



Dancing Paws Animal Wellness Center

Explanation of Your Pet's Blood Work

When Dr. Sivula orders blood work for health screening purposes, he looks at certain levels to indicate overall function of organs and blood cells. This handout gives you a brief explanation of some of the more common blood tests.

Blood Chemistries

These tests are routinely performed to assist in evaluating system organ function, electrolyte status, hormone levels and more. These values are important for evaluating health in all life stages, during times of illness, monitoring organ function during medication use and prior to the administration of anesthesia.

ALB	Albumin	Serum protein that helps evaluate hydration, enteritis, hemorrhage, liver and kidney disease
ALKP	Alkaline Phosphatase	Protein related to liver damage, Cushing's disease, steroids and active bone growth in young pets. This value is significant in cats.
ALT	Alanine Aminotransferase	Indicator of active liver disease. Does not indicate cause or reversibility.
AMYL	Amylase	Associated with pancreatitis or kidney disease, especially if elevated
AST	Aspartate Transferase	Increased levels can indicate liver or skeletal muscle death or damage
BUN	Blood Urea Nitrogen	Kidney function property; increased level of nitrogenous waste products (proteins) is called azotemia. Kidney, liver and heart disease, urethral obstruction, shock and dehydration can cause abnormalities.
Ca	Calcium	Can be an indicator of tumors, hyperparathyroidism, kidney disease and low albumin
CHOL	Cholesterol	Used to help diagnose hypothyroidism, liver disease, Cushing's disease, diabetes mellitus, etc.
Cl	Chloride	An electrolyte that can be lost with vomiting and Addison's disease. Increased values can indicate dehydration.
Cortisol		This is a hormone used to test for Cushing's disease in a low-dose dexamethasone suppression test
CREA	Creatinine	Kidney function property. Helps distinguish between kidney and non-kidney causes of elevated BUN
GGT	Gamma Glutamyl Transferase	Liver enzyme which indicates disease or cortisol excesses
GLOB	Globulin	Blood protein that is often increased with chronic inflammation and certain disease states.
GLU	Glucose	Known as 'blood sugar'. Greatly elevated levels may indicate diabetes mellitus. Low levels can cause collapse or coma.
K	Potassium	Electrolyte lost with diarrhea, vomiting or excessive urination. Increased levels can indicate kidney failure, Addison's disease, dehydration or urethral obstruction. Elevations may lead to cardiac arrest.
LIP	Lipase	A pancreatic enzyme that may indicate pancreatitis or abnormal blood fats.

Na	Sodium	Electrolyte lost with diarrhea, vomiting, kidney disease and Addison's disease. Can assist in indicating hydration status.
PHOS	Phosphorous	Elevated levels are associated with kidney disease, hyperthyroidism and bleeding disorders
TBIL	Total Bilirubin	Elevated levels may indicate liver or hemolytic disease. Aids in diagnosing anemia and bile duct disorders.
TP	Total Protein	Indicates hydration status and can provide additional information in liver, kidney and infectious diseases.
T4	Thyroxine (total)	Thyroid hormone. Abnormal findings are consistent with hypo- (low) or hyper- (high) active thyroid gland. Further tests are usually necessary to confirm diagnosis.

Complete Blood Count (CBC)

The complete blood count is a common test performed on pet. It gives valuable information about hydration status, anemia, the blood's ability to clot, infection, and the status of the immune system. A CBC is essential when a pet has a fever, vomiting, diarrhea, weakness, pale gums or refusal to eat. It's also useful when evaluating a pet before surgery.

HCT	Hematocrit	Measures the amount of red blood cells, and indicates anemia or hydration status
HGB, MCHC	Hemoglobin, Mean Corpuscular Hemoglobin Concentration	Oxygen-carrying pigment of red blood cells
WBC	White Blood Cells	Basic immune cells of the body. Increase or decrease can indicate certain diseases or infections
GRANS, L/M	Granulocytes, Lymphocytes, Monocytes	Specific kinds of white blood cells
EOS	Eosinophils	White blood cell that can indicate allergic or parasitic infections
PLT	Platelets	Cells that allow the body to form blood clots and stop bleeding
RETICS	Reticulocytes	Immature red blood cells. Can indicate if anemia is regenerative or not.
FIBR	Fibrinogen	Important clotting factor. Increased levels may indicate pregnancy in dogs who are 30-40 days pregnant

Notes: