BEATING GERD NATURALLY

GASTROESOPHAGEAL REFLUX DISEASE
A Complete Guide to Managing and Eliminating GERD

PARTHA NANDI MD FACP
If you’re here, you may already be aware that you have GERD. Or, you may just be worried that the indigestion you sometimes suffer with (or ALWAYS suffer with) is more than just a little annoyance.

Let me be honest from moment one: You’re RIGHT, this is NOT just an annoyance.

If left untreated, acid reflux and heartburn can lead to more than one very serious condition, including Barrett’s esophagus (which is a precursor to cancer). This condition can also show up in other ways too, like a hoarse voice or sore throat in the mornings, or a cough or asthma or a bitter taste in your mouth, or it can be that traditional, more obvious burning in your stomach....

ALL of these symptoms, and the impact they have on millions of people around the world, are what drove me to write my book on GERD, which stands for gastroesophageal reflux disease G - E - R - D.

GERD occurs when stomach acid flows back into the tube that connects your mouth and stomach—the esophagus. This backwash—aka acid reflux—can irritate the lining of your esophagus. Many people experience acid reflux from time to time.
And it is possible that what you’re dealing with is NOT GERD...but I want you to understand and protect yourself.

What are things you just don’t say “yes” to anymore because you’re afraid you’re going to be derailed by stomach issues and your digestive health?

Think about how many things in your life you are missing out on. What is that costing you?

This book is your easy entry point to what GERD is, and is not—and what to DO to stop it and potentially even reverse some of the damage that may have already happened.

This is your starting point.

Start wherever you are. Get a little healthier every day and life is better for YOU and for those around you.

Namaste,

Partha Nandi MD FACP

About Dr. Nandi

Partha Nandi MD FACP is a practicing physician, international best-selling author and host of the Emmy award-winning medical lifestyle talk show, The Dr. Nandi Show, which airs weekdays in syndication in over 90 million homes in the US and 90 countries. Dr. Nandi travels the globe speaking on How To Be Your Own #HealthHero which includes his no nonsense approach to food & fitness, how he combines Eastern & Western philosophies and the science behind the amazing health benefits of spirituality, mindfulness and community.
1. Do you have heartburn more than two times a week?
2. Do you have a chronic dry cough?
3. Do you ever feel like food gets stuck on its way down like you have a lump in your throat?
4. Do you sometimes feel nauseated but don’t know why?
5. Do you belch or burp a lot?
6. Do you feel like you have to clear your throat often?
7. Do you ever feel like food or liquid is coming back up into your mouth?
8. Do you often have a sour or bitter taste in your mouth?
9. When you wake up in the morning, do you feel hoarse?

If you answered yes to any of these questions, you may have a potentially serious disease called gastroesophageal reflux disease (GERD).
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CHAPTER 1

What Is GERD?
WHAT IS GERD?

Is it hard for you to enjoy your meals because you’re concerned that whatever you eat will give you heartburn?

Gastroesophageal reflux disease, better known as GERD or acid reflux, is a common condition that occurs when the muscle at the base of the esophagus doesn’t close properly. When this muscle—called the lower esophageal sphincter (LES)—weakens or relaxes, it allows harsh stomach acids to rise up into the esophagus, causing a number of painful, embarrassing, or annoying symptoms.

That’s what prompted Juanita to come to my office several years ago. She’d been suffering with intense heartburn for quite a while. The burning sensation in her chest had gotten so bad, it woke her up several times a night. The lack of sleep meant she had to drag herself out of bed in the mornings, and she felt tired all day long. It had already started affecting her work and her home.

“It’s taking over my life,” Juanita said of her heartburn.
As I assessed Juanita, I quickly saw that she was significantly overweight. We talked about her eating habits, and she mentioned that she loved cola products. When I asked her how much soda she drank per day, she sheepishly told me she usually downed five cans of cola every day.

Based on her severe symptoms, I recommended an endoscopy for Juanita. In this common procedure, which is often performed under anesthesia, I placed a small fiber-optic tube into Juanita’s mouth, down her throat, and into her esophagus, which some people call the “food tube”. Thanks to a camera attached to the end of the flexible fiber-optic tube, I could see the inside of Juanita’s esophagus on a video screen. It didn’t look good.

Juanita had ulcerations on her esophagus. No wonder she was in so much pain! I diagnosed her with gastroesophageal reflux disease, better known as GERD or acid reflux. I placed her on some medications to heal the damage and gave her a simple eating plan to follow. I had to break some tough news to her. She was going to have to cut out the sodas. I explained that the carbonation, caffeine, and acidic contents of her fizzy drinks were all making her condition worse. She was afraid it would be too hard for her to give up her soda habit, but I assured her I had faith in her and suggested that she gradually decrease her intake over several weeks. And I reminded her that she needed to be a #HealthHero and make health her number one priority.

Two months later, Juanita returned for a follow-up visit. She told me she felt like a million bucks—the heartburn was gone, and she had lost 10 pounds. On top of that, she was sleeping better and had more energy, which helped improve things at work and at home. She admitted that the first week while reducing her intake was challenging, but after a few weeks, she didn’t miss the cola so much. She could now enjoy an occasional soda rather than the five per day she had been drinking before. Over time, I lowered Juanita’s medication dosage until she was taking the lowest dosage possible.

She is a great example of how being a #HealthHero can help you take charge of GERD. Just one small change in her life led to huge results. Now she can live the life she wants.

Juanita isn’t alone. In fact, she’s just one of an estimated 60 million people in the U.S. who suffer from heartburn and one of about 20 percent of Americans who have been diagnosed with GERD. As a gastroenterologist, I’ve treated thousands of people for this condition, and I would say there are probably an additional 20 million Americans who have the disease but don’t know it. You may be one of them.
This condition is one of the main reasons people come to my office. Sadly, many of them suffer for years before coming to see me for their symptoms. And they have no idea that GERD can have serious consequences and even life-threatening complications in some cases.
CHAPTER 2
How Do I Know If I Have GERD?
HOW DO I KNOW IF I HAVE GERD?

Heartburn may be the most common symptom associated with GERD, but it isn’t the only one. Some people who have GERD don’t have heartburn, so they never suspect that they might have this condition. They may experience other bothersome problems, such as chronic sinusitis, feeling hoarse, or a persistent dry cough, but they don’t realize they are telltale signs of GERD. Instead, they blame these issues on other conditions, such as allergies, asthma, or food sensitivities. Surprisingly, some people with GERD experience no symptoms at all. For these reasons, it often takes a long time for people to seek the proper help and get a diagnosis. I see this every day in my office. In fact, most of my patients with GERD have been dealing with symptoms for several years by the time they finally come to see me for help.

Take Ken, for example. He was in his early 40s when he developed a nagging dry cough. He was in sales and the hacking was interfering with his presentations and affecting his job performance. After several months, he decided to see his primary care physician for a checkup. His doctor thought Ken might be suffering from seasonal allergies so he gave him a prescription for antihistamines. But they did nothing to clear up his cough. Ken went back to the doctor, who suggested he see an ear, nose, and throat (ENT) specialist. As part of that examination, the ENT doctor used a scope to look at the back of Ken’s throat. The doctor said she could see some changes at the back of his throat and recommended he make an appointment to see a gastroenterologist.

That’s when Ken showed up in my office. Honestly, he wasn’t very happy about it. He felt like he was getting the runaround and didn’t think his problem had anything to do with his digestive system. I let him know that a dry cough could be a symptom of GERD. “But I don’t have heartburn, so I can’t have that,” he said. I performed an endoscopy, and his esophagus showed no signs of damage, but that didn’t mean he didn’t have GERD. In fact, about 50 percent of people with the condition don’t have any esophageal damage.

To determine if he was experiencing acid reflux, I attached a small pH capsule to the wall of his esophagus during the endoscopy. Typically painless, the capsule measures and records the acidity level in the

Surprisingly, some people with GERD experience no symptoms at all.
esophagus over several days. After a few days, the capsule sloughs off naturally and passes through the stool.

When Ken came back for his follow-up appointment, he was shocked to learn that the acid levels in his esophagus were too high. Ken had acid reflux, and he had probably had it for several years. He never would have thought that a dry cough was a sign of GERD. If the ENT doctor hadn’t encouraged Ken to make an appointment with me, he might not have come in until years later when other symptoms appeared. By then, he might have had damage to his esophagus. Fortunately, we caught his condition early. I prescribed medication called proton pump inhibitors (PPIs), which will be described in detail in an upcoming chapter, and recommended a few simple diet and lifestyle changes. Six weeks later, his cough was gone, and he was back to feeling confident in his sales presentations.

