

Understanding your pet's blood work

Blood tests help us to determine causes of illness accurately, safely and quickly and let us monitor the progress of medical treatments. A tick in any box indicates a significant abnormal finding on your pet's blood work. If you have any questions, please feel free to ask a staff member- 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, anaemia, infection, the blood's clotting ability and the immune system's ability to respond. This test is essential for pets with fevers, vomiting, diarrhoea, weakness, pale gums or loss of appetite. If your pet needs surgery, a CBC can detect unseen abnormalities

- HCT** (haematocrit) measures the percentage of red blood cells to detect anaemia and dehydration
- Hb** and **MCHC** (haemoglobin and mean corpuscular haemoglobin concentration) is 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

- GRANS** and **L/M** (granulocytes and lymphocytes/ monocytes) are specific types of white blood cells
- EOS** (eosinophils) are a specific type of white blood cells that may indicate allergic or parasitic conditions
- PLT** (platelet count) measures cells that form blood clots
- RETICS** (reticulocytes) are immature red blood cells. High levels indicate regenerative anaemia

Blood serum chemistries

These common tests evaluate organ function, electrolyte status, hormone levels and more. They are important in evaluating the health of older pets, pets with vomiting and diarrhoea or toxin exposure, pets receiving long-term medications and pre-anaesthetic patients

- ALB** (albumin) is a serum protein that helps evaluate hydration, haemorrhage and intestinal, liver and kidney disease
- ALKP** (alkaline phosphatase) elevations may indicate liver damage, Cushing's disease and active bone growth in young pets. This test is especially significant in cats
- 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) indicates 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. Tumours, 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 Cushing's disease, liver disease, hypothyroidism and diabetes mellitus
- Cl** (chloride) is an electrolyte often lost with vomiting and Addison's disease. Elevations often indicate 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 non-kidney causes of elevated BUN

- GGT** (gamma glutamyl transferase) is an enzyme that indicates liver disease or corticosteroid excess
- GLOB** (globulin) is a blood protein that often increases with chronic inflammation and certain disease states
- GLU** (glucose) is a blood sugar. Elevated levels may indicate diabetes mellitus. Low levels can cause collapse, seizures or coma
- K** (potassium) is an electrolyte lost with vomiting, diarrhoea 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
- Na** (sodium) is an electrolyte lost with vomiting, diarrhoea, kidney disease, and Addison's disease. 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 haemolytic disease. This test helps identify bile duct problems and certain types of anaemia
- TP** (total protein) indicates 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