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Dog Tips

The Best Way to Prevent and Treat Stomach Issues

Digestive disorders are all too common in dogs today, and in my experience, taking this step may be the single most effective thing you can do to treat chronic gastrointestinal issues, such as IBD, IBS and sensitive stomachs. Here's what you need to know about commercial prescription foods.

Analysis by <u>Dr. Karen Shaw Becker</u>

STORY AT-A-GLANCE

- Digestive disorders are very common in dogs today, but the good news is that researchers not affiliated with the pet food industry are beginning to focus on the problem
- One example is a 2019 Penn Vet study that concluded some dogs with chronic enteropathy (a form of inflammatory bowel disease, IBD) experience remission through alterations in the gut microbiome triggered by a dietary change
- The diet used in the study was an ultraprocessed veterinary diet; in my experience, avoiding highly processed diets is the best way to prevent and treat chronic enteropathies, including IBD, irritable bowel syndrome (IBS) and "sensitive stomachs"
- To begin the healing process, dogs with IBD are fed a bland, novel protein diet and receive appropriate supplements to balance the microbiome
- To help your dog avoid digestive disease, feed a variety of nutritionally optimal, species-appropriate diets containing unadulterated, high-quality animal protein, moisture, healthy fats and fiber and low to no starch content

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Digestive disorders in dogs are all too common these days, which is one of the reasons so many pet parents are seeking information and guidance on the best diets for their canine companions.

While traditionally, most veterinarians have relied primarily on pet food manufacturers to provide information on

companion animal nutritional needs, fortunately, these days researchers and scientists outside the pet food industry are also conducting studies on gut health, the microbiome, and the role diets play.

One example is a 2019 study published by veterinary researchers at the University of Pennsylvania that suggests some dogs with chronic enteropathy (CE), a form of inflammatory bowel disease (IBD), show improvement with a change in diet that induces specific changes in their microbiome.¹

The Microbiome Plays an Essential Role in Gut Health

Inflammatory bowel disease in both humans and pets is not well understood, however, we do know the colonies of microorganisms that inhabit the intestines — collectively known as the gut microbiome — are key contributors. Not surprisingly, the food we eat and feed to our animal companions has a profound influence on the microbiome.

In the Penn Vet study, researchers looked at links between a specific "therapeutic" diet fed to 29 dogs with CE, the microbiomes of those dogs, and remission of their disease. What they discovered was that in the 20 dogs whose disease went into remission, there were key features of the microbiome and associated metabolic products.

Specifically, the microbiomes of the dogs who achieved remission had an increase in metabolites known as secondary bile acids, which are produced when certain microbes in the gut consume bile released by the liver.

One of the friendly microbes that produces secondary bile acids is Clostridium hiranonis, which was found in greater numbers in the dogs whose disease entered remission. These dogs also had fewer pathogenic bacteria such as E. coli and Clostridium perfringens after they began the diet.

The researchers performed two additional studies to test their hypothesis for what actually triggers remission.

"This allowed us to show that secondary bile acids and C. hiranonis aren't just biomarkers of remission, they can actually effect change," Daniel Beiting, senior study author and an assistant professor at Penn Vet told the publication Penn Today. "Bile acids can block the growth of pathogens, and C. hiranonis can improve gut health in mice."²

Finally, the researchers analyzed information from children with Crohn's disease (another form of inflammatory bowel disease) who responded to treatment with exclusive enteral nutrition, a specialized liquid diet. They found that the children's microbiomes showed an increase in Clostridium scindens, another friendly microbial species that produces secondary bile acids.

Why Kibble Isn't a Treatment for IBD

The Penn Vet study results reinforce the importance of a diverse microbiome to the health of dogs, and especially their digestive health. It's my belief that 100% of pets with IBD also have dysbiosis, which thankfully can now be evaluated with a microbiome analysis.

