



## Additional Lab Tests

If you have results that fall outside the expected range this may or may not be a cause of concern. We recommend you follow up with your healthcare provider.

Test	Definition	What a low number may mean	What a high number may mean
<b>BUN</b> (blood urea nitrogen)	A waste product formed in the liver and carried to the kidneys, filtered out of blood, and excreted through urine	Malnutrition, over hydration, pregnancy	Liver or kidney disease, heart failure
<b>Creatinine</b>	A chemical waste produced by muscle metabolism	Low muscle mass or pregnancy	Chronic or temporary decrease in kidney function, dehydration
<b>Glomerular Filtration Rate (GFR)</b>	Checks how well the kidneys are working by estimating how much blood passes through the glomeruli (filters) of the kidneys each minute	Chronic kidney disease or kidney failure; GFR decreases progressively with age	Generally not a concern
<b>Sodium</b>	Electrolyte	Use of diuretics, over hydration, adrenal insufficiency, liver or heart disease	Kidney dysfunction, dehydration, Cushing's syndrome, salt use, indigestion
<b>Potassium</b>	Electrolyte	Use of diuretics or corticosteroids (such as prednisone or Cortisone), diarrhea	Acute or chronic kidney failure, Addison's disease, diabetes, Dehydration, salt substitutions
<b>Chloride</b>	Electrolyte	Diuretics, chronic lung disease, vomiting	Dehydration, hyperventilation, kidney disease
<b>Carbon Dioxide</b>	Gaseous waste product from metabolism	Kidney disease, certain toxic exposures, severe infection	Lung diseases, including COPD
<b>Albumin/Globulin</b>	Proteins made by the liver	Malnutrition, liver disease, inflammatory bowel disease, kidney disease	Dehydration, certain genetic conditions
<b>Calcium</b>	A mineral stored in the hard part of bones	Calcium, magnesium, or Vitamin D deficiency, malnutrition, high phosphate	Kidney disease, hyperparathyroidism, cancer, excess vitamin D intake, diuretics
<b>Bilirubin</b>	A pigment in the bile, a digestive fluid produced by the liver	Generally not a concern	Liver disease, bile duct disorder, red cell destruction
<b>Alkaline Phosphatase</b>	Enzyme found in the liver and bones	Malnutrition, hypothyroid, increased vitamin D	Paget's disease or certain cancers that spread to bone, bile duct obstruction, liver cancer
<b>ALT/AST</b>	Enzyme found mostly in the liver	Generally not a concern	Certain toxins such as excess acetaminophen or alcohol, hepatitis