

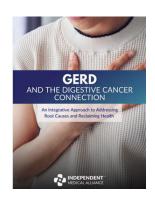
# GERD UNCOVERED

An Integrative Approach to Symptoms, Causes, and Lasting Recovery



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Read and download our 'GERD and the Digestive Cancer Connection' Guide:

<u>imahealth.org/tools-and-guides/gerd-and-digestive-</u> <u>cancer-connection/</u>



# What is GERD?

Gastroesophageal Reflux Disease (GERD) is a chronic condition in which contents from the stomach—acid, bile, enzymes, and partially digested food—flow backward (reflux) into the esophagus, causing irritation, inflammation, and a range of symptoms. GERD is more than just heartburn; it reflects deeper dysfunction in the digestive system that can have many root causes.

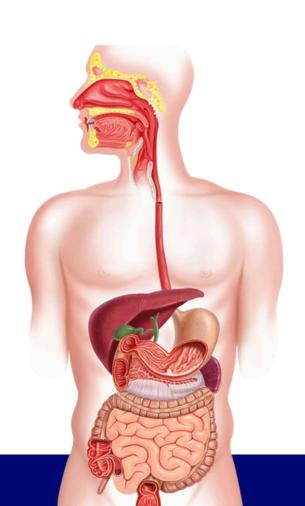
From a functional medicine and naturopathic perspective, GERD is viewed not merely as an acid-excess issue, but as a multi-factorial problem involving poor motility, microbial imbalances, mucosal integrity, and digestive insufficiency.

#### **Symptom Assessment**

The initial step typically includes an evaluation of symptoms like heartburn, regurgitation, and dysphagia (difficulty swallowing). A healthcare provider may inquire about how often these symptoms occur, their duration, and their intensity.

#### **Medical History**

A comprehensive medical history is essential to eliminate other conditions that may resemble GERD symptoms. Factors such as prior medication use, lifestyle choices, and family history are also taken into account.



# Functional & Naturopathic Diagnostic Approaches

#### **Organic Acids Test (OAT)**

Measures byproducts of microbial fermentation, mitochondrial function, detoxification capacity, and nutrient metabolism.

#### Key clues:

- Elevated benzoate, hippurate (gut dysbiosis)
- Low B vitamins (needed for mucosal healing)
- Yeast/fungal markers (e.g., arabinose)
- Indicators of motility dysfunction

#### Zinc and B12 Testing

Low levels are commonly seen in chronic PPI users and are associated with:

- Weak gastric acid production
- Delayed wound healing of the esophageal lining

#### **Serum Gastrin & Pepsinogen Testing**

- · High gastrin may suggest achlorhydria
- Pepsinogen I/II ratio may indicate atrophic gastritis

#### **Thyroid and Adrenal Panels**

- Hypothyroidism can reduce gastric motility and LES tone
- Adrenal dysfunction impacts mucosal healing and vagal tone
- Adrenal dysfunction impacts mucosal healing and vagal tone



# Functional & Naturopathic Diagnostic Approaches

These tests seek to uncover root causes often missed by conventional diagnostics.

#### **GI-MAP or Comprehensive Stool Analysis**

These tests evaluate:

- H. pylori (and its virulence factors like CagA, VacA)
- Dysbiosis or pathogen overgrowth
- Pancreatic function (elastase)
- Steatocrit (fat in stool) to assess bile and enzyme sufficiency
- Beta-glucuronidase, inflammatory markers, slgA

#### Relevance:

- Identifies H. pylori suppression of acid
- Detects inflammation that weakens the esophageal barrier
- Reveals low mucosal immunity, which increases reflux risk

#### **SIBO Breath Test**

Assesses overgrowth of hydrogen- or methaneproducing bacteria in the small intestine. Especially useful in:

- Patients with bloating, burping, GERD, and constipation or diarrhea
- Those who feel worse after starches or fiber Relevance:
  - SIBO contributes to gas buildup and increased intra-abdominal pressure, a key mechanical driver of reflux.





# Clinical Criteria for a GERD Diagnosis

Gastroesophageal Reflux Disease (GERD) is typically diagnosed based on a combination of clinical symptoms, response to treatment, and confirmatory testing when needed.

