What I need to know about

Gas

National Institute of Diabetes and Digestive and Kidney Diseases

National Digestive Diseases Information Clearinghouse

What I need to know about Gas

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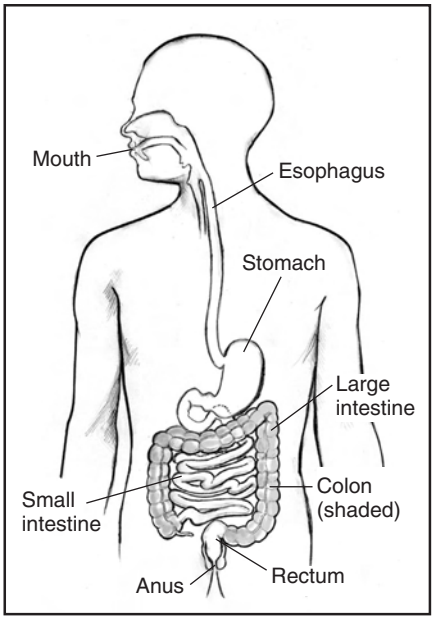
What is gas?

Gas is air in the digestive tract. Gas leaves the body when people burp through the mouth or pass gas through the **anus***—the opening at the end of the digestive tract where stool leaves the body.

Everyone has gas. Burping and passing gas are normal. Many people believe that they burp or pass gas too often and that they have too much gas. Having too much gas is rare.

What causes gas?

Gas in the digestive tract is usually caused by swallowing air and the breakdown of certain foods in the large **intestine.**



The digestive tract

*See page 12 for tips on how to say the words in **bold** type.

You typically swallow a small amount of air when you eat and drink. You swallow more air when you

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

Some of the air you swallow leaves the stomach through the mouth when you burp. Some swallowed air is absorbed in the small intestine. Some air moves through the small intestine to the large intestine and is passed through the anus.

The stomach and small intestine do not fully digest all of the food you eat. Undigested **carbohydrates**—sugars, starches, and fiber found in many foods—pass through to the large intestine. Bacteria in the large intestine break down undigested carbohydrates and release gas. This gas is passed through the anus.

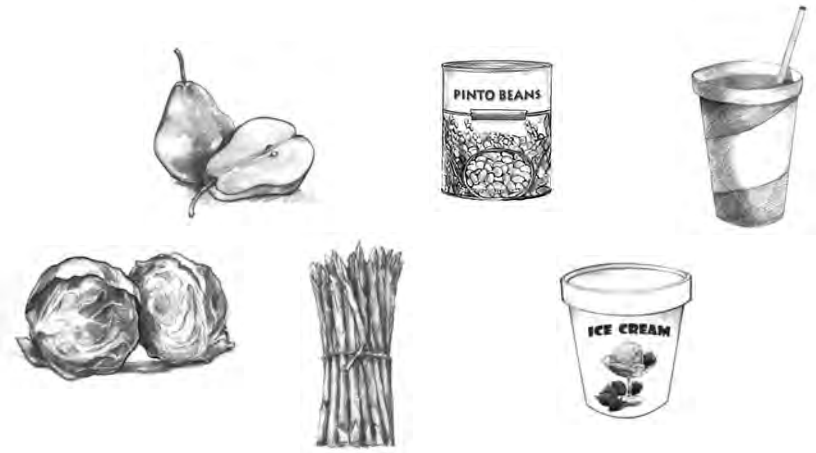
Normally, few bacteria live in the small intestine. Small intestinal bacterial overgrowth (SIBO) is an increase in the number of bacteria or a change in the type of bacteria in the small intestine. These bacteria can produce excess gas and may also cause **diarrhea** and weight loss. SIBO is usually related to diseases or disorders that damage the digestive system or affect how it works, such as Crohn's disease or diabetes.

Which foods cause gas?

Most foods that contain carbohydrates can cause gas. Foods that cause gas for one person may not cause gas for someone else. Some foods that contain carbohydrates and may cause gas are

- beans
- vegetables such as broccoli, cauliflower, cabbage, brussels sprouts, onions, mushrooms, artichokes, and asparagus

- fruits such as pears, apples, and peaches
- whole grains such as whole wheat and bran
- sodas; fruit drinks, especially apple juice and pear juice; and other drinks that contain high **fructose** corn syrup, a sweetener made from corn
- milk and milk products such as cheese, ice cream, and yogurt
- packaged foods—such as bread, cereal, and salad dressing—that contain small amounts of **lactose,** the sugar found in milk and foods made with milk
- sugar-free candies and gums that contain sugar alcohols such as **sorbitol, mannitol,** and **xylitol**



What are the symptoms of gas?

