

CardioPlus Advantage w/VAP

VAP Cholesterol Testing

Although standard blood cholesterol tests (measuring total cholesterol, LDL, HDL, and triglycerides) have helped doctors to accurately assess heart disease risk in many patients, recent advances in medical science have demonstrated that conventional cholesterol testing provides only limited insight into the multiple factors that underlie cardiovascular disease. In fact, these tests identify only 40% of those at risk for coronary heart disease.

The good news is, scientists have developed a more advanced blood test that can far more accurately gauge your risk of heart disease. The Vertical Auto Profile (VAP) test augments the standard cholesterol profile with additional measurements that can identify the risk of cardiovascular disease.

Best of all, the VAP test not only offers a comprehensive assessment of cardiovascular risk, but also supplies vital information that can help you and your doctor formulate a customized disease-prevention program and measure its progress over time. This powerful diagnostic tool can help you take the steps necessary to avoid preventable health catastrophes—like heart attack and stroke—today.

The baby-boom generation understands that as they age, their risk for heart attacks, strokes, and other cardiovascular events continues to increase.¹ Not content to succumb to disease and disability, this population is embracing a proactive, preventive approach to health care that includes advanced techniques of risk assessment such as the Vertical Auto Profile (VAP) cholesterol test.

Awareness of the VAP test is important for anyone who wants to stop cardiovascular disease in its tracks, even before signs and symptoms manifest. The VAP test is performed just like a traditional cholesterol panel: a technician or nurse draws blood and submits it to a laboratory. At reasonable cost, the VAP test provides more information than routine cholesterol tests and expands on this data. The comprehensive information derived from the VAP test enables physicians to more accurately predict their patients' risk of heart disease, and to customize more aggressive, patient-specific treatment plans.

Even if your doctor's office does not yet regularly utilize the VAP test, it is very likely that your physician will recognize the value of this advanced cholesterol screening tool, and will use the more detailed information it provides to devise the best treatment program to reduce your cardiovascular risk.

How the VAP Test Works

Routine cholesterol tests provide only the four following measurements:

1. Total cholesterol
2. Triglycerides
3. Low-density lipoprotein (LDL, the "detrimental" lipid), determined by a mathematical calculation, not by direct measurement

4. High-density lipoprotein (HDL, the “beneficial” lipid).

The standard lipid panel above is what physicians have relied on for years to assess their patients’ risk of cardiovascular disease. It has been a successful tool, helping physicians to lower patient cholesterol levels using a variety of medical therapies, including statin drugs, and motivating people to make lifesaving changes in their diet and lifestyle.

However, there are serious limitations to relying solely on the standard cholesterol panel. Most important, it can identify only about 40% of patients at risk for coronary heart disease.² The truth is, many risk factors are involved in the development of heart disease, and for some people, high cholesterol may or may not be one of them.

The well-known Framingham Study illustrated that the higher the cholesterol, the higher the statistical risk of a heart attack.³ Nonetheless, a frightening number of heart attacks still occur every day in people whose cholesterol values are seemingly normal. In fact, the American Heart Association reports that 50% of men and 64% of women who died suddenly of coronary heart disease had no previous symptoms!¹

Heart disease can lurk silently within, hidden and unsuspected. However, the additional information provided by the VAP test can help identify at-risk patients more accurately than routine cholesterol tests.²

The expanded information from the VAP test includes:

- More accurate, direct measurement of LDL.
- Measurement of LDL pattern density. This is important because small, dense LDL (“Pattern B”) triples the likelihood of developing coronary plaque and suffering a heart attack.⁴
- Measurement of lipoprotein subclasses, which include HDL2 and HDL3, intermediate-density lipoprotein (IDL), very-low-density lipoproteins (VLDL1, VLDL2, VLDL3), and lipoprotein(a) [Lp(a)], a particularly dangerous lipoprotein that can lead to heart attacks and strokes.

Patients who test “normal” in a routine cholesterol panel often are found to be at risk for heart disease after taking the VAP test. This is crucially important, not only to diagnose a number of lipid disorders and optimize the choice of medications, but also for tracking improvement when patients are working to reduce their numbers, whether with drugs or lifestyle changes. Clearly, more information means more effective treatment, and thus better health outcomes.

In addition, VAP is the only cholesterol profile that tests for all the present and emerging risk factors identified in the National Cholesterol Education Program Adult Treatment Panel III (NCEP ATP III) cholesterol guidelines.⁵

Since the National Cholesterol Education Program recommends people begin regular cholesterol testing at age 20, young adults can take a VAP test to learn about their cardiovascular disease risk early in life.

This will allow them to take aggressive steps now—including diet and exercise—to maintain a healthy heart for life. Taking a VAP test now makes infinitely more sense than waiting until a cardiovascular catastrophe occurs, and then wondering if the event might have been prevented if a more complete cholesterol profile had been obtained earlier.

VAP Cholesterol Testing: What You Need to Know

- Cardiovascular disease is America’s number-one cause of premature death. As adults age, their risk for heart attacks, strokes, and other cardiovascular events escalates.
- Cardiovascular risk assessment using conventional lipid panels (measuring LDL, HDL, total cholesterol, and triglycerides) detects only about 40% of those at risk for a cardiovascular event. An advanced form of lipoprotein testing, the Vertical Auto Profile (VAP) cholesterol test, detects far more patients at risk of heart disease. The VAP test measures all the components of a standard lipid profile, as well as all cholesterol subclasses known to contribute to cardiovascular risk.
- The data provided by a VAP test allows physicians to detect cardiovascular risk long before symptoms manifest, and to use this data to develop personalized prevention and treatment protocols for patients of all ages. Early intervention can help prevent costly hospitalizations and invasive surgery later in life.
- All individuals who wish to fully and accurately understand their cardiovascular risk should consider a VAP test. In particular, adults at high risk—due to family history, previously diagnosed cardiovascular disease, or conditions such as high blood pressure, diabetes, obesity, or known lipid abnormalities—should undergo VAP testing.
- The advanced data provided by the VAP test allow doctors and patients to proactively implement strategies to prevent cardiovascular events and mortality.

References

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