

# Understanding your pet's blood work

Blood tests help us diagnose and determine causes of illness accurately and monitor the progress of your pet's medical treatment. Baseline blood screens may be recommended to obtain general health information that is unique to your pet. A checkmark in any box indicates tests that have been selected specifically for your pet by your veterinarian. If you have questions, please ask our doctors or nurses. We want you to understand our recommendations and be a partner in your pet's care.

## Complete blood count (CBC)

The most common blood test, a CBC, gives information on hydration status, anemia, infection, the blood's clotting ability, and the immune system's ability to respond. A CBC can detect unseen abnormalities even when your pet appears to be in good health.

- HCT (hematocrit) measures the percentage of red blood cells to detect anemia and dehydration.
- Hb and MCHC (hemoglobin and mean corpuscular hemoglobin concentration) measure hemoglobin, the oxygen-carrying pigment of red blood cells (corpuscles).
- WBC (white blood cell count) measures the body's immune cells. Increases or decreases indicate certain diseases or infections.
- PLT (platelet count) measures cells that help stop bleeding by forming blood clots.
- RETICS (reticulocytes) are immature red blood cells. High or low levels help classify anemias.

## Blood serum profile

These common tests evaluate organ function, electrolyte status, hormone levels, and more. They are very helpful to the veterinarian when evaluating the health of your pet throughout his/her life. They are vital to monitoring the health of older pets, pets with vomiting and diarrhea or toxin exposure, pets receiving long-term medications, and preanesthetic patients.

- ALB (albumin) is a serum protein that helps evaluate hydration, hemorrhage, and intestinal, liver, and kidney health.
- 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 but doesn't indicate the cause.
- AMYL (amylase) elevations show pancreatitis or kidney disease.
- AST (aspartate aminotransferase) increases may indicate liver, heart, or skeletal muscle damage.
- BUN (blood urea nitrogen) reflects kidney function. An increased blood level is called azotemia and can be caused by kidney, liver, and heart disease, urethral obstruction, shock, and 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 often lost with vomiting and Addison's disease. Elevations often indicated dehydration.
- Cortisol is a hormone that is measured in tests for Cushing's disease (low-dose-dexamethasone suppression test) and Addison's disease (ACTH stimulation test).
- CREA (creatinine) reveals kidney function. This test helps distinguish between kidney and nonkidney causes of elevated BUN.
- GLU (glucose) is blood sugar. Elevated levels may indicate diabetes mellitus. Low levels can cause collapse, seizures, or coma.
- K (potassium) is an electrolyte lost with 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.
- LIP (lipase) is an enzyme that may indicate pancreatitis when elevated.
- Na (sodium) is an electrolyte lost with vomiting, diarrhea, and kidney or Addison's diseases. This test helps indicate 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) indicated hydration status and provides 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.