

GastroEase+™

Recommended Use:

- ▶ Gastritis
- ▶ Peptic Ulcer Disease
- ▶ Esophageal reflux (GERD)
- ▶ H. Pylori

Blending the wisdom of traditional herbal medicines together with the knowledge of modern science resulted in the creation of Biomed GastroEase+™. This synergistic combination of whole plant extracts (mastic gum, DGL, marshmallow root, chamomile, fennel) has been designed to provide the integrated practitioner with the natural tools to help those patients with H pylori induced peptic ulcer disease, gastritis, and GERD.

It is estimated that every year approximately half a million individuals in the United States develop peptic ulcer disease.¹ It is assumed that proportionally the same number of Canadians develop this condition. The two most common precipitating factors are excess NSAID use and/or infection with the Helicobacter pylori bacteria. It is estimated that 70% of all gastric and 90% of all duodenal ulcers are a result of H. pylori infection.² While several clinical studies have shown that triple therapy (e.g. Ranitidine bismuth citrate, amoxicillin and clarithromycin) can be highly effective in eliminating the primary infection

(90–99%),³ increasing clinicians (and patients) are seeking natural alternatives which do not have the side effects associated with these medications.

Mastic gum

Mastic gum, a resin derived from the tree Pistacia lentiscus, is the key ingredient in GastroEase+. An in vitro study has shown that mastic gum killed 50% and 90% of the H. pylori strains tested at concentrations of 125 microg/ml and 500 microg/ml respectively.⁴ Mastic gum's anti-ulcer activity has also been confirmed in a double-blind controlled trial, where results showed that 1,000 mg of mastic gum daily provided 80% symptomatic relief and healed duodenal ulcer in 70% of the cases compared to placebo ($p < 0.01$).⁵

Marshmallow and DGL (Deglycyrrhizinated licorice)

The anti-ulcer actions of mastic gum are enhanced by the anti-inflammatory actions of DGL (deglycyrrhizinated licorice). Several studies have demonstrated that DGL assists in the healing of both gastric and duodenal ulcers.^{6,7} Marshmallow (Althea officinalis) root has been added to the formula as it contains 5 to 10% mucilage polysaccharides. The demulcent, emollient, and vulnerary properties of DGL and Marshmallow root account for their traditional uses in treating inflammation of the gastric mucosa.⁸



Medicinal Ingredients:

Each vegetarian capsule contains:

Mastic gum (Pistacia lentiscus)	175 mg
Deglycyrrhizinated licorice	150 mg
Marshmallow root (Althea officinalis)	100 mg
German chamomile (Matricaria chamomilla)	100 mg
Fennel seed (Foeniculum vulgare).	50 mg

Non-Medicinal Ingredients: Magnesium stearate, silicon dioxide.

Cautions/Warnings: Hypersensitivity (e.g. allergy) has been known to occur, in which case, discontinue use. Consult a health care practitioner prior to use if you have diabetes mellitus, Crohn's disease; or are taking hypoglycaemic agents or hypolipidemic agents. Do not use if you have a known allergy to members of the Anacardiaceae family, such as pistachio.

Recommended dose (Adult): Take two capsules three times a day with food or as directed by a health care practitioner. NPN: 80037983 • 120 capsules.



Chamomille

Chamomille (*Matricaria chamomilla*), like marshmallow, has known anti-inflammatory, anti-spasmodic, and anti-peptic actions. These actions are likely as result of chamomile's key flavonoid constituents, apigenin. Apigenin has known anti-spasmodic actions that has proven to be three times more potent than the drug papaverine when tested in in vitro models.⁹ In addition to apigenin, the volatile oils alpha bisabolol and chamazulene are responsible for chamomile's anti-inflammatory actions.¹⁰ In another in vitro study bisabolol was shown to reduce the proteolytic activity of pepsin by approximately 50 percent.¹¹

Chamazulene, the agent that gives chamomile tea its bluish tinge, has in experimental in vitro evidence shown to inhibit the production of pro-inflammatory leukotriene B4.¹²

Fennel

Fennel (*Foeniculum vulgare*) has been included in this formula for its carminative and anti-spasmodic actions. A recent controlled human study has confirmed that the administration of fennel seed emulsion is superior to placebo in the treatment of infantile colic.¹³ This information is for professional use only. This product is not intended to diagnose, treat, or prevent any disease.

References:

1. Graham DY, Rakel RE. Peptic ulcer disease. *Postgraduate Med* 1999; 3:93.
2. Graham DY, Rakel RE, et al. Scope and consequences of peptic ulcer disease. *Postgraduate Med* 1999; 3:100-12.
3. Ian LP Beales. Efficacy of *Helicobacter pylori* eradication therapies: a single centre observational study. *BMC Gastroenterology* 2001 1:7.
4. Marone P, Bono L, Leone E, Bona S, Carretto E, Perversi L. Bactericidal activity of *Pistacia lentiscus* mastic gum against *Helicobacter pylori*. *J Chemother*. 2001;13:611-4.
5. Al-Habbal MJ, Al-Habbal Z, Humez FU. A double-blind placebo controlled clinical trial of mastic and placebo in the treatment of duodenal ulcer. *Clin Exp Pharmacol Physiol* 1984;11:541-4.
6. Tewari SN, Trembalowicz FC. Some experience with deglycyrrinated liquorice in the treatment of gastric and duodenal ulcers with special reference to its spasmolytic effects. *Gut* 1968;9:48-51
7. D'Imperio N, Piccari GG, Sarti F, et al. Double-blind trial in duodenal and gastric ulcers. *Acta Gastro Enterologica Belgica* 1978;41:427-34.
8. Barnes J, Anderson LA, Phillipson JD. *Herbal Medicines: A Guide for Health Care Professionals* 2nd ed. London: Pharmaceutical Press, 2002:331.
9. Mann C, Staba EJ. The chemistry, pharmacology, and commercial formulations of chamomile. In: Craker LE, Simon JE, eds. *Herbs, Spices, and Medicinal Plants: Recent Advances in Botany, Horticulture, and Pharmacology* Vol 1. Arizona, USA:Oryx Press, 1986:235-280.
10. Jakovlev V, von Schlichtegroll A. [On the inflammation inhibitory effect of (-)-alpha-bisabolol, an essential component of chamomilla oil] [In German] *Arzneimittelforschung*. 1969;19:615-6.
11. Isaac O, Thiemer K. [Biochemical studies on camomile components/III. In vitro studies about the antipeptic activity of (-)-alpha-bisabolol (author's transl)] [In German] *Arzneimittelforschung*. 1975 ;25:1352-4.
12. Safayhi H, Sabieraj J, Sailer ER, Ammon HP. Chamazulene: an antioxidant-type inhibitor of leukotriene B4 formation. *Planta Med*. 1994;60:410-3.
13. Alexandrovich I, Rakovitskaya O, Kolmo E, Sidorova T, Shushunov S. The effect of fennel (*Foeniculum vulgare*) seed oil emulsion in infantile colic: a randomized, placebo-controlled study.
14. *Altern Ther Health Med*. 2003;9:58-61. Zhu M, Wong PY, Li RC. Effect of oral administration of fennel (*Foeniculum vulgare*) on ciprofloxacin absorption and disposition in the rat. *J Pharm Pharmacol*. 1999;51:1391-6.