HDL2b

What is HDL2b?
High Density Lipoprotein (HDL) has two important subgroups: the larger, more buoyant HDL2 and the smaller, denser HDL3. These subgroups are important indicators of the efficiency of reverse cholesterol transport by HDL, or how well HDL is clearing excess cholesterol from the body. HDL is formed in the liver as dense HDL3 and as it travels through the body and accumulates cholesterol, it becomes the larger and lipid-enriched HDL2b, the largest and most buoyant HDL. Since HDL2b is an indicator of how well excess lipids are removed from cells, it positively correlates with heart health.

Why measure HDL2b?
According to the National Cholesterol Education Program (NCEP), only about half of the variability in coronary heart disease risk can be attributed to conventional risk factors (i.e. LDL, HDL and triglyceride levels). Other, more specific risk factors, enhance predictive power of cardiovascular disease in individuals. HDL2b is one of these specific risk factors that may be independent of other lipid-related risk factors.

The presence of coronary heart disease is more strongly associated with the HDL subgroups than with total HDL cholesterol levels. More specifically, the extent of atherosclerosis is associated with decreased HDL2 rather than HDL3 values.

How is low HDL2b treated?
Exercise increases HDL2b and may also promote a slight decrease in HDL3. Treatment with niacin may also raise HDL cholesterol.

References


Alterations of high-density lipoprotein subclasses in hypercholesterolemia and combined hyperlipidemia. Int J Cardiol. 2007. 120(3): pages 331-337.

High-density lipoprotein subclassifications and risk of coronary artery disease. Current Atherosclerosis Reports. 2004. 6: pages 359-365


Additional references at http://www.spectrancell.com/online-library-lpp-hdl-abstract

© 2011 SpectraCell Laboratories, Inc. All rights reserved. 7.11 DOC 432