

LABORATORY RESULT INTERPRETATION GUIDE

Reference Template – Clinical Correlation Required

PANEL / BIOMARKER	REF. RANGE	CLINICAL SIGNIFICANCE (HIGH)	CLINICAL SIGNIFICANCE (LOW)
Basic Metabolic Panel (BMP)			
Glucose (Fasting)	70–99 mg/dL	Diabetes, stress, pancreatitis, Cushing's syndrome.	Insulin overdose, starvation, hypothyroidism.
Creatinine	0.7–1.3 mg/dL	Renal impairment, dehydration, muscle trauma.	Low muscle mass, severe liver disease.
Sodium (Na ⁺)	135–145 mEq/L	Dehydration, diabetes insipidus.	Overhydration, heart failure, SIADH.
Complete Blood Count (CBC)			
Hemoglobin (Hgb)	13.5–17.5 g/dL	Polycythemia, chronic lung disease, smoking.	Anemia, hemorrhage, iron deficiency.

PANEL / BIOMARKER	REF. RANGE	CLINICAL SIGNIFICANCE (HIGH)	CLINICAL SIGNIFICANCE (LOW)
White Blood Cell (WBC)	4.5-11.0 $\times 10^3 / \mu\text{L}$	Infection, inflammation, leukemia.	Bone marrow failure, chemotherapy, viral load.
Lipid & Cardiovascular			
LDL Cholesterol	<100 mg/dL	Increased CV risk, atherosclerosis.	Malabsorption, malnutrition.
C-Reactive Protein	<1.0 mg/L	Acute inflammation, tissue injury.	N/A (Lower is generally optimal).
Liver Function Tests (LFT)			
ALT / AST	7-55 / 8-48 U/L	Hepatitis, fatty liver, alcohol consumption.	Vitamin B6 deficiency (rare).

Disclaimer: This chart is for educational purposes only. Laboratory reference ranges vary by facility. Consult a healthcare professional for diagnosis and treatment.