

Blood Work

Veterinarians commonly use blood tests to help aid in diagnosing ailments. It is helpful to understand the basics about what these blood tests tell us. Blood components change in a predictable way relative to specific disease processes. Therefore, these tests are helpful in diagnosing disease.

The common name for evaluating white and red cell counts is Complete Blood Cell count (CBC). The following outline shows the purposes of both cells and what the count tells us.

WBC (White Blood Cell)

1. Purpose: to carry out immune systems functions
 - a. Bacterial infection
 - b. Viral infection
 - c. Inflammation
 - d. Stress
 - e. Allergic Reaction

RBC (Red Blood Cells)

1. Purpose: to carry oxygen throughout the body
 - a. Anemia – decrease in RBC
 Causes: parasites, chronic inflammation, gastro-intestinal blood loss
 - b. Dehydration – increase in RBC
 Causes: diarrhea, shock, splenic contraction

Serum biochemistry panel aids in diagnosing the working condition of specific organs and systems such as liver, kidneys, endocrine, heart and muscles. The serum biochemistry machine we have at Abraham's Equine Clinic is a Vet Scan. It measures the following:

<u>Test</u>	<u>Disorder</u>
Albumin (ALB)	Liver and kidney disease
Aspartate Amino Transferase (AST)	Liver disease, viral jaundice, shock, muscle Damage
Blood Urea Nitrogen (BUN)	Liver and kidney disease
Calcium (Ca)	Parathyroid, bone, chronic kidney disease, tetanus
Creatine (Cre)	kidney disease
Gamma Glutamyltransferase (GGT)	Liver disease, primary and secondary liver tumors
Glucose (Glu)	Diabetes, hyperglycemia, hypoglycemia, liver disease
Total Bilirubin (Tbil)	Liver disorders, bile duct obstruction
Total Protein (TP)	Dehydration, liver and kidney disease, meta-bolic and nutritional disorders, and parasites
Globulin (Glob)	Liver disease, inflammation or infectious conditions
Creatine Kinase (CK)	Muscle damage

These are some of the most common tests veterinarians can use to aid in diagnosing disease in the equine. The above tests, along with thorough examination and complete history, give veterinarians the ability to make an accurate diagnosis. Testing may need to be repeated to follow the progress of the animal's condition. We are always willing to answer further questions you may have on these or other tests run on your horse.