A **Basic Metabolic Panel (BMP)** is a group of blood tests used to determine how your organs are functioning. Healthcare providers use it as a routine test and to help diagnose, screen for and monitor certain health conditions.

The table below lists some common blood tests you will see in a BMP, along with their normal values and what it means when their values are abnormal.

Key: ⬆ Indicates when the value is elevated or high.

⬇ Indicates when the value is decreased or low.

( ) Indicates the metric unit of measurement.

Elevated or decreased values are only an indication of conditions and usually additional testing is required for providers to reach a diagnosis.

Test	Normal range	Indication
Glucose (AKA blood sugar)	70 to 100 (mg/dL)	⬆ = Diabetes (additional testing required) ⬇ = Hypoglycemia (low blood sugar)
BUN (Blood Urea Nitrogen)	6 to 20 (mg/dL)	⬆ = Kidney problems, dehydration, urinary tract obstruction ⬇ = Diet low in protein, malnutrition, or severe liver damage
Creatinine	0.6 to 1.3 (mg/dL)	⬆ = Blocked urinary tract, kidney problems, infection, damage or failure, or dehydration ⬇ = Muscular degeneration
CO2 (Carbon Dioxide)	23 to 29 (mmol/L)	⬆ = Lung disease, kidney failure, not enough acid in the blood caused by vomiting dehydration or anorexia ⬇ = Too much acid in the blood caused by ketoacidosis (in diabetics), breathing difficulties, nausea and vomiting
Chloride	98 to 106 (mEq/L)	⬆ = Dehydration, too much acid in the blood caused by ketoacidosis (in diabetics), breathing difficulties, nausea and vomiting ⬇ = Overhydration, lung disease, kidney failure, not enough acid in the blood caused by vomiting dehydration or anorexia
Potassium	3.5 to 5 (mEq/L)	⬆ = Kidney or liver disease, too much medication, or bodily injury ⬇ = Usually, the result of the side effect of drugs that cause increased urination (like diuretics)
Sodium	136–145 (mEq/L)	⬆ = Dehydration, too much salt intake, or certain diseases ⬇ = Diarrhea, vomiting, or excessive sweating
Calcium	8.6–10.2 (mg/dL)	⬆ = Overactive parathyroid glands ⬇ = Underactive parathyroid glands, Vitamin D deficiency, kidney failure