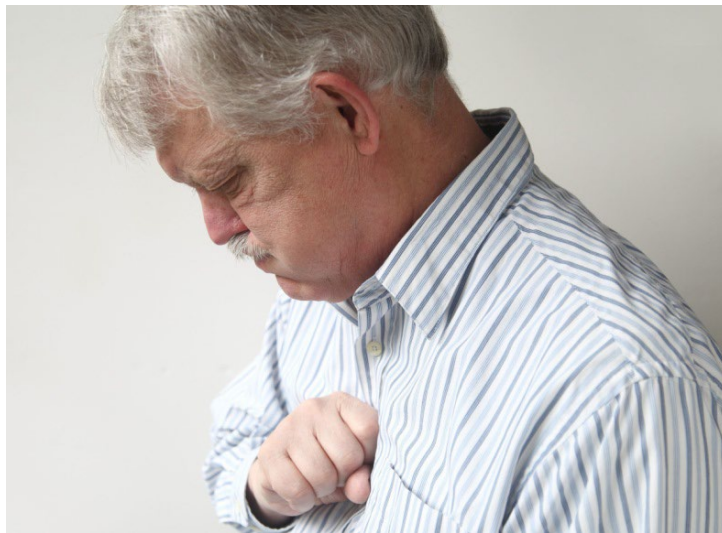


## Relief from Gastric Reflux

Gastric reflux, also variously known as gastro-oesophageal reflux (GERD), heart burn or acid reflux, is an extremely common health problem that affects the lower oesophageal sphincter, the ring of muscle between the oesophagus and stomach. Sixty percent of the adult population will experience some type of gastric reflux within a 12-month period.



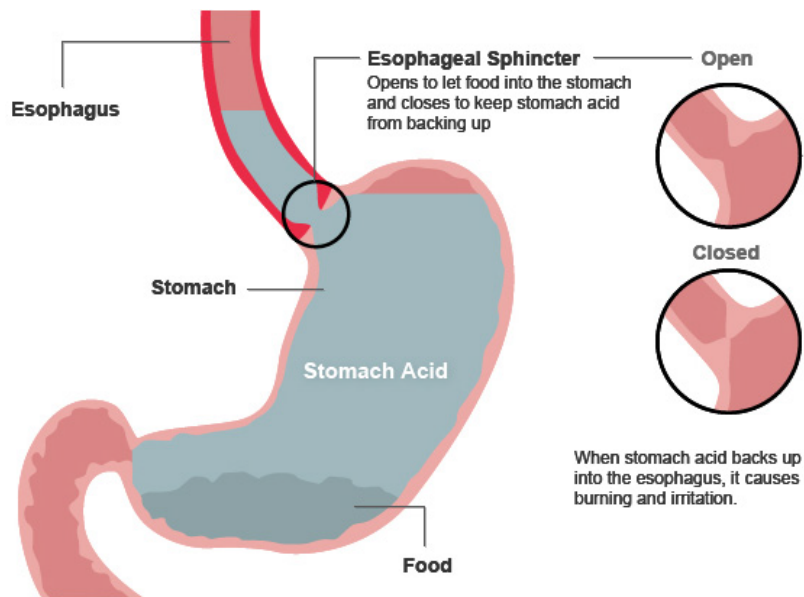
**The hallmark symptom of gastric reflux is “heartburn”– a burning sensation behind your breastbone that sometimes travels up your throat.**

Gastric reflux is thought to be caused by excessive amounts of acid leaking into the lower oesophagus from the stomach. Antacids and medications to block gastric acid production are often prescribed. While these may provide relief, excess acidity is not the problem, and this approach fails to address the underlying cause of the symptoms.

