

## Canine Condition

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## EPI: A Tale of Poop

by Geralda Aubry

### Introduction:

#### **What is EPI? What does it have to do with dog poop? And why should Schutzhund dog owners be concerned?**

EPI is Exocrine Pancreatic Insufficiency. It is an uncommon canine condition, frequently misdiagnosed by veterinarians, most often found in German Shepherd Dogs. In EPI, a dog's pancreas does not produce the digestive enzymes needed to process the food he eats. The ravenous dog may consume enormous amounts of food and other objects, losing weight, while slowly starving to death. Luckily, the condition, while not curable, is treatable. More about the poop later.

My German Shepherd Dog, Sirius, was diagnosed with EPI at the age of 11 months, after repeated episodes of diarrhea, multiple bowel movements a day (6-12), a ravenous appetite, and losing eight pounds in one month. In the practice of four veterinarians



that I use, Sirius is the only dog with EPI. I was lucky in that a friend's German Shepherd Dog also had EPI, my veterinarian was familiar with it, and I had read an article about EPI in *The Whole Dog Journal* only two months prior to Sirius' diagnosis. In many cases, it has taken months for dogs to get the proper diagnosis, particularly non-German Shepherd Dogs. Because the condition is relatively uncommon and veterinarians

often have not seen a case of EPI, it falls on the dog owner to research and use trial and error to achieve the best treatment for each individual dog.

### Symptoms

The pancreas in dogs, as in humans, produces insulin and related hormones, but also produces digestive enzymes: amylase to digest starches, lipase to digest fats, and protease to digest protein. In EPI, the pancreas fails to produce enough or any of these digestive enzymes, essentially starving the body of nutrients which, if untreated, can result in organ failure or death. Symptoms may not occur until 80-95% of the enzyme-producing cells have been destroyed. Severity may vary, making diagnosis more difficult. Luckily, most EPI dogs do not develop diabetes, even though the pancreas is involved in both conditions. The most obvious and frequent symptom is weight loss, despite a huge appetite. The dog may eat anything he can get his mouth on, including toys, bedding, greenery, dirt, and his own feces. He often has voluminous yellowish or gray cowpie-like poop, occurring frequently, and may have intermittent diarrhea and vomiting. Symptoms can be worsened by stress and changes in food, routine, or environment. Muscle mass and bones may be affected. The nervous system can also be affected, with changes in temperament, fearfulness, and increased anxiety. Dogs may act feral due to extreme hunger. Since chronic loose stools are often the first and most easily treated symptom, most veterinarians prescribe an antibiotic for intestinal bacteria. The loose stools temporarily go away, but may return weeks later, and the cycle begins again.

### Diagnosis

EPI is diagnosed by a blood test performed after the dog has fasted 12 hours. It is a trypsin-like immunoreactivity (cTLI) test that measures the dog's ability to produce digestive enzymes. Values below 2.5 are