

Newer Laboratory Blood Tests for Evaluating Cardiovascular Disease Risk

More people will die of cardiovascular (CV) disease than the next ten causes of death combined. Even more alarming, a major study showed: 50% of the people who suffered a heart attack had normal cholesterol levels. For the past 40 years, CV risk has been evaluated and managed primarily by monitoring blood cholesterol levels. We now know that cholesterol alone is not enough for you to follow.

Atherosclerosis, a disease that affects arterial blood vessels, is currently thought to actually be a chronic inflammatory condition promoted, in part, by low density lipoprotein particles carried in your blood. These components are like containers that carry varying amounts of cholesterol and triglycerides that deposit their own contents in the vessel walls and form plaque. If this occurs, blood vessels become hardened and may become narrowed. These damaged vessels are less efficient at supplying blood to your organs and may lead to chest pain, heart attack or stroke.

The LHF team has selected a special battery of relatively new laboratory blood tests for you that include:

- NMR LipoProfile test - measures the number and size of your low density lipoprotein (LDL) particles (LDL-P). Low numbers of LDL particles have been shown to be associated with reduced risk of CV events. Studies have also shown that the actual size of the LDL particles also relate to the level of CV risk; the smaller sized LDL particles having greater risk.
- C-reactive protein (CRP) - evaluates your body's inflammatory response. High levels of C-reactive protein are associated with the recurrent coronary events and higher CV risk.
- PLAC test - Lp-PLA2 evaluates the stability of plaque (atherosclerosis) that you may have in your arteries. Elevated levels have been shown to correlate with increased coronary heart disease and stroke risk.

These newer blood tests are being evaluated to determine if knowing the individual values helps to identify and manage CV risk better than blood cholesterol levels alone. The individual will have to compare his results and with what is considered by laboratories to be in desirable levels. Results that show you may be at increased risk or outside of a "normal range" should be discussed with your doctor. Some of the results may be confusing and hard to understand.

You may call or email the Living Heart Foundation office to discuss your results as well.

It is important to note that one or more "abnormal" findings in this set of three new laboratory blood tests for CV disease does not mean you have a serious disease. It does mean that you may be at increased CV risk, and you may benefit from treatment. You should discuss this with your doctor. The need to be evaluated by your doctor if any of these new blood tests are "abnormal" is generally not an emergency; however, if you feel sick you should call your doctor as soon as possible. **If you have chest pain or shortness of breath, you should call an ambulance.**

Taking these newer blood tests is a first step to learn more about your cardiovascular health, be sure to discuss these results with your doctor.