

## BLOOD CHEMISTRY TEST GUIDE

TEST	EXPECTED RANGE	UNITS	TEST GUIDE
Cholesterol Total	<170 (< 18 years old) 125-200 (> 18 years old)		Cholesterol is one of the major fats in the body. High levels indicate an increased risk for heart disease.
Triglycerides	<150	mg/dL	Triglycerides are fats that provide a reserve of energy.
VLDL Cholesterol	5-40	mg/dL	Major carrier of triglycerides. Breaks down into LDL
LDL Cholesterol	<100	mg/dL	Elevations of Low Density Lipoprotein (LDL) Cholesterol are associated with an increased risk of heart disease
HDL Cholesterol	>= 46	mg/dL	Elevated High Density Lipoprotein (HDL) Cholesterol is associated with decreased risk of heart disease.
Cholesterol/HDL Ratio	<= 5.0		A ratio of 5.0 or less is associated with a lower risk of heart disease.
LDL/HDL Ratio	Average risk 2.34-4.13		LDL/HDL Cholesterol Ratio is an indicator of heart disease risk. The lower the ratio, the lower the risk
Sodium, serum	135 - 146	mmol/L	Sodium is a major electrolyte in the body. It helps muscles and the heart function properly. Severe vomiting, diarrhea or sweating can cause levels to drop. Dehydration can cause sodium levels to rise.
Potassium, serum	3.5 - 5.3	mmol/L	Potassium is a principle electrolyte in the body. It plays an important role in nerve conduction and muscle function.
Chloride, serum	98-110	mmol/L	Chloride is another major electrolyte in the body. It helps cells function properly
Urea Nitrogen	7-25	mg/dL	Blood urea nitrogen (BUN) is an end product of protein metabolism
Creatinine, serum	0.57-1.03	mg/dL	Creatinine is a metabolic product released from muscle tissue and excreted from the kidneys
Calcium, serum	8.6-10.2	mg/dL	Calcium performs numerous functions in all cells. It is especially important in the structure of bones and in nerves
Phosphorus	2.5-4.5	mg/dL	Phosphorus is combined mostly with calcium in the bone (85%).
Uric Acid	2.5-7.0	mg/dL	Uric acid is formed by the breakdown of protein. High levels may indicate gout.
Total Protein	6.2-8.3	g/dL	Protein in the blood includes two major components, albumin and globulin
Albumin	3.6-5.1	g/dL	Albumin is the largest portion of total blood protein
Globulin, Total	2.2-3.9	g/dL	Globulin is a major component of blood proteins
A/G Ratio	1.0-2.1	ratio	The A/G ratio can be an indicator of some disease states
eGFR	>60		Tells how well the kidneys are working If African American, multiply result by 1.21
Glucose	65-99	mg/dL	Glucose is the main source of energy for living organisms.
GGT	3-40	U/L	Gamma-glutamyl transferase is an enzyme found the liver and detects alcohol-induced liver disease induced liver disease
Lactate Dehydrogenase	100-200	U/L	LDH is an enzyme that is widely distributed in body tissues and is a non-specific indicator of disease.
AST	10-30	U/L	Aspartate aminotransferase (AST) is an enzyme found in the liver, heart and skeletal muscle.
Bilirubin, Total	.2-1.2	mg/dL	Bilirubin is a breakdown product of red blood cells. Abnormally high total bilirubin levels may occur in individuals with liver and gallbladder disease, and may cause jaundice.
ALT	6-40	mg/dL	Alanine aminotransferase (ALT) is an enzyme found in the liver and rises with liver disease
Alkaline Phosphatase	33-115	U/L	Used mainly as an index of liver and bone disease when correlated with other clinical findings.
Iron	40-175	mcg/DI	Necessary for the production of hemoglobin which carries oxygen from the lungs to the body