LPP Lipoprotein Particle Profile™

ADVANCED TESTING FOR CARDIOVASCULAR RISK

The LPP™ Advantage

Only measuring cholesterol can be misleading.

Cholesterol has historically been used as the standard indicator for cardiovascular disease, being classified as HDL (good) or LDL (bad). However, it is actually the lipoprotein particles that carry the cholesterol throughout the body, not the cholesterol within them, that are responsible for key steps in plaque production and the resulting development of cardiovascular disease.

Approximately 50 percent of people suffering from heart attacks have shown "normal" cholesterol numbers. NIH – National Heart, Blood and Lung Institute, 2001

Why is it important to know lipoprotein numbers?

Cardiovascular risk increases with a higher number of low density lipoprotein (LDL) particles, regardless of how much cholesterol each lipoprotein particle contains. This is because both a higher number of LDL particles or smaller sized LDL particles dramatically increase the probability of lipoproteins penetrating the arterial wall, where it can cause serious damage.

Why measure lipoprotein subgroups?

Measuring the lipoprotein subgroups is the only way to evaluate new risk factors, which is crucial for accurate assessment of cardiovascular risk and treatment, according to the National Cholesterol Education Program (NCEP).

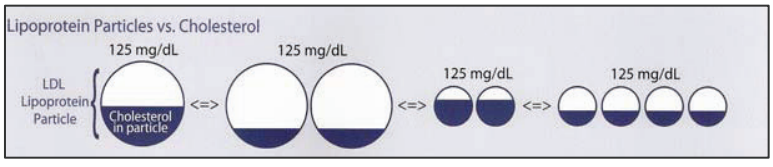
NCEP Emerging Risk Factors

- ☐ Small, dense LDL – these atherogenic particles easily penetrate the arterial endothelium causing plaque.
- ☐ RLP (Remnant Lipoprotein) – very atherogenic lipoprotein that doesn't need to be oxidized to form plaque.
- ☐ Lp(a) – a prothrombotic small, dense LDL
- ☐ HDL2b – positively correlates with heart health because it is an indicator of how well excess lipids are removed.

Over 20% of the population has cholesterol-depleted LDL. This is a condition in which a patient's cholesterol may be "normal," but their lipoprotein particle number and hence their actual risk would be much higher than conventional cholesterol tests would indicate. This is especially common in persons whose triglycerides are high or HDL is low. In a cholesterol-depleted patient, there can be up to a 40 percent error in risk assessment in a standard lipid panel.

Use LPP™ in your practice for accurate cardiovascular risk assessment. With LPP™, a physician can begin to treat patients with atherogenic lipoprotein profiles before overt dyslipidemia becomes apparent.

LOW RISK ⟷ HIGH RISK



LDL particles can be large or small, and the amount of cholesterol in each varies widely