

Test	Purpose	Relevance	Current normal range	Suggested range	Notes
<b>Fasting Glucose</b>	Measures glucose concentration in serum during fasted state	Elevated blood glucose, even at upper end of normal range, greatly increases CVD & all-cause mortality	<100 mg/dl	<89 mg/dl	Lowest all-cause mortality associated with fasting glucose range of 80-89 mg/dl
<b>Fasting Insulin</b>	Measures insulin concentration in serum during fasted state	Elevated insulin may increase risk of cardiovascular mortality via multiple mechanisms	<27 mIU/mL	Under 5 mIU/mL	
<b>Hemoglobin A1c (HbA1c)</b>	Measures serum concentrations of glycated, or glycosylated hemoglobin	Used as marker of blood glucose control during previous two to three months	4% - 6%	< 5%	Recent study of >10,000 people found increasing mortality with rising HbA1c. HbA1c less than 5% conferred lowest CVD & mortality
<b>2-hour post-load glucose</b>	Measures blood glucose levels for up to 2 hours after ingestion of glucose	Can be used in conjunction with fasting glucose measurements to improve detection of impaired glycemic control	<140 mg/dl	Linear increase in CHD risk with increasing post-load glucose values	In over 45s, 2-hour test may detect significant portion of individuals with impaired glycemic control who would otherwise be missed if relying only on fasting blood glucose
<b>White blood cell count</b>	Measures leukocyte (white blood cell) levels	Leukocyte count is a marker for inflammation	Between 4,300 and 10,800 cmm (4.3 - 10.8x10 <sup>9</sup> /L)	< 6,000 cmm (6.0x10 <sup>9</sup> /L)	Elevated WBC is a consistent, independent predictor of CVD events in those initially free of CHD & those with CHD. Leukocyte count test is common, inexpensive and reliable
<b>hsCRP</b>	Used as a marker of inflammatory activity	Causal role for CRP in CHD is yet to be established, but CRP serves as marker for inflammation. Higher CRP levels associated with increased CHD risk	<3.0 mg/l	<0.05 mg/l	CRP levels may be temporarily elevated during acute illness and infection. When used in CHD risk assessment, CRP tests should be administered when one has recovered from acute infection.
<b>Fibrinogen</b>	Measures fibrinogen concentrations in serum	Fibrinogen is a protein that promotes blood clot formation	200 - 400 mg/dl	200 - 300 mg/dl	
<b>Homocysteine</b>	Measures serum homocysteine levels	HcY is a potentially atherogenic amino acid	<12 mmol/L	<9 mmol/L; available evidence suggests the lower the better	
<b>VAP Lipid Panel</b>	Measures proportion of small, dense LDL particles to large, buoyant LDL particles, as well risk factors for Metabolic Syndrome	Small, dense particles of LDL have been shown to be risk factors for CHD; Metabolic Syndrome increases risk of CHD by several-fold	Pattern A (predominance of large, buoyant LDL)	Pattern A	This test provides important information not available with standard cholesterol tests. See <a href="http://www.thevaptest.com">http://www.thevaptest.com</a> for more info. You can order the test through <a href="http://www.healthcheckusa.com">http://www.healthcheckusa.com</a>

\* Adapted from "The Great Cholesterol Con" by Anthony Colpo