The Anorexic Cat

Introduction
Any cat that stops eating (anorexic) or begins to eat much less than their normal amount should be seen by a veterinarian right away. The primary reason why a cat stops eating may not always be determined; however it is essential that your cat be thoroughly evaluated as certain underlying diseases need to be ruled out.

Regardless whether an underlying cause is found, aggressive therapy is warranted as cats can develop severe liver changes (hepatic lipidosis or “fatty liver”) from their anorexia (decreased appetite) within a very short amount of time. Hepatic lipidosis is a condition that is unique to cats when they stop eating. During hepatic lipidosis, fat is deposited in the liver. When too much fat accumulates within the liver, liver stops working appropriately and the cat can progress into liver failure. Hepatic lipidosis can be devastating and fatal if not addressed quickly. **For this reason, any cat that stops eating for any reason is considered an emergency situation.**

History, Symptoms, and Physical Examination
Cats can have a wide variety of symptoms, which may or may not be detected prior to them becoming anorexic (not eating). Symptoms may be predisposed or worsen during times of stress. A new baby or new pet in the home, moving into a new home, construction, or underlying diseases (pancreatitis, diabetes, hyperthyroidism, gastrointestinal disease, respiratory disease, liver disease, or cancer) are all possible stressors which can predispose a cat to stop eating. Clinical signs that may be detected at home could include:

- Vomiting
- Diarrhea
- Decreased or complete loss of appetite
- Excessive salivation, licking lips
- Lethargy, exercise intolerance, playing less, depression
- Hiding more or becoming more clingy
- Yellowing of the skin (icterus)
- Weight loss
- Severe weakness, unresponsiveness
Diagnostic tests

1. Blood work evaluation:
   - Complete blood count (CBC): This blood test evaluates the patient’s red blood cells, white blood cells and platelets.
   - Chemistry profile: This blood test evaluates liver and kidney values, protein levels and electrolytes
   - Coagulation profile: A coagulation profile is performed as the liver is the primary organ that makes coagulation factors. These factors help the blood clot properly.

2. Urinalysis: A urine sample may be obtained to complete the biochemical evaluation to be sure that the kidneys are adequately concentrating their urine as well as to evaluate for any evidence of crystals or signs of increased bilirubin within the urine. If bilirubin is seen in the urine of a cat, this is abnormal.

3. FeLV/FIV test: These tests evaluate for two contagious diseases that cats get. Both of them can affect multiple organs and lead to immunosuppression.

4. Blood pressure analysis: Certain diseases may cause high blood pressure. High blood pressure can cause complications with normal organ function. Low blood pressure can occur when cats become very sick.

5. Abdominal radiographs (x-rays): Radiographs may be obtained to look at the abdomen for any evidence of possible foreign body obstruction, fluid, or mass effect within the abdomen. Radiographs also are helpful for assessing liver size (whether it is larger or smaller than normal).

6. Abdominal ultrasound: An ultrasound allows us to look inside the abdomen including the internal structures of the organs. With an ultrasound, the intestines, liver, kidneys, pancreas can all be evaluated for abnormal size, color, or consistency. Masses can also be detected.

7. Fine needle aspiration for cytology: This is a procedure that is done during the abdominal ultrasound if an organ appears abnormal. This procedure involves placing a very fine needle into the organ of interest to extract cells to evaluate underneath a microscope (cytology). Cytology will help the veterinarian identify some abnormalities within the organ, however at times, further evaluation through histology (collecting a wedge of tissue) may be necessary.

8. Chest radiograph (x-rays): Radiographs are the best way to evaluate the chest including the lungs, heart, and surrounding tissue to look for signs of infection, inflammation, or cancer.

9. Thyroid testing: In the majority of cases with hyperthyroidism, the cat becomes really hungry, but in up to 20% of cases, the cat may actually have a decreased appetite or stop eating instead. A simple blood test can tell if a cat has problems with his or her thyroid.
10. Biopsy for histopathology: This is a procedure in which a wedge of tissue is evaluated by a pathologist under a microscope. It often gives more information than cytology because more cells are present and we can evaluate the interactions between cells.

Diagnosis
An underlying diagnosis may be discovered based on your history, the veterinarian’s physical examination findings, and the diagnostic tests performed. If an obvious cause is not found based on history, physical examination, laboratory work, radiographs or ultrasound, the most likely differentials include either primary disease within the gastrointestinal tract (stomach and intestines) or pancreatitis (inflammation of the pancreas). Sometimes the only symptom of either of these types of diseases is decreased appetite. Primary gastrointestinal disease includes:

- **Inflammatory bowel disease (IBD):** In this disease, white blood cells infiltrate the gastrointestinal tract. While sometimes thickening of the gastrointestinal tract is noted on ultrasound, the laboratory work, radiographs, and ultrasound may be completely normal. Definitive diagnosis requires biopsies for histopathology, which can be obtained either via endoscopy of the stomach and duodenum, laparoscopic assisted surgery (minimal invasive) or full abdominal surgery. Treatment of inflammatory bowel disease involves suppressing the inflammatory reaction within the gastrointestinal tract. This treatment may include medications such as prednisone or metronidazole (Flagyl) as first line therapy. Most patients are able to be controlled with first line therapy but sometimes the disease is severe and 2nd or 3rd line therapy is required or the symptoms may not be controlled.