Like Ken, you may have symptoms of GERD that you didn’t know were associated with the condition.

WHAT CAUSES GERD?

For over 80 years, medical professionals and scientific researchers have pointed to excess acid production in the stomach and weakened lower esophageal sphincter (LES) as the causes of GERD. Several factors contribute to this condition.

Stomach Acid Imbalances

Each and every day, the human stomach produces about two liters of gastric juices, including hydrochloric acid (HCl), water, electrolytes, and other substances. Due to the highly acidic HCl, the stomach has an average pH level of about 2 on a scale of 1-14. For comparison purposes, battery acid has a pH level of 1. This powerful acid plays a critical role in digestion—breaking down the foods you eat and killing off any harmful bacteria you might have ingested. Every time you eat, your stomach ramps up acid production. This sends out chemical signals to your lower esophageal sphincter (LES) to clamp down to keep any stomach acid from leaking into the esophagus. In some people, however, the stomach churns out too much acid. This can cause pressure on the LES, loosening its protective seal and allowing stomach acid to spill into the esophagus. This stomach acid imbalance is one of the main causes of heartburn and other symptoms of GERD.
Beating GERD Naturally

GERD SYMPTOMS

• Heartburn
• Chronic dry cough
• Liquid or food rising up and leaving a bitter taste in the mouth
• Food getting stuck on the way down
• Burping and belching
• Feeling hoarse
• Feeling nauseated
• Clearing your throat
• Difficulty swallowing
• Chronic sore throat
• Persistent sinusitis
• A choking sensation
• Tooth enamel erosion

If you experience any of these symptoms on a regular basis and they do not go away with over-the-counter medications, be a #HealthHero and make an appointment with your doctor to discuss the possibility that you may have GERD.
Hiatal Hernia
The esophageal hiatus is a small opening in the diaphragm—the large muscle that separates your abdomen from your chest. The esophagus passes through the hiatus to attach to the stomach. In some people, however, the stomach bulges through the hiatus, creating a hernia. This is associated with an increased risk for acid reflux.

MEDICATIONS AND SUPPLEMENTS
Taking certain medications or supplements may irritate the esophagus and contribute to heartburn, acid reflux, and other symptoms of GERD. Drugs that have been associated with symptoms of GERD include:

- Antibiotics
- Anticholinergics (medications that treat overactive bladder and irritable bowel syndrome)
- Antidepressants
- Antihistamines
- Aspirin
- Asthma treatments
- Bisphosphonates (medications that prevent the loss of bone density)
- Calcium channel blockers
- Iron supplements
- Nitrates (medications that treat chest pain)
- Non-steroidal anti-inflammatory drugs
- Opioids (such as codeine)
- Potassium supplements
- Progesterone
- Quinidine (medication that treats irregular heart rhythm)
- Sedatives
**DIET AND LIFESTYLE**

The foods and beverages you consume could be triggering GERD or exacerbating the severity of your symptoms. Foods that are high in acidity and/or high in fat are known to cause heartburn and other symptoms. Carbonated beverages, caffeinated drinks, spicy foods, and alcohol can also trigger symptoms. Some of the most common foods and beverages associated with symptoms of GERD include:

- Alcohol
- Chocolate
- Coffee
- Citrus fruit juices
- Garlic and onions
- Mint and peppermint
- Red meat
- Spicy foods
- Tomatoes and tomato-based sauces

Your eating habits and daily lifestyle may also be contributing to the problem. Chowing down on supersized meals that leave you feeling bloated increases pressure on the LES and raises the risk for acid reflux. Lying down for a nap or bending over right after eating makes it more likely that acid from your stomach will backsplash into your esophagus. Wearing tight clothing that constricts your midsection may compress your stomach and lead to acid reflux. Even everyday stress may trigger or worsen your symptoms.
Obesity
Being overweight or obese makes you more vulnerable to GERD, worsens the severity of symptoms, and increases the risk for serious health complications from the condition. Research points to belly fat in particular as the culprit. Too much padding around the midsection stretches the stomach, increases pressure on the LES, and raises the risk for hiatal hernia. All of these increase the chances of acid splashing back into the esophagus. People with abdominal obesity are also more likely to have a weakened LES as well as problems with esophageal functioning, such as difficulty swallowing.

Pregnancy
Pregnancy may trigger symptoms of GERD. Several processes are at work here. For example, as a fetus develops, the uterus expands, placing added pressure on the stomach and LES. During pregnancy, hormonal changes may lead to greater relaxation of the LES. In addition, digestion slows in pregnant women in order to allow the fetus to absorb nutrients. This delayed emptying of the stomach is associated with more heartburn and acid reflux. Medical studies show that the likelihood of experiencing heartburn and other symptoms of GERD increases as a pregnancy progresses. In most cases, symptoms improve after giving birth.

Smoking
Smoking, and in particular its addictive ingredient nicotine, has been linked to a greater incidence of GERD. The nicotine in cigarettes relaxes smooth muscle in the body, including the lower esophageal sphincter (LES) and the esophagus. When the LES relaxes, it opens the gate for stomach acid to flow into the esophagus. By relaxing the smooth muscle of the esophagus, it reduces its ability to push food down into the stomach, increasing the likelihood of food getting stuck on the way down. Smoking also increases acid production in the stomach. Smokers are also at greater risk for serious health complications from GERD.

Chronic Inflammation
Recent research suggests that chronic inflammation in the body may also play a role in GERD. Inflammation is an immune response that is a natural part of your body’s healing process. It’s your body’s first line of defense against foreign invaders (like a splinter in your finger), injuries, and infections. Let’s say you’re cooking dinner and as you slice some vegetables, you accidentally cut your finger—ouch! Almost immediately, an army of white blood cells goes into
attack mode to fight the damage to your tissue. As a result, the skin around your cut turns red, swells, radiates heat, feels stiff, and throbs with pain. As distressing as this may be, these are signs that your body’s healing process has kicked in. With time, the pain goes away, the redness subsides, and your skin seals itself. Your finger is as good as new because your body’s inflammatory process successfully did its job.

Chronic inflammation is different. It’s as if your body’s immune response has gotten stuck in high gear. That army of white blood cells is still in attack mode, but there is no infection or injury to target. Instead, your inner army roams around your body and starts damaging your internal organs, cells, and tissues. This uncontrolled inflammation affects your whole body rather than a localized injury and can lead to a cascade of potentially harmful issues. Doctors and researchers believe that this systemic, long-term inflammation plays a role in almost every major disease—heart disease, cancer, Alzheimer’s, diabetes, allergies, and even depression. It’s also associated with autoimmune diseases, such as rheumatoid arthritis, lupus, irritable bowel disease, and thyroid disorders. Now, the medical community believes it may also be linked to GERD.

WHAT CAUSES CHRONIC INFLAMMATION?

Research has pinpointed a number of factors that contribute to this insidious condition:

If you have chronic inflammation, it may be contributing to GERD. Treating and reversing chronic inflammation may be an important step in getting control of GERD. To counter chronic inflammation, consume an anti-inflammatory diet, reduce toxins in your environment, and practice stress relief.
WHO’S AT RISK FOR GERD?

Be aware that GERD can affect anyone. It’s more common in men, but women, children, teens, and even babies get it too. Parents often mistake their children’s symptoms for allergies or think their offspring are just being picky eaters. If your child has eating issues, see your doctor. People who are at increased risk for GERD include men, pregnant women, smokers, people who are obese, and people who have a hiatal hernia.

GETTING A DIAGNOSIS

Be a #HealthHero and find a primary care physician or a gastroenterologist who specializes in disorders of the digestive system. Getting a diagnosis in your initial appointment will likely include a physical exam and a discussion of your symptoms. Be sure to bring a list of foods that trigger your symptoms and situations that worsen them. Based on this, your doctor may recommend some form of treatment. Depending on the severity of your symptoms or if you don’t respond well to early treatment, your doctor may recommend a variety of additional tests.

Endoscopy

As a gastroenterologist, I have performed thousands of endoscopies. This procedure can be performed in a doctor’s office or in an outpatient surgery facility. During an upper endoscopy, while you’re sedated, a long, thin, flexible tube is inserted into your mouth and into your esophagus. At the end of the tube is a tiny camera that captures images of your esophagus and transmits them to a monitor so your doctor can assess the health of your esophagus.

