

# Gastritis and *H. pylori*

Improve stomach and gut mucosal health with demulcent and anti-inflammatory herbs and alkaline bicarbonate (HCO<sub>3</sub><sup>-</sup>) minerals. This combination works to decrease inflammation, protect stomach mucosa, and improve symptoms of functional dyspepsia including indigestion, gas, belching, and bloating. The anti-bacterial and anti-ulcer herbs in GastroEase also provide support in cases of gastritis and *H. pylori*.



Remedy	Phase/Dose	Monday to Sunday
GastroEase	2 capsules	three times a day away from food/medication
Basictab or	2 tablets	twice daily with warm water on an empty stomach
Pleo Alkala N Powder	1/2 scoop	twice daily with warm water on an empty stomach

## GastroEase

**Recommended dosage (adult):** 2 capsules three times daily. Take away from food and medication (1 hour before or 2 hours after meals/medication). Consult a healthcare professional for use beyond 2 weeks.

GastroEase contains traditional herbs and demulcents to strengthen and protect the stomach mucosa and gastrointestinal tract. The herbs work to reduce inflammation and soothe irritated and inflamed mucous membranes in cases of gastritis, burning sensation in the stomach, gastric or duodenal ulcers, and functional dyspepsia (indigestion, gas, belching, bloating).

GastroEase is specifically designed to aid in cases of gastritis and *H. pylori* induced peptic ulcer disease.

### The herbs in GastroEase are traditionally used in herbal medicine for:

- **Fennel seed** – digestive disturbances, mild spasmodic GI complaints, bloating, flatulence<sup>1</sup>
- **Mastic Gum** – functional dyspeptic disorders, anti-ulcer, anti-inflammatory, symptoms associated with gastric or peptic or duodenal ulcers, protect peptic mucosa, anti-bacterial, *Helicobacter pylori*<sup>2,3,4,5,6,7,8</sup>
- **Deglycyrrhizinated licorice** – demulcent, anti-inflammatory, gastritis, inflammation of the GI tract, abdominal pain and burning sensation in the stomach, gastric and duodenal ulcer.<sup>9,10,11</sup>
- **Marshmallow root** – demulcent, gastritis, inflammation of the gastrointestinal mucosa.<sup>9,12,14,15</sup>
- **German chamomille** – inflammatory conditions of the gastrointestinal tract, digestive upset including dyspepsia, flatulence, bloating, belching<sup>9,10,12,13</sup>

**Key Features:** Gastrointestinal mucosa, gastritis, anti-inflammatory, indigestion, functional dyspepsia (gas, belching, bloating), anti-bacterial, *H. pylori* infection.

## Basictab or Pleo Alkala N Powder

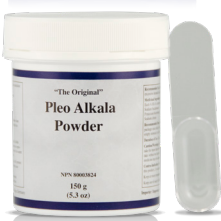
**Recommended dosage (adult):** 2 tablets (Basictab) or ½ scoop (Pleo Alkala) twice daily. Take with warm water on an empty stomach. Use for three to six months.

Basictab and Pleo Alkala N Powder are alkaline supplements containing essential alkaline mineral salts, including sodium bicarbonate and potassium bicarbonate, for acid-base (pH) balance.

Inflammation of the stomach (gastritis) affects the integrity of the stomach mucosal lining, leading to symptoms of indigestion and dyspepsia (gas, belching, bloating) or more serious conditions including gastric ulcers and *H. pylori* infections.<sup>16</sup> When the integrity of the gastric mucosa is damaged, interstitial bicarbonate (HCO<sub>3</sub><sup>-</sup>) flows into the gastric lumen for mucosal repair. When there are low levels of systemic and intramucosal bicarbonate (HCO<sub>3</sub><sup>-</sup>) and high levels of intracellular acidosis in the gastric lumen, the gastric mucosa becomes susceptible to ulceration.<sup>17,18</sup> An overall depletion of bicarbonate (HCO<sub>3</sub><sup>-</sup>) reserves in the body results in the accumulation of acid, otherwise known as metabolic acidosis. The human body has buffering systems to prevent acid accumulation, however over time an acidogenic (acidic) diet that is high in animal protein and low in alkaline fruits and vegetables can slowly deplete the buffering system.<sup>19,20,21</sup>

Alkaline therapy with NaHCO<sub>3</sub> (sodium bicarbonate) supplementation increases serum bicarbonate levels in the blood and replenishes bicarbonate (HCO<sub>3</sub><sup>-</sup>) reserves. Recommendations to reverse metabolic acidosis, increase systemic bicarbonate (HCO<sub>3</sub><sup>-</sup>) levels, and restore normal pH levels include alkaline supplementation therapy, a diet high in alkaline foods, and a reduced protein diet.<sup>19,22,23,24</sup>

**Key Features:** Alkaline salts, bicarbonate buffers, sodium and potassium bicarb, diet induced acidosis, metabolic acidosis, acid-base balance.