Dr. Holly Gantz from AnimalBiome and I discuss the benefits of a feeding a diversified, fresh food diet in keeping pets'

microbiomes balanced and resilient and recovering from GI disease. Most veterinarians agree that addressing a dysbiotic microbiome and the profound inflammatory response is the key to healing many chronic enteropathies.

However, I don't agree that offering a **feed-grade**, highly processed "prescription" kibble containing hydrolyzed protein is the best approach to achieve improved gut health in dogs with inflammatory bowel disease. Although rendered, feed-grade pet food may improve GI symptoms in some pets, it's worth noting that a third of the dogs in the study didn't achieve remission on the "hypoallergenic" diet.

Researchers are beginning to identify potential systemic consequences, including chronic inflammatory responses, from consuming advanced glycation end products found in high-heat processed pet foods (kibble), which may explain why many pets don't improve by switching from one pellet to another.

First, Balance the Microbiome Then Reseed the Gut

The traditional dietary recommendation for dogs with IBD, especially those with vomiting or diarrhea, is to feed a homemade, bland diet temporarily until symptoms improve, along with medications or nutraceuticals to manage the vomiting and diarrhea, if needed.

The bland diet most veterinarians suggest is ground beef and rice, but it isn't as effective, in my opinion, as the grainfree, highly digestible bland diet I recommend: cooked, fat free ground turkey and 100% canned pumpkin or cooked sweet potato.

Beef is relatively high in fat, which can increase GI upset and exacerbate pancreatitis, if also present. Rice is an unnecessary complex carbohydrate that often ferments in the digestive tract, causing gas, bloating, and additional GI irritation before being passed in the stool, undigested, in many cases.

If your dog has been diagnosed with IBD and you're feeding a bland diet, I recommend working with an integrative veterinarian, because after the bland diet, you'll need to choose a novel, balanced, low residue, preferably fresh food diet.

A novel (new) diet will give your dog's GI tract and immune system a much-needed rest, and the anti-inflammatory nature of the diet will support healing.

I also recommend asking your veterinarian about microbiome restorative therapy, which is nontoxic, resonates with the body, and can have a profoundly positive effect on your dog's health — not just GI health, but also organ function, immune system function and even behavior.

You and your veterinarian should also discuss appropriate supplements, including specific protocols to balance the microbiome and reseed the gut with healthy bacteria. In addition, there are numerous herbs and nutraceuticals that are excellent in helping to improve digestion and absorption and reduce GI inflammation.

Whether these supplements are introduced before, during, or after a dietary change depends on your dog's individual situation. Transitioning too soon or incorrectly can actually lead to a worsening of symptoms, which is why I strongly encourage you to get professional guidance from an integrative veterinarian well-versed in gut health.

Other environmental and lifestyle factors that impact the microbiome should also be reviewed, including the routine prescribing of dewormers without confirmation of parasites, ongoing non-steroidal anti-inflammatory (NSAID) medications and flea-tick pesticides, as well as any environmental chemicals in your pet's environment or lifestyle that could be contributing to unaddressed gut inflammation.

Minimally-Processed Diets Are Best

While there are many environmental and lifestyle factors that influence your dog's gut health, as I've already mentioned, the diet you feed has a direct effect on the microbial diversity of the microbiome and is the single most important factor in preventing illness and maintaining wellness.

If you haven't already, I recommend transitioning your pet away from highly refined "fast food" (kibble), and instead, feed a nutritionally optimal, species-specific diet, which means human-grade food containing unadulterated, highquality animal protein, moisture, healthy fats and fiber, with low to no starch content.

A variety of nutritionally complete raw or gently cooked homemade diets is the top choice for pets, but only for those pet parents who are committed to doing it right. If you don't want to deal with balancing diets at home, choosing to feed a pre-balanced, commercially available fresh food is a good alternative.

Sources and References

ScienceDaily September 9, 2019 ¹ Microbiome, Volume 7, Article number: 126 (2019) ² Penn Today, September 9, 2019