

Gastrointestinal Disorders

FOOD-RESPONSIVE ENTEROPATHY (DIARRHEA) IN DOGS



Food-responsive enteropathy is one of the most common forms of chronic enteropathy in dogs and includes those with adverse food reactions (i.e., food allergy and food intolerance) and those with intestinal inflammation that benefits from properties of a different diet.¹

Food-responsive enteropathy is characterized by persistent or intermittent gastrointestinal (GI) clinical signs lasting 3 weeks or longer in the absence of other causes (e.g., dietary indiscretion, parasitism, identified enteropathogens, or neoplasia) and non-GI diseases.^{2,3}

Dogs with food-responsive enteropathy are more likely to be younger, have less severe clinical signs, and exhibit more large-bowel diarrhea compared to dogs with immunosuppressant-responsive enteropathy. $^{4-6}$

Since many dogs with chronic idiopathic GI signs respond well to dietary changes, an elimination diet trial is often recommended before endoscopy for those dogs with mild or moderate signs unless negative prognostic factors (e.g., hypoalbuminemia, hypocobalaminemia, high clinical activity index score) are present.^{1,2,4,7,8}

The goals of nutritional intervention are to provide a complete and balanced diet that avoids known allergens or ingredients that cause adverse food reactions and resolves or minimizes clinical signs.



An elimination diet has been proven to be the most effective method for diagnosis and treatment of foodresponsive enteropathy.⁶

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Key Messages

Nutritional management approaches to consider

- No single diet or approach to dietary management of chronic enteropathy works for all dogs, even when choosing a food for a diet elimination trial.^{4,7-9}
 - Identifying the intestinal origin of diarrhea as small or large bowel or mixed can help guide selection of an appropriate diet.
 - Dietary strategies commonly used in general veterinary practices include: 4,5,8,10-13
 - hydrolyzed or novel protein diets, especially if food allergies or intolerance are suspected
 - highly digestible, low-residue (i.e., low fiber) diets
 - fiber-enhanced diets if fiber-responsive large bowel diarrhea is suspected
- Exclusive feeding of the recommended diet is essential to diagnosing and managing dogs with food-responsive enteropathy, especially if the underlying cause is food allergy or intolerance.
 - Although improvement in dermatological signs often requires a diet elimination trial lasting 8 weeks or longer, improvement in gastrointestinal signs may be seen within 1 to 4 weeks.^{1,4}
- Dogs who respond positively to a hydrolyzed or novel protein diet within the first 4 weeks of a diet trial are categorized as having food-responsive enteropathy.
 - Not all dogs with food-responsive enteropathy will respond to a particular food within 1 to 4 weeks. If no response occurs during the initial dietary trial, a second dietary trial that uses a different nutritional approach may be beneficial before considering an antibiotic trial or intestinal biopsies.¹⁴
 - Studies have shown, following 12 to 14 weeks of feeding an elimination diet after diagnosis, many dogs with food-responsive enteropathy could be gradually transitioned back to their original diet without recurrence of clinical signs.^{4,5}
- Following resolution of clinical signs, some owners may decline to perform the challenge phase of an elimination diet trial to confirm the presence of a food allergy or intolerance. These dogs should be continued on dietary therapy for maintenance of their food-responsive condition.
- Dogs whose clinical signs resolve during an elimination diet trial and relapse upon challenge with the original diet (or its components) should be continued on dietary therapy for maintenance of their food-responsive condition.

Diet characteristics, nutrients of concern, and related interventions

- Diet characteristics and nutrients of concern include digestibility, protein, fat, and fiber.¹0,15 However, not every nutrient of concern is relevant for every patient.
- For dogs with suspected food allergies, protein is the nutrient of greatest concern since, in most cases of food allergy, the allergen is a dietary protein. Hydrolyzed protein, amino acid-based or novel protein diets can be used with these patients.
 - Common food allergens in dogs are beef, dairy, wheat, chicken, and egg.¹6,¹7 Allergies can form to any protein since allergies are an inappropriate immune reaction to a normal protein.
 - A comprehensive diet history is essential to identify a novel protein diet but is not critical to the selection of a hydrolyzed protein diet.

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Key Messages (continued)

Diet characteristics, nutrients of concern, and related interventions (continued)

- Food intolerance, which is an adverse reaction to a food or food additive, is not recognized as having a specific immune component.^{1,18}
 - These idiosyncratic reactions are variable, usually dose-dependent, can happen at any age, and may occur any time after the triggering food or ingredient is eaten.¹8
 - Identifying the ingredient responsible for the adverse reaction can be challenging.
- For dogs with evidence of large bowel diarrhea, a high-fiber diet containing mixed fibers (e.g., soluble/fermentable and insoluble/poorly fermentable) may be indicated to help reduce tenesmus and assist mucosal repair in the colon. 10,19
- Increased levels of omega-3 fatty acids, which have anti-inflammatory and immune response-modulating effects, may benefit dogs with food-responsive enteropathy.^{1,20}
- Prebiotics, probiotics, or synbiotics may help dogs with food-responsive enteropathy by influencing the composition of the GI microbiome.^{1,10}

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