'Good' cholesterol function as important as its levels

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High levels of "good" cholesterol (HDL cholesterol) are associated with a decreased risk of coronary artery disease (CAD) -- a disease of the major arterial blood vessels that is one of the major causes of heart attack and stroke. This suggests that therapeutics that increase HDL levels could be clinically useful.

However, such therapies have not yielded clear-cut decreases in disease, indicating that the beneficial effects of HDL are likely not related simply to its abundance. More evidence to support this notion has now been provided by a team of researchers, led by Ulf Landmesser, at the University of Zurich, Switzerland, who found that HDL from patients with (CAD) had different effects on cells lining blood vessels than did HDL from healthy individuals.

In particular, the HDL from patients with CAD was found to lack anti-inflammatory effects on blood vessel–lining cells and could not stimulate repair of the blood vessel lining. As noted by the team and, in an accompanying commentary, Philip Shaul and Chieko Mineo, at The University of Texas Southwestern Medical Center, Dallas, these data indicate that if the protective potential of HDL is to be harnessed, its biological functions as well as its abundance must be considered.

More information: Mechanisms underlying adverse effects of HDL on eNOS-activating pathways in patients with coronary artery disease, www.jci.org/articles/view/4294 … 75b59fdbec4a2b72920d

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