Cardiovascular Health

The circulatory system, also known as the cardiovascular system (CVS), is a vast network of organs and vessels that are responsible for the flow of blood, nutrients, oxygen, other gases, and hormones to and from cells. Without the circulatory system, the body would not be able to fight disease or maintain a stable internal environment like a proper temperature and pH, referred to as homeostasis. The cardiovascular system is made up of three independent systems that work together: the heart (cardiovascular), lungs (pulmonary) and arteries, veins, coronary and portal vessels (systemic).

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HDL Particles

High density lipoprotein (HDL) particles are often referred to as good cholesterol, because they are associated with a decreased risk of developing cardiovascular disease.

HDL LARGE 8028
(nmol/L)
Range: >6729

Result Comments

Relative Risk: Optimal >6729; Moderate 6729-5353; High <5353. Male Reference Range: 4334 to 10815 nmol/L; Female Reference Range: 5038 to 17886 nmol/L.

LDL Particles

Low-density lipoprotein particle (LDL-P) testing evaluates LDL particles according to their number, size, density, and/or electrical charge. Low-density lipoproteins (LDL) are particles that transport lipids throughout the body. Each particle contains a combination of protein, cholesterol, triglyceride, and phospholipid molecules. Their composition changes as they circulate in the blood. Some molecules are removed and others are added, resulting in lipoprotein particles whose properties vary from large and fluffy to small and dense. LDL particle testing determines the relative amounts of particles of differing properties. Traditional lipid testing measures the amount of LDL cholesterol (LDL-C) present in the blood, but it does not evaluate the number of particles of LDL (LDL-P). Some studies have shown that increased numbers of small dense LDL particles are more likely to cause atherosclerosis than fewer light, fluffy LDL particles. An increased number of small, dense LDL could be one of the reasons that some people have heart attacks even though their total and LDL cholesterol concentrations are not particularly high."

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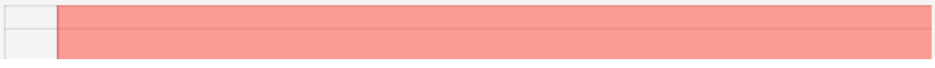
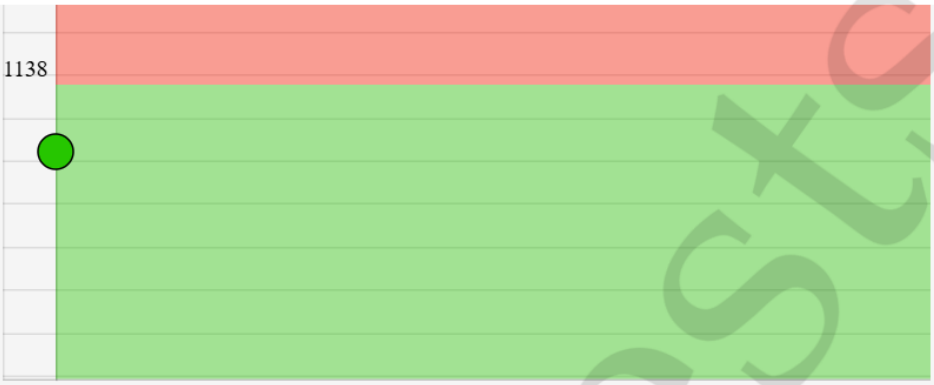
LDL PARTICLE NU... 1060
(nmol/L)
Range: <1138



(nmol/L)



Result Comments

Relative Risk: Optimal <1138; Moderate 1138-1409; High >1409. Male and Female Reference Range: 1016 to 2185 nmol/L.

