

Flatulence

(Excessive Gas in the Digestive Tract)

Basics

OVERVIEW

- Excessive gas formation in the stomach or intestinal tract (known as “flatulence”)
- Burping or belching (known as “eructation”) is the passage of gas from the stomach through the mouth
- Expelling or passing gas (known as “flatus”) is the passage of gas through the anus

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs—common complaint
- Cats—rare

Breed Predispositions

- Excessive swallowing of air (known as “aerophagia”) is seen in short-nosed, flat-faced (brachycephalic) breeds, sporting dogs, and those with excessive eating or drinking behavior (known as “gluttonous behavior”) and with competitive-eating behaviors

Mean Age and Range

- Any age

SIGNS/OBSERVED CHANGES IN THE PET

- Increased frequency and possibly volume of gas expelled or passed through the anus (flatus) as detected by the pet owner
- Mild abdominal discomfort caused by gastrointestinal distention possible; mild discomfort may be indicated by repeated swallowing efforts, restlessness, or sluggishness (lethargy)
- When increased frequency and possibly volume of gas expelled or passed through the anus (flatus) is due to gastrointestinal disease, may see additional gastrointestinal signs—diarrhea, vomiting, rumbling or gurgling sounds in the intestines (known as “borborygmus”), changes in appetite, and weight loss

CAUSES

Excessive Swallowing of Air (Aerophagia)

- Competitive eating (gluttony) or competitive eating
- Respiratory disease or any cause of increased breathing rate
- Feeding shortly after exercise
- Short-nosed, flat-faced (brachycephalic) breeds

Diet-Related

- Diets high in hindgut vegetable sugars (absorbable oligosaccharides)—soybeans, peas, beans
- Diets high in fermentable fiber—lactose, pectin, inulin, psyllium, oat bran; complex starch



- Spoiled diets
- Milk products
- Abrupt changes in diet
- Spices and food additives/supplements

Disease Conditions

- Sudden (acute) and long-term (chronic) intestinal disease—inflammatory bowel disease (IBD); antibiotic-responsive intestinal disorders (known as “antibiotic-responsive enteropathies”); cancer; irritable-bowel syndrome; parasitism; bacteria-caused inflammation of the intestines (known as “bacterial enteritis”); protozoal-caused inflammation of the intestines (known as “protozoal enteritis”); virus-caused inflammation of the intestines (known as “viral enteritis”); and food allergy or intolerance
- Inadequate production of digestive enzymes by the pancreas (known as “exocrine pancreatic insufficiency”)

RISK FACTORS

- Nervous, excessive eating or drinking behavior (gluttonous behavior), or competitive eating
- Eating soon after exercise
- Short-nosed, flat-faced (brachycephalic) breeds
- Abrupt changes in diet
- Inappropriate or spoiled foods
- Sedentary lifestyle—a 1998 study reported that 43% of randomly chosen dog owners detected the expelling or passing of gas through the anus (flatulence) most commonly in sedentary pets, and with no association to a particular diet

Treatment

HEALTH CARE

- Outpatient
- Treat any underlying gastrointestinal disease

ACTIVITY

- Encourage an active lifestyle—exercise increases gastrointestinal motility, which will help expel intestinal gas and increase regularity of bowel movements

DIET

- Feed small, more frequent meals in an isolated, quiet environment
- Change diet to one with lower fiber and fat, prescription or balanced homemade diets; avoid carbohydrate in cats to eliminate carbohydrate intolerance as a factor
- A change in protein or carbohydrate source, or removing additives will benefit some pets

Medications

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive

- Carminitives are medications that relieve excessive gas in the stomach and intestines (flatulence); no studies show safety or benefit of these medications in dogs or cats
- Zinc acetate binds sulfur-containing compounds
- *Yucca schidigera* binds ammonia and is added to pet foods as a flavoring agent, binds ammonia
- Inclusion of activated charcoal, *Yucca schidigera*, and zinc acetate in a treat reduced the frequency of highly odiferous episodes in dogs
- Bismuth subsalicylate (dogs) adsorbs hydrogen sulfide and has antibacterial properties; however, the required long-term, multiple daily dosing makes it impractical; not recommended for use in cats
- Simethicone is an antifoaming agent that reduces surface tension of gas bubbles, allowing easier coalescence and release of intestinal gas; however, gas production is unaltered

- Pancreatic digestive enzyme supplements may reduce gas in the stomach and intestines (flatulence) in some pets with reduced pancreatic enzyme production
- Probiotics—used to normalize or stabilize intestinal microenvironment; safe to try; no studies of effectiveness have been completed
- More than 30 herbal and botanical preparations are available to reduce gas in the stomach and intestines (flatulence); however, the dosage, safety, and efficacy are unknown

Follow-Up Care

PATIENT MONITORING

- Response to therapy

PREVENTIONS AND AVOIDANCE

- Avoid diets high in partially digestible vegetable sugars (non-absorbable oligosaccharides) and high in fermentable or non-fermentable fiber
- Avoid milk products, spoiled diets, and abrupt changes in diet
- Do not feed shortly after exercise
- Use of probiotics to improve bacterial flora of the intestines may be beneficial, if changes in intestinal bacteria are the primary cause of increased gas (flatulence)

POSSIBLE COMPLICATIONS

- None

Key Points

- Excessive gas formation in the stomach or intestines
- Burping or belching (eructation) is the passage of gas from the stomach through the mouth
- Expelling or passing gas (flatus) is the passage of gas through the anus
- Discourage dietary indiscretions (such as garbage ingestion or eating feces [known as “coprophagia”])
- Avoid diets high in partially digestible vegetable sugars (non-absorbable oligosaccharides) and high in fermentable fiber
- Avoid milk products, spoiled diets, and abrupt changes in diet
- Do not feed shortly after exercise