

# Common Blood Tests and Their Meaning

## Franciscan Care Services

### Comprehensive Metabolic Profile

#### (CMP)

**Sodium:** An electrolyte that helps maintain water balance and stabilize the body's pH. Sodium helps monitor dehydration, kidney diseases and heart conditions.

**Potassium:** An electrolyte that helps transfer nutrients into cells, important for muscle function, helps maintain water balance and stabilize the body's pH. Potassium helps monitor dehydration and kidney diseases.

**Chloride:** An electrolyte that helps maintain water balance and stabilize the body's pH. Chloride helps monitor dehydration, and kidney diseases.

**Glucose:** Body's main source of energy. Glucose is used to monitor diabetes, hypoglycemia and hyperglycemia.

**BUN:** A waste produced by the liver and excreted by the kidney. BUN is used to monitor liver disease and kidney disease.

**Creatinine:** A waste produced by the muscles and excreted by the kidney. Creatinine is used to monitor kidney disease.

**CO2:** An electrolyte that helps maintain the body's pH. CO2 is used to monitor kidney diseases, lung disorders and high blood pressure.

**Calcium:** A mineral within the body that helps with the proper function of nerves, enzymes, muscles and blood clotting. Calcium is used for monitoring diseases affecting bone, kidneys, parathyroid gland and the gastrointestinal tract.

**Total Protein:** Is a combination of albumin and globulin which are two proteins commonly found in the body. Total Protein is used for monitoring liver disease, kidney disease and nutritional disorders.

**Albumin:** Is a protein produced by the liver. Albumin is used for monitoring liver disease, kidney disease and nutritional disorders.

**Total Bilirubin:** Is a waste product that is processed by the liver. Total Bilirubin is used to monitor liver diseases.

**Alkaline Phosphatase (ALP):** Is an enzyme that is found in the bone and liver. ALP is used to monitor bone disease and liver disease.

**AST (SGOT):** Is an enzyme that is found in the heart and liver. AST is used to monitor heart disease and liver disease.

**ALT (SGPT):** Is an enzyme that is found in the liver. ALT is used in conjunction with AST to monitor liver disease.

**GFR:** Glomerular Filtration Rate helps measure kidney function.

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### Lipid Panel

**Triglycerides:** Are found in fat tissue and is a major source of energy for the body. Triglycerides are used to help monitor an individual's risk for developing heart disease.

**Cholesterol:** Is a steroid that is used to make hormones that are essential for cell growth and development. Increased values may indicate a hardening of the arteries that is caused by plaque build-up. Cholesterol is used to help monitor an individual's risk for developing heart disease.

**HDL:** Considered "Good" Cholesterol. It is a fat protein that carries cholesterol from the arteries to the liver and helps protect the arteries from plaque build-up. An increased HDL helps reduce the risk of developing heart disease. HDL is used to help monitor an individual's risk for developing heart disease.

**LDL:** Considered "Bad" Cholesterol. It is a fat protein that carries and deposits the excess cholesterol into the blood vessel walls creating plaque build-up. LDL is used to help monitor an individual's risk for developing heart disease.

### Complete Blood Count (CBC)

**White Blood Cell (WBC):** The white blood cell count is the total number of white blood cells found in a person's blood sample. White Blood cells are the body's defense and help protect the body from infection and play an important role in inflammation. The WBC is used to monitor an infection and/or inflammation process.

**Red Blood Cell (RBC):** Red blood cells circulate in the blood and carry oxygen to other parts of the body. The RBC count is used to help monitor anemia and polycythemia.

**Hemoglobin:** Is an iron containing protein that helps the RBC carry the oxygen to other parts of the body. Hemoglobin is used to help screen and monitor anemia.

**Hematocrit:** Helps determine what portion of your blood is made up of RBC's. The hematocrit is used in conjunction with the hemoglobin to screen and monitor anemia.

**MCV:** Measures the size of the red blood cell. MCV is used to help classify different types of anemia.

**MCH:** Measures the amount of hemoglobin in a RBC's. MCH is used to help classify different types of anemia.

**MCHC:** Calculates the average concentration of hemoglobin in a RBC. MCHC is used to help classify different types of anemia.

**RDW:** A calculation that measures the variation of sizes of red blood cells.

**Platelet Count:** Number of platelets in an individual's blood sample. Platelets play an important role in normal blood clotting.

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### Other Common Lab Tests

**TSH:** Thyroid Stimulating Hormone is a hormone produced by the Pituitary Gland and controls the activity of the Thyroid Gland. TSH is used to screen and monitor an overactive and underactive Thyroid gland.

**FT4:** Is a hormone produced by the thyroid gland. FT4 is used to screen and monitor thyroid diseases.

**PSA (Prostate Specific Antigen):** Is a protein produced by the prostate. A PSA is used to screen males for prostate cancer.

**Hemoglobin A1C:** Is hemoglobin with glucose attached. The A1C test evaluates the average amount of glucose in the blood over the last 3 months. Hemoglobin A1C can be used to diagnose diabetes and monitor diabetic treatment.

**Troponin:** Are proteins produced by cardiac (heart) muscle. Troponin is used to help diagnose a heart attack.

**Protime/INR:** Is a laboratory test that can be used to detect bleeding or clotting disorders. The PT/INR is commonly used to monitor warfarin (Coumadin) therapy.