#### **Clinical Definition**

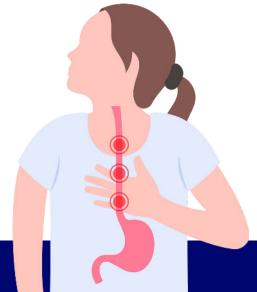
According to the Montreal Consensus and Rome IV criteria, GERD is defined as:

- The presence of troublesome reflux symptoms (heartburn and/or regurgitation) occurring two or more times per week
- And/or mucosal damage confirmed by endoscopy.

These symptoms must impact quality of life or result in complications such as esophagitis, Barrett's esophagus, or respiratory manifestations.

#### **Key Diagnostic Indicators**

- Heartburn (burning sensation behind the sternum) or regurgitation persisting for ≥4-8 weeks
- Symptom improvement with acid-suppressing therapy, such as proton pump inhibitors (PPIs), is suggestive—but not definitive, as non-acid reflux or placebo effect may influence response
- Exclusion of alarm features (see below) that would require further workup or specialist referral



# Differential Diagnosis Within the Reflux Spectrum

It's important to recognize that not all reflux-like symptoms are caused by classic acid GERD. Differentiating these presentations helps determine appropriate treatment approaches.

#### **GERD** (Erosive or Non-Erosive)

- Reflux of stomach contents into the esophagus
- May cause erosive esophagitis, or remain non-erosive but still symptomatic
- Often linked to LES dysfunction, delayed gastric emptying, or abdominal pressure

#### **Functional Heartburn**

- Symptoms mimic GERD (burning, discomfort) but no acid exposure or inflammation is detected
- Normal esophageal pH and motility studies
- Often driven by visceral hypersensitivity, stress, or altered pain perception

#### Laryngopharyngeal Reflux (LPR or Silent Reflux)

- Reflux affects the throat, vocal cords, or upper airway
- Often no heartburn is present
- Symptoms may include chronic cough, throat clearing, hoarseness, or post-nasal drip
- More difficult to diagnose—often treated empirically

#### **Red Flag Symptoms Requiring Urgent Referral**

Even when pursuing a functional or naturopathic approach, it's essential to recognize when additional investigation or referral to a gastroenterologist is appropriate:

- Unintentional weight loss
- Difficulty swallowing (dysphagia) or pain with swallowing (odynophagia)
- Persistent vomiting, especially if food or blood is present
- Black, tarry stools (melena) or vomiting blood (hematemesis)
- Persistent cough, laryngitis, or unexplained asthma-like symptoms
- Iron-deficiency anemia of unknown cause
- Symptoms that worsen despite treatment or recur immediately after stopping medications

These may indicate serious complications such as ulcers, strictures, Barrett's esophagus, or esophageal cancer.

# GERD as a Systemic, Multifactorial Condition

While GERD is often viewed as a localized esophageal issue, a functional and naturopathic perspective considers broader systemic contributors:

- Low stomach acid (hypochlorhydria) → poor digestion and LES dysfunction
- Gut-brain axis dysregulation → stress and vagal tone influence motility
- Hormonal imbalances → estrogen dominance or hypothyroidism can delay gastric emptying
- Mitochondrial insufficiency → energy-dependent processes like digestion and sphincter control are compromised
- Immune activation and inflammation → chronic lowgrade inflammation affects tissue repair and barrier function
- Microbiome imbalances → SIBO, H. pylori, and dysbiosis may increase gas pressure and inflammation

Recognizing these connections helps move beyond symptom suppression and toward personalized root-cause resolution—the hallmark of functional and naturopathic care.





# **Symptoms of GERD:**

Gastroesophageal Reflux Disease (GERD) is a chronic digestive disorder where stomach acid frequently flows back into the tube connecting your mouth and stomach (esophagus). This acid reflux can irritate the lining of your esophagus, causing discomfort and potentially leading to more serious health issues.

#### **Heartburn: A Burning Sensation in the Chest**

Heartburn is perhaps the most well-known symptom of GERD. It usually presents as a burning sensation in the chest, often after eating. The discomfort may worsen when you're lying down or bending over. While occasional heartburn is common, experiencing it frequently can be a sign of GERD. It's important to note that persistent heartburn can also lead to damage to the lining of the esophagus over time.

