

Understanding & Managing Bloating

A Patient Guide to Abdominal Bloating and Distension

What Is Bloating?

Bloating usually refers to a subjective feeling of gassiness, fullness, or pressure in the abdomen, while **distension** refers to a visible increase in belly size — the two often occur together but not always. Importantly, research over the past decade has shown that bloating and distension frequently happen without any actual increase in the amount of gas in the gut. That surprises most patients, but it explains why the cause — and the right treatment — is more individual than “just gas” would suggest.

Common Causes of Bloating

- **Small intestinal bacterial overgrowth (SIBO) or intestinal methanogen overgrowth (IMO).** Bacteria (or, in IMO, methane-producing microbes called archaea) that normally live further down the gut are present in excess in the small intestine, fermenting food earlier than they should and producing gas.
- **Carbohydrate malabsorption.** Sugars like lactose (dairy), fructose (fruit, honey, high-fructose corn syrup), or sugar alcohols (sorbitol, mannitol, xylitol) aren't fully absorbed in some people, and ferment in the gut, producing gas and drawing in water.
- **Celiac disease.** An autoimmune reaction to gluten (found in wheat, barley, and rye) damages the lining of the small intestine, which impairs nutrient absorption and commonly causes bloating, gas, and altered bowel habits — often alongside fatigue, anemia, or unexplained weight loss. It's worth specifically testing for (see “Diagnostic Testing” below) rather than assuming bloating is “just” a functional issue, since it's a distinct, treatable condition with its own long-term health implications if missed.
- **Abdominophrenic dyssynergia** — a diaphragm and abdominal-wall coordination problem. Normally, the diaphragm relaxes and the abdominal muscles tighten slightly after eating. In some patients with bloating, this reflex reverses: the diaphragm contracts downward while the abdominal wall relaxes outward, physically pushing the belly out — even when gas volume is completely normal. This is now recognized as one of the most common mechanisms behind visible distension, particularly when it worsens through the day and looks dramatic relative to how much someone ate.
- **Slow gut transit or constipation.** Stool and gas that move through the gut more slowly have more time to build up and stretch the bowel.
- **Visceral hypersensitivity.** Some people's gut nerves register normal amounts of gas or stretching as uncomfortable or painful, even when the actual volume present is unremarkable.
- **Diet and eating behavior.** High intake of fermentable carbohydrates (FODMAPs), carbonated beverages, large meals, and swallowing excess air (from chewing gum, drinking through straws, eating quickly, or talking while eating) can all contribute.
- **Other medical causes that need to be ruled out** when bloating is new, progressive, or accompanied by other symptoms — including ovarian masses, ascites (fluid accumulation), and gastroparesis (delayed stomach emptying). See “When to Contact Our Office” below.

Diagnostic Testing

Two breath tests are commonly used to help identify a specific, treatable driver of bloating. Both work the same way: you drink a sugar solution, then breathe into a collection device every 15–20 minutes for 2–3 hours. Gut bacteria (or archaea) ferment any of the sugar that isn't absorbed, producing hydrogen and/or methane gas that shows up in your breath.

- **SIBO / IMO breath testing** uses lactulose or glucose as the test sugar. Current consensus guidelines define a positive result as a hydrogen rise of 20 parts per million or more within 90 minutes, or a methane level of 10 ppm or higher at any point — methane-dominant results correlate more with constipation, hydrogen-dominant results more with diarrhea. It's a reasonable, non-invasive first test, though it's an indirect measure: a positive result is a helpful clue, not a certain diagnosis, and should be interpreted alongside your symptoms.

- **Carbohydrate malabsorption breath testing** uses the specific sugar in question — lactose, fructose, or sorbitol — in place of lactulose or glucose. It's considered a reasonably reliable way to confirm a specific sugar intolerance, particularly for lactose, though it can't fully distinguish true malabsorption from ordinary sensitivity to normal amounts of gas.
- **Celiac disease blood testing** (most commonly a tTG-IgA antibody test), followed by an upper endoscopy with small-intestine biopsies to confirm the diagnosis if the blood test is positive.

Evidence: celiac blood testing has excellent accuracy (well over 90% sensitivity and specificity in most studies) and biopsy confirmation remains the diagnostic standard; both are well-established, guideline-recommended steps rather than emerging or preliminary tests. The one thing that matters practically: you need to still be eating gluten regularly for these tests to be accurate. Going gluten-free first — even for a couple of weeks — can cause a false-negative result, so it's worth testing before restricting gluten on your own.

How Bloating Is Treated

Because bloating has several possible drivers, treatment works best when it's matched to the likely cause rather than applied generically. A few terms come up below: a study “compared to a dummy pill (placebo)” means some patients got the real treatment and others a fake version, without knowing which, so researchers could isolate the treatment's true effect. An “open-label” study means everyone knew what they were taking, which tends to inflate how effective a treatment looks compared to a placebo-controlled trial.

Dietary Management

Goal: reduce fermentable gas production and gut irritation through diet.

- **A structured low-FODMAP diet trial** — temporarily limiting fermentable carbohydrates, then reintroducing them systematically (see our separate FODMAP guide for detailed instructions).

Evidence: One of the best-studied dietary approaches for bloating specifically; the majority of patients with IBS-type bloating improve in clinical trials. Most effective when done as a structured, time-limited trial with guided reintroduction rather than indefinite restriction.

- **Targeted removal of a specific sugar** (lactose, fructose, or sorbitol) if breath testing or a trial elimination points to it.

Evidence: Directly addresses a confirmed intolerance rather than restricting broadly; generally the most satisfying fix when a single sugar is clearly the driver.

