

## Understanding Your Pet's Test Results

Pets tell you how they are feeling by changes in behavior, appearance, and actions. Evaluating your pet's health is initially determined by a thorough physical exam. To completely understand organ function and animal health, blood tests and urinalysis evaluation are necessary. For that reason, we recommend senior blood work at least annually.

What is included in Senior bloodwork?

1. Chemistry: a collection of blood tests to screen several organs at one time. These organs include:
  - Kidneys: kidneys are responsible for filtering metabolic waste, excess sodium and water from the bloodstream
  - Liver: has multiple functions: processes the blood by removing bacteria and toxins and breaking down complex nutrients from food
  - Pancreas: responsible for producing several digestive enzymes and hormones responsible for metabolism
  - Glucose: a basic nutrient for the body that naturally fluctuates after eating, but changes can also detect metabolic diseases
  - Electrolytes: Sodium, Potassium, etc are critical to body function and imbalances must be regulated
2. Complete Blood Count: The complete blood count measures the number of cells of different types circulating in the bloodstream. There are three major types of blood cells in circulation; red blood cells (RBC), white blood cells (WBC), and platelets.
  - Red Blood Cells: RBC's are the most numerous blood cell. They typically make up nearly half of the blood's volume. RBC's contain a special protein called hemoglobin that binds oxygen and transports it through the rest of the body. A CBC can detect anemia- low red blood cell count, inflammation, infection, etc.
  - Reticulocytes: These are the immature RBC's. When numbers are increased it can be due to blood loss or immune-mediated anemia.
  - White Blood Cells: WBC's are primarily responsible for fighting infections. There are 5 different types of WBC's and each one performs a specific function to keep the body healthy.
  - Platelets: play a critical role in clotting the blood
3. Urine: A complete urinalysis is essential for a comprehensive evaluation of kidney function.
4. Thyroid

- Thyroxine (T4) is a hormone produced by the thyroid gland, and is essential for growth and metabolism. As your pet ages, thyroid function can become abnormal and cause signs of illnesses.

Upon obtaining results, your veterinarian will contact you promptly to thoroughly describe any abnormalities detected, what they might mean, and what recommendations are suggested.