Prior to your procedure, you may need to refrain from taking certain prescription and over-the-counter medications, and you’ll need to avoid eating or drinking anything for four to eight hours.
before the test. For best results, be sure to follow all pre-procedure instructions carefully.

Although endoscopy doesn’t require anesthesia, a sedative is usually given to help you relax and keep you comfortable. I occasionally use an anesthetic spray that numbs your throat to prevent any discomfort as the tube is inserted. In addition, I have my patients wear a plastic mouth guard to keep their mouth propped open during the procedure. As the tube is inserted into your mouth, you may be asked to swallow. Rest assured; the insertion process isn’t painful, but you may notice some pressure as the tube goes down.

We often take tissue samples that can be biopsied during the endoscopy procedure. The esophagus can also be stretched to make it easier for you to swallow food. An upper endoscopy takes about 15 to 30 minutes and when it is completed, the tube is gently removed. After the procedure, you’ll be monitored for about an hour as you recover. Usually, you’ll be sent home with instructions to take it easy for the rest of the day. In most cases, you’ll be able to eat normally after your procedure.

At a follow-up appointment, your gastroenterologist will go over your results. In my practice, I like to show my patients some of the images of their esophagus. If it shows damage, I show them a healthy esophagus for comparison purposes. If the endoscopy confirms a diagnosis of GERD, I use this time to discuss treatment options and to recommend diet and lifestyle changes.

**Upper GI**

This is an x-ray to visualize your esophagus and stomach. Prior to this test, you may be asked to eat a low-fiber diet for a few days and to stop taking certain medications. You will also need to fast for about 12 hours before your procedure. An upper GI is typically performed by a radiologist, or x-ray technician, and takes place at a radiology facility or in a hospital lab.

For this test, you’ll lie on an x-ray table, which is tilted into an upright position. Don’t worry, these tables have straps that will secure you in place so you won’t slide off. First, an x-ray is taken while you have an empty stomach. Next, you’ll drink a thick, chalky substance called barium, which shows up on the x-ray. The x-rays are displayed on a video monitor that shows the barium as it travels through your esophagus and into your stomach to see if it splashes back into your esophagus. Note that although the barium may look
like a tasty milkshake, it doesn’t taste like one. Some people have a hard time swallowing the thick liquid and find its taste and texture to be unpleasant.

The test takes about 30 minutes and after it’s completed, you can return to your usual activities and are free to eat and drink normally. Some people feel mildly nauseated following the procedure, but this usually passes with time. Be sure to drink lots of fluids after your upper GI to help flush the barium out of your system and to prevent constipation, which is a common side effect from the procedure.

Your doctor will go over your test results at a follow-up appointment and may recommend treatment options if a diagnosis of GERD is made.

**Esophageal pH Test**

One of the tests gastroenterologists use to determine if you have GERD is called an esophageal pH study. This test monitors the pH, or acidity, level in your esophagus over a day or two. In a healthy person who does not have GERD, the normal pH level in the food tube ranges from about 4 to 7. Meanwhile, the stomach has a pH level as low as 2, meaning it is highly acidic. When pH levels in your esophagus fall lower than 4, it is a sign that stomach acid is rising back into the food tube.

This test is usually performed during an endoscopy and involves inserting a tiny capsule down your throat and attaching it to the wall of your esophagus. The wireless capsule records pH measurements and transmits them to a small portable receiver that you wear around your waist.

Your gastroenterologist will give you detailed instructions to follow over the next day or two to get an accurate picture of the pH level in your esophagus. I generally ask my patients to eat two to three meals a day, including foods that usually trigger symptoms—think pizza with tomato sauce, chocolate, orange juice, and coffee. For this study, it’s important to keep a diary of the exact times when you start and finish eating or drinking. Whenever you feel symptoms, such as heartburn, you just press a button on the
receiver. It’s that simple. While you’re doing this study, it’s best to skip between-meal snacks and to avoid chewing gum, hard candies, and lozenges. It’s also recommended that you refrain from lying down until you go to sleep at night. Be sure to record what time you go to bed and what time you get up in the morning.

When the monitoring period is over, you’ll return your diary and the receiver to your doctor’s office. A lot of my patients ask if they will need to have a second procedure to remove the capsule, but the good news is that this isn’t necessary. The capsule will naturally slough off from your esophagus and will pass through the stool in about a week to 10 days. At a follow-up appointment, your gastroenterologist will share the results of your test with you. If your results show abnormal pH levels, treatment for GERD may be recommended.

**Esophageal Manometry**

Another test gastroenterologists use to diagnose GERD is esophageal manometry. This test effectively measures two things: how tightly your lower esophageal sphincter (LES) closes and how well the muscles of your esophagus work to push food down into your stomach. Prior to this test, you may need to stop taking certain prescription and over-the-counter medications. Ask your doctor for a detailed list of drugs to avoid.

For this test, your gastroenterologist will insert a thin, flexible tube into your nose and will thread it through your esophagus and into your stomach. You may feel some temporary discomfort as the tube is inserted, but this usually goes away once the tube is in place, which takes only about 60 seconds. The tube has a number of sensors that measure the strength of the esophagus and LES. With the tube in place, you’ll be asked to drink small amounts of water. As you drink, the sensors on the tube measure the contractions in your esophagus and the amount of pressure the LES exerts. The test takes less than an hour and when it is completed, your gastroenterologist will slowly remove the tube, which may again cause momentary discomfort. Your doctor will discuss the findings with you and will make treatment recommendations based on your results. Be aware that some people experience temporary soreness in the throat following this test, but this can usually be relieved with lozenges.

If your results show abnormal pH levels, treatment for GERD may be recommended.
CHAPTER 3
Health Complications of GERD
HEALTH COMPLICATIONS OF GERD

You may be acutely aware of the everyday symptoms associated with GERD—the burning sensation of heartburn, the socially unacceptable belching, the annoying dry cough. It can interfere with your daily life at work and at home. There’s no more joy in eating. It’s hard to get a good night’s sleep. You’re plagued by embarrassing symptoms. What you may not realize is that without treatment, GERD can lead to some very serious complications. I encourage you to become a #HealthHero and educate yourself about the consequences of GERD and get checked by a healthcare professional if you have any of the signs or symptoms of this common condition.

Esophagitis

When the tissues of the esophagus have become irritated or inflamed due to acid reflux, it’s called esophagitis. This condition can make it difficult or painful to swallow and may also cause chest pain. Over time, the tissues can become so damaged that it compromises your food tube’s ability to perform its primary function of pushing food down into your stomach.

Stricture

Inflammation that goes unchecked can produce scar tissue and eventually cause stricture, which is a narrowing of the esophagus. This means there is less space for food and beverages to pass through on their way to your stomach. When this occurs, swallowing can become difficult and food is more likely to get stuck on its way down. Food may get lodged in the esophagus, making it difficult to breathe or causing a choking sensation. Having trouble swallowing can prevent you from taking in adequate amounts of food and water, which can lead to malnutrition or dehydration.

Stricture can be treated with esophageal dilation, a procedure that stretches the esophagus. This procedure is often performed during an endoscopy while you are sedated. When I’m performing an endoscopy, I always look for signs of stricture. If any areas of narrowing are detected, I insert a dilator—a long tube that widens at the end. After the esophagus has expanded, the dilator is removed. For most people, this procedure makes it easier to swallow and helps food and water reach your stomach without getting stuck on the way down. In some people, the esophagus will narrow again and dilation will need to be repeated.
In some cases when a section of the esophagus becomes partially blocked, an esophageal stent may be used to expand the area. Stents are narrow, expandable tubes that can be inserted and left in the esophagus. Stents can be made of plastic, metal, or flexible mesh. To minimize discomfort during this procedure, you will be given either anesthesia or sedation. Your doctor will insert a long, thin tube called a catheter into your esophagus until it reaches the narrowed area. Then the stent will be placed over the catheter and gently guided to the problem spot. Once in position, the stent will expand to re-open the esophagus. After the procedure has been completed, the catheter will be removed. The stent will remain in place to keep the esophagus open.

Following this procedure, you may experience some discomfort, but this usually goes away within a few days. Over-the-counter pain medications usually provide adequate relief from any soreness. Your doctor will give you detailed instructions to let you know when it is safe for you to resume eating and drinking. Typically, you will begin with fluids only and then gradually transition to a soft diet over the next few days.

