

THERA N O R D I C

Addressing

Ulcerative Colitis, IBS and leaky gut with a

Zinc L-Carnosine protocol

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INFLAMMATORY BOWEL DISEASE (IBD)

Crohn's Disease (mostly upper GI)

Ulcerative Colitis (mostly lower GI)

Not IBD:

- IBS
- Leaky Gut

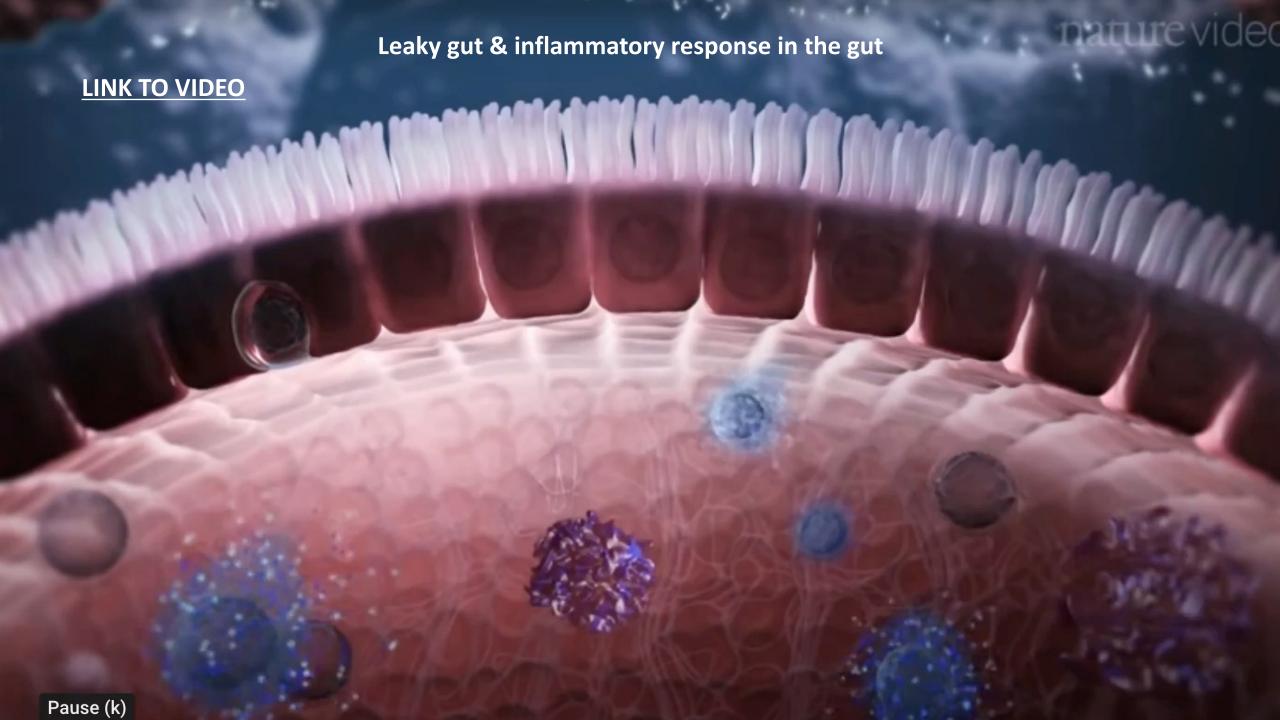
All of these share similar inflammatory pathways, in varying degrees.



ULCERATIVE COLITIS – WHY?

"The pathogenesis is multifactorial, involving **genetic predisposition**, **epithelial barrier defects**, **dysregulated immune responses**, and environmental factors. Patients with ulcerative colitis have mucosal inflammation starting in the rectum that can extend continuously to proximal segments of the colon."

