

Have You Tried Curcumin for Indigestion?

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STORY AT-A-GLANCE

- › If you experience chronic heartburn, a new study indicates that taking curcumin, the biologically active polyphenolic compound found in turmeric, may offer the same protection and relief as the popularly used proton pump inhibitor (PPI) Prilosec (omeprazole)
- › Despite knowing the serious side effects associated with PPIs, data show people are prescribed and are taking them at doses higher than recommended and for longer than is recommended by clinical guidelines
- › PPIs may increase your risk of a gut infection, vitamin B12 deficiency, heart disease, heart attack, bone fractures and events of cutaneous and systemic lupus erythematosus. In just one week of use, PPIs are associated with significant impairment in attention, executive function, visual memory and working and planning functions
- › Steps you can take to naturally reduce symptoms are to identify your trigger foods and eliminate them, don't eat within four hours of going to bed, consider elevating the head of the bed if you experience nighttime symptoms and don't wear clothing that is tight around the waist

Curcumin is the major biologically active polyphenolic compound of turmeric and the compound that gives the spice its yellow color. A 2023 study¹ published in the BMJ Journal finds that curcumin has yet another health benefit – it helps improve outcomes in people with functional dyspepsia.

In the past decade, researchers have discovered several health benefits from including turmeric and curcumin in your diet. As I reported in 2021, curcumin was among the **top five substances** researchers had found that could help improve COVID outcomes. However, on their own, turmeric and curcumin have poor bioavailability when taken orally.

Researchers have attributed this to the body's limited ability to absorb the compound and the body's ability to rapidly metabolize and eliminate it.² However, research has also demonstrated that when taken with different compounds, the bioavailability can improve and therefore may help enhance the multiple health benefits that are attributed to the compound.

For example, when taken with piperine, an alkaloid found in black pepper, the bioavailability of curcumin rises by 2,000%.³ Combining curcumin with bromelain, a protease from the pineapple stem, also “substantially increases the absorption of curcumin after oral administration.”⁴

Curcumin Is Potentially Effective for Functional Dysplasia

In the featured paper,⁵ 151 people completed the study. The group was broken into four groups. They either received two 250 mg capsules of curcumin four times daily, one placebo capsule, 20 mg of Prilosec (omeprazole) and two placebo pills four times daily, or turmeric plus Prilosec.

Prilosec is a proton pump inhibitor (PPI) that is commonly used to treat functional dyspepsia. Functional dyspepsia⁶ is a type of chronic indigestion in which you experience symptoms of feeling full or bloated during and after meals, heartburn and excessive burping.

The researchers were interested in how curcumin could affect the gastrointestinal tract, so no additional compounds were included to increase bioavailability. The study was a randomized, double-blind controlled trial that engaged participants with functional dyspepsia from university hospitals in Thailand.

The main outcome measure used was the Severity of Dyspepsia Assessment (SODA) score that was measured on Days 28 and 56 to evaluate pain, non-pain and satisfaction with treatment. Secondary outcomes measured included adverse events and severe adverse events.

At the start of the study, patients in all the groups had similar clinical characteristics and scores on the SODA. When evaluating the results, the researchers found that on Days 28 and 56, the SODA scores indicated a significant reduction in symptoms for all but the placebo group.

The improvements were greater by Day 56. The researchers reported no serious adverse events occurred during the study, but acknowledged that individuals who were overweight experienced some liver function deterioration while taking curcumin.⁷

The researchers acknowledged several limiting factors, including the size of the study, the short intervention and the lack of long-term data. Despite these limitations, the researchers found that "The strength of the study lies in its relevance to daily clinical practice, providing additional drug options in addition to PPIs alone, without added side effects." and "... the new findings from our study may justify considering curcumin in clinical practice."⁸

What You Eat Matters to Your Heartburn

While it might seem counterintuitive, one of the most common causes of heartburn is insufficient amounts of stomach acid. Your body uses stomach acid to properly digest food, breaking it down to absorb nutrients. Without enough stomach acid, undigested food can lead to indigestion and heartburn. Undigested food can also cause bacterial overgrowth.

Yet, if you use PPIs,⁹ they reduce your stomach acid even further, and over time may cause the glands in the stomach that secrete acid to stop working altogether. A 2017 study¹⁰ suggested that a Mediterranean diet that focuses on fruits, healthy fats, lean meat and vegetables could be as effective as PPIs in treating acid reflux symptoms.

The study involved 184 participants and found that after six weeks those who had changed their diet had a slightly greater reduction in reflux symptoms than those who used PPI medication. The study measured symptoms of laryngopharyngeal reflux during which stomach acid affects the tissue at the back of your throat.

