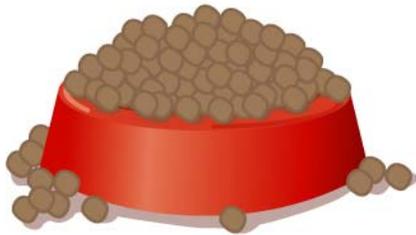


Polyphagia (Increased Appetite)

What are the causes of increased appetite?

Physiological causes of increased appetite include growth, pregnancy, and lactation. The consumption of poor quality food may require that increased amounts be consumed in order to meet daily metabolic requirements.



Few diseases or conditions result in an increased appetite so our list of possibilities is somewhat limited. Included on this list are endocrine or hormone related diseases, namely hyperadrenocorticism, hyperthyroidism, diabetes mellitus, and insulinoma.

Conditions associated with malabsorption or maldigestion of food, such as intestinal parasitism and exocrine pancreatic insufficiency, may result in an increased appetite.

Some drugs, especially steroid containing drugs, may cause an increased appetite.

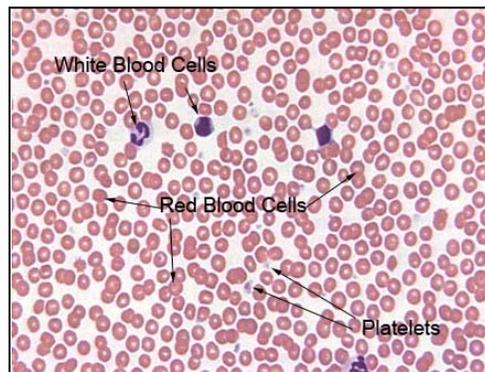
How can we determine what the cause is with respect to my pet?

Certain diseases are more common in certain species (dogs versus cats) or breeds, which helps narrow down the range of possibilities.

The history that you provide, including a list of all medications that your pet has recently received, along with a physical examination, will allow further reduction in the list. A panel of screening tests may exclude some of these conditions and may even allow us to reach a definitive diagnosis.

What screening tests are recommended?

The screening tests include a complete blood count (CBC), a serum biochemical profile, a urinalysis and a fecal flotation. In middle aged to older cats a serum thyroxine (Total T4) concentration is also suggested.

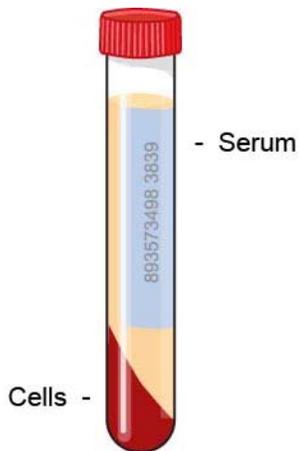


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Carolyn Sink
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What can these tests indicate?

The **CBC (complete blood count)** requires a single blood sample and provides an evaluation of the red blood cells, the white blood cells, and the platelet components of that sample. The total numbers of these cells are evaluated along with specific cellular characteristics. *Most of the diseases or conditions mentioned above will not produce specific changes in the CBC. However, any patterns of change that are present may well provide us with important 'clues' as to the underlying disease. As well, other related, underlying conditions may be uncovered.*

For example, intestinal parasitism may be accompanied by an increase in a specific type of white blood cell called an eosinophil. Animals with diabetes mellitus will often suffer



from secondary infections that may be indicated by increases in specific white blood cells called neutrophils. Hyperadrenocorticism (Cushing's disease) is also typically associated with increases in white blood cell numbers.

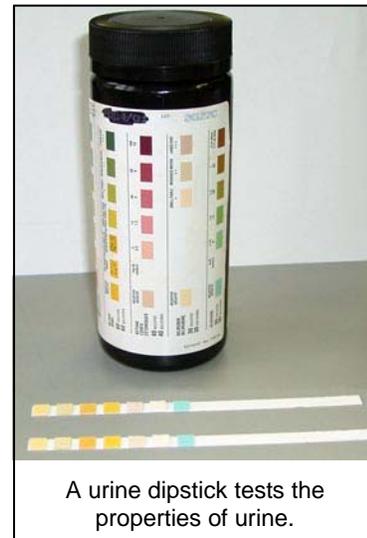
The red blood cell parameters of the CBC may indicate the presence of variable degrees of anemia, which may be related to the condition responsible for your pet's increased appetite.