**Esophageal Ulcers**

Untreated acid reflux can damage the lining of the esophagus, causing painful sores known as ulcers. These sores often cause a burning pain in the chest. In some people, however, they don’t cause any noticeable symptoms. Without treatment, ulcers can destroy the tissue in the esophagus and may lead to an esophageal perforation (a hole in the esophagus). A perforation is a medical emergency and requires immediate treatment.

Treatment for esophageal ulcers usually includes a combination of medication, lifestyle changes, and adherence to a GERD-friendly diet. Medications may include antibiotics and PPIs, which promote healing of ulcers. When combined with lifestyle and diet changes to minimize acid reflux, it can prevent the recurrence of ulcers. See the “Partha’s Prescriptions” chapter in this e-book for more details on what you can do to take control of GERD and heal ulcers.
Barrett’s Esophagus

In a small percentage of people with GERD, chronic exposure to acid reflux develops into a serious condition known as Barrett’s esophagus. In this condition, tissue in the esophagus changes in reaction to the presence of stomach acid and begins to resemble the intestinal lining. Having Barrett’s esophagus puts you at higher risk for esophageal cancer, which is potentially fatal. Other than the typical signs of GERD—heartburn, difficulty swallowing, and sometimes chest pain—there aren’t any specific symptoms associated with this condition. This is why it’s so important to be a #HealthHero and make an appointment with your doctor or a specialist if you have heartburn or other symptoms of GERD.

Barrett’s esophagus is most commonly seen in people who are:
- White
- Male
- Over the age of 50
- Overweight

To make a diagnosis, your doctor will perform an endoscopy. In addition to assessing any visible changes to your esophagus, your doctor will take a small tissue sample called a biopsy to determine if there are any abnormal or precancerous cells. If abnormal tissue is detected, there are a number of treatment options.

Medication

Your doctor may recommend prescription or over-the-counter medications (see “Partha’s Prescriptions” for detailed information on medications) to help balance stomach acid and prevent further damage to your esophagus. Proton pump inhibitors (PPIs) are the only medication that promotes healing of tissue that has already been damaged. Other drugs that may be prescribed include promotility agents, which move food from the esophagus to the stomach more quickly.
Lifestyle and Diet Changes
Eating a GERD-friendly diet and making simple lifestyle changes (see the “Partha’s Prescriptions” chapter for more details) can help prevent additional damage.

Routine Screening Endoscopy
If you have Barrett’s esophagus, having regular screenings with endoscopy—every two to three years—allows for early detection and treatment of precancerous cells.

Mucosal Resection
This is a procedure in which your doctor uses an endoscope to remove abnormal tissue from the lining of the esophagus.

Radiofrequency Ablation
This treatment method uses radio waves to eliminate abnormal cells without damaging surrounding healthy tissue.

Cryotherapy
Cryotherapy involves applying cold liquid or gas to freeze and destroy abnormal cells while protecting normal tissue.

Photodynamic Therapy
Photodynamic therapy uses light to target and eliminate abnormal cells while preserving healthy cells.

Surgery
Surgery to remove a portion of the esophagus may be necessary in some cases.

Rest assured that even though Barrett’s esophagus is a serious condition, early detection and treatment can help prevent it from developing into esophageal cancer.
In rare cases, GERD and Barrett's esophagus can progress to esophageal cancer. I recently treated a man in his thirties who was having trouble swallowing, and it became progressively worse. When he finally came to see me after suffering for several weeks, I diagnosed him with esophageal cancer. I had to tell him that he had a common type of esophageal cancer known as adenocarcinoma and that it has a five-year survival rate of just 18 percent. I hate having to deliver this kind of news to my patients, especially when I know that with early detection, we can prevent this type of cancer.

The symptoms associated with esophageal cancer are similar to those linked to GERD:

- worsening heartburn
- trouble swallowing
- chest pain
- unexplained weight loss
- coughing
- hoarseness

In many cases, esophageal cancer causes no noticeable symptoms. This is why it is critical that you see your doctor if you suspect you may have GERD.
Each year, approximately 17,000 people are diagnosed with esophageal cancer. Far more common in men than in women, it is the seventh most common cause of cancer death among men. A person’s survival rate depends largely on the stage of the cancer at the time of diagnosis. If the cancer is confined to the esophagus, the survival rate is higher. When cancer has already spread to other organs, the survival rate is lower.

In many cases, esophageal cancer causes no noticeable symptoms. This is why it is critical that you see your doctor if you suspect you may have GERD.

There are two main types of esophageal cancer: adenocarcinoma and squamous cell carcinoma. In the U.S., the most common type of esophageal cancer is adenocarcinoma. Found most often in the lower section of the esophagus, this cancer develops in gland cells that produce mucus. Squamous cell carcinoma, which affects the lining of the food tube, is typically found in the upper section of the esophagus.

If you’ve been diagnosed with esophageal cancer, there are several treatment options. Work closely with your doctor to choose the best options for your individual situation.

**Surgery**

Surgery may be recommended to remove a portion of the esophagus and, in some cases, part of the stomach as well.
Radiation Therapy
Radiation uses x-rays and other types of rays to target and destroy cancer cells.

Endoscopic Treatments
Many of the same endoscopic treatments used for Barrett’s esophagus, such as esophageal resection and radiofrequency ablation, may also be used to treat esophageal cancer.

Systemic Treatments
Chemotherapy, targeted therapy, and immunotherapy are medical treatments that may be used to find and destroy cancer cells.

As you can see, there are some very serious consequences stemming from GERD. Don’t discount your heartburn as something that isn’t dangerous. Take charge of your health by becoming a #HealthHero and see your doctor if you have heartburn or any other signs of GERD.

EARLY DETECTION

of esophageal cancer increases your chance of survival.

To detect cancer and to determine what stage of cancer is present, a number of diagnostic tests may be recommended, including:

- Blood tests
- Imaging tests
- Upper GI
- CT scan
- MRI
- PET scan
- Endoscopy
- Endoscopic ultrasound

As you can see, there are some very serious consequences stemming from GERD. Don’t discount your heartburn as something that isn’t dangerous. Take charge of your health by becoming a #HealthHero and see your doctor if you have heartburn or any other signs of GERD.
CHAPTER 4

5 Myths About GERD Debunked
After seeing thousands of patients for GERD, I think I’ve heard every misconception and misunderstanding about this condition. There’s a lot of misinformation out there, and it can make your symptoms worse if you follow the wrong advice. As I explain to my patients, one of the first things you can do to be a #HealthHero and take control of GERD is to educate yourself about the condition. In this chapter, you’ll discover five of the most common myths about GERD that could be holding you back from getting the relief you want. With knowledge on your side, you’ll be on your way to better health.
Myth #1
If I Have Heartburn, It’s Nothing Serious

Did you reach for that extra piece of gooey, cheesy pizza at dinner and now you’re feeling a burning sensation in your chest that’s preventing you from sleeping? Most of us experience heartburn at some point in our lives when we overdo it—stuffing ourselves during the holidays, diving into bowls of ice cream at midnight, noshing on supersized portions of fries. For occasional heartburn, you might pop an antacid and feel better. You probably think it’s no big deal. But heartburn can be a sign of something more serious, so you need to pay attention to it.

If you have heartburn at least three times a week for an extended period, it’s time to see your doctor. You might have GERD, the underlying cause of heartburn, which can lead to serious complications, such as esophagitis, stricture, ulcers, Barrett’s esophagus, and esophageal cancer. If acid is regularly rising up into your esophagus, it can irritate the lining. This can cause ulcers like Juanita had, or it can lead to a narrowing of your food tube. This makes it harder for your esophagus to do its job of pushing the food down into your stomach. For some people, this means food gets stuck on its way down. In fact, one of the most common reasons I’m called to the hospital in the middle of the night is to treat people who have food caught in their esophagus. I see so many people in the hospital with beef, pork, chicken, or other foods in their food tube. It’s a miserable feeling that gives them a sense of doom. I have to insert a small fiber-optic device into the esophagus and either push the food down or pull it out. Believe me, it’s not fun.

Even worse, untreated GERD can lead to a serious condition called Barrett’s esophagus, which can increase your risk for esophageal cancer. (See chapter 3 for more information on these health complications.) This is why it’s so important to see a healthcare professional if you have any symptoms of GERD. With early diagnosis, we can try to prevent this type of cancer.
Many people turn to over-the-counter and prescription medications to treat GERD. The most commonly used drugs include:

**Antacids**
These OTC drugs work by neutralizing the acid in your stomach. Popular antacids include Tums, Rolaids, Alka-Seltzer, and many other OTC brands.