Each of your dietary choices can play a role in heartburn symptoms, including beverages. For occasional symptom relief, alkaline water, also tested in the study, may help neutralize the acid and offer relief. You can add 1 teaspoon of baking soda to 4 ounces of orange juice and stir.

Because the reaction causes foaming, make sure the glass is only half full to avoid overflow. Another option is to add a squeeze of lemon or lime juice, or one-half to 1 teaspoon of baking soda in a glass of filtered water.

However, I would underscore the importance of using alkaline water only as a temporary solution and only if reflux is caused by excess stomach acid. The bottom line is that daily consumption of water that's either too acidic or too alkaline can upset the pH balance in your gastrointestinal tract and trigger heartburn.

PPIs Have Serious Side Effects

PPIs are associated with several significant side effects. For example, individuals who regularly use them can develop a vitamin B12 deficiency as they reduce your body's ability to absorb vitamin B12 from food.¹¹ Vitamin B12 is a water-soluble vitamin that's required for red blood cell formation, DNA synthesis, and for the development of the central nervous system.¹²

A 2017 study¹³ indicates PPIs may increase your risk for a gut infection. The study engaged a total of 564,969 PPI users and controls (188,323 PPI users and 376,646 controls) and found that those who took certain heartburn drugs had an increased risk of developing *C. difficile* and campylobacter bacterial infections related to the suppression of stomach acid production.

Research has also found that even short-term use of PPIs can contribute to cognitive changes and long-term use is linked to dementia. One 2015 study¹⁴ suggested PPIs were associated with clinically and statistically significant impairment in attention, executive function, visual memory and working and planning functions after just one week of use.

Finally, long-term use has also been linked to chronic kidney disease, heart disease and heart attacks and increased risk of bone fractures and events of cutaneous and systemic lupus erythematosus.¹⁵

Despite this evidence, a 2018 Iceland nationwide drug utilization study¹⁶ demonstrated a continued increase in overall use in the previous 13 years, particularly in older adults.

The researchers noted that “Patients were increasingly treated for longer durations than recommended by clinical guidelines and mainly with higher doses.”¹⁷ A 2022 study from Spain found similar results in which the researchers observed an increase in PPI use especially in a population older than 65 years, “despite the risk of cognitive decline and falls.”¹⁸

A 2023 literature review¹⁹ identified observational studies on PPI use in individuals older than 18 across several databases from 23 countries. The data indicated that of the people using PPIs, 63%, were younger than 65 years, 56% were female and roughly two-thirds were on high doses of PPIs, 25% of which for more than a year and 28% for more than three years.

After reviewing the global data, the researchers concluded, “Given the widespread use of PPIs and increasing concern regarding long-term use, this review provides a catalyst to support more rational use, particularly with unnecessary prolonged continuation.”²⁰

Steps to Help Naturally Reduce Symptoms

As I have written before, **PPIs have serious effects** on your health, so it is wise to first consider non-drug alternatives to reduce your symptoms. Since the foods you eat affect

your reflux and heartburn symptoms, you can begin by identifying the foods that trigger your symptoms and eliminating them from your diet.

If you are on a PPI, it is vitally important that you seek to wean from them as soon as possible with your physician. The best H2 blocker to use would be Pepcid (famotidine) which you will gradually wean from as well.

Foods that commonly increase heartburn²¹ include fried and processed foods, such as fast food, pizza, and potato chips or similar fried snack foods. Other foods that commonly make the list are tomato-based sauces, citrus fruits and carbonated beverages.

After you have eliminated the foods that trigger your symptoms, there are several more steps you can take. Steer clear of clothes that are tight around your waist or middle²² since it can increase the symptoms of heartburn.

When you sit down, tight clothes squeeze your abdominal area, increasing the risk your stomach contents will push through the sphincter at the top of the stomach and you'll experience reflux.

It's important to remember that for many people, heartburn gets worse at night after you are lying down to go to sleep.²³ It's easier for food to back up the esophagus without the push of gravity as you're standing.

Don't eat in the three to four hours before going to sleep at night and if you're still having trouble, try elevating the head of your bed approximately 6 inches. Don't simply sleep on extra pillows as that adds an extra strain to your neck and shoulders.

The angle of the pillows can also increase pressure on the abdomen, depending on the position. Instead, consider blocks sold specifically for elevating the bed, which stabilizes it, so it doesn't move at night.

Ginger has long been known to have a gastroprotective effect. Add two to three quarter-size slices of fresh ginger root to 2 cups of hot water and let it steep for several minutes.

Drink it approximately 20 minutes before eating your meal. If heartburn seems to plague you at night, try a cup of chamomile tea about an hour before going to sleep.²⁴

Sources and References

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