#### **Management Tips:**

- Steer clear of trigger foods, such as those that are spicy or high in fat.
- Refrain from lying down right after a meal.
- While over-the-counter antacids may offer temporary relief, it's best to consult your healthcare provider for long-term solutions.



#### Regurgitation: A Sour or Bitter Taste from Stomach Acid Rising into Your Throat

Another common symptom of GERD is the regurgitation of stomach acid or bile into the throat or mouth, resulting in an unpleasant sour or bitter flavor. This sensation can be particularly troublesome in the morning or after consuming meals high in fats, spices, or acids. Additionally, regurgitation may contribute to other issues such as bad breath or dental erosion.

#### **Management Tips:**

- Raise the head of your bed to prevent stomach acid from refluxing into the esophagus.
- Refrain from eating right before bedtime.
- Chewing gum can occasionally boost saliva production, which may aid in neutralizing acid.

#### **Dysphagia: Difficulty Swallowing**

Dysphagia, which refers to difficulty swallowing, is a less common yet more severe symptom of GERD. It can create challenges when trying to swallow food, liquids, or even saliva. Over time, dysphagia may result in weight loss or malnutrition. If you encounter dysphagia, it's essential to seek advice from a healthcare provider for an accurate diagnosis and appropriate treatment, as this symptom could signal other serious conditions such as esophageal stricture or even cancer.

#### **Management Tips:**

- Choose softer foods that are easier to swallow.
- Chew your food well and take smaller bites.
- Always seek advice from a healthcare provider for accurate diagnosis and treatment.

## **Potential Causes of GERD:**

#### Diet

- Certain foods can weaken or relax the LES—the muscular valve between the stomach and esophagus—allowing stomach contents to flow backward. However, this is only part of the picture.
- Acidic Foods: Citrus fruits (lemons, oranges, grapefruits), vinegar, and tomato-based products may irritate the esophageal lining in sensitive individuals—but they do not cause reflux on their own.
- Chocolate: Contains methylxanthines (like theobromine), which can reduce LES pressure.
- High-Fat or Fried Foods: Delay gastric emptying and reduce LES tone. Fats also slow digestion, increasing the chance of food and acid buildup in the stomach.
- Caffeinated Drinks: Coffee, black tea, and energy drinks may trigger reflux by relaxing the LES and increasing acidity.
- Alcohol: Especially red wine and beer, lowers LES tone and delays gastric emptying.
- Carbonated Beverages: Cause gastric distension and pressure buildup, which may force contents upward.

Functional Perspective: While these foods can be symptomatic triggers, their effects are magnified when deeper dysfunctions are present—such as hypochlorhydria, slow motility, or microbial imbalance.

#### Low Stomach Acid (Hypochlorhydria)

Contrary to popular belief, many GERD cases involve too *little* stomach acid, not too much. Adequate acid is essential for:

- Proper digestion and nutrient absorption (especially protein, B12, zinc, and iron)
- Triggering the release of digestive enzymes and bile
- Preventing bacterial overgrowth

#### Low stomach acid:

- Leads to poor protein digestion, causing food to ferment in the stomach
- Generates gas pressure that forces open the LES
- Fails to trigger proper digestive signaling downstream (e.g., pancreatic enzyme or bile release)

This state allows for reflux—not because of too much acid, but because the little acid present is in the wrong place (esophagus, not stomach).

## **Potential Causes of GERD:**

#### **Gut Microbiome Imbalance and SIBO**

- Small Intestinal Bacterial Overgrowth (SIBO): Fermentation of carbohydrates by misplaced bacteria leads to gas and pressure, contributing to reflux.
- Dysbiosis (Imbalanced gut flora): Can disrupt motility, reduce mucosal defenses, and weaken digestion.

Mold exposure, antibiotic use, low stomach acid, and poor motility are common drivers of microbial imbalances.

#### H. pylori Infection

This common bacterium:

- Inhibits stomach acid production by damaging parietal cells
- Inflames the stomach lining
- Alters gastric motility and contributes to bloating, belching, and reflux

Stool testing or urea breath tests can reveal H. pylori and its virulence factors, which often coexist with GERD symptoms and must be addressed for lasting resolution.

