



Advanced Cardiovascular Labs

Level 1

Inflammation

- **hs-CRP:** A protein in your blood released by your liver that indicates you have inflammation.
- **Microalbumin/Creatinine:** Tests for protein leaked from your kidneys, which indicates damage to the endothelium (the cell layer that lines your arteries throughout your body).

Lipids

- **Cholesterol, Total:** A waxy, fat-like substance made by your liver and found in the cell membranes in your body. Cholesterol helps make hormones, Vitamin-D, and other substances your body needs.
- **HDL Cholesterol:** High-density lipoprotein (HDL) cholesterol, also known as the "good" cholesterol because it removes LDL cholesterol from your blood.
- **Triglycerides:** Fats from the food we eat that are carried in the blood and stored in fat cells throughout the body.
LDL Cholesterol: Low-density lipoprotein (LDL), also known as the "bad" cholesterol because it can build up on the walls of your blood vessels. This buildup is called "plaque."
- **LDL-P:** Actual number of LDL particles, the "traffic", in your artery.
- **LDL Size:** The size of the LDL particles. Small LDL particles can easily puncture the arterial lining, while large particles bounce off arterial walls.
- **HDL - P:** The actual number of HDL particles in the blood.
- **HDL Size:** The size of the HDL particles. Larger HDL particles are more effective at removing excess cholesterol from the blood.

Vitamins/Enzymes

- **Coenzyme Q10:** An anti-oxidant that protects tissues from damage and inflammation and helps cells make energy.
- **Vitamin D-25:** A vitamin that regulates bone, immune and metabolic health.

Fatty Acids

- **OmegaCheck:** The amount of fatty acids (a building block of fat) in your blood. They provide energy, reduce inflammation, and line all the cells in your body helping your cells function.
- **Omega-6/Omega-3 Ratio:** Measures the ratio of anti-inflammatory Omega-3s to the more inflammatory Omega-6's in your body.

Metabolic Panel

- **HbA1c:** An average of your blood sugar over the last 3 months.
- **Insulin:** A hormone made by the pancreas that helps your body use sugar (glucose) from carbohydrates in your diet for energy or storage. Also helps keep your blood sugar level from getting too high (hyperglycemia) or too low (hypoglycemia).
- **C-Peptide:** A substance made in the pancreas, released in the same amount and at the same time as insulin. C-Peptide can measure how much insulin your body is making because it stays in the body longer than insulin.
- **Glucose:** A type of sugar you get from foods you eat that your body uses for energy.



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Advanced Cardiovascular Labs

Level 2

Includes all of the tests in Level 1 and MORE!

Inflammation

- **Myeloperoxidase (MPO):** An enzyme released when the endothelium (the tissue that lines the heart and blood vessels) is damaged. High levels of MPO increase plaque and activate enzymes that can rupture plaque.
- **Lp-PLA2:** Measures the active build-up of inflammation inside your artery walls.
- **ADMA/ SDMA:** Compounds made in your body when proteins degrade and are broken down. These compounds decrease your body's ability to produce nitric oxide, a molecule that helps maintain the lining of your tissues.
- **OxLDL:** Amount of LDL that is damaged due to oxidation, which causes hardening of the arteries.
- **F2 - Isoprostane/Creatinine:** Amount of oxidation of arachidonic acid (omega 6) that could damage your endothelium (the tissue that lines the heart and blood vessels).

Lipids

- **Apolipoprotein A1:** A protein carried in HDL cholesterol that helps HDL remove cholesterol from the artery wall to the liver for excretion.
- **Apolipoprotein B:** The main protein found in LDL that can lead to fatty plaque build-up.
- **Lipoprotein (a):** A substance made of fat and protein that carries cholesterol through your blood. Higher levels are genetic and increase your risk of a heart attack and clotting.

Metabolic Panel

- **Homocysteine:** An amino acid (a building block of protein) that can damage the endothelium, increase clots, and oxidize LDL.

Coagulation/Platelet Function

- **11dhTxB2/Creatinine:** A more stable and reliable measure of thromboxane, which decreases when taking Aspirin. This test determines if Aspirin is protecting you against heart attack or stroke.
- **Fibrinogen Antigen, Nephelometry:** A protein that helps blood clots form.



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