
Gas In the Digestive Tract

QUESTIONS & ANSWERS



GLASGOW COLORECTAL CENTRE

WWW.COLORECTALCENTRE.CO.UK

GLASGOW COLORECTAL CENTRE

Ross Hall Hospital

221 Crookston Road

Glasgow

G52 3NQ

Phone :

0141 810 3151 (main hospital switchboard)

0808 101 0337 (general pricing and bookings enquiries)

Gas in the digestive tract is not a subject that most people like to talk about, but the truth is that all of us have it and must get rid of it in some way. Normally the gas passes out through the rectum or is belched through the mouth. These are both necessary functions of the body that allow us to eliminate gas.

When gas does not pass out of the body easily it can collect in some part of the digestive tract, causing bloating and discomfort. Even normal amounts of gas in the body can bother people who are sensitive to this pressure. Although gas usually is not a sign of a medical problem, it can be.

What causes gas?

A common source of upper intestinal gas is swallowed air. Each time we swallow, small amounts of air enter the stomach. This gas in the stomach is usually passed into the small intestine where part of it is absorbed. The rest travels into the colon (large intestine) to be passed out through the rectum.

In some people, part of the gas is belched out instead of being passed from the stomach into the intestine. This happens for several reasons. People under a lot of stress often swallow large amounts of air. Some people swallow air frequently because they have post-nasal drip, chew gum, or smoke. Rapid eating or poorly fitting dentures also may cause too much air to be swallowed. Also, drinking beverages that contain carbonated water may increase gas in the digestive tract. These drinks contain carbon dioxide, which can produce large amounts of gas when warmed in the stomach. People with a gas problem should avoid carbonated or “sparkling” drinks.

What causes repetitive belching?

Some people experience frequent belching. This might occur after a person has swallowed air without realising it. Sometimes belching accompanies movement of stomach material back up (reflux) into the oesophagus (swallowing tube). To clear material from the oesophagus, a person may swallow frequently which leads to more intake of air and further belching.

Another cause of repeated belching is gastritis (inflammation of the stomach). There are many causes of acute or chronic gastritis, but the most common cause is infection with a bacterium called *Helicobacter pylori*. When this organism gets into the stomach, it can produce bloating. This condition usually can be diagnosed by a specialist in digestive diseases. The doctor may detect the infection with a breath test or a blood test. The doctor also may take a sample of tissue (biopsy) from the stomach, using a lighted, flexible tube (endoscope) that is inserted through the mouth. *Helicobacter pylori* infection usually is treated with antibiotics and a drug to reduce acid secretion in the stomach.

Do any foods cause gas?

The foods we eat can be a factor in the production of gas in the lower intestine. Some foods such as cauliflower, brussels sprouts, dried beans; broccoli, cabbage, and bran are not completely digested in the small intestine. When the undigested bits of food reach the colon, they are fermented by the bacteria that live in the colon, causing gas. Today many people are trying to improve their nutrition and health by eating more fibre. However, some people discover that adding large amounts of fibre to their diets causes gassiness. This can happen when someone begins eating more whole-grain cereals such as whole bran, oatmeal, or oat bran, or whole-grain breads or fresh fruits, and vegetables. They get a feeling of being bloated when they first begin the high-fibre diet, but within 3 weeks or so, they may adapt to it. Some people, however, don't adapt, and the bloating from eating a lot of fibre can be a permanent problem.

A common cause of excess lower intestinal gas is that a person's body may not have enough lactase, an enzyme normally found in the small intestine. Lactase is needed to digest lactose, the sugar found in milk and other dairy products. When this sugar passes undigested into the colon, it is fermented by bacteria, and gas forms. This can be a cause of excessive flatulence.

If lactase deficiency is suspected of causing your gas, your doctor may tell you to stop eating dairy products for a while to see if you will have less gas. The doctor also may give you a blood test or a breath test to find out if you are lactose intolerant. The breath test detects hydrogen that is released by the bacteria as the undigested lactose ferments in the colon.

How much gas wind does the body produce?

The amounts of gas that people produce vary. Most people produce between a pint and a half gallon of gas each day. Oxygen, carbon dioxide, and nitrogen from swallowed air make up a large part of flatus. Fermenting foods in the colon produce hydrogen and methane as well as carbon dioxide and oxygen. All of these components of flatus (gas) are odourless. The unpleasant odour of some flatus is the result of trace gases, such as hydrogen sulfide, indole, and skatole, which are produced when foods decompose in the colon.

Is gassiness caused by a disease?

If excess gas or wind is your only symptom, it is probably not caused by a disease. The problem may occur simply because you swallow air or digest food incompletely. It could be that your intestines have the kind of bacteria that produce a lot of gas. You could have a sluggish bowel that does not get rid of air readily you might have an irritable bowel, often called spastic colon, which means that you cannot tolerate gas accumulation inside of the intestines, so even small amounts of air feel uncomfortable.

What causes the abdominal pain and bloating?

Eating a lot of fatty food can cause bloating and discomfort because the fat delays stomach emptying, allowing gas to build up there. This problem can be avoided by eating less fatty meals.

The feeling of bloating in the abdomen may increase during the day and become most severe after a large meal. Many people think the bloated feeling after eating is caused by large amounts of gas. Researchers, however, have not found any connection between this symptom and the total amount of gas in the abdomen. Studies show that in some people even modest amounts (1 ounce to 1/2 pint) of gas in the intestine can cause spasms there, especially after eating.

Gas in the upper abdomen often is relieved by belching. Sometimes people try to swallow air to make themselves belch. This doesn't work, however, because it only adds to the amount of gas in the stomach and does not reduce the discomfort.

A bloated feeling is probably not anything to be concerned about, but it can be a symptom of a more serious problem, such as an intestinal obstruction. If your problem is chronic, or if you are experiencing a severe increase in gassiness, you should talk to your doctor.

Do over-the-counter drugs relieve gas?

Many claims are made for over-the-counter drugs intended to relieve gassiness. Often people find that these drugs do not help much, but some of them do help some people. Simethicone, activated charcoal, and digestive enzymes, such as the lactose supplement lactase, are among those doctors often recommend. Sometimes doctors prescribe drugs called gastrointestinal stimulants that help move gas through the intestines more readily and that may help gassiness in some cases.

Some suggestions on how to reduce gas in the digestive tract

If you are bothered by excessive belching or flatus, and your physician has determined that you have no serious disease, the following suggestions may be helpful:

- Check with a dentist to make sure dentures fit properly
- Avoid chewing gum or sucking on hard sweets (especially sugarless gum or dietetic sweets that contain sorbitol).
- Eliminate carbonated beverages from your diet.
- Avoid milk and milk products if you have lactose intolerance.
- Eat fewer gas-producing foods such as cauliflower, brussels sprouts, bran, beans, broccoli, and cabbage.
- Walking, jogging, and other exercise help to stimulate the passage of gas through the digestive tract.