

UNDERSTANDING YOUR PET'S BLOOD WORK

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BLOOD CHEMISTRIES

These common blood serum tests evaluate organ function, electrolyte status, hormone levels, and more. They are important in evaluating your pet's health status before anesthesia, especially your pet's ability to process and excrete anesthetics. These tests are also important for older pets, pets with vomiting and diarrhea or toxin exposure and pets receiving long-term medications.

KIDNEY CHEMISTRIES

BUN (blood urea nitrogen) indicates kidney function. An increased blood waste product level is called azotemia and can be caused by kidney, liver and heart disease, urethral obstruction, shock and dehydration.

CREA (cretonne) reveals kidney function. This test helps distinguish between kidney and non-kidney causes of elevated BUN.

PHOS (phosphorous) often associated with kidney disease, hyperthyroidism, and bleeding disorders.

Ca (calcium) deviations can indicate a variety of diseases. Tumors, hyperparathyroidism, kidney disease, and low albumins may alter serum calcium levels.

LIVER CHEMISTRIES

ALB (albumin) is a serum protein that helps evaluate hydration, hemorrhage, & 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) a sensitive indicator of active liver damage but does not indicate the cause.

TBIL (total bilirubin) elevations may indicate liver or hemolytic disease. This test helps identify bile duct problems and certain types of anemia.

GGT (gamma glutamyl transferase) is an enzyme that may indicate liver disease or corticosteroid excess.

CK (creatinine kinase) is an enzyme that may indicate skeletal or cardiac lesions.

OTHER CHEMISTRIES/TESTS

TP (total protein) indicates hydration status and provides additional information about liver, kidneys and infectious diseases.

GLU (glucose) is a blood sugar. Elevated levels may indicate diabetes mellitus. Low levels may cause collapse, seizures, or coma.

AMYL (amylase) elevations may indicate pancreatitis or kidney disease.

LIP (lipase) is an enzyme that may indicate pancreatitis.

CHOL (cholesterol) is used to supplement diagnosis of hypothyroidism, liver disease, Cushing's disease, and diabetes mellitus.

GLOB (globulin) a blood protein that often increases with chronic inflammation and certain disease states.

T₄ (thyroxine) is a thyroid hormone. Decreased levels often signal hypothyroidism in dogs, while increased levels signal hyperthyroidism in cats.

Cortisol is a hormone that is measured in tests of Cushing's disease (low-dose dexamethasone suppression test) and Addison's disease (ACTH stimulation test).

ELECTROLYTES

Cl (chloride) is often lost with vomiting and Addison's disease. Elevations often indicate dehydration.

Na (sodium) is often lost with vomiting, diarrhea, kidney disease and Addison's disease and may be an indicator of hydration status.

K (potassium) is often 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.

Patient Name: _____

COMPLETE BLOOD COUNT (CBC)

This is the most common test performed on pets and people. A **CBC** gives information on hydration status, anemia, infection, 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.

WBC (white blood cell count) measures the body's immune cells. Increases or decreases indicate certain diseases or infections.

LYM (lymphocyte count) cells of the specific immune system, which produce antibodies, or activate other cells.

MONO (monocyte count) early stage of cells that ultimately fight infection & regulate inflammatory response.

NEU (neutrophil count) primary function is to fight and destroy foreign organisms/bacteria/viruses.

EOS (eosinophil count) specific type of white blood cells that indicate allergic or parasitic conditions.

BASO (basophil count) cells involved in immediate hypersensitivity reactions and inflammation.

HCT (hematocrit) measures the % of red blood cells to detect anemia and dehydration.

RBC (red blood cell count) primary function is to carry oxygen to tissue cells and carbon dioxide away.

HGB (hemoglobin) measurement of concentration of this the oxygen-carrying pigment of red blood cells measures oxygen carrying capacity of blood.

RETIC (reticulocyte count) are immature red blood cells. High levels indicate regenerative anemia.

MCV (mean cell volume) mean volume of all red cells.

RDW (red cell distribution width) measurement of how widely sizes of red cells vary.

MCHC (mean corpuscular hemoglobin concentration) provides a means of further classifying anemias.

MCH (mean corpuscular hemoglobin) mean mass of hemoglobin in each RBC.

PLT (platelet count) measures cells that form blood clots.

MPV (mean platelet volume) mean platelet volume.

PCT (platelet hematocrit) measures % of platelets.

PDW (platelet distribution width) measurement of how widely sizes of platelets vary.

OTHER POSSIBLE TESTS

FELINE LEUKEMIA & FELINE IMMUNODEFICIENCY VIRUS this tests for two of the major causes of illness and death in cats.

CANINE HEARTWORM & TICK-BORNE DISEASE this tests for deadly parasites that can live in the heart or lungs, as well as Lyme Disease and Ehrlichiosis.

CANINE PARVOVIRUS this tests for one of the most common and severe gastrointestinal diseases of dogs.

If you have questions, ask any staff member. We want you to understand the benefits and value of blood work and be a partner in your pet's care.

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