**H2 Blockers**
This type of medication works by reducing the amount of acid produced in the stomach. Sold over the counter and by prescription, popular H2 blockers include famotidine (Pepcid, Pepcid AC), cimetidine (Tagamet, Tagamet-HB), nizatidine (Axid, Axid AR), and ranitidine (Zantac, Zantac 75).

**Proton Pump Inhibitors (PPIs)**
Sold OTC and by prescription, these drugs work by blocking acid production in the stomach. Popular PPIs include lansoprazole (Prevacid), esomeprazole (Nexium), omeprazole (Prilosec), dexlansoprazole (Dexilant, Kapidex), pantoprazole sodium (Protonix), and rabeprazole sodium (Aciphex).

A lot of my patients think these drugs are the only things that will make a difference in their symptoms. Wrong! Medicine can be very beneficial, but it’s only part of the solution. Lifestyle changes and diet tweaks can dramatically reduce your symptoms and let you go back to enjoying your life again. In the “Partha’s Prescriptions” chapter, you’ll learn much more about the medications used to treat GERD in addition to discovering the small changes you can make to get big results.
Beating GERD Naturally

Myth #3
Antacids Can Heal My Acid Reflux

Antacids may temporarily soothe the burning sensation in your chest from occasional heartburn, but they don’t heal a damaged esophagus, they don’t cure GERD, and their effects are short-lived. The heartburn comes right back, and you feel like you need more and more Tums or Rolaids to get relief. The majority of my patients have been taking antacids for years before they decide to make an appointment with me to get assessed. With a comprehensive treatment program, they can often reduce their reliance on antacids and get long-term healing.
Beating GERD Naturally

Proton pump inhibitors (PPIs) are a type of drug that has revolutionized the treatment of GERD. They are the only medications available that can best heal a damaged esophagus. In spite of this, PPIs have gotten a bad rap. A few studies that garnered national media attention suggested that PPIs had some scary side effects, which has frightened a lot of people away from using them. I see patients on a regular basis who are afraid to take these drugs without having the whole story. Of course, like every medication, PPIs come with possible side effects. However, based on many studies, they are considered safe. Long-term use of these drugs has been associated with an increased risk for fractures due to bone loss, but medical experts have yet to determine the cause for this.

With my patients, I go over the pros and cons of taking PPIs so they can make an informed decision. In addition, I make it a practice to use the lowest dosage necessary. And I recommend lifestyle changes as well that can reduce your need for medication. If you decide to take PPIs, which are sold over the counter as well as by prescription, be sure to take them as directed. In order to be effective, these drugs need to be taken about 30 to 60 minutes before breakfast or dinner.
Myth #5
If I Take Medicine, I Can Eat Whatever I Want

Just because you’re taking medication for GERD doesn’t mean you get a free pass to go crazy at the buffet line. I see so many patients who think that popping a pill is all it takes to control this condition. They believe that they’ll be able to indulge in all their favorites. It’s not that simple. Following a GERD-friendly nutrition plan and avoiding common trigger foods is an essential part of your treatment. You’ll learn more about the specific foods to avoid and you’ll find some recipes for delicious meals that get the green light within the chapters of this e-book.
CHAPTER 5
Partha’s Prescriptions to Manage and Eliminate GERD
If you want to say goodbye to painful heartburn, annoying coughing, and the scary feeling of food getting stuck in your esophagus and you want to start getting a good night’s rest, take heart. There are many treatment options that can minimize your symptoms so you can begin healing and start loving your life again. Depending on your individual condition, you may need some combination of over-the-counter or prescription medications, lifestyle changes, and diet tweaks to get GERD under control.

Let’s be real! Changing your habits isn’t as easy as snapping your fingers. It takes commitment. To help keep you on track, think about the benefits to your life if you get GERD under control—no more sleepless nights, no more fear of food getting stuck in your food tube, no more agonizing heartburn. Make a list of the things that are motivating you to change your behavior and look at it every time you get the urge to fall back into old patterns.

**MEDICATIONS**

**Antacids**

Over-the-counter antacids work by neutralizing the acid in your stomach. They provide fast-acting, temporary relief from occasional heartburn, acid reflux, and indigestion. Antacids are available in chewable tablets or gummies, liquids, or tablets that dissolve in water. Active agents found in antacids include calcium carbonate, sodium bicarbonate, aluminum-magnesium compounds, and alginic acid. Antacids are not recommended for long-term use, and they don’t aid in healing a damaged esophagus or reducing the inflammation associated with GERD. If your symptoms don’t resolve after a few weeks of taking antacids, make an appointment to see your doctor.
Side effects from antacids include gas, constipation, and diarrhea. Check with your doctor before taking antacids if you have liver or kidney problems or if you’re on a low-sodium diet.

**H2 Blockers**

Histamine 2 (H2) blockers reduce the amount of acid produced in the stomach. To understand how H2 blockers work, it’s a good idea to look at how stomach acid is produced. In the lining of the stomach, there are special cells called parietal cells that secrete acid. In order to activate acid production, however, a compound called histamine has to get involved. On the surface of parietal cells are receptors just waiting for histamine. When histamine binds to the receptors, it gives the green light to the parietal cells to start secreting their gastric juices. If the parietal cells don’t get the go-ahead from histamine, they don’t produce acid.

H2 blockers work by blocking histamine from doing its job. The active ingredient in these drugs binds to the parietal cell receptors, so the real histamines can’t. Without the signal from the histamines, the parietal cells don’t produce as much acid.

These medications are available by prescription and over the counter in tablet, capsule, and liquid form. You may take H2 blockers with your first meal in the morning or with your evening meal, or both. The medication takes up to 90 minutes to work so keep that in mind when deciding when to take them in relation to your meals. Talk to your doctor about the best dosage and timing for your individual needs.

**Popular H2 blockers include:**
- Famotidine (Pepcid, Pepcid AC)
- Cimetidine (Tagamet, Tagamet-HB)
- Nizatidine (Axid, Axid AR)
- Ranitidine (Zantac, Zantac 75)

**Popular antacids include:**
- Alka-Seltzer
- Alternagel
- Amphojel
- Gaviscon
- Maalox
- Milk of Magnesia
- Mylanta
- Rolaids
- Tums
Proton Pump Inhibitors

Proton pump inhibitors (PPIs) have revolutionized the treatment of GERD. They are the most effective medication available for healing a damaged esophagus. PPIs work by reducing the amount of acid produced in the stomach. Specifically, they work by blocking an enzyme—the hydrogen-potassium adenosine triphosphatase enzyme—known as the “proton pump” that is found in the wall of the stomach and is involved in producing acid. The pump releases protons into the gastric juices, which become acid. By blocking this enzyme, PPIs decrease the amount of acid produced in the stomach. This lowers the risk of acid spilling out into your food tube, giving your esophagus time to heal.

PPIs are sold over the counter as well as by prescription and are available in tablets and capsules. Whether you take OTC or prescription PPIs, be sure to take them as directed. In order to be effective, these drugs need to be taken about 30 to 60 minutes before breakfast or dinner. I’ve seen so many patients who tell me they tried PPIs but didn’t have success with them. In most cases, I find out it’s because they weren’t taking them at the right time. Working with your doctor is the best way to ensure that you are getting the maximum benefit from PPIs.

Side effects of PPIs include constipation, diarrhea, gas, headaches, nausea and vomiting, and abdominal pain. If you have liver problems, are pregnant, take medicine for epilepsy, or take blood thinners or birth control pills, check with your doctor before taking PPIs.

Popular PPIs include:

- lansoprazole (Prevacid)
- esomeprazole (Nexium)
- omeprazole (Prilosec)
- dexlansoprazole (Dexilant, Kapidex)
- pantoprazole sodium (Protonix)
- rabeprazole sodium (Aciphex)
Here are some of the most common questions about PPIs that I hear from my patients:

**Don’t I need acid in my stomach to digest my food? Will PPIs take away too much acid?**

Your stomach naturally produces highly corrosive acid that aids in the digestion of the foods you eat and neutralizes any bacteria that sneak into your stomach with your meals. After you eat, your stomach goes into action by pumping out acid to help break down the food and kill the bacteria. The arrival of this acid in your stomach is supposed to prompt the lower esophageal sphincter (LES) to close tightly. But in some people, the stomach produces too much acid, and it seeps through the LES into the esophagus, irritating your food tube and possibly leading to ulcers and other potentially serious conditions. PPIs target excess acid production, helping your body achieve a better balance of acid in your stomach and reducing the chances of acid seeping into your food tube.