### Gastric reflux is caused by too little acid not too much

If you suffer from gastric reflux, chances are you take antacids or proton pump inhibitors to help control the symptoms. These medications either neutralise or “turn off” gastric acid production in the stomach interfering with proper digestion and nutrient absorption. Gastric reflux is almost always caused by low stomach acid. When the stomach isn't acidic enough, the lower oesophageal sphincter is not signalled to close properly and remains partially open. Stomach acid also protects you from harmful bacteria, so lowering stomach acid can leave you susceptible to food poisoning.<sup>1 2</sup>

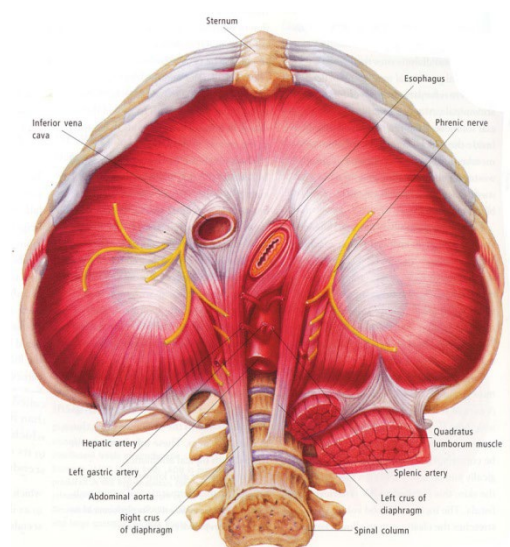
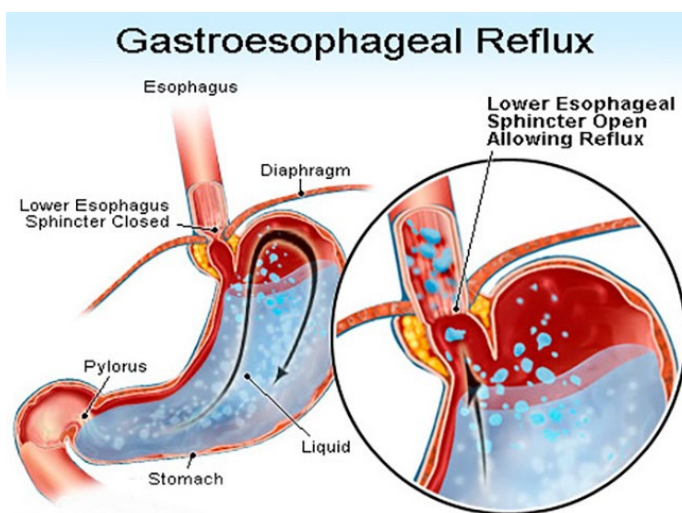
In addition to this, research has linked long-term use of PPIs to a host of health problems including higher risks for dementia, kidney disease, and heart attacks.<sup>34</sup> A 2017 study found people who use PPIs are twice as likely as non-users to develop stomach cancer. Risk rises 5-fold after one year and 8-fold after three years.<sup>5</sup> Common PPIs sold in New Zealand include omeprazole (Omezol, Losec), lansoprazole (Lanzol, Solox), pantoprazole (Panzop Relief) and rabeprazole (Prolox).



**Gastric reflux is caused by a faulty valve allowing gastric fluids to back up into the oesophagus.**

### Gastric reflux, hiatal hernia and your diaphragm

The primary cause of gastric reflux is commonly related to hiatal hernia. In other words, the valve that separates the oesophagus from the stomach, known as the lower oesophageal or cardiac sphincter, fails to close properly and gastric juices leak back causing the symptoms often described as heartburn. And this is where the diaphragm comes in.



**The Diaphragm: forget biceps – if you suffer from gastric reflux then tone this muscle. Diaphragm tone is essential for proper closure of the lower oesophageal sphincter. <sup>6</sup>**

**An Austrian study published in 2012 found that people practising 15 minutes of diaphragm breathing exercises a day reduced gastric reflux symptoms and medication use by 75%.<sup>7</sup>**

Poor diaphragm tone, over-breathing and mouth breathing are common features of dysfunctional breathing. Over-breathing and mouth breathing activate the upper chest muscles which, further exacerbates over-breathing. When this pattern exists the diaphragm often ends up in a chronically descended and flattened position and cannot relax, a state known as paradoxical breathing.

