

**Gastrointestinal Disorders**

# CANINE ACUTE GASTROENTERITIS/ GASTROENTEROPATHY



Acute gastroenteritis, the sudden onset of vomiting and/or diarrhea caused by inflammation of the gastrointestinal (GI) mucosa, is a common reason for dogs to be presented to veterinary practices. Inflammation is typically assumed, but not confirmed by histopathology, so *acute gastroenteropathy* is considered a more appropriate term.

Common causes of acute gastroenteropathy can include infections with bacteria, viruses, parasites or protozoa; dietary indiscretion; toxin ingestion; and acute food intolerance. Acute vomiting and/or diarrhea also can occur secondary to systemic diseases such as pancreatic, liver or kidney disease, as well as endocrine and neurological diseases. Clinical signs often resolve spontaneously without a cause being identified. In other cases, symptomatic treatment may be all that is needed if extra-gastrointestinal causes are excluded.

The goals of nutritional management of dogs with acute gastroenteropathy are to provide a diet that meets the dog's nutrient requirements, minimizes irritation to the GI mucosa, supports normal motility of the stomach and intestines, and reduces risk for gastroesophageal reflux.

**Key Messages**

- Short periods (24–36 hours) of fasting are appropriate for dogs with acute, non-life-threatening gastroenteropathy to reduce severity and frequency of vomiting, reduce risk of aspiration pneumonia, minimize additional fluid losses and decrease discomfort.
- Prolonged (i.e., > 48 hours) fasting should be avoided because it can contribute to atrophy of the intestinal mucosa, delayed recovery of intestinal function and development of malnutrition or problems such as dysbiosis.
  - Early enteral feeding, or “feeding through diarrhea,” has been shown to help maintain intestinal integrity during studies of acute diarrhea in multiple species.
  - An initial feeding target of 25% to 33% of resting energy requirement (RER) calories, divided into 3 to 6 meals per day, may optimize recovery of the intestinal mucosa.
  - If feeding results in worsening diarrhea, which may occur in some cases of osmotic diarrhea, feeding should stop.

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## Key Messages (continued)

- Water is the most important nutrient for dogs with acute gastroenteropathy due to the risk for life-threatening dehydration if excessive fluid and electrolyte losses occur.
  - Dogs with mild fluid deficits that are not vomiting can be managed with oral water intake. Cases of moderate to severe dehydration should receive intravenous fluid and electrolyte replacement.
  - As vomiting resolves, small amounts of water or ice chips can be offered every few hours.
  - Once water is tolerated, food can be introduced gradually in small amounts to minimize adverse GI response and increase food absorption.
- The chosen diet should be highly digestible because normal digestion and absorption of nutrients are often compromised. A low-to-moderate fat, highly digestible formula is appropriate.
  - Feeding small meals frequently (3 to 6 meals per day) can minimize stomach distention, reduce gastric acid secretion and help promote gastric emptying. It also helps minimize adverse GI response (e.g., vomiting or diarrhea) and improve nutrient absorption.
  - The increased moisture content of a wet formula or dry foods with warm water added can help offset fluid losses while enhancing palatability.
  - If the dog can eat small amounts of food without episodes of vomiting or diarrhea, the amount fed can be increased, and frequency per day decreased, over several days until the pet returns to its normal eating schedule.
  - If the underlying issue has resolved, a gradual transition to the normal diet can be undertaken over a 5- to 7-day period.

### Additional Resources

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Zoran, D. L. (2017). Nutritional management of gastrointestinal disease. In S. J. Ettinger, E. C. Feldman & E. Côté (Eds.), *Textbook of veterinary internal medicine: Diseases of the dog and the cat* (8th ed., pp. 1892–1899). Elsevier.

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