Fecal Centrifugation Testing

- Intestinal parasites can cause serious illness and even death in pets.
- Some parasites are zoonotic, which means humans can become infected.
- Fecal centrifugation testing can identify intestinal parasites, which is important for determining the best treatment and helping to ensure a full recovery.
- Even pets receiving parasite preventive medication need periodic parasite testing, because no single medication is effective against all parasites.

What Is Fecal Centrifugation?
Roundworms, hookworms, whipworms, and other intestinal parasites are relatively common in pets, but that doesn’t mean that they can’t cause serious illness. Young, sick, or debilitated pets can even die if they are heavily infected with parasites. If your pet has parasites, accurate diagnosis, including identification of the parasite(s) present, is important to determine the best treatment and help ensure a full recovery. Fecal diagnostic testing, such as fecal centrifugation, is an important part of this process.

Why Does My Pet Need a Fecal Centrifugation Test?
Parasites can cause clinical signs such as diarrhea, vomiting, and weight loss. If your pet is showing any suspicious signs, your veterinarian may recommend fecal centrifugation testing to determine if parasites are the cause. However, some pets don’t develop clinical signs, so periodic testing of healthy pets is also recommended. Your pet’s routine wellness examination is a convenient time to perform parasite testing. Even pets that regularly receive parasite preventive medication should be tested periodically, because there is no single medication that is effective against all parasites.

Any new pets (adult pets or puppies/kittens) that you would like to bring into your home should be tested for parasites before being introduced to your other pets. Many parasites are transmitted through contact with fecal material, so if your new pet has worms, he or she can infect your other pets. Even if your new pet seems perfectly healthy, you should schedule an examination with your veterinarian. Parasites, viruses, and other medical problems aren’t always apparent, so your veterinarian may recommend fecal centrifugation testing, along with some other diagnostic tests to help ensure that your new pet is healthy before being introduced to your other pets and family members.

Even pets receiving parasite preventive medication need periodic parasite testing, because no single medication is effective against all parasites.

Some intestinal parasites, such as roundworms and hookworms, are zoonotic. This means that humans can become infected. Periodically testing your pets for parasites is a good way to help protect your other family members from dangerous zoonotic parasites.

How Is Fecal Centrifugation Performed?
To test for intestinal parasites, your veterinarian needs a stool sample from your pet. Ask your veterinarian for a stool specimen container. Otherwise, a clean dry container or a plastic bag can also be used to hold the sample. A fresh sample is preferable to a sample that is more than a day old, and only a small amount (approximately a teaspoonful) is generally needed for testing. Also, if you have multiple cats sharing a litterbox, or multiple dogs using the same exercise area, many veterinarians will accept a representative sample from your household of pets.

If you aren’t comfortable collecting a specimen at home, your veterinarian can obtain a stool sample during an office visit. This can be performed during a routine rectal examination of your pet, or your veterinarian may choose to use a fecal loop. A fecal
loop is a small plastic wand with a small loop on the end. After applying lubricant, your veterinarian can gently insert the loop into your pet’s rectum and collect a sample of fecal material.

To perform fecal centrifugation, your veterinarian places a small amount of fecal material into a test tube and mixes it with a special fecal flotation solution. The solution is formulated so that the eggs of many parasites (such as whipworms, hookworms, and roundworms) will float to the top of the solution. Your veterinarian then covers the top of the tube with a microscope coverslip and places the tube into a centrifuge, a machine that spins the tube in a circle very rapidly. The spinning creates a force inside the tube that causes heavy material (such as fecal debris) to sink quickly to the bottom and lighter material (such as parasite eggs) to float to the top. After a few minutes, your veterinarian collects the coverslip from the top of the tube, places it onto a microscope slide, and examines it under a microscope for identification of parasite eggs. Studies have shown that fecal centrifugation permits the detection of more parasite eggs than some other forms of fecal analysis.

Some veterinarians perform fecal centrifugation testing in the office, so results may be available the same day. Other practices send fecal material to an outside laboratory for centrifugation testing, so results may take a few days. Some veterinarians use other fecal diagnostic techniques (such as flotation or evaluation of fecal smears) to help diagnose parasites.

**What Are the Benefits of Fecal Centrifugation Testing?**

Fecal centrifugation testing for parasites helps identify zoonotic parasites that can pose a risk to children and other family members.

Although some pets infected with intestinal parasites develop diarrhea or other clinical signs, many pets don’t show any signs at all. The only way to identify infected pets and treat their parasites is to test them periodically for evidence of infection. Fecal centrifugation testing is a good way to identify infected pets.