**Why do I have to take PPIs 30 to 60 minutes before a meal?**

PPIs take time to start working, so you need to take them about 30 to 60 minutes before eating. If you wait to take the medication until you start eating or take it during or after your meal, it’s too late. By the time the PPIs arrive in your stomach, the enzyme in the lining that produces acid will have already pumped out excess amounts of gastric juices. In essence, this renders the medication useless. By taking PPIs 30 to 60 minutes prior to mealtime, it gives the drug time to block the enzyme to prevent it from releasing too much acid.
GERD-FRIENDLY EATING HABITS

Avoid Trigger Foods

Coffee
Coffee—whether it’s regular or decaf—is highly acidic and relaxes the lower esophageal sphincter (LES). The caffeinated version also decreases the tone of the LES. I hate to break it to you, but whether you love a single cup of Joe in the morning or you’re a java junkie who drinks 10 cups a day, you’re going to have to eliminate it. You may think it’s impossible to go without your cappuccinos, lattes, and mocha blends. After all, caffeine is a drug, and stopping cold turkey can result in headaches, fatigue, and irritability. Because of this, I usually advise my patients to reduce their intake slowly over a few weeks to minimize any withdrawal symptoms. I’ve seen so many of my patients successfully eliminate coffee that I know you can do it too. Take note that caffeinated tea also worsens GERD symptoms. If you drink black or green tea, you may want to switch to herbal teas that have no caffeine.

Soda
Just as you saw with Juanita, sodas are a triple threat when it comes to GERD—caffeine, carbonation, and a high acidity level. The carbonation can cause bloating, which places added pressure on the LES. Over time, this can decrease the sphincter’s ability to function.

Energy Drinks
Along with caffeine, most energy drinks include a sneaky ingredient called citric acid that adds flavor but also boosts acidity levels.

Chocolate
How can something that tastes so good be so bad for people with GERD?! Chocolate is full of fat, caffeine, and another ingredient called theobromine that relaxes the LES and increases reflux. Even dark chocolate, which many health professionals say is good for heart health, can be problematic. How can you satisfy your sweet tooth if you have GERD? Try non-citrus fruits and berries, sorbet, low-fat angel food cake, or hard candies.

Fried and Fatty Foods
French fries, bacon, potato chips, sausage—fatty and fried foods take longer to digest, which puts pressure on the LES and can increase the likelihood of acid reflux.
High-Fat Red Meats
You may love a good steak, but red meat that has a lot of fat or marbling is hard to digest and stays in your stomach longer than most other foods. This puts added pressure on the LES. If you can’t give up steak, choose leaner cuts, such as sirloin and tenderloin and limit your consumption.

Garlic and Onions
Although garlic is believed to be helpful for heart health, it can lead to heartburn in some people with GERD. Garlic and its equally pungent cousin the onion are both part of the allium family. We don’t know exactly why these foods cause heartburn, but some experts think it may have something to do with a sulfur compound found in them.

Tomatoes and Tomato Sauce
You may have heard about the many health benefits of tomatoes, but you may not realize that they are highly acidic. Tomato sauce, in particular, packs a powerful punch of acid.

Mint
High doses of mint, including spearmint and peppermint, relax the LES, triggering acid reflux. Avoid chewing mint-flavored gum and steer clear of mint tea and candies.

Citrus Fruits and Juices
These foods and beverages are very acidic and should be avoided.

Dairy
Cheese, whipping cream, half and half, whole milk, chocolate milk—these are all culprits when it comes to heartburn and other symptoms of GERD. The problem lies in their fat content. High-fat foods stay in the stomach longer, putting pressure on the LES.

Spicy Foods
If you like foods that are so spicy they make your head sweat, you might want to think twice before indulging. Chili powder, Tabasco sauce, black and red pepper, and many other fiery spices are known to cause heartburn misery.

Alcohol
After a stressful day at work, a cocktail or glass of wine can make you feel more relaxed. But they can also relax the LES and invite heartburn.
Eat Smaller Meals
If you have GERD, don’t go to war with the buffet because you’ll lose. Devouring big meals is a surefire way to make your symptoms worse. Supersized meals stretch your stomach and put added pressure on the lower esophageal sphincter (LES), which increases the likelihood that gastric juices will splash into the esophagus. I always encourage my patients to eat smaller meals throughout the day. In addition, be sure to eat slowly and chew your food thoroughly. This aids digestion and can help prevent food from getting stuck in your esophagus.

Avoid Nighttime Snacking
It’s midnight and you’re staring into the refrigerator looking for something to nibble on. You push the apple aside and grab the cold pizza instead. After chomping on it, you go back to bed and almost immediately regret it because heartburn is keeping you up. Snacking after dinner is one of the most common culprits of nighttime heartburn. Avoid eating for three hours before going to bed to reduce the chances of heartburn. This gives your stomach time to empty so it’s less likely that food will slosh up while you’re sleeping.

Maintain a Healthy Weight
People who are obese have an increased risk for developing GERD. Like most medical experts, I believe that excess belly fat can put pressure on the stomach, forcing acid to spill out into the esophagus. Losing weight can make a big difference. In a 2012 study published in the journal *Obesity*, women who lost just 5 to 10 percent of their body weight and men who shed 10 percent of their body weight experienced a reduction in their symptoms. The more weight they lost, the greater the improvement. By eliminating the foods that trigger heartburn and contribute to GERD, you are likely to shed some weight.

Avoid Lying Down After Eating
Are you one of those people who eats and then immediately wants to lie down for a nap? Don’t do it! You need to give your stomach time to empty before lying down. Wait at least three hours after eating before getting horizontal and trying to catch some zzz’s.
LIFESTYLE CHANGES

Wear Loose-Fitting Clothing
Cinched belts, skin-tight jeans, and certain undergarments can press on your stomach and lead to acid reflux and heartburn. Trade in your tight garb for loose, flowing garments that don’t constrict your midsection. I always say that if you want to be a true #HealthHero, you need to think about health before fashion.

Elevate the Head of Your Bed
If your symptoms are worse at night, try elevating the head of your bed. Acid reflux is more common while lying down because gravity can’t do its job to help keep gastric juices in the stomach. Nocturnal acid reflux can be especially harmful because it allows stomach acid to remain in the esophagus for several hours. Elevating the head of your bed could be the answer. Be aware that piling up pillows won’t do the trick, however. In fact, trying to prop your head up with extra pillows compresses the stomach, which will aggravate GERD symptoms. Try placing a couple of yoga blocks or bricks between your mattress and box spring to raise the bed. A 2012 study in the Journal of Gastroenterology and Hepatology found that an elevation of just 8 inches reduced the amount of acid in the esophagus.

Stop Smoking
Smoking cigarettes is linked to a higher incidence of GERD and worse complications, including Barrett’s esophagus and esophageal cancer. The good news is research shows that quitting smoking can help. A 2013 study looked at the effects of quitting smoking on heartburn and acid reflux. People who used antireflux medication at least weekly and who quit smoking experienced significant improvements in their symptoms. Their heartburn and reflux symptoms went from severe to mild or went away entirely. Quitting smoking isn’t easy. Ask your doctor about medications that can help you kick the habit.
Calm Stress

Do your symptoms of GERD go through the roof when you’ve got a big deadline at work or you’re hosting the family holidays? You’re not alone. In a 2015 study in Internal Medicine over 12,000 people with GERD said stress was the number one factor that exacerbated their symptoms. It’s no surprise. Research shows that stress can increase the amount of acid your stomach produces and can make you more sensitive to the presence of acid in the esophagus.

Keeping stress at bay can be yet another powerful tool in reducing your symptoms. Set aside time on a regular basis for stress-reduction techniques. Try mindfulness meditation, prayer, deep breathing, tai chi, massage, or yoga on a daily basis to lower your stress levels.

Take Advantage of #Tribe Support

If you want to make lifestyle changes to minimize symptoms of GERD, you don’t have to go through it alone. #Tribe support can help keep you on track. Enlist your family and friends to give you the support you need. Let them know the medications you’re taking, the foods you’re trying to avoid so they don’t sneak them into family meals, and the lifestyle changes you’re making. Your community or tribe plays an important role. Decades of medical research have shown that when you have an illness, having a strong support network improves health outcomes. In fact, in 2010 when researchers from Brigham Young University and University of North Carolina at Chapel Hill analyzed data from 148 studies involving over 300,000 participants, they found that people who lacked social support were 50 percent more likely to die in the study’s follow-up than people who enjoyed solid social ties.

