

Understanding your pet's blood work...

TO HELP YOU UNDERSTAND YOUR PET'S TEST RESULTS, THIS GUIDE EXPLAINS COMMON TESTS AND INDICES PERTINENT TO ANIMAL HEALTH.



COMPLETE BLOOD COUNT (CBC)

A CBC gives information on hydration status, anemia, infection, the blood's clotting ability, and the ability of the immune system to respond. This test is essential for pets with fevers, vomiting, diarrhea, weakness, pale gums, or loss of appetite. If your pet needs surgery, a CBC can detect bleeding disorders or other unseen abnormalities.

- **HCT (Hematocrit)** - measures the percentage of red blood cells to detect anemia and dehydration.
- **Hb or MCHC (Hemoglobin and mean corpuscular hemoglobin concentration)** - help determine the blood's ability to carry oxygen.
- **WBC (White blood cell count)** - measures the body's immune cells. Increases or decreases indicate certain disease or infections.
- **Lymphocytes/ Monocytes/ Neutrophils** - specific types of WBCs
- **Eosinophils** - specific type of WBC that may indicate allergic or parasitic conditions.
- **PTL (Platelet count)** - type of blood element that is involved in the clotting process.

BLOOD CHEMISTRIES

These common blood serum tests help evaluate organ function, electrolyte status, hormone levels, and more. They are important in evaluating older pets, pets with vomiting and diarrhea or toxin exposure, pets receiving long-term medications, and health before anesthesia.

- **ALB (Albumin)** - is serum protein that helps evaluate hydration, hemorrhage, and intestinal, liver, and kidney disease.
- **ALKP (Alkaline Phosphatase)** - elevations may indicate liver damage, Cushing's disease, and active bone growth in young pets.
- **ALT (Alanine Aminotransferase)** - is a sensitive indicator of active liver damage.
- **AMYL (Amylase)** - elevations can occur with pancreatitis but not always.
- **BUN (Blood Urea Nitrogen)** - assesses kidney function. An increased BUN is called azotemia and can be caused by kidney, liver, or heart disease, urethral obstruction, shock, or dehydration.
- **Ca (Calcium)** - deviations can indicate a variety of diseases. Tumors, hyperparathyroidism, kidney disease, and low albumin are just a few of the conditions that alter serum calcium.
- **CHOL (Cholesterol)** - is used to supplement diagnosis of hypothyroidism, liver disease, Cushing's disease, and diabetes mellitus.
- **Cl (Chloride)** - is an electrolyte lost with vomiting and Addison's disease. Elevations often indicate dehydration.
- **CREA (Creatinine)** - assesses kidney function. This test helps distinguish between kidney and non-kidney elevations of BUN.
- **GLOB (Globulin)** - is a blood protein that can be abnormal with chronic inflammation and certain gastrointestinal disorders.
- **GLU (Glucose)** - is the blood sugar level. Elevated levels may indicate diabetes mellitus. Low levels can cause collapse, seizures, or coma.
- **K (Potassium)** - is an electrolyte lost in vomiting, diarrhea, or excessive urination. Increased levels may indicate kidney failure, Addison's disease, dehydration, and urethral obstruction. High levels can lead to cardiac arrest.
- **Na (Sodium)** - is an electrolyte lost with vomiting, diarrhea, kidney, and Addison's disease. This test also helps assess hydration status.
- **PHOS (Phosphorus)** - elevations are often associated with kidney disease, hyperthyroidism, and bleeding disorders.
- **TBIL (Total Bilirubin)** - elevations may indicate liver or hemolytic disease. This test helps identify bile duct problems and certain types of anemia.
- **TP (Total Protein)** - assesses hydration status and provides additional information about the liver, kidneys, and infectious diseases.
- **T4 (Thyroxine)** - is a thyroid hormone. Decreased levels often signal hypothyroidism in dogs, while high levels indicate hyperthyroidism in cats.