Understanding the functions of the pancreas

The pancreas has many functions including the production and secretion of digestive enzymes and the production of insulin. Digestive enzymes are critical for food absorption, while insulin aids in the control of blood sugar levels. The pancreas is located toward the front of the abdomen and is situated near the stomach and liver.

What is pancreatitis?

The suffix “-itis” refers to inflammation; so, “pancreatitis” is an inflammation of the pancreas.

Pancreatitis can be acute or chronic. Acute pancreatitis occurs abruptly and lasts for a few days, while chronic pancreatitis is a recurring inflammatory disease that results in irreversible damage to the pancreas. Acute pancreatitis can progress into chronic pancreatitis.

With pancreatitis, the enzymes that digest food, which are normally activated in the small intestine, are activated in the pancreas instead, causing inflammation and swelling that is often accompanied by severe pain.

Is my dog or cat at risk?

Pancreatitis can occur in any pet, but it is more common in older dogs and cats. Some breeds are more susceptible to the disease than others.

If you suspect your pet may have pancreatitis, contact your veterinarian immediately. Your vet is the best resource to ensure the health and well-being of your pets.
What causes pancreatitis?

There are many factors that may predispose your dog to pancreatitis; these include obesity; high-fat diets; concurrent disease, such as diabetes or Cushing’s syndrome; certain medications or toxins; and infection. Dietary indiscretion (e.g., eating inappropriate materials, garbage or table food) is a leading cause of pancreatitis in dogs—and those dogs that have experienced dietary indiscretion are known to be up to 10 times more likely to develop pancreatitis.

Pancreatitis in cats is often secondary or accompanied by other disease, such as inflammatory bowel disease (IBD), diabetes or liver disease. Other causes in cats include infection; injury; certain medications, toxins and insecticides.

Symptoms of pancreatitis can differ among dogs and cats.

Dogs with pancreatitis will often stop eating and drinking because of the pain associated with this disease.

Symptoms to look for in your canine friend:
- Vomiting
- Lethargy
- Diarrhea
- Abnormal posture; arching of the back
- Swollen abdomen
- Fever
- Gagging
- Restlessness
- Abdominal pain

Cats are instinctively wired to hide signs of sickness, and cats with pancreatitis are no exception. Typically, they have vague signs, especially as compared to dogs, so it isn’t often obvious to their owners that they are sick. If your cat has pancreatitis, you might observe the following signs:
- Lethargy
- Decrease in appetite
- Weight loss
- Vomiting
- Diarrhea
- Abdominal pain
- Fever

Diagnosis

Your veterinarian will take a complete history and perform a thorough physical exam of your pet. Additionally, diagnostic tests will be required to determine if your pet has pancreatitis. These may include the following:
- Chemistry tests to evaluate kidney, liver and pancreatic disease or dysfunction, as well as sugar levels
- A complete blood count (CBC) to screen for infection, inflammation or anemia and other blood-related conditions
- Electrolyte tests to ensure your pet isn’t dehydrated or suffering from an electrolyte imbalance
- Pancreas-specific tests to help diagnose or rule out the disease
- X-rays of the abdomen and intestinal tract
- Ultrasound to image the pancreas and other abdominal organs

Keep in mind that your veterinarian might recommend that some diagnostic tests—such as the CBC, chemistry tests and pancreas-specific tests—be repeated to monitor your pet’s progress during treatment.

Treatment

Your veterinarian will suggest a treatment plan that is specific to your pet. The treatment of pancreatitis depends on the severity of the disease and may include the following:
- Hospitalization at the veterinary clinic
- Fluid therapy and electrolytes
- Pain medicine
- Antivomiting medication (antiemetics)
- Antibiotics, if a secondary bacterial infection is suspected
- Nutritional support
- Treatment of other concurrent diseases that may result secondarily to pancreatic inflammation, such as diabetes mellitus (sugar diabetes)
- Other medications, depending on your pet’s symptoms

Preventing pancreatitis

While you can’t completely prevent pancreatitis, the following will help reduce the risk of your pet developing the disease and ensure his health and well-being:

The cause of pancreatitis in cats may not be known and the symptoms can be vague. If your cat is appearing ill, it is important to bring them into your veterinarian.

Preventive tips for your dog:
- Don’t let your dog become overweight—weight management is just as important for our four-legged friends as it is for us
- Avoid high-fat diets
- Avoid giving your dog table scraps, especially if he isn’t accustomed to eating people food
- Make sure you discuss all medications for your dog with your veterinarian; they will help you avoid any unnecessary medications that may cause pancreatitis
- Don’t let your dog have access to garbage