
Bloating - Gas in the Digestive Tract

Causes, symptoms, and treatment

WHAT IS GAS?

Gas is air in the digestive tract. It leaves the body by burping through the mouth or passing wind through the anus. Gas is mostly made up of carbon dioxide, oxygen, nitrogen, and hydrogen. Everyone has gas; having too much is actually quite rare.^[2]

WHAT CAUSES GAS?

Swallowing air

Everyone swallows small amounts of air when eating or drinking. More air is swallowed when you:

- Eat or drink too quickly
- Smoke or chew gum
- Suck on hard lollies or drink carbonated drinks
- Wear loose-fitting dentures

Burping releases swallowed air from the stomach. The rest moves to the small intestine where most is absorbed, and a small amount passes to the large intestine and is released as wind.

Breakdown of food by bacteria

Certain carbohydrates cannot be fully digested and pass to the large intestine, where bacteria ferment them and produce hydrogen and carbon dioxide gas as a by-product.^[2,3]

WHICH FOODS CAUSE GAS?

Foods that commonly cause gas include:^[2]

- Legumes: beans, lentils, chickpeas
- Vegetables: broccoli, cauliflower, cabbage, Brussels sprouts, onions, mushrooms, artichokes, asparagus
- Fruits: pears, apples, peaches
- Whole grains: whole wheat and bran
- Soft drinks, fruit drinks (especially apple and pear juice), and drinks containing glucose-fructose (high fructose corn syrup)
- Milk and dairy products, and packaged foods containing lactose
- Sugar-free lollies and gums containing sorbitol, mannitol, or xylitol

SYMPTOMS

Burping

Occasional burping, especially during or after meals, is normal. Frequent burping may mean too much air is being swallowed, or it may be a sign of a condition like gastro-oesophageal reflux disease (GORD).^[1]

Passing wind

Passing wind 13 to 21 times a day is normal. Flatulence (excessive wind with bloating) may result from difficulty digesting certain carbohydrates.^[2]

Bloating

Bloating is a feeling of fullness or pressure in the abdomen. It can be caused by excess gas, conditions that slow bowel movement, or increased sensitivity to normal gas levels (as seen in IBS). High-fat foods can also delay stomach emptying and cause bloating.^[1,3]

Abdominal pain

Gas that does not move through the intestines easily can cause pain. People with IBS may feel pain even when gas levels are normal, due to heightened bowel sensitivity.^[3]

WHEN TO SEE A DOCTOR

See your doctor if gas symptoms are severe, change suddenly, appear alongside constipation, diarrhoea, or unintentional weight loss, or if you are over 40 and have new digestive symptoms.

TREATMENT

Reduce swallowed air

- Eat slowly and chew food thoroughly.
- Avoid chewing gum and hard lollies.
- Have poorly fitting dentures adjusted.

Adjust your diet

- Keep a food diary to identify trigger foods.
- Gradually reduce trigger foods; many gas-producing foods are still important for overall health.
- Reducing high-fat foods may help the stomach empty faster, reducing bloating.

Over-the-counter remedies

- **Alpha-galactosidase (Beano):** helps digest sugars in beans and vegetables. Take just before eating. Does not help with lactose or fibre related gas.
- **Simethicone (Gas-X, Mylanta Gas):** relieves bloating and abdominal discomfort.
- **Lactase tablets or drops (Lactaid):** help people with lactose intolerance digest dairy. Take before eating foods with lactose.

Prescription medications

If symptoms are linked to small intestinal bacterial overgrowth or IBS, your doctor may prescribe specific medications.^[4]

RESOURCES AND SUPPORT

- **Gastroenterological Society of Australia (GESA):** www.gesa.org.au - Find a gastroenterologist and evidence-based clinical resources
- **Irritable Bowel Information and Support Association (IBIS Australia):** www.ibisaustralia.org.au - Support and information for people experiencing IBS and bloating
- **Monash University FODMAP Research:** www.monashfodmap.com - Research and resources on fermentable sugars that contribute to bloating and gas
- **Healthdirect Australia:** 1800 022 222 | www.healthdirect.gov.au - Free 24/7 health advice line

REFERENCES

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 4. Gastroenterological Society of Australia (GESA). (2023). Functional gut disorders. <https://www.gesa.org.au>