The **serum biochemistry profile** requires a separate blood sample, from which the serum (the liquid portion of blood) is separated from the cellular portion. Serum contains many substances including glucose, lipids (fats), proteins, enzymes, electrolytes, and metabolic waste products. Changes and patterns of change within the serum biochemistry profile may allow us to determine that a specific disease is responsible for your pet's clinical signs, whereas biochemistry results within the normal or reference range may make the presence of certain diseases highly unlikely.

Increases in the liver related enzymes *ALT (alanine aminotransferase)* and *ALP (alkaline phosphatase)* are related not only to liver disease (which is unusual in an animal with an **increased** appetite), but also to Cushing's disease, diabetes mellitus, hyperthyroidism, and the use of steroid-containing medications.

Markedly increased serum glucose values are suggestive of diabetes mellitus whereas low serum glucose values may indicate the presence of an insulinoma.

A **urinalysis** is essential for the proper interpretation of changes found on the serum biochemistry profile. These two screening tests should always accompany one another, and be obtained at the same time.

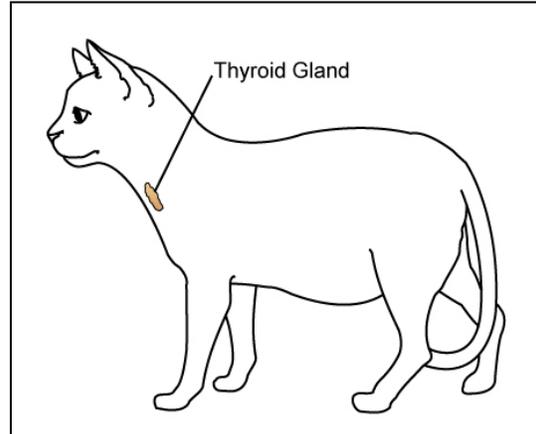


The presence of glucose in a urine sample, if accompanied by the finding of increased serum glucose values, is supportive of diabetes mellitus for example.

The urinalysis will alert us to the presence of red blood cells, white blood cells, glucose, protein, and crystals within the urine sample. The presence of red blood cells and white blood cells supports an inflammatory or infectious process. Urinary tract infections occur commonly in association with diabetes mellitus and Cushing's disease.

A **fecal flotation** simply requires that a fresh fecal sample be microscopically evaluated for the presence of parasite eggs.

A **serum thyroxine (total T4)** test is recommended in middle-aged to older cats. This test does not require further blood to be obtained from your cat; the sample taken for the biochemistry profile will suffice. The total amount of thyroid hormone in the sample is determined. A normal result will help to eliminate hyperthyroidism as a cause of your cat's increased appetite whereas increased values are supportive of hyperthyroidism.



Will further testing be required?

That depends upon the results of the screening tests.

It is **impossible to predict** what changes or conditions that may be uncovered with the screening tests. However in most instances this screening panel will provide either a specific diagnosis or a direction for further investigation.

If, for example, the screening tests are suggestive of hyperadrenocorticism (Cushing's disease), then we will need to confirm the presence of this disease by further testing, specifically an **ACTH stimulation test or a dexamethasone suppression test.**

If the screening tests are suggestive of diabetes mellitus, but we cannot absolutely confirm this from the blood and urine results, we may need to evaluate the long-term blood glucose values of your pet by **serum fructosamine**

A suspicion of insulinoma may require that we send a blood sample to a referral laboratory to evaluate **serum insulin** concentrations and perform an **ultrasound** evaluation of your pet's abdomen to try to detect the insulin-producing mass.

Occasionally no specific changes are found on the screening tests, especially when maldigestion is suspected as a cause of your pet's increased appetite. This is true of dogs suffering from *exocrine pancreatic insufficiency (EPI)*. EPI is a disease of the portion of the pancreas that is involved in the production of digestive enzymes. EPI can be diagnosed with a single fasted blood sample using a test detecting **trypsin-like immunoreactivity** within the serum.

This client information sheet is based on material written by Kristiina Ruotsalo, DVM, DVSc, Dip ACVP & Margo S. Tant BSc, DVM, DVSc.

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