

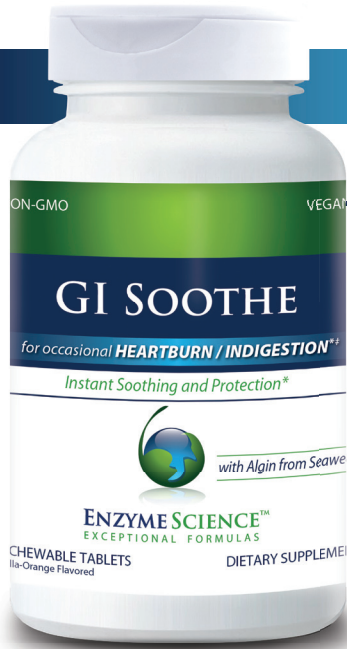


**ENZYME SCIENCE™**  
EXCEPTIONAL FORMULAS

# GI SOOTHE

for occasional **HEARTBURN / INDIGESTION\*\***

*With an Instant Soothing Effect\**



*Indigestion and occasional heartburn are some of the most common digestive complaints among 25-40% of Americans, with millions struggling with symptoms on a weekly basis and is among the most frequent reason for doctors visits.<sup>1</sup> Traditional methods such as antacids provide temporary relief by blocking stomach acid. However, they can often lead to comorbidities and a long-term reduction of acid secretion.<sup>2</sup>*

## SUPPLEMENT FACTS

Calories	10	
Total Carbohydrate	3 g	1%
Sugar Alcohols (Xylitol & Sorbitol)	<1 g	**
Calcium (from calcium carbonate)	160 mg	12%
Proprietary Blend	550 mg	**
Alginic acid, Prickly Pear Cactus (cladodes) ( <i>Opuntia ficus indica</i> ) extract, Trimethylglycine (Betaine anhydrous)		

**OTHER INGREDIENTS:** Natural orange flavor, natural vanilla flavor, rice concentrate

**CONTAINS NO:** Gluten, milk, casein, soy, egg, artificial colors or flavors.

**RECOMMENDED DOSAGE:** Chew 1 - 2 tablets after a meal that causes discomfort. Take at least one hour after any medications. Do not exceed 6 tablets daily. Natural speckling may occur.

## OUR QUALITY



GLUTEN FREE



DAIRY FREE



SOY FREE



NO FILLERS



VEGAN



NON  
GMO

## THE DIGESTIVE PROCESS

The digestive tract is 16ft in length and includes the oral cavity, esophagus, stomach, and small and large intestines. The gastrointestinal tract is made up of the lumen (the interior passageway which is surrounded by multiple layers, including the innermost layer, the mucosa. The mucosal epithelium allows nutrients to be absorbed and digested; it also serves as a barrier to unwanted food, bacteria and toxins. Upon consumption, food is mixed with saliva, and a bolus is formed, passing into the esophagus. To swallow food, the esophageal sphincter relaxes, allowing the esophagus to open. As the bolus of food moves down the esophagus, both voluntary and involuntary muscles are stimulated by parasympathetic nerves. Peristalsis, the constriction and relaxation of muscles, create wave-like movements to push the bolus into the stomach. The gastroesophageal sphincter act as circular muscles allowing food to pass from the esophagus into the stomach. Pressure within the stomach keeps the sphincter closed; this is important, so food particles and stomach acid does not flow back (reflux) into the esophagus.

Several different factors which can relax the lower esophageal sphincter (LES). This can include: certain foods such as chocolate, peppermint, high-fat or fried foods and highly acidic foods such as certain citrus fruits. Obesity, pregnancy, lying down and other lifestyle factors can also play a role in allowing partially digested foods flow back up into the esophagus.

\*For relief of occasional heartburn. Not intended for frequent heartburn sufferers.

**WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## THE ROLE OF HYDROCHLORIC ACID

Once the bolus of food successfully passes through the gastroesophageal sphincter, it enters the stomach for further breakdown and assimilation. Gastric juice is made up of digestive enzymes and hydrochloric acid that is secreted from gastric parietal cells. Hydrochloric acid is responsible for denaturing proteins, acting as bactericide agent, activating key enzymes which break down foods into their simplest forms. Once macronutrients are broken down, our body absorbs and utilizes them for energy, cell repair, and growth. Hydrochloric acid is needed to absorb nutrients such as calcium, zinc, vitamin B12, and iron; it also acts as a bactericide agent – protecting us from any unwanted bacteria ingested.