Natural inflammatory response, but out of control





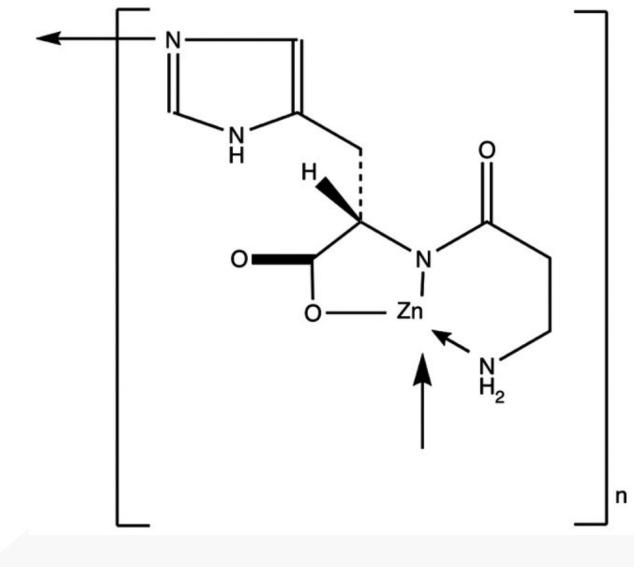
ZINC CARNOSINE PROTOCOL

FOR MODULATING THE INFLAMMATION & REPAIR



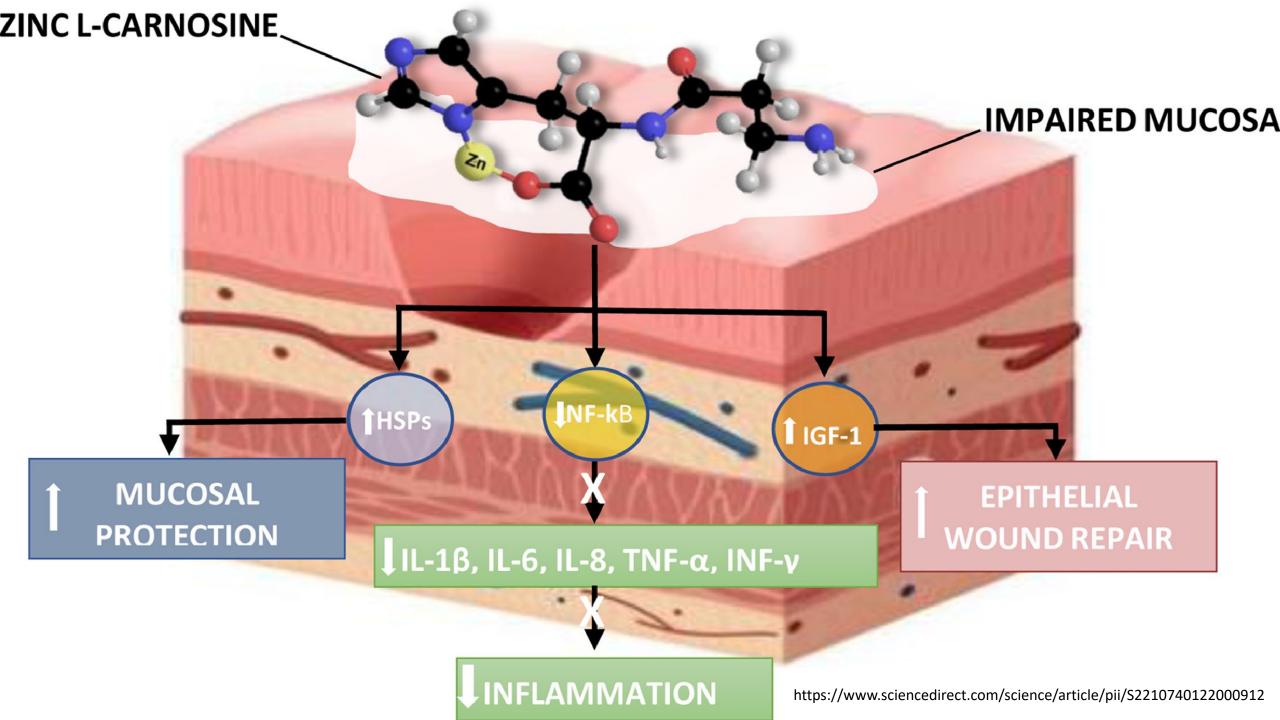
ZINC L-CARNOSINE

- L-Carnosine
 - Beta-Alanine
 - Histidine
 - → Complexated with **Zinc Acetate**
- Targeted wound healing
- Low zinc source at 11% absorbtion rate





<u>How Zinc Carnosine works – animation link</u>





ZINC L-CARNOSINE

Upregulates:

- Heat Shock Proteins (protection)
- Insulin-like Growth Factor 1 (repair)
- Glutathione synthesis in mucosa
- Superoxide Dismutase (SOD) activity
- bFGF, VEGF (Vascular & Fibroblast growth)

Downregulates:

- TNF-α / Tumor Necrosis Alpha
- Interleukins IL-1β, IL-2, IL-6, IL-8
- Nuclear factor-kappaB (NF-κB)
- Macrophage inflammatory protein 2 (MIP-2)

Note: In Ulcerative Colitis all mentioned factors are exactly opposite

Stabilises membrane:

- Directly neutralizes Superoxide anion and hydroxyl radicals
- Prevents lipid peroxidation



ZNC + L-GLUTAMINE

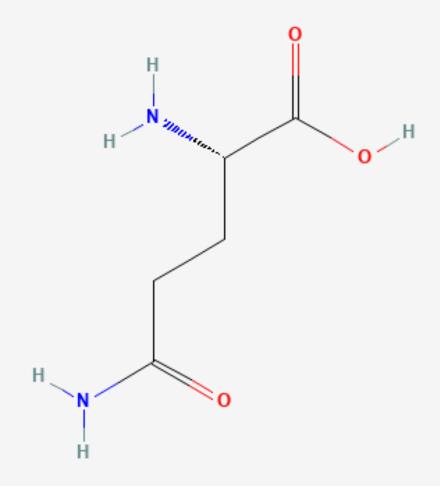
- For best results Zinc Carnosine is combined with L-Glutamine
 - Zinc Carnosine provides the "cease fire"
 - L-Glutamine is the material of rebuilding





L-GLUTAMINE

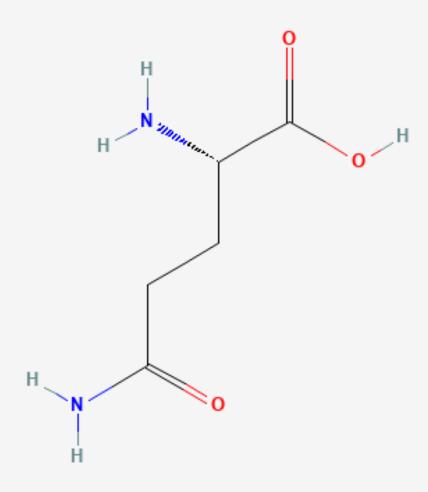
"Glutamine, the most abundant free amino acid in the human body, is a **major substrate utilized by intestinal cells**. In gut physiology, glutamine promotes **enterocyte proliferation**, regulates **tight junction proteins**, suppresses pro-inflammatory signaling pathways, and **protects cells against apoptosis** and cellular stresses during normal and pathologic conditions."





L-GLUTAMINE AND GUT

- Most abundant amino acid in the body
- Intestine utilizes 30% of all free Glutamine
- ¼ of blood plasma glutamine is absorbed by the organ with each passing
- **Key** substrate / building block for enterocytes (the one cell thick layer in the gut)
- Key signaling molecule to upregulate growth factors and protein kinases to stimulate new epithelial layer (enterocyte) genesis





DOSAGE

- Clinical studies use 75mg of Zinc Carnosine two times daily (total 150mg)
- With REZCUE this means four scoops, divided to morning and evening dose
- **Standard recommended dose** is two scoops daily and that is enough for most people
- One scoop provides
 - 37,50mg of Zinc Carnosine
 - 2,5 grams of L-Glutamine
- Going overboard with L-Glutamine (40 grams+) is higher risk than high dose of Zinc Carnosine





REZCUE DRINK POWDER

- ✓ Zinc Carnosine blended with pharmaceutical grade L-Glutamine
- ✓ No fillers, flavors or additives
- ✓ Mixed with hot liquid of choice (water, tea, coffee).
- ✓ As the active ingredients are water soluble they area immediately effective in the solution and will soothe the whole GI tract starting from the mouth onwards.





THERA NORDIC

- Sole focus on gut health
- Clean label products
- Made in UK at GMP facilities
- Only use ingredients we're comfortable to give family members and loved ones
- Young and small company, but combined experience of 40 years from supplement world
- Ask us for training, or send any questions
- We are looking for professionals to work with us - and send clients to







THANK YOU

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Resources:

Zinc Carnosine and Glutathione restoration https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7146259/

Zinc Carnosine inflammatory response mediation https://www.mdpi.com/2304-6767/11/7/181

The role of Zinc L-Carnosine in the prevention and treatment of gastrointestinal mucosal disease in humans: a review. https://www.sciencedirect.com/science/article/pii/S2210740122000912

The Roles of Glutamine in the Intestine and Its Implication in Intestinal Diseases https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5454963/