#### Vagal Nerve and Motility Dysfunction

The vagus nerve regulates gastric motility and LES tone. If vagal signaling is weak:

- The stomach may empty slowly (gastroparesis)
- LES tone may be insufficient to prevent reflux

Contributors to vagus nerve dysfunction:

- · Chronic stress or trauma
- Mold or heavy metal toxicity
- Viral infection (e.g., post-viral vagal damage)
- Nervous system dysregulation (e.g., high sympathetic tone)

Support strategies include vagal toning (gargling, humming, cold exposure), breathwork, and nervous system retraining.

#### **Mechanical or Structural Causes**

- Hiatal Hernia: The stomach bulges above the diaphragm, weakening the LES.
- Obesity and Abdominal Pressure: Excess weight or pregnancy increases intra-abdominal pressure.
- Tight Clothing or Posture: Can compress the abdomen and compromise LES function.
- Overeating or Late-night Eating: Increases stomach volume and pressure when the LES is most vulnerable (e.g., lying down).



## **Potential Causes of GERD:**

#### **Inflammation and Food Sensitivities**

Some individuals react to non-acidic foods due to underlying inflammation, leaky gut, or immune reactivity:

- Gluten and dairy are common culprits in functional medicine, especially in those with autoimmune tendencies or chronic gut issues.
- Processed foods, additives, and seed oils may contribute to oxidative stress and weaken gut barrier function.
- Histamine-rich foods or MCAS (mast cell activation) may amplify symptoms.

Elimination diets or IgG/IgA testing may be warranted for stubborn or atypical cases.

#### Mold, Mycotoxins, and Environmental Toxicants

Mold toxins can:

- Suppress stomach acid
- · Alter bile flow
- Impair mitochondrial energy in the GI tract
- Drive gut inflammation and microbial imbalance

In patients with persistent GERD + fatigue, brain fog, histamine symptoms, or poor response to treatment, environmental testing should be considered.

#### Lifestyle and Behavioral Triggers

- · Eating too fast or eating while stressed
- Lack of proper chewing
- · Skipping meals and then binge-eating
- · Lying down immediately after eating
- Chronic dehydration (low stomach secretions)

Addressing meal environment, posture, and stress state can significantly improve digestive resilience.



# **Tips for Managing GERD Symptoms**

#### **High-Fiber Diet**

A high-fiber diet is beneficial for overall gastrointestinal health and can help in managing GERD symptoms by:

- Improving Digestion: Fiber plays a crucial role in normalizing bowel movements, which can alleviate pressure on the stomach and, in turn, decrease the likelihood of acid reflux.
- Supporting Weight Management: Fiber promotes a sense of fullness, helping to curb overeating and supporting a healthy weight, ultimately reducing the risk of GERD.

#### **Acid-neutralizing Foods**

Incorporating more alkaline foods can help balance the stomach's acidity. Acidneutralizing foods, including:

- Vegetables: Green leafy vegetables, cucumbers, and potatoes contribute to an alkaline effect on the stomach.
- Fruits: In addition to melons and bananas, avocados and apricots are also effective in neutralizing acid.
- Nuts: Almonds, for instance, are alkaline and make for a healthy snack choice.

#### **Smaller, More Frequent Meals**

Changing the WAY you eat, in addition to changing WHAT you eat, can have a significant impact on your symptoms:

- Portion Size: Smaller meals put less pressure on the stomach's LES.
- Meal Timing: Avoid eating 3 to 4 hours before lying down or going to bed.



# **Tips for Managing GERD Symptoms**

#### **Avoid Trigger Foods**

Work with your practitioner to identify and avoid foods that trigger symptoms:

- Personal Triggers: Keeping a food diary can help identify which foods exacerbate your GERD symptoms.
- Common Triggers: These often include spicy foods, acidic fruits, fatty foods, chocolate, caffeine, carbonated beverages, and alcohol.

#### **Additional Tips**

There are several other nutritional strategies to consider:

- Chewing Gum: Chewing sugar-free gum can increase saliva production, which can help neutralize acid in the esophagus.
- Ginger: Known for its gastrointestinal benefits, ginger can be a soothing herb for GERD symptoms.
- Probiotics: These can improve digestive health and might contribute to reducing GERD symptoms.