Reduced or suppressed hydrochloric acid (HCl) secretion over time can slow down the entire digestive process. Without gastric acid present, enzymes can not be activated; food can remain undigested and ultimately lead to poor nutrient absorption. Symptoms such as abdominal discomfort, indigestion, and lack of energy are all common. Since hydrochloric acid serves as the first line of defense, low stomach acid can increase exposure to food-borne or water-borne pathogens.

## NATURAL BUFFERING AGENTS

Enzyme Sciences' GI Soothe is a comprehensive formula that combines the soothing benefits of alginate with natural buffering agents, calcium carbonate, trimethylglycine, and prickly pear cactus.

Alginate, also called alginic acid, is a compound found within the cell walls of brown algae. Alginate has a unique ability to hold upwards of 200-300 times its weight in water, making it a naturally gelling substance.<sup>3</sup> The therapeutic benefits of alginate are

attributed to the protective coating it forms within the esophagus, throat, and stomach.<sup>4</sup> In clinical studies, alginate has been shown to support healthy digestion, with one study showing alginate provides similar clinical outcomes compared to traditional therapies.<sup>5</sup> Alginate forms a thick gel-like pocket around the gastric acid formation; with the help of calcium carbonate, alginate sits on top of any contents within the stomach acting as a barrier.<sup>6</sup> This protection barrier has a few hours of life, allowing the stomach to break down and digest food contents properly.

Enzyme Sciences' formula combines alginate and natural buffering agents: prickly pear cactus, trimethylglycine, and calcium to enhance the protective properties of these ingredients. Prickly pear cactus (*optunia*) is an extract from the flattened stems of the plant, known as the cladodes.<sup>7</sup> The extract of *optunia* is naturally high in fiber and rich in the flavonoids kaempferol and quercetin.<sup>8</sup>

It is recommended to take GI Soothe following meals and/or 30 minutes before bedtime. These chewable tablets mix with saliva for faster action and improved taste when compared to other formulas.

## GI SOOTHE ACHIEVING OPTIMAL HEALTH

In optimal health, the body produces gastric acid so key enzymes can be released and food can be broken down properly. GI Soothe supports this natural digestive process by helping shield the delicate lining of the esophagus. Enzyme Science formulates with a synergistic combination of calcium, alginic acid, prickly pear cactus, and betting to release any irritation and support healthy esophageal tissues. This combination makes it the right choice when it comes to digestive health.

## REFERENCES

- <sup>1</sup> Leiman DA, Riff BP, Morgan S, et al. Alginate therapy is effective treatment for GERD symptoms: a systematic review and meta-analysis. *Dis Esophagus*. 2017;30(5):1-9.
- <sup>2</sup> Clarrett DM, Hachem C. Gastroesophageal Reflux Disease (GERD). *Mo Med*. 2018;115(3):214-218.
- <sup>3</sup> Houghton D, Wilcox MD, Chater PI, Brownlee IA, Seal CJ, Pearson JP. Biological activity of alginate and its effect on pancreatic lipase inhibition as a potential treatment for obesity. *Food Hydrocoll*. 2015;49:18-24.
- <sup>4</sup> Leiman DA, Riff BP, Morgan S, et al. Alginate therapy is effective treatment for GERD symptoms: a systematic review and meta-analysis. *Dis Esophagus*. 2017;30(5):1-9.
- <sup>5</sup> De Ruigh A, Roman S, Chen J, Pandolfino JE, Kahrilas PJ. Gaviscon Double Action Liquid (antacid & alginate) is more effective than antacid in controlling post-prandial oesophageal acid exposure in GERD patients: a double-blind crossover study. *Aliment Pharmacol Ther*. 2014 Sep;40(5):531-7.
- <sup>6</sup> Salvatore S, Rippepi A, Huysentruyt K, et al. The Effect of Alginate in Gastroesophageal Reflux in Infants. *Paediatr Drugs*. 2018;20(6):575-583.
- <sup>7</sup> Kim SH, Jeon BJ, Kim DH, et al. Prickly pear cactus (*Opuntia ficus indica* var. *saboten*) protects against stress-induced acute gastric lesions in rats. *J Med Food*. 2012;15(11):968-973.
- <sup>8</sup> Del Socorro Santos Díaz M, Barba de la Rosa AP, Héliès-Toussaint C, Guéraud F, Nègre-Salvayre A. *Opuntia* spp.: Characterization and Benefits in Chronic Diseases. *Oxid Med Cell Longev*. 2017;2017:8634249.

\*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.