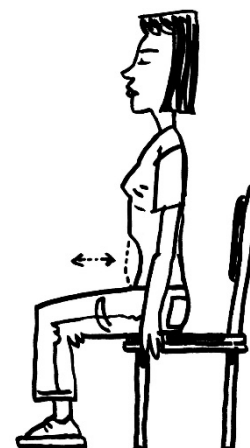
Correct use of the diaphragm helps correct paradoxical breathing and tones the diaphragm. A toned diaphragm is essential for proper closure of the valve at the top of the stomach. This helps correct the hiatal hernia, unlike proton pump inhibitors that only suppress acid production.

Furthermore, over-breathing and paradoxical breathing contribute to keeping the Autonomic nervous system (ANS) in sympathetic dominance (flight or fight), which contributes to indigestion. Diaphragm breathing exercises help normalise your breathing and turn off the fight or flight response, easing digestion.

The Buteyko breathing retraining programme focuses on normalising your breathing pattern and restoring functional diaphragmatic breathing. The breathing exercises are also effective in reducing stress which is a common trigger in gastric reflux. In addition to daily breathing practices, it will help to determine foods that might be contributing to your symptoms. These can include alcohol, caffeine, refined grains, seed oils and dairy.

### An exercise to relieve gastric reflux and tone the diaphragm

Sit with a relaxed, upright posture on a stable, firm chair. Edge forward so that the 'sitting bones' are near the front edge of the chair as shown in the accompanying figure. Upper legs parallel with the floor, knees slightly lower than the hips and directly over the ankles. Maintain this posture and practise breathing gently into the area below the sternum and above the navel. You may feel this gentle breath subtly billowing forward into the belly or outward into the side ribs, or into the mid to low back. Try not to exaggerate or balloon the breath, just allow yourself to be effortlessly breathed, exercising your diaphragmatic breath. Practise this exercise for five minutes 2-3 times each day to help tone the diaphragm and engage the parasympathetic nervous system which aids digestion.



Breathe gently and rhythmically through your nose. Try to breathe as softly and gently as possible. Maintain a state of relaxation throughout the exercise. Try to avoid controlling the breath.

### When to do the breathing exercise

The exercise is best done on waking, before meals and just before sleeping. It is also useful to do after physical exercise to help restore a resting heart rate. You should wait at least one hour after meals before doing the exercise.

## A note about getting started

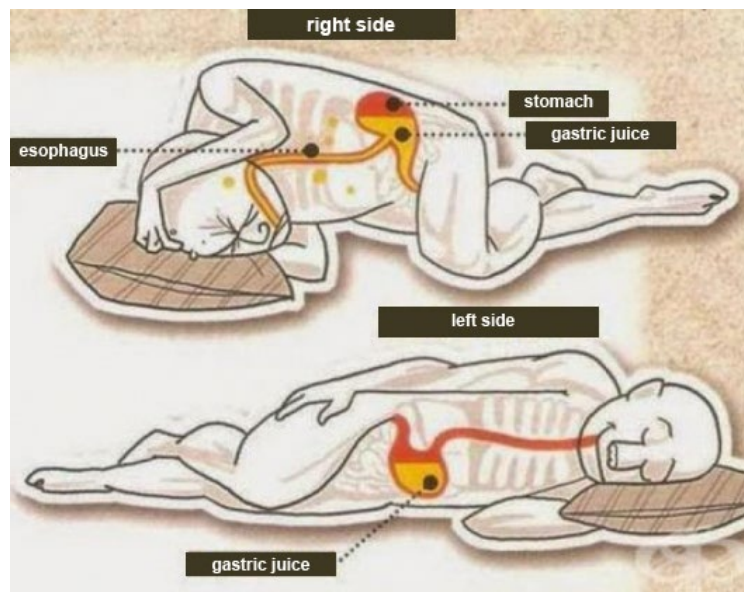
The diaphragm, like any muscle that starts to be used more, may ache initially. This can continue for a few days and may be slightly uncomfortable, especially if you have had a habitual upper chest breathing habit for many years. To manage this, you may need to go very gently. As suggested in the guidelines above, allow the diaphragm to engage naturally rather than forcing it.

