

Recommended tests for CVD.

A more complete picture of cardiovascular health ideally includes these tests:

1. Nuclear magnetic resonance (NMR) lipid profile. This looks at your cholesterol under an MRI scan to assess the size of the particles, which can determine your cardiovascular risk. This is a very important test that can further differentiate the risk of your cholesterol and can be an important factor to track as your system improves and your cholesterol transforms from being small, dense, and dangerous to light and fluffy and innocuous. It is done by a company called Liposcience and is also available through LabCorp. If you have small LDL and HDL particles or high triglycerides (over 100), you probably have metabolic syndrome. If your triglyceride-to-HDL ratio is over 2 you also likely have diabetes.
2. Glucose Insulin Tolerance Test: Measurements of fasting and 1 and 2 hour levels of glucose AND insulin help identify pre-diabetes and excessively high levels of insulin, and even diabetes itself. Most doctors just check blood sugar and NOT insulin, which is the first thing to go up. By the time your blood sugar goes up, the train has left the station.
3. Hemoglobin A1c: This measures your average blood sugar level over the last 6 weeks. Anything over 5.5 is high.
4. Cardio C-reactive protein. This is a marker of inflammation in the body that is essential to understand in the context of overall risk. Your C-reactive protein level should be less than 1.
5. Homocysteine. Your homocysteine measures your folate (vitamin B9) level and should be between 6 and 8.
6. Lipid peroxides and TBARS test, which looks at the amount of oxidized or rancid fat. This should be within normal limits of the test and indicates whether or not you have oxidized cholesterol.
7. Fibrinogen, which is another test looking at clotting in the blood. It should be less than 300.
8. Lipoprotein (a), which is another factor that can promote the risk of heart disease, often in men. It should be less than 30.
9. Genes or SNPs (single nucleotide polymorphism) may also be useful in terms of assessing your situation. A number of key genes regulate cholesterol and metabolism, including Apo E genes and the cholesteryl ester transfer protein gene. The MTHFR gene, which regulates homocysteine, is also important and may be part of an overall workup.
10. Get a high-speed or electron beam CT scan of the heart if you are concerned that you have cardiovascular disease. This may be helpful to assess overall plaque burden and calcium score. A score higher than 100 is a concern, and a score higher than 400 indicates severe risk of cardiovascular disease.