

## ***Explanation of Your Pet's Bloodwork***

When your medical provider orders bloodwork for health screening, he or she will be looking at certain values to give a picture of your overall health. The same applies to your pet. When your veterinarian orders bloodwork, they are screening for potential health problems. This handout gives a brief explanation of some of the more commonly performed 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 in evaluating your pet's health in all life stages; during times of illness, monitoring organ function when on long term medications and prior to administration of anesthesia.

<b>ALB</b>	Albumin	Serum protein that helps evaluate hydration, enteritis, hemorrhage, liver and kidney disease.
<b>ALKP</b>	Alkaline Phosphatase	Protein that is related to liver damage, Cushing's disease, steroids and active bone growth in young pets. This value is significant in cats
<b>ALT</b>	Alanine Aminotransferase	Indicator of active liver disease. Does not indicate cause or reversibility.
<b>AMYL</b>	Amylase	Associated with pancreatitis or kidney disease, especially if elevated.
<b>AST</b>	Aspartate Transferase	Increased levels can indicate liver or skeletal muscle necrosis/damage.
<b>BUN</b>	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.
<b>Ca</b>	Calcium	Can be an indicator of tumors, hyperparathyroidism, kidney disease and low albumin. Abnormalities can be a sign of a wide variety of conditions.
<b>CHOL</b>	Cholesterol	Used to help diagnose hypothyroidism, liver disease, Cushing's disease, diabetes mellitus, etc.
<b>Cl</b>	Chloride	An electrolyte that can be lost with vomiting and Addison's disease. Increased values often indicate dehydration.
<b>Cortisol</b>		This is a hormone used to test for Cushing's disease in a low-dose dexamethasone suppression test.

<b>CREA</b>	Creatinine	Kidney function property. Helps distinguish between kidney and non-kidney causes of elevated BUN.
<b>GGT</b>	Gamma Glutamyl Transferase	Liver enzyme which indicates disease or cortisol excess.
<b>GLOB</b>	Globulin	Blood protein that often is increased with chronic inflammation and certain disease states.
<b>GLU</b>	Glucose	Known as "blood sugar". Greatly elevated levels may indicate diabetes mellitus. Low levels can cause collapse or coma.
<b>K</b>	Potassium	An electrolyte that is lost with diarrhea, vomiting or excessive urination. Increased levels are associated with kidney failure, Addison's disease, dehydration and urethral obstruction. Elevations can lead to cardiac arrest.
<b>LIP</b>	Lipase	A pancreatic enzyme that may indicate pancreatitis or abnormal blood fats.
<b>Na</b>	Sodium	An electrolyte lost with diarrhea, vomiting, kidney disease and Addison's disease. Can also assist in indicating hydration status.
<b>PHOS</b>	Phosphorous	Elevated levels are associated with kidney disease, hyperthyroidism and bleeding disorders.
<b>TBIL</b>	Total Bilirubin	Elevated levels may indicate liver or hemolytic disease. Aids in diagnosing anemia and bile duct disorders.
<b>TP</b>	Total Protein	Indicates hydration status and can be additional information in liver, kidney, infectious diseases and more.
<b>T4</b>	Thyroxine (total)	Thyroid hormone. Decreased levels are associated with primary hypothyroidism (dogs) while elevations are associated with hyperthyroidism (cats). Abnormal findings are confirmed with further thyroid function tests performed by an outside laboratory.

### **Complete Blood Count (CBC)**

The complete blood count is a common test performed on both pets and people. It can give invaluable information about hydration status, anemia, the body's ability to form blood clots, infection and the ability to mount an immune response. A CBC is essential in pets with fevers, vomiting and/or diarrhea, weakness or pale gums, not eating, etc. The CBC is useful in pre-surgical evaluation to detect bleeding disorders or other abnormalities.

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