

## Lipidology

## Very High HDL-C: Too Much of a Good Thing? The study was published online May 18 in JAMA Cardiology

A new study suggests that very high levels of high-density lipoprotein cholesterol (HCL-C) may be associated with higher mortality risk in patients with coronary artery disease (CAD).

Investigators studied close to 10,000 patients with CAD in two separate cohorts. After adjusting for an array of covariates, they found that individuals with HDL-C levels greater than 80 mg/dL had a 96% higher risk for all-cause mortality and a 71% higher risk for cardiovascular mortality than those with HDL-C levels between 40 and 60 mg/dL. A U-shaped association was found, with higher risk for all-cause and cardiovascular mortality in patients with both very low and very high, compared with midrange, HDL-C values.

"Very high HDL levels are associated with increased risk of adverse outcomes, not lower risk, as previously thought. This is true not only in the general population, but also in people with known coronary artery disease, "Physicians have to be cognizant of the fact that, at levels of HDL-C above 80 mg/dL, they [should be] more aggressive with risk reduction and not believe that the patient is at 'low risk' because of high levels of 'good' cholesterol," said Quyyumi, who is the director of the Emory Clinical Cardiovascular Research Institute. HDL-C levels have "historically been inversely associated with increased cardiovascular disease (CVD) risk; however, recent studies have questioned the efficacy of therapies designed to increase HDL-C levels," the authors write. Moreover, genetic variants associated with HDL-C have not been found to be linked to CVD risk.

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