Name of Test	Purpose	Normal Range	High Results Mean	Low Results Mean
BUN (Blood Urea Nitrogen)	Indirect measure kidney function	**10 – 20**	Low blood volume/ dehydration, shock, HF, kidney disease, drug toxicity	Liver failure, cirrhosis, overhydration, nephrotic syndrome
Creatinine (Cr)	Diagnose impaired kidney function	Male: **0.6 – 1.2** Female: **0.5–1.1**	Kidney disease, heart failure, muscle disease	Debilitation, decreased muscle mass
Specific Gravity (Urinalysis)	Measure urine particle concentration	**1.010 – 1.030**	Dehydration, pituitary tumor, hypotension, HF, liver failure	Distal renal tubular disease, polycystic kidney disease, overhydration, diabetes insipidus
Amylase (AMS)	Detects & monitors pancreatitis	**60 – 120**	Pancreatitis	
Glucose (serum)	Blood sugar level	**70 – 105**	Diabetes, stress response, Cushing's, hyperthyroidism, acute/chronic pancreatitis	Too much insulin production/overdose, hypothyroidism, Addison's, liver disease
Cholesterol (serum)	Risk for CAD	**< 200**	Family high cholesterol/lipid	Malabsorption, malnutrition
CBC				
RBC	Evaluate anemia	Male: **4.5 – 5.3** Female: **4.1–5.1**	Illness, high altitude, congenital heart disease, COPD	Anemia, hemorrhage, liver cirrhosis
WBC	Evaluates infection or immunosuppression	**5,000 – 10,000**	Infection, leukemic cancer, steroid usage, severe sepsis	Drug toxicity, bone marrow failure, overwhelming infections, lupus
Hemoglobin (Hgb)	Rapid indirect measurement of RBC count	Male: **13 – 18** Female: **12 – 16**	Congenital heart disease, dehydration, COPD	Anemia, cirrhosis, hemorrhage
Hematocrit (Hct)	Indirect measurement of red blood cell number and volume	Male: **42 –52%** Female **36–46%**	Congenital heart disease, dehydration, COPD	Anemia, cirrhosis, hemorrhage
Platelet	Blood ability to clot	**150,000 – 400,000**	Malignant disorders, rheumatoid arthritis, anemia	Hemorrhage, infection, cancer therapy
Coagulation Studies				
PT (Prothrombin time)	Tests extrinsic clotting	**11 – 15 seconds**	Anticoagulation therapy, DIC, hepatic disease, malabsorption	Digitalis therapy, diuretic action, vitamin K therapy
PTT (Partial thromboplastin time)	Tests coagulation mechanisms	**60 – 70 seconds**	Deficiency factors, anticoagulation therapy	Extensive cancer, DIC
APTT (Activated PTT)	More sensitive than PTT	**30 – 45 seconds**		
INR (International Normalized Ratio)	Test for coagulation	**> 1.5 – 2.0** *Higher for prosthetic valve	Blood too thin, warfarin (Coumadin) therapy	Blood too thick
D-Dimer	Assess for breakdown of a venous clot (DVT, PE)	**< 0.5**	DIC, recent surgery, active or recent bleeding, TE, pregnancy, liver disease, inflammation, malignancy, hypercoagulable states	