

Gas in the Digestive Tract

Definition & Facts

What is gas?

Gas is air in your [digestive tract](#). Gas leaves your body through your mouth when you burp or through your [anus](#) when you pass gas.

Flatulence is excess gas in your stomach or [intestines](#) that can cause bloating and flatus. Flatus, gas that leaves your body through your anus, can contain small amounts of sulfur. Flatus that contains more sulfur has more of an odor.

Learn more about [your digestive tract and how it works](#).

How common is gas?

Everyone has gas. People may think that they burp or pass gas too often and that they have too much gas. Having too much gas is uncommon.

Who is more likely to get gas?

[Certain conditions](#) may cause you to have more gas or to have more symptoms when you have a normal amount of gas in your digestive tract. People who [swallow more air](#) or [eat certain foods](#) may be more likely to have more gas.

Symptoms & Causes

What are the symptoms of gas?

The most common gas symptoms include burping, passing gas, bloating, and pain or discomfort in your abdomen. Gas symptoms vary from person to person.

Burping

Burping, or belching, once in a while, especially during and after meals, is normal. If you burp a lot, you may be swallowing too much air and releasing it before the air enters your [stomach](#).

Passing gas

Passing gas around 13 to 21 times a day is normal.¹

Bloating

Bloating is a feeling of fullness or swelling in your [abdomen](#). Bloating most often occurs during or after a meal.

Pain or discomfort in your abdomen

You may feel pain or discomfort in your abdomen when gas does not move through your intestines normally.

When should I talk with a doctor about my gas symptoms?

You should talk with your doctor if

- gas symptoms bother you
- your symptoms change suddenly
- you have other symptoms with gas—such as [constipation](#), [diarrhea](#), or weight loss

What causes gas?

Gas normally enters your [digestive tract](#) when you swallow air and when [bacteria](#) in your [large intestine](#) break down certain undigested foods. You may have more gas in your digestive tract if you swallow more air or eat certain foods.

Swallowed air

Everyone swallows a small amount of air when eating and drinking. You swallow more air when you

- chew gum
- drink carbonated, or fizzy, drinks
- eat or drink too fast
- smoke
- suck on hard candy
- wear loose-fitting dentures

Swallowed air that doesn't leave your stomach by burping moves into your intestines and passes through your anus.

You swallow more air when you chew gum; drink carbonated, or fizzy, drinks; or suck on hard candy.

Bacteria in your large intestine

Your [stomach](#) and [small intestine](#) don't fully digest some of the carbohydrates—sugars, starches, and fiber—in the food you eat. Undigested carbohydrates will pass to your large intestine, which contains bacteria. These bacteria break down undigested carbohydrates and create gas in the process.

What foods, drinks, or products cause gas?

A variety of foods, drinks, and products can cause gas. See the following table for examples.

Table 1. Examples of foods, drinks, and products that can cause gas		
Foods		
Vegetables asparagus artichokes black beans broccoli brussels sprouts cabbage cauliflower kidney beans mushrooms navy beans onions pinto beans	Fruits apples peaches pears Whole Grains bran whole wheat	Milk Products cheese ice cream yogurt Packaged Foods with Lactose bread cereal salad dressing
Drinks		
apple juice pear juice	carbonated drinks drinks with high-fructose corn syrup	fruit drinks (such as fruit punch) milk
Products		
Sugar-free Products with Sorbitol, Mannitol, or Xylitol candies gum		
Dietary Supplements and Additives certain types of fiber, such as inulin and fructo-oligosaccharide, that may be added to processed foods to replace fat or sugar fiber supplements		

What conditions cause excess gas or increase gas symptoms?

Some conditions can cause you to have more gas than usual or have more symptoms when you have gas. These conditions include the following:

Small intestinal bacterial overgrowth

Small intestinal bacterial overgrowth is an increase in the number of bacteria or a change in the type of bacteria in your small intestine. These bacteria can produce extra gas and may also cause diarrhea and weight loss. Small intestinal bacterial overgrowth is most often a complication of other conditions.

IBS

[Irritable bowel syndrome](#) (IBS) is a group of symptoms—including pain or discomfort in your abdomen and changes in your [bowel movement](#) patterns—that occur together. IBS can affect how gas moves through your intestines. You may also feel bloated due to increased sensitivity to normal amounts of gas.

GERD

[Gastroesophageal reflux disease](#) (GERD) is a [chronic](#) condition that occurs when stomach contents flow back up into your [esophagus](#). People with GERD may burp a lot to relieve discomfort.

