

# A OWNER'S GUIDE TO PREVENTATIVE TESTING.

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Complete health care is essential for the wellbeing of your pet. This includes obtaining a thorough history of your pet's activity and behaviour and a nose to tail physical examination each time you visit your veterinarian. But that's not all – **did you know that your pet can also benefit from routine blood testing?**

Dogs and cats age faster than humans. As animals age, they are prone to many of the same diseases as humans, including: diabetes mellitus, kidney disease, liver disease, heart disease, cancer, and thyroid disease, among many others.

As a preventative measure, we recommend blood and urine testing on a regular basis, and more frequently as your pet enters their senior years.

Why wait until your pet is not feeling well to test them? Your veterinarian can detect disease earlier with some simple diagnostics.

## PREVENTATIVE TESTING RECOMMENDATIONS\*



### CATS<sup>1</sup>

Current Age	Physiological Age in Human Years
6 months	10
1 year	15
2 years	24
3 years	28
4 years	32
5 years	36
6 years	40
7 years	44
8 years	48
9 years	52
10 years	56
11 years	60
12 years	64
13 years	68
14 years	72
15 years	76
16 years	80
17 years	84
18 years	88
19 years	92
20 years	96
21 years	100



### DOGS<sup>2</sup>

Current Age	Physiological Age in Human Years			
	≤9kg	9-22kg	23-41kg	> 41kg
1 year	15	15	15	15
2 years	24	24	24	24
3 years	28	28	30	32
4 years	32	33	35	37
5 years	36	37	40	42
6 years	40	42	45	49
7 years	44	47	50	56
8 years	48	51	55	64
9 years	52	56	61	71
10 years	56	60	66	78
11 years	60	65	72	86
12 years	64	69	77	93
13 years	68	74	82	101
14 years	72	78	88	108
15 years	76	83	93	115
16 years	80	87	99	123
17 years	84	92	104	-
18 years	88	96	109	-
19 years	92	101	115	-
20 years	96	105	120	-

✓Chemistry Panel ✓Complete Blood Count (CBC) ✓Faecal ✓Urinalysis  
 ✓Infectious Disease Testing

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✓Chemistry Panel ✓Complete Blood Count (CBC) ✓Faecal ✓Urinalysis  
 ✓Infectious Disease Testing ✓Thyroid Testing ✓Blood Pressure  
 ± Electrocardiogram

\*Recommendations may vary based on species and geography, ✓ = Highly recommended, ± = Optional. Your veterinarian may recommend alternative or additional testing based upon your pet's specific needs.

## WHAT IS PREVENTATIVE CARE?

Preventative care is taking measures for disease prevention, as opposed to treatment for an illness.

One measure of preventative care is diagnostic testing, which provides a detailed look at your pet's health from the inside. While a physical examination is vital to your pet's health care, there are many conditions that cannot be diagnosed by only looking, listening, and touching. Much of your pet's health is revealed with quick, simple, and affordable laboratory testing.

Preventative diagnostic testing provides baseline organ function information about your pet that will be useful when assessing future health issues and anaesthetic safety. Additionally, if assessments uncover any existing conditions, early diagnosis provides the best approach to effective treatment.

We recommend starting preventative testing as soon as possible: puppies and kittens should visit the veterinarian early in life to receive regular examinations, vaccinations and screening for parasitic and/or congenital conditions.

We use VETSCAN state-of-the-art, in-clinic laboratory systems to evaluate your pet's overall health. Results from these analysers are obtained in under 12 minutes, and allow for immediate diagnosis and interpretation by your veterinarian.

## CHEMISTRY TESTS

Chemistry blood tests provide useful indicators of the health and function of your pet's organ systems and fluid balance. Chemistry tests may include the following:

### **Alanine Aminotransferase (ALT)**

An enzyme released by the liver when the liver is damaged. Elevations may be a sign of liver damage or disease. ●

### **Albumin (ALB)**

A protein made by the liver that circulates in the blood. Low levels can indicate liver, kidney, or intestinal disease.