## References:

1. EMEA 2007. European Medicines Agency. Community Monograph on *Foeniculum vulgare* Miller. London (UK): EMEA Committee on Herbal Medicinal Products (HMPC), 6 August 2007. [Accessed 2018 August 14]. Available from: [http://www.ema.europa.eu/docs/en\\_GB/document\\_library/Herbal\\_Community\\_herbal\\_monograph/2009/12/WC500018540.pdf](http://www.ema.europa.eu/docs/en_GB/document_library/Herbal_Community_herbal_monograph/2009/12/WC500018540.pdf)
2. [https://www.ema.europa.eu/en/documents/herbal-report/final-assessment-report-pistacia-lentiscus-l-resin-mastic\\_en.pdf](https://www.ema.europa.eu/en/documents/herbal-report/final-assessment-report-pistacia-lentiscus-l-resin-mastic_en.pdf)
3. 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.
4. Dabos, K.J., Sfika, E., Viatta, L.J., Giannikopoulos, G. The Effect of Mastic Gum on *Helicobacter pylori*: A Randomized Pilot Study. *Phytomedicine*. 2010 Mar;17(3-4):296-9.
5. 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 Dec;13(6):611-4.
6. Paraschos, S., Mitakou, S., Skaltsounis, A-L. Chios Gum Mastic: A Review of Its Biological Activities. *Curr Med Chem*. 2012;19(14):2292-302.
7. Pachi, V.K., Mikropoulou, E.V., Gkiouvetidis, P., et al. Traditional Uses, Phytochemistry and Pharmacology of Chios Mastic Gum (*Pistacia lentiscus* var. Chia, Anacardiaceas): A Review. *J Ethnopharmacol*. 2020 May 23;254:112485.
8. Kakagia, D., Papalois, A., Lambropoulou, M., et al. The Use of *Pistacia Lentiscus* Chia Resin Versus Omeprazole in Protecting Male Rats Peptic Mucosa Against Cold Restraint Stress. *J Crit Care Med (Targu Mures)*. 2020 May 6;6(2):100-110.
9. Blumenthal M, Goldberg A, Brinkmann J, editors. 2000. *Herbal Medicine: Expanded Commission E Monographs*. Boston (MA): Integrative Medicine Communications.
10. Bradley PR, ed. *British herbal compendium*, 1992. Vol. 1. Bournemouth, British Herbal Medicine Association. pp. 145-148.
11. Wichtl M., Bisset N.G., ed *Herbal Drugs and Phytopharmaceuticals*. Medpharm Scientific Publishers; Stuttgart: 1994. pp. 486-489.
12. Mills S, Bone K. 2005. *The Essential Guide to Herbal Safety*. Amsterdam (NL): Elsevier.
13. ESCOP 2003: European Scientific Cooperative on Phytotherapy Scientific Committee. 2003. *ESCOP Monographs: The Scientific Foundation for Herbal Medicinal Products*, 2nd edition. Exeter (GB): European Scientific Cooperative on Phytotherapy and Thieme.
14. Wichtl M, editor. *Herbal Drugs and Phytopharmaceuticals: A Handbook for Practice on a Scientific Basis*. 3rd edition. Stuttgart (DE): Medpharm Scientific Publishers; 2004.
15. Hoffmann D. *Medical Herbalism: The Science and Practice of Herbal Medicine*. Rochester (VT): Healing Arts Press; 2003.
16. *Gastritis and Gastropathy*. US Department of Health and Human Services: National Institute of Diabetes and Digestive and Kidney Diseases. Aug 2019.
17. Kivilaakso, E., Kiviluoto, T., Mustonen, H., Paimela, H. Gastric Mucosal Acid-Base Balance. *J Intern Med Suppl*. 1990;732:63-8.
18. Silen, W. Leakage of HCO<sub>3</sub>- and Mucosal Restitution. *J Intern Med Suppl*. 1990;732:59-62.
19. Pizzorno, J., Frassetto, L.A., Katzinger, J. Diet-Induced Acidosis: Is It Real and Clinically Relevant? *Br J Nutr*. 2010 Apr;103(8):1185-94
20. Robey, I. F. Examining the Relationship Between Diet-Induced Acidosis and Cancer. *Nutr Metab (Lond)*. 2012; 9: 72.
21. DiNicolantonio, J.J., O'Keefe, J. Low-Grade Metabolic Acidosis as a Driver of Chronic Disease: A 21st Century Public Health Crisis. *BMJ Journals*. Oct 2021;8(2)
22. Abramowitz, M.K., Melamed, M.L., Bauer, C., Raff, A.C., Hostetter, T.H. Effects of Oral Sodium Bicarbonate in Patients with CKD. *Clin J Am Soc Nephrol*. 2013 May;8(5):714-20.
23. Siener, R. Dietary Treatment of Metabolic Acidosis in Chronic Kidney Disease. *Nutrients*. 2018 20;10(4):512.
24. Angeloco, L,R,N, de Souza, G.C.A, Romao, E, A., Chiarello, P.G. Alkaline Diet and Metabolic Acidosis: Practical Approaches to the Nutritional Management of Chronic Kidney Disease. *J Ren Nutr*. 2018 May;28(3):215-220.