- **Smaller, more frequent meals**, and slowing down while eating.

Evidence: Reduces the volume the gut has to process at once and lessens air swallowing associated with eating quickly; mechanistically sound, low-risk, though not tested in large dedicated trials.

- **Reducing swallowed air** — limiting chewing gum, carbonated beverages, and drinking through straws.

Evidence: These habits measurably increase the amount of air swallowed during the day; cutting back is low-risk and a reasonable first step, particularly if bloating is worse later in the day.

- **Treating underlying constipation**, if present, with adequate fiber, fluids, and osmotic laxatives such as polyethylene glycol (PEG/Miralax) as needed.

Evidence: Regular bowel movements reduce the time gas and stool spend stretching the bowel. That said, trial evidence on laxatives specifically for bloating is mixed — some studies show real improvement, while others have found PEG can increase gassiness or distension in certain patients, so this is worth individualizing rather than assuming it will help across the board.

Treating Underlying SIBO or Methane Overgrowth (IMO)

Goal: reduce excess bacteria or archaea in the small intestine when breath testing is positive.

- **Rifaximin** — a minimally absorbed, gut-targeted antibiotic, typically dosed for 2 weeks; standard first-line treatment for hydrogen-dominant SIBO.

Evidence: Well studied for SIBO overall, with meaningful breath-test normalization and symptom improvement in trials, though response is less consistent for methane-dominant overgrowth on its own.

- **Rifaximin plus neomycin** — added for methane-dominant results (IMO), since the methane-producing organisms are archaea, not bacteria, and respond differently to antibiotics.

Evidence: A landmark trial found this combination eradicated methane on repeat breath testing in 87% of patients, compared with only about a third of patients on rifaximin alone. This remains the most studied regimen for methane-dominant overgrowth, though a more recent, smaller study didn't find as clear an advantage over rifaximin by itself — so the true added benefit is still being worked out.

- **Addressing constipation as a root cause**, since slow transit is thought to promote methane overgrowth in the first place.

Evidence: A reasonable and low-risk complement to antibiotic treatment, based on the established link between constipation and methane-producing organisms, though it hasn't been tested as a standalone cure.

Diaphragm-Targeted Therapy

Goal: retrain the diaphragm and abdominal wall for bloating driven by abdominophrenic dyssynergia (described above), especially visible distension that seems out of proportion to gas or food intake.

- **Diaphragmatic breathing exercises** — a structured daily practice of belly breathing, often before and after meals, aimed at retraining the diaphragm's normal relaxation response.

Evidence: A reasonable, low-risk starting point based directly on the mechanism involved; smaller studies support it, though formal biofeedback (below) has the more rigorous trial evidence to date.

- **Biofeedback therapy** — sensors placed on the chest and abdomen give real-time visual feedback while a therapist guides you to reverse the abnormal diaphragm-abdominal wall pattern; typically several sessions.

Evidence: A randomized, placebo-controlled trial found biofeedback significantly more effective than a sham treatment at reversing the abnormal breathing pattern, reducing visible distension, and improving symptoms. Older electromyography-guided biofeedback approaches report 70–80% success rates in small studies, though that technique is complex, expensive, and not widely available; access to any form of this therapy is still limited outside specialized centers.

Supplements & Medications

Goal: reduce gas-related symptoms directly, alongside the causes-based treatments above.

- **Enteric-coated peppermint oil** — a capsule coated to release in the intestine rather than the stomach, taken before meals.

Evidence: One of the better-supported supplement options for bloating: in one placebo-controlled trial, 83% of patients taking enteric-coated peppermint oil had less abdominal distension, compared with 29% on a dummy pill. Multiple other placebo-controlled trials show similar benefit for overall IBS-type symptoms. The enteric-coated capsule form specifically has the strongest evidence — peppermint tea or uncoated oil hasn't been shown to work the same way.

- **Atrantil** — an over-the-counter supplement combining peppermint, quebracho bark, and horse chestnut extract, marketed specifically for bloating linked to methane overgrowth.

Evidence: A small placebo-controlled trial found about 70% greater symptom improvement with Atrantil than placebo after 2 weeks, and an open-label follow-up study found roughly 9 in 10 patients reported bloating relief. Promising, but this is a limited body of evidence — the trials are small, some were company-funded, and there's currently no independent, large-scale confirmation. Reasonable to try given the low risk, but we'd call this preliminary rather than established evidence.

- **Digestive enzymes** — e.g., alpha-galactosidase (Beano, FODZYME) for gas-producing carbohydrates in beans and vegetables, or lactase supplements taken with dairy.

Evidence: Lactase supplementation is well established for confirmed lactose intolerance. Alpha-galactosidase has modest supporting evidence specifically for gas and bloating after eating high-FODMAP or gas-producing foods, mostly from smaller or manufacturer-associated studies — reasonable to try around trigger meals, but not a substitute for identifying and addressing the underlying cause.

When to Contact Our Office

- Bloating or distension that is new, rapidly worsening, or doesn't fluctuate with meals or bowel movements the way typical functional bloating does
- Unintentional weight loss, early fullness with reduced appetite, pelvic pressure, or urinary frequency — especially in women over 40, given the need to rule out an ovarian mass
- Blood in the stool, fevers, or a family history of ovarian or colon cancer
- Before starting, stopping, or combining any medication or supplement in this guide, especially if you take other medications

This guide supports your personalized plan and isn't a substitute for individualized medical advice. Check with your provider before starting, stopping, or combining anything mentioned here.

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