



focus

The scientific power of Zinc and Carnosine



Zinkcarnosine

Zinc has proved efficient in **improving taste disorders** (1), restoring gastric lining in **gastric ulcers** (2) and **oral mucositis** as a result of cytotoxic radiotherapy and/or chemotherapy (3).

Anti-inflammatory
Anti-oxidant functions
Increase in heat shock proteins

Nutrined Zinkcarnosine is a chelated compound, containing Zinc and Carnosine.

Zinc is a mineral that is part of many enzymes that are critical for cell proliferation during cell repair in epithelial & epidermal lining.

Carnosine enhances the absorption of Zinc and delivers Zinc to tissues in a delayed/extended manner*.

* Choi H.S., Kim E.S., Keum B., Chun H.J., Sung M.-K. Betaine Chemistry, Analysis, Function and Effects. Royal Society of Chemistry. London, UK: 2015. L-Carnosine and Zinc in Gastric Protection; pp. 548-565.

1. Improving taste disorders

Several studies have demonstrated that Zinc supplementation restores taste in those with taste disorders not associated with cancer.



Study

107 subjects were assigned to receive placebo, 150 mg Zn C/day or 300 mg Zn C/day for 12 weeks.

- taste perception
- subjective questionnaire
- serum Zinc before and after supplementation

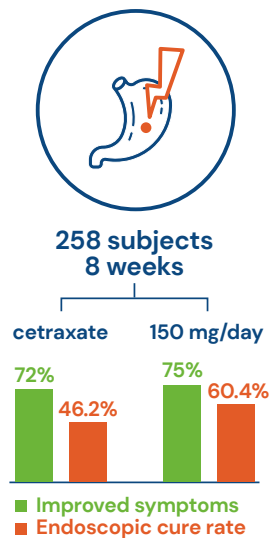
Conclusion

Improvement was most significant in the group receiving 300 mg/day.

Source: Sakagami M, Ikeda M, Tomita H, Ikui A, Aiba T, Takeda N, Inokuchi A, Kurono Y, Nakashima M, Shibasaki Y. A zinc-containing compound, Polaprezinc, is effective for patients with taste disorders: Randomized, double-blind, placebo-controlled, multi-center study. Acta Oto Laryngol. 2009; 129: 1115-1120. doi: 10.1080/00016480802552550.

2. Restoring gastric lining in gastric ulcers

Zinc Carnosine is known for its approved use in management of stomach ulcers.



Study 1

258 subjects with confirmed stomach ulcer were assigned to participate in a double-blind comparative study. Cetraxate Hydrochloride was used as the control drug to evaluate more objectively the clinical usefulness of Zinc Carnosine 2x 150 mg/day for 8 weeks.

- symptoms were collected
- endoscopy before and after treatment

Conclusion

In the group receiving 150 mg Zn C/day, symptoms improved with 75% and endoscopic cure rate was 60.4%.

Source: Miyoshi A, Namiki A, Asagi S, Harasawa S, Ooshiba S, Hayakawa K. Clinical Evaluation of Z-103 on Gastric Ulcer—A Multicenter Double-Blind Comparative Study with Cetraxate Hydrochloride. Jpn. Pharm. Ther. 1992; 20: 199-223

Study 2

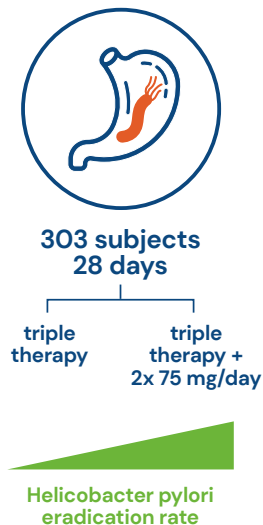
A randomized, parallel-group, open-label, prospective study was conducted to assess the efficacy and safety of Zn C combined with triple therapy (omeprazole 20 mg, amoxicillin 1 g, clarithromycin 500 mg) and triple therapy alone as therapy to eradicate *Helicobacter pylori*.

303 subjects were randomly assigned to receive triple therapy + 2x 75 mg Zn C/day or triple therapy alone.

Conclusion

The rate of *Helicobacter pylori* eradication was significantly higher in the subjects with triple therapy + Zinc Carnosine 2x 75 mg/day.

Source: Tan B., Luo H.Q., Xu H., Lv N.H., Shi R.H., Luo H.S., Li J.S., Ren J.L., Zou Y.Y., Li Y.Q., et al. Polaprezinc combined with clarithromycin-based triple therapy for *Helicobacter pylori*-associated gastritis: A prospective, multicenter, randomized clinical trial. PLoS ONE. 2017; 12: e0175625. doi: 10.1371/journal.pone.0175625.



3. Oral mucositis = common complication of cytotoxic radiotherapy and/or chemotherapy



Oral mucositis is associated with severe pain, odynophagia, taste disorder and dehydration.

Prospective studies used an oral rinse, 4x/day, kept in mouth for 1 minute or oral administration of Zn C in a suspension with sodium alginate. This dose equated to the recommended Zinc Carnosine dose of 150 mg/day.

Source: Fujiwara M., Suzuki H., Niwa Y., Nakayama M., Shikata T., Odawara S., Takada Y., Kimura T., Kamikonya N., Hirota S. Polaprezinc reduces the severity of radiation-induced mucositis in head and neck cancer patients. Mol. Clin. Oncol. 2015;3:381–386.



Zinc Carnosine

indication	Stomach and esophagus pathology, anti-inflammatory and healing effect on mucosa stomach & esophagus
dosage	1 cap in the morning and 1 cap in the evening before food
packaging	60 vegecaps per container
composition (amount per 2 vegecaps)	Zinc Carnosine – 75 mg

References

Zincarnosine



Combination carnosine and zinc

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