UT Southwestern
Harold C. Simmons
Comprehensive Cancer Center
Radiation Oncology

Managing Gas and Bloating

Excessive gas may be a side effect of cancer treatments, such as radiation therapy to the bowels or chemotherapy. When a therapy causes changes in gut function, more gas than usual may be the result.

What Causes Gas?

Possible causes of gas include:

- Diarrhea, constipation, or other changes in bowel function
- Milk and dairy foods if you have trouble digesting lactose (the natural sugar in milk)
- Swallowing too much air as you eat or drink
- Eating high-fiber foods

Symptoms of Gas and Bloating

- Excessive burping
- Rectal urgency
- Feeling bloated or chronic need to pass gas
- Abdominal pain or cramping
- Often occurs in areas where gas may be trapped, such as in the corner of the colon, upper-middle right side of abdomen, and upper-middle left side of the colon

Sources of Gas

Swallowing air is one of the primary sources of gas. It is normal to swallow a small amount of air when eating, drinking, and when swallowing saliva. However, you might swallow more air when eating foods too fast, gulping liquids, chewing gum, and smoking. Don't talk while eating or use straws to avoid swallowing additional air.

Your posture can influence the amount of air passed into the small intestine:

- Sitting upright decreases the amount of air passed into the small intestine
- Air travels back up the esophagus and is released by burping
- Lying flat increases the amount of air passed into the small intestine and causes one to pass gas

Most excess gas is released by burping to limit the amount passed from the stomach into the small intestine. Involuntary burping usually occurs after eating to release air that enlarges the stomach. Burping commonly occurs in foods that cause the lower esophageal sphincter to relax, including chocolate, peppermint, and fatty foods.

Bacteria is another primary source of gas.

- Your colon is home to several strains of "good" bacteria that support the health of the bowel.
- Some carbohydrates are not digested by stomach enzymes, but rather by the good bacteria found in the small and large intestines; these carbohydrates can cause more gas due to bacterial digestion.
- Some individuals cannot digest specific carbohydrates, such as lactose; in fact, when eaten in large quantities, these individuals experience increased gas production, bloating, cramping, and/or diarrhea.

Sensitivity to Gas

The relationship of gas, burping, and actual gas volume remains unclear. Those who frequently complain of gas/bloating are typically more sensitive to normal amounts of gas in the intestine. This can include those who suffer from:

- Irritable bowel syndrome (IBS)
- Functional (non-ulcer) dyspepsia
- Chronic irritation of the anus or the esophagus

Causes of Increased Gas

- Swallowing large amounts of air (aerophagia); oftentimes this is involuntary and related to emotional stress
- FODMAP (fermentable oligosaccharides, disaccharides, monosaccharides, and polyols) foods carbohydrates that are often poorly absorbed or remain undigested
- Lactose intolerance you can manage this by using over-the-counter digestive enzymes for lactose and choosing lower lactose dairy foods, such as yogurt, sweet acidophilus milk, and reduced-lactose milk
- Celiac disease/short bowel syndrome

How to Manage Gas and Bloating

- Limit or avoid foods that appear to aggravate your symptoms, such as foods high in fructose and lactose
- Try over-the-counter products that aid in digestion, such as Beano or Lactaid. If
 you are currently undergoing chemotherapy or radiation therapy, talk to your
 doctor before using products like Lactaid or Beano, as they may not be
 recommended for you.
- Try over-the-counter products containing simethicone to alleviate abdominal bloating/gas, such as Gas-X®, Maalox Anti-Gas, Mylanta Gas, and Phazyme
- Try over-the-counter products containing activated charcoal, such as CharcoCaps[®] and CharcoAid[™]
- Ask your dietitian about the low FODMAP diet
- Avoid cruciferous (gas-producing) vegetables, such as cabbage, Brussels sprouts, broccoli, and cauliflower, as well as beans, sugar-free products, alcohol, and carbonated beverages, as they can cause gas and make bloating worse.

Foods That May Cause Gas

Below is a list of foods that may cause gas.

Fruits

- Apples (raw)
- Apple juice
- Avocados
- Cantaloupe

- Honeydew melon
- Pear juice
- Watermelon

Vegetables

- Broccoli
- Brussels sprouts
- Cabbage
- Cauliflower
- Corn
- Cucumbers
- Kohlrabi
- Onions, leeks, scallions, and shallots
- Peppers
- Pimientos
- Radishes
- Rutabaga
- Sauerkraut
- Turnips

Legumes

- Dried beans (kidney, lima, or navy)
- Dried peas (split or black-eyed)
- Lentils
- Soybeans