



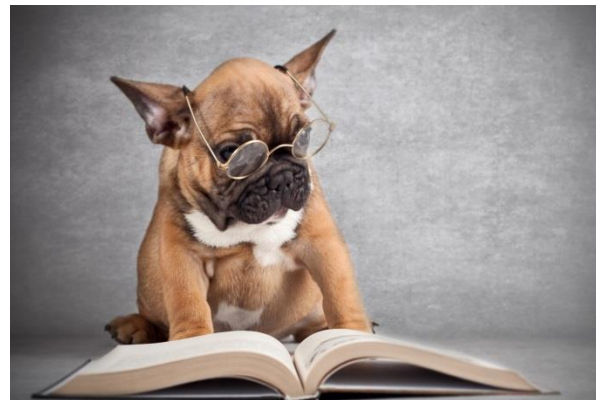
Canine Screening Wellness Lab Work

Screening bloodwork is an important factor in determining if your pet is healthy, along with a complete physical exam. Although the symptoms you may detect at home are extremely helpful in diagnosing certain disease processes, sometimes your pet may not show any outward symptoms, but their exam or bloodwork could detect early signs of aging or disease.

In order to obtain a “full picture” of your dog’s health, it is important to have routine annual exams and bloodwork performed. Screening lab work (also called a wellness profile) is recommended for all adult dogs (age 1+ years) at their annual exams, primarily to establish their baseline values when they are young and healthy. It becomes especially important for senior pets (age 7+ years), as their organs undergo changes more frequently than younger dogs, and we can often detect changes early to intervene and improve quality and length of life.

In our canine friends, certain conditions become more prevalent with age, such as arthritis, hypothyroidism (an underactive thyroid gland), liver and kidney disease. These conditions can be detected on examination and lab work evaluation, and a treatment plan can be initiated to keep your pet as happy and healthy as possible.

In addition, it is recommended to have blood and urine screened every 6 months if your pet is on certain chronic, long-term medications.



Did you know?

- If detected early, 75% of common diseases in dogs and 63% of common diseases in cats can be prevented by dietary modifications alone over a one-year period.
- Kidney disease is one of the major causes of illness and death in dogs and cats, but symptoms do not usually appear until 2/3 – 3/4 of kidney function has been lost. If caught early, the animal can have a good quality life with this condition for many years.
- If a liver problem is detected at an early stage of disease and proper treatment is administered, the chance of your pet's recovery is greatly enhanced.
- Diabetes is more frequently diagnosed in older dogs. Early detection of diabetes is extremely important because, if left untreated in its early stages, irreversible damage to nerves, kidneys and eye sight can occur.

Early detection is always the best policy, just as it is for our own health. Sometimes pets will show no, or only subtle, symptoms when a disease process is occurring. Consultation, physical examination, and testing will help discover health problems early in their course.

*To encourage preventative medicine in our patients,
we offer this routine testing at 15% off.*

Blood Analysis and Testing

Complete Blood Count (CBC)

<p>WBC (White blood cells):</p> <ul style="list-style-type: none"> ▪ Neutrophils ▪ Bands ▪ Lymphocytes ▪ Monocytes ▪ Eosinophils ▪ Basophils 	<p>It is important to know whether the total WBC count (or any of the individual WBCs) is normal. WBCs help fight infection. They can decrease with <u>severe</u> infection or bone marrow disorders, and can increase with inflammation and infection. Eosinophils (a type of white blood cell) may also be increased in pets with allergies or parasite infections.</p>
<p>Platelets</p>	<p>Platelets help with blood clotting. The platelet count may be decreased due to autoimmune disease, cancer, tick-borne infections, or bone marrow disorders</p>
<p>RBC (Red blood cells) Packed Cell Volume (PCV) Hemoglobin MCV MCH MCHC RBC Morphology (shape)</p>	<p>Values that evaluate RBCs (size, shape, number). Anemia (low RBCs) may be due to bleeding (internal or external), internal destruction due to autoimmune disease, genetic disorders, infections, or toxins (e.g. zinc, onion).</p>

Chemistry Profile

<p>ALT, ALP Also in seniors: AST, GGT</p>	<p>Increased liver enzymes can occur for a variety of reasons, including age, liver disease, pancreatic disease, intestinal inflammation, steroids (medications, Cushing's Disease, etc).</p>
<p>TOTAL BILIRUBIN (in seniors)</p>	<p>Bilirubin is made by the liver, stored in the gall bladder, and excreted into the bile. Bilirubin may increase when there is blockage of the bile duct (e.g. pancreatitis or pancreatic cancer) or autoimmune destruction of red cells (hemolytic anemia). Marked elevation causes jaundice (yellowed skin).</p>
<p>TOTAL PROTEIN, ALBUMIN, GLOBULIN</p>	<p>Blood protein is comprised of albumin (synthesized by the liver) and globulin (from the liver and immune system). Albumin may be decreased due to the disease of the intestine, kidneys or liver, or decreased nutrient intake. The globulin level may decrease due to intestinal disease and may increase in response to inflammation and some types of cancer.</p>

CREATININE, BUN, Also in seniors: PHOSPHORUS	Creatinine, blood urea nitrogen (BUN), and phosphorous are products of metabolism and excreted by kidneys into the urine. Levels increase in pets with kidney failure/injury (acute or chronic), and dehydration. (Urinalysis should be performed concurrently to fully assess kidney function).
CALCIUM (in seniors)	Elevated calcium levels can occur for a variety of reasons, though the most common cause is lymphosarcoma (a type of cancer). Decreased calcium levels can be due to intestinal disease, pregnancy/lactation, hormone imbalance, etc.
GLUCOSE	Increased blood sugar levels may indicate diabetes both for dogs and cats. In cats, elevations may occur due to stress or fear. Low blood sugar may occur with liver disease, severe infection, cancer, Addison's disease (low cortisol), and malnutrition.
AMYLASE, LIPASE (both in seniors)	Amylase and lipase are digestive enzymes made by the pancreas. They are often increased in pets with pancreatitis. Marked lipase elevations can occur in pets with pancreatic cancer.
POTASSIUM Also in seniors: SODIUM and CHLORIDE	These are electrolytes responsible for regulating fluid balance and nervous system activity. They are often abnormal with vomiting/diarrhea, kidney failure, and Addison's disease.
CPK (in seniors)	Creatine phosphokinase (CPK) is a muscle enzyme which increases with muscle injury (trauma, over-use) or inflammation, or rapid weight loss due to illness.
T4 (in seniors)	Thyroxine (T4) is the major thyroid hormone that regulates body metabolism. In cats we look for levels above normal (hyperthyroidism - hyperactivity, weight loss) and in dogs we look for subnormal levels (hypothyroidism - sluggishness, weight gain, hair loss). If the result is abnormal, more detailed thyroid testing may be necessary to verify the diagnosis.

Complete Urinalysis: Color, Clarity, Concentration, pH, Protein, Glucose, Ketones, Blood (WBC, RBC), Bilirubin, Crystals, Casts, Epithelial Cells, Bacteria (in seniors)	Urinalysis is a very important test for evaluating kidney function, and should be done every time a chemistry profile is performed. It also evaluates for inflammation or infection in the urinary tract (bladder or kidneys), as well as sugar or ketones in a diabetic patient.
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