# **Supplement Support**



#### **Betaine HCl with Pepsin**

Used to support digestion in individuals with low stomach acid, betaine hydrochloride helps restore the acidic environment needed for proper protein breakdown and nutrient absorption. Pepsin, a protein-digesting enzyme, is often combined to enhance efficacy. Best taken mid-meal, HCl should be used cautiously—not suitable for those with ulcers, active gastritis, or without professional supervision.



#### Apple cider vinegar (ACV)

Apple cider vinegar has a naturally acidic pH of approximately 2–3, which is similar to that of healthy stomach acid. In individuals with low stomach acid (hypochlorhydria)—a common but underdiagnosed contributor to reflux—taking a small amount of ACV diluted in water before meals may help support digestive secretions and improve protein breakdown.



#### **Zinc Carnosine**

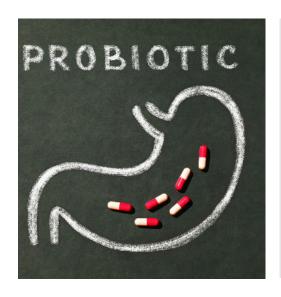
A unique compound that combines zinc with the amino acid carnosine, this supplement supports mucosal healing and repair of the stomach and esophagus. It's especially helpful in those with esophagitis, gastritis, or gut lining damage from reflux or medications like PPIs



#### **Ginger (Zingiber officinale)**

Ginger is a well-known digestive aid with prokinetic properties—it supports gastric emptying, reduces nausea, and helps prevent pressure buildup that can trigger reflux. Used as tea, or taken as capsules, or in tincture form, it also provides anti-inflammatory effects throughout the GI tract.

# **Supplement Support**



#### **Targeted Probiotics**

Certain strains may be beneficial in modulating the gut microbiome, improving motility, and supporting mucosal immunity:

- Lactobacillus plantarum helps rebalance dysbiosis and reduce bloating
- Saccharomyces boulardii beneficial for pathogen control and gut repair
- Lactobacillus reuteri supports upper GI balance and oral-gut immune health

Not all probiotics are well tolerated in sensitive patients—strainspecific recommendations are key.



#### **Iberogast (Herbal Prokinetic Blend)**

A liquid formula of nine herbs including Iberis amara, lemon balm, peppermint, and chamomile, Iberogast has been studied for its ability to improve motility, reduce gas and cramping, and support LES tone. Particularly helpful in GERD with slow stomach emptying or IBS overlap.



#### Chamomile (Matricaria recutita)

Traditionally used to soothe the stomach and calm the nervous system, chamomile tea or tincture may help reduce inflammation, ease bloating, and relax the digestive tract. Especially helpful where stress and GERD overlap.



#### Marshmallow Root & Slippery Elm

Both are demulcent herbs that coat and soothe irritated mucosal tissues. Ideal for esophageal inflammation, they may reduce burning, soreness, and throat irritation from reflux. Best taken as teas or powders mixed with water, away from medications.

# **Supplement Support**



#### Melatonin (Low Dose)

Emerging research shows melatonin may help strengthen LES function and reduce nighttime reflux, especially when combined with other nutrients like I-tryptophan and B vitamins. Low-dose formulations (0.3–3 mg) are typically sufficient.



#### Aloe Vera (Inner Fillet Juice or Gel)

Aloe vera is deeply soothing and anti-inflammatory for the entire digestive tract. The inner fillet (not the whole-leaf form, which contains laxative anthraquinones) helps calm esophageal irritation, repair mucosal tissue, and reduce inflammation caused by acid exposure. It's particularly useful for those with esophagitis, gastritis, or a "burning throat" sensation after meals. Best used chilled, 1–2 oz before meals or at bedtime; avoid in individuals prone to diarrhea.



#### Other Considerations

- Taurine & Phosphatidylcholine aid bile flow and digestion of fats
- Magnesium Citrate or Glycinate supports motility, especially when constipation is part of the reflux picture
- Bitters formulas stimulate overall digestive secretions, though should be avoided in cases of gastritis or ulcers



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