

CARDIOVASCULAR BLOOD SPOT

Cardiovascular disease (CVD) is one of the leading causes of death worldwide. In the past decade CVD has been the cause of over one-third of all premature deaths in Australia. The conventional risk factors for CVD include hypertension, dyslipidaemia, smoking, and diabetes mellitus. However, in a given individual, the presence of only one of these factors has a low positive predictive value. The most advanced strategy for coronary risk assessment is therefore to combine the information of several risk factors; a 'multi-marker' approach which enhances risk stratification.

Cardiovascular Blood Spot test reports on a conventional risk factor and other state of the art CVD biomarkers such as C-reactive protein (CRP), pre-diabetic marker HBA1C, insulin and cholesterol markers including VLDL. Useful for a comprehensive assessment of Metabolic Syndrome.

Cardiovascular Disease

Being one of the leading causes of death worldwide, more years of potential life before the age of 75 are lost due to this disease than any other human condition. Fortunately, over the past thirty years significant progress has been made in the areas of diagnosis, prevention, and treatment of CVD.

Conventional Risk Factors for CVD

The conventional risk factors for CVD include hypertension, smoking, diabetes mellitus, hypercholesterolemia, hypertriglyceridemia and low HDL cholesterol. However, in a given individual, the presence of only one of these factors has a low positive predictive value. Furthermore, a significant number of cardiovascular events still occur in individuals without these established risk indicators. At present, the most advanced strategy for coronary risk assessment is therefore to combine the information of several risk factors. This 'multi-marker' approach can enhance risk stratification, identifying those individuals with a moderate baseline risk who might benefit from aggressive risk reduction strategies.

SIGNS AND SYMPTOMS ASSOCIATED WITH CARDIOVASCULAR DISEASE

'Fluttering' in chest	Racing heartbeat (tachycardia)
Dizziness	Slow heartbeat (bradycardia)
Chest pain or discomfort	Shortness of breath
Light-headedness	Fainting or near fainting
Fatigue	High blood pressure (hypertension)

CARDIOVASCULAR BLOOD SPOT [Test code: 1408]

❖ Fasting Cholesterol, Triglycerides, HDL, LDL, VLDL, HbA1C, hs CRP, Fasting Insulin

Analytes

- Cholesterol is an organic lipid molecule required to maintain cell structure, integrity and fluidity. It acts as a precursor to biosynthesis of Steroid hormones, Vitamin D and bile acids.
- Triglycerides are a combination of glycerol and fatty acids enables adipose fat and blood glucose transport from the liver.
- HDL (high density lipoproteins) act to transfer fats away from cells, artery walls and tissues through the bloodstream, back to LDL particles or the liver for other disposition.
- LDL and VLDL (low density and very low density lipoproteins) are associated with increased risk of carotid atherosclerosis, angina, myocardial infarction and future coronary events.
- High sensitive C-reactive Protein (CRP) is an acute phase reactant to inflammation. High levels are linked to coagulation and vascular endothelium damage.
- HbA1C is a pre-diabetes marker.

Other cardiovascular and hypercholesteremia tests available

- **Cardiovascular Profile - Comprehensive [4001]:** Cholesterol, Triglycerides, HDL, LDL, ratios, Fasting Glucose, Homocysteine, Apolipoproteins A & B, Lipoprotein (a), Fibrinogen, hsCRP
- **Cardiovascular Profile - Comprehensive 2 [4027]:** Cholesterol, Triglycerides, HDL, LDL, ratios, Fasting Glucose, Homocysteine, Apolipoproteins A & B, Lipoprotein (a), Fibrinogen, hsCRP; Liposcreen LDL subfractions
- **LIPOSCREEN LDL Subfractions [4028]:** Cholesterol, Triglycerides, HDL, LDL, VLDL, IDL, LDL subfractions
- **Oxidised LDL [4029]:** Oxidised LDL
- **LIPOSCREEN LDL Subfractions & Oxidised LDL [4031]:** Cholesterol, Triglycerides, HDL, LDL, VLDL, IDL, LDL subfractions (x7), Oxidised LDL
- **LIPOSCREEN LDL Subfractions & Oxidised LDL & HDL Subfractions [4032]:** Cholesterol, Triglycerides, HDL, LDL, VLDL, IDL, LDL subfractions (x7), Oxidised LDL; HDL subfractions (x3)
- **Lipoprotein (a) [4009]:** Apolipoprotein (a)

How to order a test kit:

To order a test kit simply request the test name and/or test code on a NutriPATH request form test code and have the patient phone NutriPATH Customer Service on 1300 688 522.



Phone **1300 688 522** for further details
www.nutripath.com.au