

# Stress, stomach pain: diarrhea, constipation, ulcers & more

April 7 2023, by Shirley Eichenberger-Archer

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You may be struggling with stomach pain and digestive distress without

understanding why, thinking it might be something you ate.

Can stress cause [stomach pain](#)?

Stress, especially [chronic stress](#), can indeed increase your risk for gastrointestinal (GI) problems.

"Stress and anxiety are common causes of stomach pain and other GI symptoms," [Dr. Nina Gupta](#), a gastroenterologist at University of Chicago Medicine, said recently in an [article](#). Stress impacts the [digestive system](#) through the [nervous system](#), and can affect food movement and the gut's bacterial balance. Stress can also cause people to eat poorly, smoke and/or drink too much alcohol or caffeine—all habits that can trigger stomach pain.

Outside the brain, the gut has the greatest area of nerves. This component of the autonomic nervous system—known as the enteric nervous system—is sometimes referred to as the "second brain." According to [Harvard Health](#), "neurons lining the digestive tract signal muscle cells to initiate a series of contractions that propel food farther along, breaking it down into nutrients and waste."

The enteric nervous system communicates with the central nervous system and is known as the "brain-gut axis." This connection explains why stress may cause digestive problems.

According to the [American Psychological Association](#), stress may increase the risk for or exacerbate symptoms of the following gut diseases or dysfunction:

- Bloating, burping, gas
- Heartburn, acid reflux or [gastroesophageal reflux disease](#)

(GERD)

- Nausea and vomiting
- Diarrhea
- Constipation
- Ulcers
- Inflammatory bowel disease or irritable bowel syndrome

## **Bloating, burping, gas**

Stress can contribute to bloating, burping or gassiness by making swallowing foods difficult or increasing swallowed air, per the American Psychological Association.

It can also slow the digestive process, allowing gut bacteria to create gas. For treatment, gastroenterologist [Dr. Roshini Rajapaksa](#) of NYU Langone Health in New York City recommends exercise: "[Exercise actually helps your colon start moving and it moves that gas along, so it's not going to stay in your system](#)," she said recently. She also suggested to avoid chewing gum, using straws or drinking carbonated beverages, to keep you from swallowing extra air.

## **Heartburn, acid reflux or GERD**

Emotional stress can increase stomach acid production leading to heartburn and [acid reflux](#), according to [Harvard Health](#). It can also aggravate GERD, a disorder where acid rises up from the stomach into the esophagus. How to counteract that? Harvard Health experts suggest not smoking, eating a healthy diet, limiting coffee, tea and cola drinks, eating smaller meals, avoiding meals close to bedtime and using relaxation strategies like mindful meditation or deep breathing.

## **Nausea and vomiting**

"Your anxious feelings can translate into a whole range of gastrointestinal symptoms, including stress nausea, [abdominal pain](#), changes in bowel habits, and even stress vomiting," [Dr. Timothy Tramontana](#) said recently in a [Cleveland Clinic article](#). Tramontana recommends exercise, meditation and a healthy diet, with frequent smaller meals. Another option is to drink peppermint tea, which is known to settle the stomach.

## Diarrhea

Can stress cause diarrhea?

"[Stress] hormones affect the body, including the gut, to shift swiftly into stress mode," gastroenterologist [Dr. Christine Lee](#) said recently in a Cleveland Clinic [article](#). Adrenal glands release hormones like cortisol, serotonin and adrenaline. "There are more serotonin receptors in the intestinal tract than in the brain... [Serotonin] can make your stomach turn. It stimulates the intestines, creating waves of contractions in the colon."

"It can cause a constellation of symptoms of nausea, gas, bloating and crampy abdominal pains," Lee explained, noting that the release of stress causes the diarrhea. "Everything relaxes, and what was on hold is released," she said. "This counter-response can cause symptoms of nausea, pain, flushing, diarrhea or even sweating."

Treatment suggestions include mindful eating—a practice that involves slowing down and savoring each bite of food—and avoiding stressful environments when eating, like eating while driving. Listening to your body and eliminating waste when the urge occurs, rather than holding it in, also improves bowel movements.

## Constipation

Can stress cause constipation?

Constipation results when food moves too slowly through the gut. According to the [American Institute of Stress](#), when the body goes into fight-or-flight mode, it diverts blood flow away from the intestines that can cause intestinal movement to slow down, resulting in constipation. Another stress hormone, corticotrophin-releasing factor (CRF), slows down the intestines. Stress may also affect healthy gut bacteria, slowing digestion.

Treatment can include exercise, a healthy diet with plenty of fiber, maintaining proper hydration, allowing time when going to the bathroom and engaging in stress-relieving activities like listening to peaceful music, journaling or reading. If you have a history of trauma or are coping with anxiety or depression, professional therapy may be helpful.

## Stomach ulcers

Stomach ulcers can be made worse by stress.

Ulcers are open sores or raw areas in the lining of the stomach or intestine. A gastric ulcer is in the stomach; a duodenal ulcer is in the intestines. According to the [University of Pennsylvania Medicine](#), an imbalance between digestive juices and chemicals that protect the [stomach](#) lining causes ulcers, often from a bacteria called *Helicobacter pylori*. Stress does not cause ulcers, but it can exacerbate them.

Recommendations for treatment include professional care and lifestyle changes including smoking cessation, avoidance of alcohol and stress management.

## Gastrointestinal disorders

Gastrointestinal disorders include irritable bowel syndrome (IBS), which is a group of symptoms that includes chronic abdominal pain and bowel changes like diarrhea, constipation or both. The underlying cause is unknown. Inflammatory bowel disease (IBD) refers to two conditions, ulcerative colitis and Crohn's disease, and these are caused by a malfunctioning immune system, according to [Harvard Health](#). IBD symptoms include abdominal pain, cramping, fevers, diarrhea, and bloody bowel movements. The relationship between stress and both IBS and IBD is unclear, but stress can make symptoms worse. Using stress management techniques and consulting with your health care provider are recommended.

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