FLATULENCE IN PETS

One of the children's books in our hospital is called *Walter the Farting Dog*. This book sold in the millions a few years ago. Although indelicate, the topic usually makes people smile. Unfortunately, for a lot of pet owners the concern for their dog's gas passing is very real. Excessive gas, which is the definition of flatulence, is a common problem for pet owners.

Flatulence manifests itself in three ways. The first is belching. If there is gas in the stomach it often comes up through the mouth vs. the other end of the body. This is usually amusing to owners rather than concerning, but excessive belching has been linked to bloat and to the intestinal parasite *Giardia*. If noticed, belching should be brought to the attention of your pet's doctor.

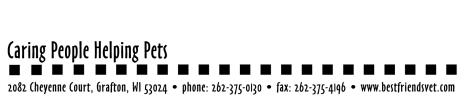
The second manifestation of flatulence is borborygmus. This term describes gas as it is rumbling through the intestines, sounding like a little symphony of gurgling and popping noises. Many humans have heard or felt this sensation in themselves when having gastrointestinal upset or diarrhea. It is not only noisy but causes cramping, abdominal pain and sometimes vomiting.

The intestines have no sensation when it comes to cutting – we can't feel an incision into the stomach or intestines. What causes gastrointestinal pain is stretching. When the intestines stretch like a balloon as excessive gas or fluid passes through, it hurts. Sometimes the intestines are so irritated they become hypermotile – they contract much more often and strongly than usual, sending digesta through so quickly that the water in it cannot be reabsorbed by the time the stool exits the body – thus leading to diarrhea.

Borborygmus can be managed with medication that is given intermittently at the first sign or sound of excessive intestinal noise. Many owners of dogs with easily upset digestive systems keep prescription medication on hand for this. Pepto bismol sometimes works as well.

The last form of flatulence is flatus, or farting. Although stinky, this form of the problem is the least worrisome as far as a pet's health. Sulfur compounds produced by the bacteria that live in the colon, or large intestine, are mixed with the nitrogen and other inert gasses passing through the intestine, leading to the stinky smell of passing gas.

There are two sources of gas that we can influence to minimize problems with flatulence. Everyone knows that beans can cause flatulence. This is because beans contain lots of oligosaccharides. Oligosaccharides are large carbohydrate molecules that we, and dogs and cats, do not make enzymes to digest. Oligosaccharides thus pass through the stomach and small intestines undigested and unabsorbed. When they get to the large intestine, our normal gut bacteria digest them for us. Digestion of oligosaccharides by bacteria





produces gasses, which then proceed to pass out of the body when we "pass gas."

Kidney beans, pinto beans and black beans contain lots of oligosaccharides. Soybeans do too, and corn and wheat contain some as well. Rice has almost no oligosaccharides. One of the simplest things you can do for your pet with excessive gas is to feed a pet food containing rice rather than corn, wheat or soybean meal. Rice is not a better choice nutritionally, it simply reduces gas formation compared to the other ingredients mentioned.

Addressing and treating other intestinal parasites or digestive problems can reduce gas production and flatulence as well. Have stool samples tested for bacterial infections, intestinal worms and *Giardia*. Lack of digestive enzymes from the pancreas, known as exocrine pancreatic insufficiency, or EPI, can be a cause, as can liver disease and pancreatitis. If switching to a bland or rice based food doesn't help, a hypoallergenic diet trial to rule out food allergies may be in order. (Ask us, these diets are not available in pet stores.)

The second major source of excessive gas is swallowing too much air. The air we breathe consists mostly of nitrogen. Nitrogen is not absorbed as it passes through the digestive tract, so it just goes on through, picking up noxious smelling sulfur compounds and other gasses as it goes by. Talking causes us humans to swallow more air, so anyone who talks a lot, as part of their job or because they are outgoing and sociable, is likely to pass a lot more gas than someone who works quietly at their own desk all day.

For dogs, barking is a major source of swallowed air. If your dog barks a lot plus has a problem with farting you might want to try a citronella Bark-Not collar or some behavioral modification. (Ask us, we have materials available and citronella collars to loan out on a trial basis.)

Dogs that eat very quickly gulp down a lot of air along with their food, so modifying the food, the food bowl or the feeding schedule may be helpful. Some dogs eat more slowly if their dry food is watered down or mushed with some canned food. You can also try spreading the food out in a pan so only a few nuggets can be eaten at a time, adding rocks, golf balls or pieces of log chain to the bowl that the pet has to eat around (be careful the objects are not swallowed themselves), or feeding multiple small meals per day. One manufacturer makes a food dish that has plastic protrusions into the bowl for the dog to eat around.

Brachycephalic dogs, those with flat faces such as pugs, bulldogs and Pekingeses, breathe through their mouths and less through their noses, which leads to lots of air swallowing and flatus. For these breeds, corrective surgery on the nose and throat restores more normal breathing, which then reduces the farting. (This type of surgery also reduces risk of heat stroke, recurrent respiratory diseases and early death from airway restriction. These breeds have much shorter life expectancies without corrective surgery on their noses and throats.)

Cats occasionally have problems with flatulence too. Cats don't show their symptoms as much as dogs but they may have a bloated-appearing abdomen or seem uncomfortable a few hours after eating. They may also have stinkier stools than normal cats (although cat poop tends to be quite smelly in general). As for dogs, avoiding diets containing soybean meal, corn and wheat may be helpful.