Remember, by taking care of your own health, you will inspire your #Tribe to take care of their health. Being a #HealthHero is contagious.
CHAPTER 6
GERD-Friendly Foods & Recipes
Are you afraid that cutting out foods that trigger GERD symptoms will leave you with nothing good to eat? Don’t worry. Finding delicious, satisfying GERD-friendly foods is easy. And when you eat healthy fare that doesn’t give you heartburn flare-ups, you’ll start enjoying your meals more. In general, fill your diet with low-fat, high-fiber choices, including fish, white-meat poultry, vegetables and fruits (excluding the trigger foods listed in previous chapter). Specific foods that get the thumbs up include:

**PROTEIN**
- Fish
- White-meat poultry
- Tofu
- Eggs (limit yolks to 2-3 per week)

**FRUITS**
- All non-citrus fruits
- Bananas
- Apples
- Pears
- Melons
- Berries

**VEGETABLES**
- Vegetables
- Leafy green vegetables
- Root vegetables (Except onions)

**GRAINS**
- Gluten-free Oatmeal
- Brown rice
- Gluten-free bread
- Quinoa
- Buckwheat
### BEVERAGES
- Water
- Herbal teas
- Non-citrus juices

### SPICES
- Basil
- Fennel
- Ginger
- Oregano
- Parsley
- Rosemary
- Tarragon
- Thyme

### HEALTHY GOOD FATS
- Always use in moderation
- Low-fat salad dressings
- Low-fat mayonnaise
- Olive oil (cold or expeller pressed)
- Canola oil (organic)
- Coconut oil (small amounts)

### DESSERTS
- Angel food cake
- Sorbet
- Hard candies (non-citrus flavors)
On the following pages, you will find a few of my favorite GERD-friendly recipes.

For any recipes, use organic ingredients whenever possible. You can also modify recipes to fit a GERD-friendly diet by following these simple rules and easy swaps.

<table>
<thead>
<tr>
<th>FOOD</th>
<th>SWAP OUT</th>
<th>SWAP IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILK &amp; DAIRY</td>
<td>Whole milk, cream, cheese, yogurt, sour cream</td>
<td>Ghee, Kefir, Coconut milk yogurt, soy milk, almond milk, nutritional yeast</td>
</tr>
<tr>
<td>MEATS</td>
<td>Sausage, bacon, pepperoni, skin-on poultry</td>
<td>Skinless chicken breast or white-meat turkey, tofu</td>
</tr>
<tr>
<td>VEGETABLES</td>
<td>Onions, scallions</td>
<td>Celery, chives</td>
</tr>
<tr>
<td>SMOOTHIES</td>
<td>Citrus fruits</td>
<td>Bananas, apples, pears</td>
</tr>
<tr>
<td>BREAKFAST DISHES</td>
<td>Whole eggs</td>
<td>Egg whites</td>
</tr>
<tr>
<td>FOOD</td>
<td>SWAP OUT</td>
<td>SWAP IN</td>
</tr>
<tr>
<td>--------------------------</td>
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<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ITALIAN FOOD</td>
<td>Tomato sauce</td>
<td>Pesto with a small amount of olive oil and basil or oregano</td>
</tr>
<tr>
<td>SANDWICHES &amp; SALADS</td>
<td>Tomatoes, ketchup, mayonnaise, full-fat salad dressing</td>
<td>Cucumbers, mushrooms, beets, mustard, low-fat salad dressing</td>
</tr>
<tr>
<td>COOKING METHODS</td>
<td>Frying, creamy style</td>
<td>Baking, steaming, roasting</td>
</tr>
<tr>
<td>SPICES</td>
<td>Chili powder, tabasco, red and black pepper, garlic</td>
<td>Basil, fennel, ginger, oregano, parsley, rosemary, tarragon, thyme</td>
</tr>
</tbody>
</table>

**EXCLUSIVE BONUSES**

Gain access to your exclusive book bonuses and expanded content by visiting www.askdrnandi.com/GERDBookVIP
RECIPES
SLOW COOKER OATMEAL

Serves 4

INGREDIENTS
8 cups water
2 cups Gluten-free Steel Cut Oats
⅔ cup dried apricots, chopped
¾ teaspoon salt
⅓ cup dried cranberries (optional)

DIRECTIONS
Combine water, oats, dried apricots, and salt in a 6-quart slow cooker. (Add dried cranberries, if desired, at this time.)
Set slower cooker heat on low.
Put lid on pot and cook until oats are tender and consistency is creamy (about 7-8 hours).
BLUEBERRY RICE FLOUR PANCAKES

Serves 4

INGREDIENTS
1 cup rice flour
1 cup blueberries
1 teaspoon sugar
2 teaspoons baking powder
½ teaspoon salt
1 cup soy milk
1 egg, lightly beaten
2 teaspoons extra virgin olive oil
1 cup honey or maple syrup

DIRECTIONS
Sift rice flour, sugar, baking powder, and salt together in a bowl. Beat in soy milk until mixture has a smooth consistency. Add beaten egg, extra virgin olive oil, and blueberry. Mix until just blended.

Heat a non-stick griddle to 375 degrees or until it is hot enough that drops of water splashed on griddle bounce and sizzle.

Lightly oil pan.

Ladle pancake mixture onto griddle to form 4-inch cakes.

Turn cakes once bottom has browned and bubbles appear on tops.

Cook cakes for an additional two minutes.

Serve pancakes with blueberries and warmed maple syrup or honey.
HEALTH HERO SCRAMBLED EGGS

Serves 6

INGREDIENTS
Cooking spray
2 whole eggs plus 8 egg whites
2 tablespoons unsweetened soy milk
Kosher salt
1 cup chopped spinach
½ cup chopped mixed fresh herbs (such as parsley and tarragon)

DIRECTIONS
In large bowl whisk together eggs, soy milk, and salt.
Spray the pan with cooking spray then pour the mixture into the pan and cook, stirring occasionally, to desired texture (about 4 to 5 minutes).
Fold in herbs and spinach.
TROPICAL MIXED GREENS & GRILLED CHICKEN

Serves 4

INGREDIENTS

- 2 tablespoons extra virgin olive oil
- 1¼ tablespoons balsamic oil
- 2 tablespoons mango chutney
- 1 tablespoon low-sodium soy sauce
- ¾ teaspoon grated and peeled fresh ginger
- 4 (4-ounce) skinless, boneless organic chicken-breast halves
- 2 tablespoons avocado oil
- 8 cups organic mixed salad greens of your choice
- 1 cup diced peeled mango
- ¾ cup diced peeled organic avocado
- 1 tablespoon sliced leeks (optional based on dietary restrictions)

DIRECTIONS

Prepare grill.

Combine olive oil, balsamic, chutney, soy sauce, and ginger in a small bowl. Place chicken on large plate; spoon 2 tablespoons oil mixture over chicken, reserving the rest for the salad. Turn chicken to coat, and let stand 5 minutes.

Place chicken on grill rack. You can spray with avocado oil if necessary; grill 5 minutes on each side or until chicken is done, brushing with oil mixture remaining on plate before turning. Slice chicken crosswise into strips.

Arrange greens, mango, and avocado on 4 serving plates. Arrange chicken over greens. Drizzle reserved dressing over salads.
ROOT VEGETABLE MEDLEY

Serves 6

INGREDIENTS
16 baby carrots, peeled and cut in half lengthwise
12 baby turnips, peeled and cut in half lengthwise
2 teaspoons avocado oil
2 tablespoons sorghum
2 tablespoons cider vinegar
½ teaspoon kosher salt

DIRECTIONS
Preheat oven to 450 degrees. Place carrots and turnips on a jelly-roll pan. Drizzle with avocado oil and toss gently to coat. Bake at 450 degrees for 15 minutes. Combine sorghum and vinegar. Drizzle half of sorghum mixture over carrot mixture and toss gently to coat. Bake an additional 15 minutes or until vegetables are tender. Drizzle with remaining sorghum mixture. Sprinkle evenly with salt.
MEDITERRANEAN SALMON

Serves 4

INGREDIENTS
- ⅛ teaspoon salt
- 4 (6-ounce) skinless salmon fillets (about 1-inch thick)
- 1 tablespoon olive oil
- ½ cup finely chopped zucchini
- 2 tablespoons capers, undrained
- ½ cup Dairy Free Almond Feta
- 1 (2½-ounce) jar sliced ripe black olives, drained

DIRECTIONS
Preheat oven to 425 degrees.
Sprinkle salt over both sides of fish.
Place fish in a single layer in an 11- x 7-inch baking dish coated with olive oil.
Combine remaining ingredients in a bowl; spoon mixture over fish.
Bake at 425 degrees for 22 minutes.

