

#### Gastrointestinal Disorders

# DIAGNOSTIC CONSIDERATIONS FOR DOGS WITH CHRONIC DIARRHEA: WHY DIET MAKES A DIFFERENCE



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## Q. Diet-responsive chronic enteropathy (DRCE) is a common diagnosis in dogs with chronic diarrhea. What is the etiology?

**A.** Chronic enteropathies are multifactorial. Among the elements in play are the immune system, genetics, diet and the animal's intestinal microbiome. If something goes awry with the microbiota in the intestinal lumen—or with the recognition of these organisms by the immune system—the adaptive immune system initiates a reaction.

Dogs with DRCE may have low-grade inflammation that is exacerbated by dietary components. The initial inflammation may not be food-induced; but if the food contains ingredients that are not tolerated by the patient, it adds fuel to the fire.

### Q. When should veterinarians suspect diet as a potential cause of chronic diarrhea? What workup is recommended?

**A.** Studies have shown that diet is a factor in approximately 50% to 60% of dogs with chronic diarrhea.<sup>1,2</sup> Diarrhea is considered chronic if the dog has been affected for three weeks or longer. In some cases, the diarrhea may be intermittent. Patients with DRCE are typically younger dogs that are otherwise healthy in appearance, with no weight loss, no loss of appetite and good stamina.

Intestinal parasites must first be eliminated as a cause. Following this, an elimination diet trial with either a hydrolyzed or novel-protein diet should be initiated. Dogs with DRCE respond more quickly than dogs with food allergy with cutaneous signs, typically within 10 to 14 days. Along with containing novel or hydrolyzed proteins, commercial elimination diets are formulated with an optimized ratio of omega-3 to omega-6 fatty acids and highly bioavailable ingredients that make them highly digestible.

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- Q. Veterinarians can select from several types of diets for an elimination diet trial. What considerations should shape the choice for a particular patient?
- A. Different diets can work well and personal preference enters into it. However, there are several considerations:
  - **Novel-protein diets.** If a veterinarian decides to recommend a novel-protein diet, he or she first must thoroughly research the patient's diet history in order to ascertain what protein sources have previously been fed to the dog. Without this knowledge, the protein selected may not actually be novel.
  - **Home-cooked diets.** In cases where owners ask to prepare the food themselves, I respect their wishes but recommend they work with a veterinary nutritionist to ensure the diet is nutritionally balanced. Most dogs are on elimination diets for months, so if the diet has nutritional deficiencies, its deficits will outweigh its benefits.
  - **Hydrolyzed diets.** If a true food allergy is suspected, some specialists debate whether or not a hydrolyzed diet obtained from a common animal protein could trigger allergic reactions in animals allergic to the protein. My experience is that commercial hydrolyzed diets can be used with good success in most dogs with DRCE.

A common question I hear from veterinarians is, "What do I do if signs point to DRCE but the dog doesn't respond to the elimination diet?" Before moving on to further testing, I suggest they first conduct a second elimination diet trial. If the first diet was a novel-protein diet, for example, practitioners may have success switching to a hydrolyzed diet.

#### References

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- 2. Volkmann M, Steiner JM, Fosgate GT, Zentek J, Hartmann S, Kohn B. Chronic Diarrhea in Dogs Retrospective Study in 136 Cases. *J Vet Intern Med.* 2017;31(4):1043-1055. doi:10.1111/jvim.14739

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