The most common symptoms of gas are:

- Burping. Burping once in awhile, especially during and after meals, is normal. If you burp very often, you may be swallowing too much air. Some people with digestive problems swallow air on purpose and burp because they believe it will help them feel better.
- Passing gas. Passing gas around 13 to 21 times a day is normal. If you think you pass gas more often than that, you may have trouble digesting certain carbohydrates.
- Bloating. Bloating is a feeling of fullness and swelling in the **abdomen,** the area between the chest and hips. Disorders such as **irritable bowel syndrome** (IBS) can affect how gas moves through the intestines. If gas moves through your intestines too slowly, you may feel bloated.
- Abdominal pain or discomfort. People may feel abdominal pain or discomfort when gas does not move through the intestines normally. People with IBS may be more sensitive to gas in the intestines.

How is the cause of gas found?

You can try to find the cause of gas by keeping a diary of what you eat and drink and how often you burp, pass gas, or have other symptoms. The diary may help you identify the foods that cause you to have gas.

Talk with your health care provider if

- gas symptoms often bother you
- your symptoms change suddenly
- you have new symptoms, especially if you are older than age 40
- you have other symptoms—such as **constipation,** diarrhea, or weight loss—along with gas

Your health care provider will ask about your diet and symptoms. Your health care provider may review your diary to see if specific foods are causing gas.

If milk or milk products are causing gas, your health care provider may perform blood or breath tests to check for **lactose intolerance.** Lactose intolerance means you have trouble digesting lactose. Your health care provider may ask you to avoid milk and milk products for a short time to see if your gas symptoms improve.

Your health care provider may test for other digestive problems, depending on your symptoms.

How is gas treated?

You can try to treat gas on your own, before seeing your health care provider, if you think you have too much.

Swallowing less air and changing what you eat can help prevent or reduce gas. Try the following tips:

- Eat more slowly.
- If you smoke, quit or cut down.
- If you wear dentures, see your dentist and make sure your dentures fit correctly.
- Don't chew gum or suck on hard candies.
- Avoid carbonated drinks, such as soda and beer.
- Drink less fruit juice, especially apple juice and pear juice.
- Avoid or eat less of the foods that cause you to have gas.

Some over-the-counter medicines can help reduce gas:

- Taking alpha-galactosidase (Beano) when you eat beans, vegetables, and whole grains can reduce gas.
- **Simethicone** (Gas-X, Mylanta Gas) can relieve bloating and abdominal pain or discomfort caused by gas.
- If you are lactose intolerant, lactase tablets or liquid drops can help you digest milk and milk products. You can also find lactose-free and lactose-reduced milk and milk products at the grocery store.

Your health care provider may prescribe medicine to help relieve gas, especially if you have SIBO or IBS.

Eating, Diet, and Nutrition

Your eating habits and diet affect the amount of gas you have. For example, eating and drinking too fast can cause you to swallow more air. And you may have more gas after you eat certain carbohydrates.

Track what you eat and your gas symptoms to find out what foods cause you to have more gas. Avoid or eat less of the foods that cause your gas symptoms.

Points to Remember

- Gas is air in the digestive tract.
- Everyone has gas. Burping and passing gas are normal.
- Gas in the digestive tract is usually caused by swallowing air and the breakdown of certain foods in the large intestine.
- Most foods that contain carbohydrates can cause gas.
- Foods that cause gas for one person may not cause gas for someone else.

- The most common symptoms of gas are burping, passing gas, bloating, and abdominal pain or discomfort.
- Swallowing less air and changing what you eat can help prevent or reduce gas.
- Some over-the-counter medicines can help reduce gas.

Hope through Research

The National Institute of Diabetes and Digestive and Kidney Diseases' (NIDDK's) Division of Digestive Diseases and Nutrition supports research into digestive conditions, including gas. Researchers are studying new treatments for gas and for IBS, a disorder in which people may have gas along with other symptoms.

Participants in clinical trials can play a more active role in their own health care, gain access to new research treatments before they are widely available, and help others by contributing to medical research. For information about current studies, visit *www.ClinicalTrials.gov*.

Pronunciation Guide

abdomen (AB-doh-men)

anus (AY-nuhss)

carbohydrates (KAR-boh-HY-drayts)

constipation (KON-stih-PAY-shuhn)

diarrhea (DY-uh-REE-uh)

fructose (FROOK-tohss)

intestine (in-TESS-tin)

irritable bowel syndrome (IHR-ih-tuh-buhl) (boul) (SIN-drohm)

lactose (LAK-tohss)

lactose intolerance (LAK-tohss) (in-TOL-ur-uhnss)

mannitol (MAN-ih-tol)

simethicone (sih-METH-ih-kohn)

sorbitol (SOR-bih-tol)

xylitol (ZY-lih-tol)

For More Information

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This publication may contain information about medications. When prepared, this publication included the most current information available. For updates or for questions about any medications, contact the U.S. Food and Drug Administration toll-free at 1–888–INFO–FDA (1–888–463–6332) or visit *www.fda.gov*. Consult your health care provider for more information.

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