Problems digesting carbohydrates

Problems digesting carbohydrates that can lead to gas and bloating include

- [lactose intolerance](#), a condition in which you have digestive symptoms such as bloating, gas, or diarrhea after eating or drinking milk or milk products.
- dietary fructose intolerance, a condition in which you have digestive symptoms such as bloating, gas, or diarrhea after consuming foods that contain [fructose](#).
- [celiac disease](#), an immune disorder in which you cannot tolerate gluten, a protein found in wheat, rye, barley, and some products such as lip balm and cosmetics. If you have celiac disease, gluten damages the lining of your small intestine.

Conditions that affect how gas moves through your intestines

Conditions that affect how gas moves through your intestines can lead to problems with gas and bloating. These conditions include [dumping syndrome](#), [abdominal adhesions](#), [abdominal hernias](#), and conditions that can cause an [intestinal obstruction](#) such as [colon cancer](#) or [ovarian cancer](#).

References

[1] Greenberger NJ. Gas-related complaints. The Merck Manual website. www.merckmanuals.com. Updated November 2013. Accessed November 10, 2015.

Diagnosis

How do doctors diagnose the cause of gas?

Doctors may diagnose the causes of excess gas or increased gas symptoms with a medical history and physical exam.

If your doctor thinks you may have a [condition that causes excess gas or increases gas symptoms](#), he or she may order more tests.

Treatment

How can I reduce or prevent excess gas?

To reduce or prevent excess gas and gas symptoms, your doctor may suggest the following:

Swallow less air

Your doctor may suggest that you take steps to swallow less air. For example, eat more slowly, avoid gum and hard candies, and don't use a straw. If you wear dentures, check with your dentist to make sure they fit correctly. Swallowing less air may help ease gas symptoms, especially if you burp a lot.

Quit smoking

If you smoke, [quit smoking](#). Your doctor can help you find ways to quit smoking. Studies show that people who get help quitting have a better chance of succeeding.

Change your diet

To reduce gas, your doctor may suggest you eat smaller, more frequent meals and eat less of the foods that give you gas. Learn more about [changing your diet to reduce gas](#).

Take medicines

Some over-the-counter medicines may reduce gas or gas symptoms:

- Alpha-galactosidase (Beano, Gas-Zyme 3x) contains the [enzyme](#) the body lacks to digest sugars in beans, grains, and many vegetables. You can take this enzyme just before eating to break down gas-producing sugars. Doctors recommend the enzyme for adults and for children ages 12 and older.

- [Simethicone](#) (Gas-X, Mylanta Gas) can relieve gas-related [bloating](#) and pain or discomfort in your [abdomen](#) by helping gas pass through your [digestive tract](#). Doctors may recommend simethicone for infants and children.
- [Lactase](#) tablets and drops are available for people with [lactose intolerance](#). The lactase enzyme digests the [lactose](#) in the food or drink and reduces the chances of developing symptoms such as bloating, gas, or [diarrhea](#). Lactose-free and lactose-reduced milk and milk products are available at most supermarkets and are identical nutritionally to regular milk and milk products. Check with your doctor before using lactase products. Some people, such as children younger than age 3 and pregnant and breastfeeding women, may not be able to take these products.

For safety reasons, talk with your doctor before using supplements or any [complementary or alternative medicines](#) or medical practices.

Your doctor may prescribe medicines to help reduce gas or gas symptoms, especially if you have [small intestinal bacterial overgrowth](#) or [irritable bowel syndrome](#).

Eating, Diet, & Nutrition

What should I avoid eating to reduce gas?

You may be able to reduce gas by avoiding or eating less of the foods that give you gas. You can keep a food diary to help figure out which foods give you gas and how much of the [gas-producing foods](#) you can handle.

You may try avoiding or limiting

- carbonated, or fizzy, drinks
- fried and high-fat foods
- high-[fiber](#) foods for a few weeks and then slowly increasing your daily fiber intake
- sugar

If your doctor diagnoses you with [celiac disease](#), your doctor will recommend a [gluten](#)-free diet. Most people with celiac disease see a big improvement in their symptoms when they follow a gluten-free diet.

If your doctor diagnoses you with [lactose intolerance](#), your doctor may recommend limiting how much [lactose](#) you eat or drink. Many people can manage the symptoms of lactose intolerance by changing their diet.

If your doctor diagnoses you with [irritable bowel syndrome](#), your doctor may recommend trying a special diet—called [Low FODMAP](#) or FODMAP. If you follow this diet, you avoid or eat less of certain foods—called high FODMAP foods—that contain [carbohydrates](#) that are hard to

digest. Examples of high FODMAP foods include certain fruits and vegetables, dairy products, wheat and rye products, and foods that contain certain types of sweeteners.

July 2016

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