### **Alkaline Phosphatase (ALP)**

Elevations can indicate liver swelling, or decreased bile flow caused by liver disease or endocrine disorders such as thyroid disease, diabetes, Cushing's Disease, or Addison's Disease, and may also be an indicator of certain bone diseases. ● ●

### **Amylase (AMY)**

An enzyme produced to help digest food. Elevated levels can indicate disease of the pancreas, intestines, or kidney.



### **Bile Acids (BA)**

Vital for identifying and monitoring liver disease, bile acids are one of the best measures of liver function.

### **Blood Urea Nitrogen (BUN)**

Made by the liver and removed from the body by the kidneys, BUN levels show hydration status and help to evaluate the kidney and liver.

### **Calcium (Ca)**

Elevations can be an early sign of certain cancers. Imbalanced calcium and phosphorus levels are indicative of certain metabolic disease, such as those of the parathyroid gland and kidney disease.

### **Cholesterol (CHOL)**

Changes may be an indication of a variety of disorders, including liver and thyroid disease. Low values may be a sign that the liver is not working well.

### **Creatinine (CRE)**

An important value to monitor kidney function.

### **Electrolytes ( K+, Na+)**

Potassium (K+) levels are important for normal muscle function and heart rate. Sodium (Na+) levels are important for body fluid balance. Both are critical to your pet's health and aid in the diagnosis and treatment of several life threatening diseases.



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● pancreas ● kidney ● intestine ● liver ● thyroid

### **Gamma Glutamyl Transferase (GGT)**

A liver enzyme that helps to differentiate among different types of liver disease. ●

### **Globulin (GLOB)**

A body protein that, if elevated, may indicate inflammation or infection.

### **Glucose (GLU)**

Elevated levels can indicate problems, such as diabetes  
Low levels can be associated with liver disease or severe infection. ● ●

### **Phosphorus (PHOS)**

Important to monitor for kidney disease, as well as its balance with calcium to monitor many conditions. ●

### **Thyroxine (T4)**

An excellent test for thyroid gland function in dogs and cats. The thyroid glands play a major role in metabolism.

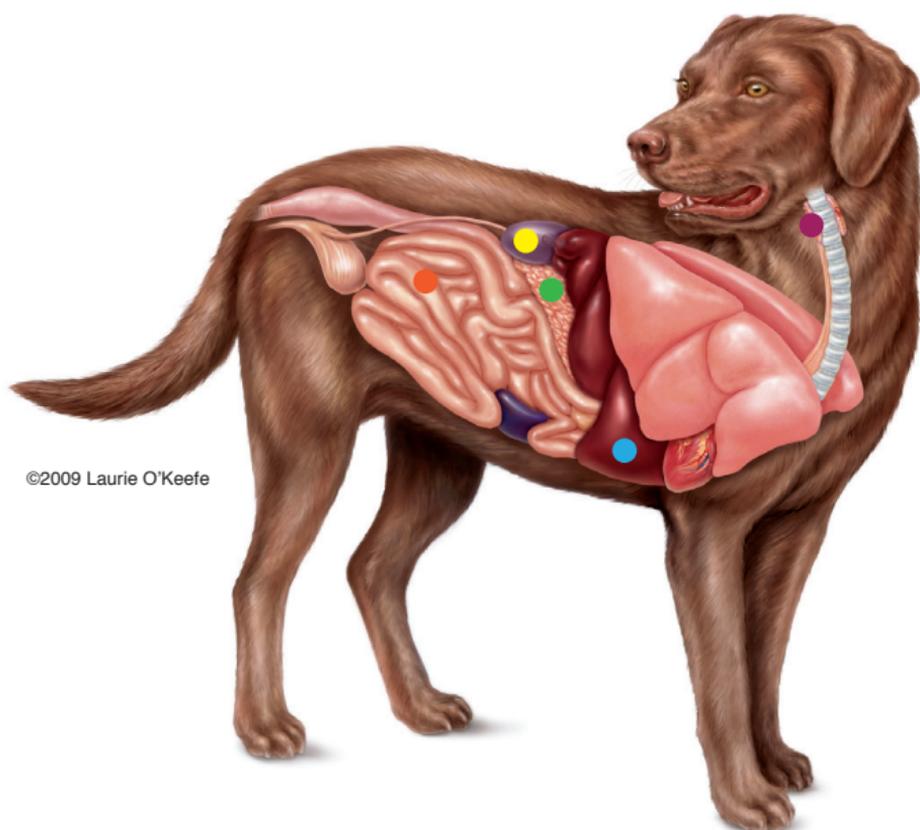


### **Total Bilirubin (TBIL)**

An important value to evaluate the liver and when there is a low red blood cell count (anaemia). ●

### **Total Protein (TP)**

An estimate of the total protein in the body. Changes can help identify many conditions such as anaemia, and diseases of the liver, kidney, and gastrointestinal tract.



