CHEWABLE

# PEPZINGI®

## ZINC-CARNOSINE

*Promotes stomach & digestive health*

endurance products COMPANY

Since 1978

## WHAT IS IT?

PepZinGI® Zinc-Carnosine is a chewable dietary supplement featuring a patented form of zinc, backed by decades of clinical research, that helps fortify the protective mucous membrane lining the stomach and intestines.

## HOW DOES IT WORK?

PepZinGI exerts its effects directly on the cells of the stomach lining. This unique chelate form has the ability to dissociate in the stomach at a slower rate. This prolonged existence allows it to maintain its gastric healing effect over a longer period of time and support the natural defense mechanisms of the stomach.

PepZinGI is approved in Japan as an anti-ulcer drug of membrane protection type. Its anti-ulcer activity is attributed to its ability to remain in stomach juice without rapid dissociation and attach to ulcerous lesions where it releases L-carnosine and zinc to heal the ulcer. Its clinical use has been shown to be well tolerated and highly effective, including an inhibitory effect on *H. pylori*.[1]

## WHO CAN BENEFIT?

For adults who want effective, yet gentle, drug-free support to help maintain the health and integrity of the stomach over the long term.

## PRODUCT AVAILABILITY

Bottle Size(s):
60 tablets

## PRACTITIONER DISTRIBUTION

- Emerson® Ecologics (www.emersonecologics.com)
- Fullscript™ (www.fullscript.com)
- WholeScript™ (www.wholescript.com)

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## Supplement Facts

Serving Size 1 Tablet

| Amount Per Tablet | | % DV |
|---|---|---|
| Zinc (from zinc-carnosine) | 16 mg | 145% |
| L-Carnosine (from zinc-carnosine) | 59 mg | * |

* Daily Value (DV) not established.

**Other Ingredients:** Isomalt (vegetable), stearic acid (vegetable), magnesium stearate (vegetable), modified cellulose (vegetable), and silica.

**Directions:** As a dietary supplement, take or chew one (1) tablet, twice daily with or without meals, or as directed by your healthcare practitioner.

1. Matsukura T, et al. *Biochemistry.* 2000;65(7):817-23.

## RESEARCH HIGHLIGHTS

### Helps protect the small intestine from non-steroidal anti-inflammatory (NSAID)-induced injury

One double-blind, placebo-controlled, crossover study[2] involving 10 healthy volunteers indicates PepZinGI zinc-carnosine (ZnC) (37.5 mg, twice daily) helps stabilize gut mucosa. Study participants were randomly assigned to take indomethacin (50 mg, 3 times a day) with a placebo or PepZinGI (37.5 mg, twice daily) for 5-day periods separated by a 2-week washout period. Changes in gut permeability were compared. Taking the NSAID indomethacin with a placebo for 5 days caused a significant ($P<.01$) increase in gut permeability. By contrast, taking it with PepZinGI resulted in no significant increase in gut permeability or side effects, suggesting PepZinGI helps prevent the rise in gut permeability caused by standard clinical doses of NSAIDs.

### Helps fortify epithelial resistance & tight junction structure in the gut

In one double-blind, placebo-controlled crossover study[3] involving 8 volunteers, researchers investigated zinc carnosine (ZnC) and its effect on changes in gut permeability resulting from heavy exercise. Study participants completed four 14-day treatments (placebo, ZnC, colostrum, or ZnC plus colostrum) in random order with a 14-day washout between each treatment. After an exercise challenge, body temperature increased 2˚C and gut permeability significantly increased 3-fold. However, ZnC or colostrum attenuated the temperature rise by 70% after 14-days of treatment with combination treatment showing additional benefit. Cell culture studies indicate that a 2˚C temperature rise results in the doubling of apoptosis and reduces epithelial resistance 3-4 fold. ZnC or colostrum significantly attenuated these effects (35-50%) with the greatest response seen with the combination treatment ($P<.01$). These findings suggest that ZnC (75 mg, twice daily) taken alone or with colostrum, fortifies epithelial resistance and the tight junction structure in the gut, an action that may be especially beneficial for athletes and for preventing heat stroke in military personnel.

### Helps alleviate gastric ulcer

In one multi-center, double-blind study[4] involving 299 patients with gastric ulcer, researchers compared PepZinGI zinc-carnosine (75 mg, twice daily, at breakfast and before bedtime) with the drug cetraxate hydrochloride (800 mg/day in divided doses of 200 mg, after each meal and before sleep) taken for 8 weeks. When endoscopy revealed a cure before 8 weeks, a patient was allowed to discontinue the treatment. After 8 weeks, the ulcer cure rate for the PepZinGI group was significantly better compared to the drug group, although symptom improvements were similar in both groups. In addition, compared to drug treatment, PepZinGI treatment resulted in a significantly better ($P<.05$) final global improvement rating for the "markedly improved" category. Side effects were rare (1.4%) and mild with no between-group difference. These findings indicate that PepZinGI (75 mg, twice daily) is as effective as the drug cetraxate hydrochloride for treatment of gastric ulcer and is well tolerated.

### Helps alleviate gastritis

In one multi-center, double-blind, controlled study,[5] 348 adult patients with gastritis accompanied by erosion and hemorrhage were randomly assigned to one of two treatments: (1) PepZinGI zinc-carnosine (ZnC) (75 mg, twice daily, at breakfast and upon retiring) and a sucralfate placebo or (2) active sucralfate drug (900 mg, three times daily, at breakfast, lunch and upon retiring) and a ZnC placebo for 2 weeks. Group size varied by outcome measure (safety; symptoms improvement; endoscopic improvements, overall improvements, and usefulness). If endoscopy revealed a cure by 2 weeks, a patient was allowed to discontinue the treatment. ZnC was found to be as effective as sucralfate for all parameters measured with an excellent safety profile. These findings indicate that ZnC (75 mg, twice daily) is as effective as sucralfate, an internationally accepted drug for treatment of gastritis, and is well tolerated.

2. Mahmood A, et al. *Gut*. 2007;56(2):168-75.
3. Davison G, et al.. *Am J Clin Nutr*. 2016;104(2):526-36.
4. Miyoshi A, et al. *Jpn Pharmacol Ther*. 1992;20(1):199-223.
5. Nakajima M, et al. *Jpn Pharmacol Ther*. 1997;25(4):325-366.