DAIRY FREE ALMOND FETA

INGREDIENTS
- 3 cups blanched almonds, soak in water for 18-24 hours
- 1½ cups sauerkraut juice
- ¾ teaspoons sea salt
- 1 cup water
- 3 tablespoons agar powder

BRINE
- 9 cups water
- 1½ cups sea salt

DIRECTIONS
Almond Feta
Drain and rinse almonds.
In a blender, add almonds, sauerkraut juice and salt.
Blend on highest setting for 90 - 120 seconds. Mixture should be smooth and not grainy.
Pour mixture into a container and cover with plastic wrap tightly.
Let sit for 1 - 2 days. Time will depend on temperature of room.

Warmer temperatures will be faster to culture.
Taste it every day to check for slight tanginess.
When it is tangy, it is time for the next step.
Line a 10 inch square pan with cheesecloth.
In a medium saucepan over low heat, add water and agar, then whisk.
Cover with a lid and simmer for 3-4 minutes.
Then uncover and check to see if it is bubbling.
When agar is fully dissolved, pour in cultured almond mixture and whisk until fully combined.
Pour cheese mixture into lined pan.
Refrigerate until hard.
Prepare Brine
In a large bowl, whisk water and salt together until the majority of salt dissolves.
Cut cheese into four pieces and place in brine.
Cover and let sit for 8-9 hours at room temperature.
Transfer cheese to a storage container and pour brine over cheese until halfway submerged.
Add plain water until completely covered and brine is diluted.
Cheese can be stored in fridge for up to 3-4 months.
RIGATONI WITH ROASTED CAULIFLOWER AND BRUSSELS SPROUTS

Serves 6

INGREDIENTS
¾ pound gluten free rigatoni or other short pasta
½ medium head cauliflower (about 1 pound), cut into florets
8 ounces Brussels sprouts, trimmed and halved (quartered if large)
2 sprigs fresh thyme
4 tablespoons olive oil
Kosher salt
2 ounces grated soy parmesan

DIRECTIONS
Heat oven to 450 degrees. Cook the pasta according to the package directions. Reserve 1 cup of the cooking water. Drain the pasta and return it to the pot.
On 2 large rimmed baking sheets, toss the cauliflower and Brussels sprouts with the thyme, 2 tablespoons of the oil, and ½ teaspoon salt.
Roast, tossing the vegetables once and rotating the sheets halfway through, until golden brown and tender, 15 to 20 minutes.
Add the vegetables, parmesan, ½ cup reserved cook water and remaining 2 tablespoons of oil to pasta. Toss until combined (add water if pasta seems dry). Serve sprinkled with remaining parmesan.
COCONUT, BANANA AND GINGER SMOOTHIE

Serves 1

INGREDIENTS
1 banana, sliced
6 ounces full fat coconut milk
1 tablespoon raw organic honey
½ teaspoon freshly grated ginger
Handful of ice

DIRECTIONS
Combine banana, coconut milk, honey, ginger and ice.
Blend in a blender until smooth.
Drink immediately.
SWEET POTATO FRIES

Serves 6

INGREDIENTS
- 2 pounds sweet potatoes
- ¼ cup organic olive oil
- 1-2 tablespoons raw organic sugar
- 1 tablespoon kosher salt
- 1-2 tablespoon of your favorite GERD-friendly spices, such as oregano, rosemary, or thyme

DIRECTIONS
Preheat oven to 450 degrees.
Peel the sweet potatoes and cut off the ends.
Cut the potatoes in half lengthwise and then, if they are very long, in half crosswise.
Cut each piece into wedges.
Put the sweet potatoes into a large bowl and add the oil.
Mix well to combine.
Sprinkle with salt, sugar, and spices of your choice.
Mix well.
Spread the sweet potatoes out in a single layer on a baking sheet; the oil they are coated with should keep them from sticking to the pan.
RESOURCES

• For more information about GERD, visit the patient portal of the American College of Gastroenterology at http://patients.gi.org/topics/acid-reflux/.

• You can download a pdf with patient information about GERD courtesy of the American Gastroenterological Association at http://www.gastro.org/patient-care/conditions-diseases/gerd

• The International Foundation for Functional Gastrointestinal Disorders is a nonprofit research and education organization that offers a summary of signs, symptoms, and treatment options for GERD. In addition, its website features a forum where you can read other people’s real-life experiences with GERD and share your own story. Visit https://aboutgerd.org/

• For a comprehensive overview of digestive diseases, such as acid reflux, visit the National Institutes of Health’s National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) website at https://www.niddk.nih.gov/health-information/digestive-diseases/acid-reflux-ger-gerd-adults.

• If you’d like more healthy recipes, visit https://askdrnandi.com/recipes/

• To help you soothe stress, check out my free Calm the Chaos audio program available at https://askdrnandi.com/calmthechaos/

• GERD Awareness Week falls annually around the week of Thanksgiving. For more information, visit https://aboutgerd.org/gerd-awareness-week.html
REFERENCES

CHAPTER 1

General information on GERD
Patient Info: GERD. American Gastroenterological Association, July 2017
http://www.gastro.org/attachments/6320/All_GERD_2017.pdf

60 million suffer from heartburn
American College of Gastroenterology
http://patients.gi.org/topics/acid-reflux/

20 percent of Americans have been diagnosed with GERD
National Institute of Diabetes and Digestive and Kidney Diseases

CHAPTER 2

Gastric Juices
Each and every day, the human stomach produces about two liters of gastric juices, including hydrochloric acid (HCl), water, electrolytes, and other substances. www.interactivephysiology.com/login/digestdemo/misc/assignmentfiles/digestive/Secretion.doc

Hiatal Hernia and GERD

Obesity and GERD

Pregnancy and GERD
Medicines and GERD
https://www.mayoclinic.org/diseases-conditions/gerd/expert-answers/heartburn-gerd/faq-20058535

Smoking and GERD
https://www.webmd.com/heartburn-gerd/features/heartburn-tobacco-connection#1

Chronic Inflammation and GERD

CHAPTER 3

Esophageal Cancer Statistics:
Each year, approximately 17,000 people are diagnosed with esophageal cancer.
Cancer Facts & Figures 2018, American Cancer Society, pg. 4

There are two main types of esophageal cancer: adenocarcinoma and squamous cell carcinoma. In the U.S., the most common type of esophageal cancer is adenocarcinoma.
National Cancer Institute
https://www.cancer.gov/types/esophageal
Esophageal cancer risk factors
American Cancer Society
MayoClinic.com
https://www.mayoclinic.org/diseases-conditions/esophageal-cancer/symptoms-causes/syc-20356084

CHAPTER 5

Maintain a healthy weight: In a 2013 study published in the journal Obesity, women who lost just 5 to 10 percent of their body weight and men who shed 10 percent of their body weight experienced a reduction in their symptoms.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3853378/

Bed Elevation
A 2012 study in the Journal of Gastroenterology and Hepatology found that an elevation of just 8 inches reduced the amount of acid in the esophagus.

Smoking Cessation
A 2013 study involving nearly 30,000 people who had heartburn or acid reflux looked at the effects of quitting smoking on their symptoms. People who used antireflux medication at least weekly and who quit smoking experienced significant improvements in their symptoms. Their heartburn and reflux symptoms went from severe to minor or went away completely. Ness-Jensen E, Lindam A, Lagergren J, and Hveem K. Tobacco Smoking Cessation and Improved Gastroesophageal Reflux: A Prospective Population-Based Cohort Study: The HUNT Study. The American Journal of Gastroenterology 109:171-77(2014). doi:10.1038/ajg.2013.414
https://www.nature.com/articles/ajg2013414
Stress and GERD
In a 2015 study in Internal Medicine over 12,000 people with GERD said stress was the number-one factor that exacerbated their symptoms.

Tribe Support
In fact, in 2010 when researchers from Brigham Young University and University of North Carolina at Chapel Hill analyzed data from 148 studies involving over 300,000 participants, they found that people who lacked social support were 50 percent more likely to die in the study’s follow-up than people who enjoyed solid social ties.

“To maintain healthy habits is to forge a lifelong friendship with your body”
Partha Nandi MD FACP

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