LDL SMALL 156 H
(nmol/L)
Range: <142

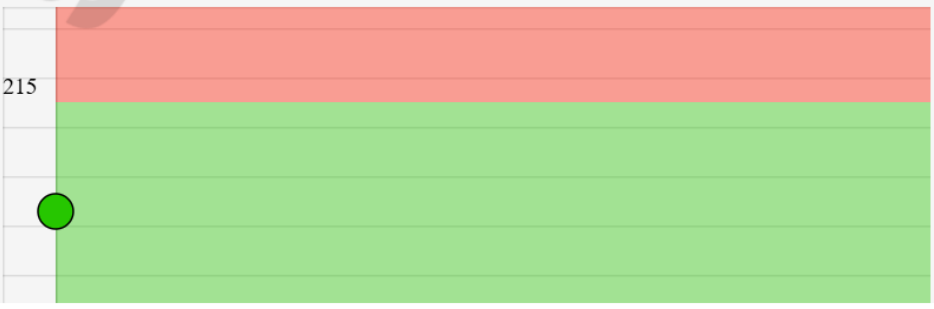
LDL SMALL
(nmol/L)

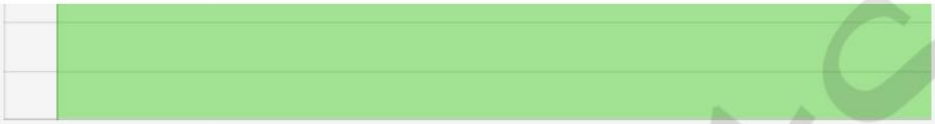
Result Comments

Relative Risk: Optimal <142; Moderate 142-219; High >219. Male Reference Range: 123 to 441 nmol/L; Female Reference Range: 115 to 386 nmol/L.

LDL MEDIUM 193
(nmol/L)
Range: <215

LDL MEDIUM
(nmol/L)





Result Comments

Relative Risk: Optimal <215; Moderate 215-301; High >301.
Male Reference Range: 167 to 485 nmol/L; Female Reference Range: 121 to 397 nmol/L.

LDL PATTERN (Pattern) A Range: A

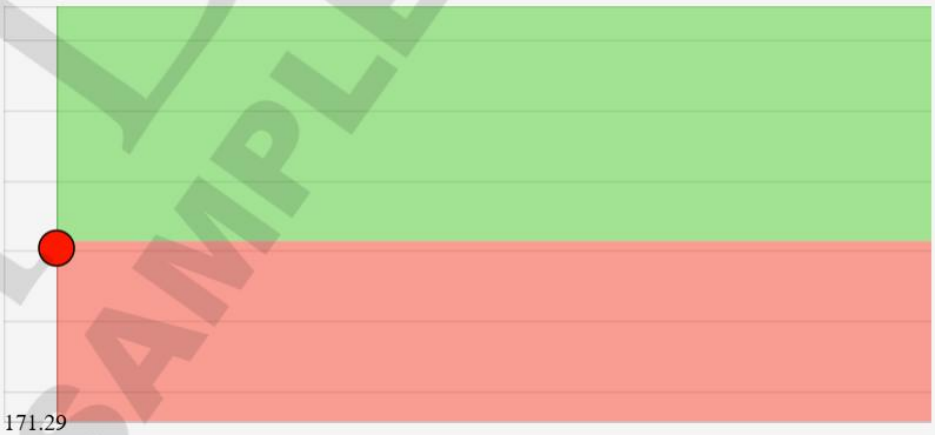
LDL PATTERN
(Pattern)

Result Comments

Relative Risk: Optimal Pattern A; High Pattern B. Reference Range: Pattern A.

LDL PEAK SIZE (Angstrom) 220.7 L Range: >222.9

LDL PEAK SIZE
(Angstrom)



Result Comments

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics Cardiometabolic Center of Excellence at Cleveland HeartLab. It has not been cleared or approved by the U.S. Food and

Drug Administration. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes. Relative Risk: Optimal >222.9; Moderate 222.9-217.4; High <217.4. Male and Female Reference Range: 216 to 234.3 Angstrom. Adult cardiovascular event risk category cut points (optimal, moderate, high) are based on an adult U.S. reference population plus two large cohort study populations. Association between lipoprotein subfractions and cardiovascular events is based on Musunuru et al. ATVB.2009;29:1975. For additional information, please refer to http://education.QuestDiagnostics.com/faq/FAQ134 (This link is being provided for informational/educational purposes only.)