- **Lymphosarcoma (aka lymphoma):** This disease is caused by a white blood cell (lymphocyte) cancer within the gastrointestinal tract. While sometimes thickening of the gastrointestinal tract is noted on ultrasound, the laboratory work, radiographs, and ultrasound may be completely normal. Definitive diagnosis requires biopsies for histopathology, which can be obtained either via endoscopy of the stomach and duodenum, laparoscopic assisted surgery (minimal invasive) or full abdominal surgery. The overall prognosis for lymphoma is grave to poor with a median survival time (time at which 50% of the patients are alive and 50% have died) of weeks to months. There is no cure for this type of cancer and eventually the cat will die of this disease. With chemotherapy, we may be able to increase the number of days with a good quality of life that your cat has. Prednisone can be used as a short term treatment, but patients who receive only prednisone have a shorter median survival time than patients on aggressive chemotherapy. Also, cats who receive prednisone prior to receiving chemotherapy have a risk of having the cancer develop resistance to the chemotherapy faster.

- **Parasites:** Large parasite burdens can lead to nausea or decreased appetite. We can test for parasites by examining feces. If no parasites or eggs are seen, though, we still cannot completely rule out parasites as they just may not have been present in that sample of feces. Therefore, if parasites are on our differential list for your cat, we will send them home with a broad-spectrum dewormer even if parasites are not detected.
Treatment
Therapy for anorexic cats involves treatment for any underlying condition that may be found as well as supportive therapy for intravenous fluids to correct dehydration, anti-nausea medications, and nutritional intervention. It is not recommended to force feed cats as they can develop aversion to foods which may continue to perpetuate their anorexia. If a cat has stopped eating and has not had adequate nutrition in greater than 48-72 hours, aggressive nutritional intervention, potentially including a feeding tube, will be recommended.

Medications that are often given:
- Anti-nausea medications: Reglan (metoclopramide), anzemet, and Cerenia are the three anti-nausea medications that we use in cats. They each work in different ways and can be used together for synergistic effects.
- Appetite stimulants: Cyproheptadine is given twice a day. Mirtazapine is given once every 3 days and also has some anti-nausea effects as well.
- Pain medications: The pain medication we most commonly use in cats is Buprenex. This can be given as an injection or orally. Fentanyl can also be used in hospital or as a patch on the skin to go home. Tramadol is an oral pain medication that is sometimes used.
- Antacids: Pepcid (famotidine), Zantac (ranitidine), or pantoprazole are the main antacids used in the hospital.
- IV fluids to keep the patient hydrated.
- Prednisone, prednisolone, and dexamethasone: These medications are steroids. They can be used to treat inflammatory bowel disease or lymphoma. Side effects of these medications include: increased appetite (a good thing in these patients), increased urination and drinking, increased risk of infection (with long-term use), increased risk of gastrointestinal ulceration, increased risk of blood clot formation, and increased risk of formation of diabetes (with long-term administration).

There are several different types of feeding tubes that can be used in cats.
- Naso-esophageal feeding tubes (“NE tubes”): This tube goes into the cat’s nose and down to their esophagus. It can be placed under sedation, instead of full anesthesia. Only liquid diets can be given through this type of feeding tube. Cats will sometimes be annoyed by this type of feeding tube and, therefore, not eat on their own while this type of feeding tube is present.
- Esophageal feeding tubes (“E” tubes): This procedure involves placing your cat under general anesthesia. A small incision is made in the side of the neck and a rubber tube is placed within the esophagus. This feeding tube can be left in the neck for several weeks or until the patient is eating on their own. Cats generally tolerate this type of feeding tube very well and will usually go home with the feeding tube in place. One the patient is seen eating their full caloric intake for 3 consecutive days, the feeding tube may be removed by your veterinarian. Cats will remain in the hospital for at least the first day after the feeding tube is placed to begin nutritional therapy. Gradual increases in the amount of food fed per feeding will occur over a few days. This is the most common type of feeding tube we use in this hospital.
- Stomach (gastric) tubes (G-tube): This type of feeding tube is placed directed into the stomach. It requires full anesthesia and is place either via endoscopy or surgery. This type of tube can be used long-term. Because it is much more invasive, we use this type of tube less often than we use E tubes.

Some cats cannot tolerate food in their stomach; for example, they may be having excessive vomiting. Nutrition is just as critical in these patients. Therefore, we have to provide nutrition to them through their veins. This is called TPN (total parenteral nutrition). A special catheter is placed into the patient’s neck and an intravenous solution of proteins, fat, and carbohydrates is formulated for the patient. Because bacteria love to get into this solution, the system needs to be treated very carefully to try to avoid infection. It is always better to feed the gastrointestinal tract if possible, but this intravenous nutrition can be used in hospital as a last resort.

**Complications**
As stated earlier the most serious complication that can occur with any cat that stops eating is hepatic lipidosis (fatty liver). This can cause life-threatening liver failure. Therefore, any cat that has not had adequate nutrition in greater than 3 days needs to be addressed immediately!

Force feeding cats is NOT recommended as they can develop food aversion and increase stress which can perpetuate the anorexia.

Esophageal strictures (scarring) may form if the feeding tube is left in the esophagus for too long. The feeding tube insertion site may also develop infection and the feeding tube may need to be removed and replaced. If infection occurs with stomach tubes, this can be a very serious complication. Stomach tubes can also cause leakage into the abdominal cavity, which is life-threatening and requires emergency surgery.

**Prognosis**
Prognosis is variable and depends on any underlying disease present, the severity of the patient’s initial physical examination and blood work findings. Overall, the prognosis for a cat who is not eating starts at poor to guarded. While we are not able to save all cats, many cats are able to be nursed through the situation with aggressive care.

**Follow-up**
Follow-up evaluation once your cat goes home will be determined by Dr. Prober, Dr. Koch or your veterinarian. It is generally recommended that reevaluation be conducted every couple of days initially.