## Additional help for gastric reflux

### Sleeping position

To relieve gastric reflux when sleeping it may help to sleep with head elevated. This allows gravity to keep the stomach's contents where they belong. Studies have shown that sleeping on your right side can aggravate reflux while sleeping on the left tends to calm it.<sup>8 9</sup>

Breathing is also eased in this position.



**Sleeping on the left-side puts the junction between stomach and oesophagus above the level of gastric acid.**

### Dietary guidelines

Eating processed foods, refined grains and sugars can exacerbate gastric reflux as it will upset the bacterial balance in your stomach and intestine. Reducing or eliminating food triggers such as alcohol, caffeine, dairy, or citrus may help. Food triggers can be individual, so it is advisable to establish which foods aggravate your symptoms through a process of elimination. Overeating and eating immediately before physical exercises or close to bedtime can also exacerbate gastric reflux.

As mentioned earlier, gastric reflux is not caused by too much acid in your stomach; it's usually a problem with too little acid. One of the simplest strategies to encourage your body to make sufficient amounts of hydrochloric acid (stomach acid) is to consume enough of the raw material.

One of the simplest, most basic food items that many neglect is quality unrefined sea salt.

## A note about withdrawing PPIs (proton pump inhibitors)

Withdrawal from PPIs can lead to severe rebound acid secretion, a complication that can force users to become dependent on them.<sup>10</sup> Untreated, gastric reflux can lead to complications including Barrett's oesophagus, oesophagitis, oesophageal ulcers, stricture, or oesophageal cancer.<sup>11</sup> For these reasons you should consult your GP or specialist before making any changes to your medication. When withdrawing from long-term use of PPIs it is essential that you do so gradually to avoid recurrence of your symptoms.

## About the Buteyko breathing course

A Buteyko breathing retraining course is recommended for anyone who habitually breathes through the mouth, snores or suffers from sleep apnoea, insomnia, asthma, chronic nasal congestion, chronic cough, frequent respiratory infections, chronic fatigue, gastric reflux, cardiovascular problems, frequent headaches, anxiety or panic attacks.

The course includes six sessions in total: four 60-90-minute sessions in the first week of the programme, one group session the following week, and one individual session at approximately 6 weeks.

The course fee is \$795 (including GST). An early bird rate of \$750 is available if paid before the course. A discounted course fee of \$590 is offered to additional family members enrolled on the same course.

The fee covers all six sessions and support as needed for six weeks from commencement of the programme. Participants also receive a course manual and access to downloads in the [client page](#) on our website. For the course timetable and bookings visit our [website](#) or contact the clinic email: [info@buteykobreathing.nz](mailto:info@buteykobreathing.nz) Tel: 09-360 6291.

Glenn White

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## References

<sup>1</sup> [Bavishi C Dupont HL Alimentary Pharmacology & Therapies 2011; 34: 1269-1281](#)

<sup>2</sup> [Hasing RJ et al Eur J Epidemiol \(2016\) 31](#)

<sup>3</sup> [Goodman B Research Evaluates Possible Link to PPI Risks WebMD](#)

<sup>4</sup> [Northuis CA et al Neurology Oct 31, 2023](#)

<sup>5</sup> [Cheung KS et al BMJ Gut Jnl. 2017-314605](#)

<sup>6</sup> [Rosen, RD., Ryan W. Stat Pearls Publishing 2021](#)

<sup>7</sup> [Eherer AJ et al 2012 Am J Gastroenterology](#)

<sup>8</sup> [Katz LC et al J Clin Gastroenterol. 1994 Jun;18](#)

<sup>9</sup> [Kaltenbach T Arch Intern Med. 2006;166\(9\)](#)

<sup>10</sup> [Nordqvist C Medical News Today 24 Aug 2011](#)

<sup>11</sup> [Clarrett D.M. Hachem C. Missouri Medicine 2018 May -June 115 \(3\)](#)