; **SC:** Standard of Care; **OM:** Omega; **CCD:** Chronic Coronary Disease

*Particularly prevalent in patients with insulin resistance and diabetes mellitus and is believed to underlie much of the accelerated atherogenesis in these patients.

1. Toth PP, Granowitz C, Hull M, Liassou D, Anderson A, Philip S. High triglycerides are associated with increased cardiovascular events, medical costs, and resource utilization: a real world administrative claims analysis of statin treated patients with high residual cardiovascular risk. *J Am Heart Assoc.* 2018;7(15):e008740. 2. Hokanson J.E., Austin M.A. Plasma triglyceride level is a risk factor for cardiovascular disease independent of high-density lipoprotein cholesterol level: a meta-analysis of population-based prospective studies. *J Cardiovasc Risk.* 1996;3(2):213–9. 3. Weintraub WS, Bhatt DL, Zhang Z, Dolman S, Boden WE, Bress AP, Bellows BK, Derington CG, Philip S, Steg G, Miller M, Brinton EA, Jacobson TA, Tardif JC, Ballantyne CM, Kolm P. Cost-Effectiveness of Icosapent Ethyl in REDUCE-IT USA: Results From Patients Randomized in the United States. *J Am Heart Assoc.* 2024 Jan 2;13(1):e032413. 4. Kaur G, Mason RP, Steg PG, Bhatt DL. Omega-3 fatty acids for cardiovascular event lowering. *Eur J Prev Cardiol.* 2024 Jun 3;31(8):1005-1014. 5. Virani SS, Newby LK, Arnold SV, et al. 2023 AHA/ACC/ACCP/ASPC/NLA/PCNA Guideline for the Management of Patients With Chronic Coronary Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines. *Circulation.* 2023 Aug 29;148(9):e9-e119. 6. Hilleman DE, Wiggins BS, Bottorff MB. Critical Differences Between Dietary Supplement and Prescription Omega-3 Fatty Acids: A Narrative Review. *Adv Ther.* 2020 Feb;37(2):656-670.

**The ACTION: MANAGE CV RISK AGGRESSIVELY**