## HAEMATOLOGY TESTS

Haematology testing includes the complete blood count (CBC), which is a test that provides measurements of various blood components. The CBC is an important tool that can detect conditions such as anaemia and leukaemia, and is also used to assess stress levels, inflammation, infection and blood clotting capabilities. Blood components measured include:

**Red Blood Cells (RBCs)** carry oxygen to the tissues of the body and transport carbon dioxide to be exhaled by the lungs. Anaemia results when RBCs are not present in sufficient numbers. Determination of the cause of anaemia is vital.

**White Blood Cells (WBCs)** play a major role in your pet's immune system function. Normal baseline levels are very important to determine the importance of changes seen with infection or inflammation. Elevations can help us treat your pet more effectively.

**Platelets** are a crucial component of the blood clotting system. Adequate numbers must be present to prevent or stop bleeding. Therefore, it is very important that platelet numbers are known to identify clotting issues before they become critical in the non-surgical patient, and prior to any surgical procedure.

## URINE TESTS

Urine testing may also be evaluated alongside chemistry blood testing to evaluate for urinary tract and systemic diseases.

**Urinalysis** completes the total body assessment of your pet when combined with other laboratory testing. A urinalysis helps to assess how well the kidneys can concentrate urine, if there is a protein loss (microalbuminuria or urine protein to creatinine ratio), and/or if there are any signs of infection or other abnormalities (crystals, casts, and other sediment) of the urinary system. This test is necessary to determine the extent of kidney dysfunction, if present.

**TALK TO YOUR VET TODAY - ONE SIMPLE BLOOD TEST CAN SAVE YOUR PET'S LIFE.**

# BENEFITS OF PREVENTATIVE TESTING

## Establish healthy baseline values

- Normal results indicate your pet is stable and healthy.
- Many pets show subtle changes in their blood values over time. These changes cannot be identified without first establishing and documenting normal values for your individual pet.

## Uncover existing conditions

- Not all conditions can be found on a physical exam.
- Early identification of a problem can prevent more obvious signs of illness, and could decrease the cost of treatment, expand available treatment options, and increase the likelihood of a successful outcome.

## Identify unseen disease

- Many diseases begin before your pet actually appears sick. Regular diagnostic testing can help catch the disease earlier.
- In some cases, the severity and progression of a disease can be stalled or minimised through diet and/or medication.
- Treatment expense can be minimised by catching a disease before your pet requires hospitalisation.

## Provide peace of mind

- Your veterinarian will have the tools to evaluate risks of anaesthesia or side effects of medications that may be needed later in life for your pet.
- You and your veterinary team are doing everything possible to ensure your pet lives a happy, healthy life. Preventative testing is a fast, easy, and affordable way to verify your pet's health.

**A physical exam only evaluates the outside of your pet. Diagnostic testing helps determine your pet is healthy inside as well!**

# MY NEXT APPOINTMENT

**Pet:**

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**Date:**

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**Veterinarian:**

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**Contact Number:**

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**Reason for Appointment:**

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Cat age chart and preventative testing recommendations adapted from AAFP-AAHA Feline Life Stage Guidelines. Dog age chart adapted from Dog Owner's Home Veterinary Handbook, Appendix B: Comparative Age of Dogs and Humans.

1. Hoyumpa Vogt A, Rodan I, Sparkes A, et al. Special Article: AAFP-AAHA. Feline Life Stage Guidelines. Journal Of Feline Medicine And Surgery [serial online]. January 1, 2010;12:43-54.
2. Eldredge D, Giffin J, Carlson L, et al. Comparative Age of Dogs and Humans [Appendix B]. Dog Owner's Home Veterinary Handbook, 4th Edition. Wiley, 2007: 575-576.