

# FLATULENCE (EXCESSIVE GAS IN THE DIGESTIVE TRACT)

## BASICS

### OVERVIEW

- Excessive gas formation in the stomach or intestines (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”) through the anus

### SIGNALMENT/DESCRIPTION of ANIMAL

#### **Species**

- Common complaint in dogs; rare in cats

#### **Breed Predislection**

- 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 ANIMAL

- 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
- 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”), and weight loss

### CAUSES

#### **Excessive Swallowing of Air (Aerophagia)**

- Excessive eating or drinking (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 partially digestible vegetable sugars (nonabsorbable oligosaccharides)—soybeans, peas, beans
- Diets high in fermentable fiber—lactose, Fibrim®, psyllium, oat bran
- 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); increased number of bacteria in the small intestine (known as “small intestinal bacterial overgrowth”); cancer; irritable-bowel syndrome; parasitism; bacteria-caused inflammation of the intestines (known as “bacterial enteritis”); and virus-caused inflammation of the intestines (known as “viral enteritis”)
- 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 (Jones, et al) reported that 43% of randomly chosen dog owners detected the expelling or passing of gas through the anus (flatus) 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 a highly digestible, low-fiber and low-fat diet (such as Eukanuba® Low Residue Formula™, Hill's Prescription Diet® i/d®, Purina Veterinary Diets® EN Gastro ENteric® Canine Formula, Royal Canin Veterinary Diet™ Low Fat formula), or feed homemade diets containing boiled white rice (dogs) or baby cereal (cats) with skinned chicken or cottage cheese (balanced with vitamins and minerals).
- Change in protein or carbohydrate source of diet benefits some individuals
- In cats, high-protein, low-carbohydrate diets may be beneficial

## 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)
- Zinc acetate binds sulfur-containing compounds
- *Yucca schidigera* binds ammonia and is added to pet foods as a flavoring agent
- Inclusion of activated charcoal, *Yucca schidigera*, and zinc acetate in a treat reduced the frequency of highly odiferous episodes in dogs
- [Bismuth subsalicylate](#) adsorbs hydrogen sulfide and has antibacterial properties; however, the required long-term, multiple daily dosing makes it impractical
- 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 patients
- 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 (nonabsorbable oligosaccharides) and high in fermentable fiber
- Avoid milk products, spoiled diets, and abrupt changes in diet
- Do not feed shortly after exercise

### 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) through the anus
- Discourage dietary indiscretions (such as garbage ingestion or eating feces [known as “coprophagia”])
- Avoid diets high in partially digestible vegetable sugars (nonabsorbable oligosaccharides) and high in fermentable fiber
- Avoid milk products, spoiled diets, and abrupt changes in diet
- Do not feed shortly after exercise