

PERQUE®

L-Histidine Guard™



ESSENTIAL AMINO ACID FOR
GUT AND IMMUNE SUPPORT



BACKGROUND

Amino acids are building blocks for proteins and essential for growth, tissue repair, enzyme production, and metabolism. The German physician Albrecht Kossel discovered the amino acid histidine in 1896 and while it was first thought to be an essential amino acid only in infants, it later was shown to be essential in adults as well. L-histidine is not synthesized endogenously by the body to meet its physiological demands and needs to be obtained through dietary protein sources.

WHY YOU NEED PERQUE L-HISTIDINE GUARD

Digestive Health

The stomach is responsible for secreting gastric acid which kickstarts digestion, prevents developing infections, helps absorb vitamin B12, and signals the other digestive organs (e.g., gallbladder and liver) to release their juices and enzymes. Adequate presence of stomach acid is needed for the digestion process to occur efficiently. While multiple stressors can impair digestion, decreased stomach acid can crash the process from the get-go. While most individuals believe excess stomach acid is to blame for symptoms such as heartburn and reflux, it is actually **the lack** of optimum stomach acid production that aggravates the situation and leaves the body vulnerable to gut bacterial overgrowth (SIBO) and *H. pylori* infections. Unfortunately, many people don't produce enough stomach acid due to age, lack of essential dietary nutrients, excess caffeine, stress, alcohol, or medications (especially those that block the production or excretion of stomach acid e.g., Pepcid®, Zantac 360®, etc.).

L-histidine supplementation can help restore optimum stomach acid production and in turn stimulate the secretion of gastric juices such as pepsin and hydrochloric acid. L-histidine is a good source of stomach acid protons, which are often lacking in people with inherent digestive issues and those with acute or delayed allergies. Combining **PERQUE L-Histidine Guard™** with the bitters in **PERQUE DigestivAide™** just before a meal can be particularly helpful in ensuring a solid start to healthy digestion. Complete the symphony by adding **PERQUE Digesta Guard Forté 10™**, **PERQUE Endura/PAK Guard™** and **PERQUE Regularity Guard™**.

Oxidative Stress and the Immune System

L-histidine has significant physiological antioxidant properties. It can scavenge free radicals and help remove toxic "divalent" metal ions from the body, providing an anti-inflammatory effect while empowering the body to boost its inherent antioxidant pools. This can enhance repair activity and reduce the extent of oxidative stress that underlies many chronic conditions.

Histidine is the precursor for other important organic compounds such as anserine and carnosine which also add to the antioxidant capacity of the body, prevent oxidative damage to cells, and support skeletal, muscular and cardiac health.

L-histidine is a precursor for histamine. Histamine has a variety of roles including: functioning as a neurotransmitter, stimulating stomach cells to produce gastric acid, and providing a local immune response to foreign material.

Digestive Health

In some people, excess histamine is released from mast cells in response to foreign material. This leads to immediate allergic responses such as asthma, itching, swelling, smooth muscle contractions, and mucus secretion. It is important to note that while histidine converts to histamine, it is the lack of supporting nutrients, a poor digestive system, and bacterial overgrowth that can cause excess histamine release. In addition, chronic allergies may deplete histidine stores. Therefore, histidine supplementation is helpful to prevent oxidative stress, maintain adequate histidine-histamine balance and allow for antioxidant metabolites like anserine and carnosine to flourish in the body.

Since L-histidine works synergistically with vitamin C, quercetin, and zinc to support growth, development, and immune function, **PERQUE L-Histidine Guard™** can be combined with **PERQUE Repair Guard™**, **PERQUE Energized Double Zinc Guard™** or **PERQUE Zinc & Throat Guard™** lozenges, and **PERQUE Potent C Guard™** powder or tabsules to achieve these effects and augment overall antioxidant function.

Cardiovascular and metabolic syndrome

Metabolic syndrome is the collective term for cardiovascular issues, diabetes, obesity, insulin resistance and stroke. It is associated with increased oxidative stress and inflammatory cytokine production. L-histidine, with its anti-inflammatory and antioxidant properties, can be helpful in improving insulin resistance, supporting healthy weight, delaying the development of atherosclerosis, and decreasing cytokine production.

Other health benefits of L-histidine can include:

- Cell and tissue growth repair, and protection.
- Protection of nerve cells and aiding in memory and cognitive function.
- Healthy red blood cell production.
- Assisting in heavy metal chelation.
- Protecting hair and skin.

REFERENCES

1. Ramsay PT, Carr A. Gastric acid and digestive physiology. *Surg Clin North Am.* 2011 Oct;91(5):977-82
2. Moriguchi T, Takai J. Histamine and histidine decarboxylase: Immunomodulatory functions and regulatory mechanisms. *Genes Cells.* 2020;25(7):443-449. doi:10.1111/gtc.12774
3. Ramani S, Pathak A, Dalal V, Paul A, Biswas S. Oxidative Stress in Autoimmune Diseases: An Under Dealt Malice. *Curr Protein Pept Sci.* 2020;21(6):611-621. doi:10.2174/1389203721666200214111816
4. Holeček M. Histidine in Health and Disease: Metabolism, Physiological Importance, and Use as a Supplement. *Nutrients.* 2020;12(3):848. Published 2020 Mar 22. doi:10.3390/nu12030848. Feng RN, Niu YC, Sun XW, et al. Histidine supplementation improves insulin resistance through suppressed inflammation in obese women with the metabolic syndrome: a randomised controlled trial. *Diabetologia.* 2013;56(5):985-994. doi:10.1007/s00125-013-2839-
5. Thalacker-Mercer AE, Gheller ME. Benefits and Adverse Effects of Histidine Supplementation. *J Nutr.* 2020;150(Suppl 1):2588S-2592S.

Directions: As a dietary supplement, take one (1) capsule 30 minutes before meals or as directed by your healthcare practitioner.

SUPPLEMENT FACTS

Serving size: 1 Capsule

Servings per container: 60

Energized Nutrients	Amount per serving	% Daily Value
L-Histidine	650 mg.	*
Vegetable capsule (Plantcaps®)	120 mg.	*
Medium chain triglycerides (MCT)**	8.5 mg.	*
Maltodextrin (Tapioca)	8.5 mg.	*

*Daily value not established

**From palm

Other ingredients: None

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THE PERQUE GUARANTEE

Like every other **PERQUE** product, **PERQUE L-Histidine Guard** comes with a 100%, unconditional, money-back guarantee – the strongest guarantee in the natural health industry. This unique guarantee provides the assurance that:

- Every **PERQUE** product provides 100% potency and activity for its entire shelf life.
- Every ingredient used in a **PERQUE** product is pharmaceutical-grade or better.
- All **PERQUE** products dissolve rapidly (usually within 20 minutes), eliminating digestive irritation often found with other brands.
- Full label disclosure is provided for all **PERQUE** products — no hidden ingredients.
- Every **PERQUE** product is activated with the same transporters that are used by nature and in food to ensure full bioavailability. The biologically preferred form of an ingredient is always used for enhanced activity.
- Free of citrus, MSG, wheat/gluten, corn/zein/starch, dairy/casein/whey/milk derivatives, yeast, soy, sulfate, phosphates (other than coenzymes), and preservatives.
- No genetically modified organisms (GMOs).
- Unique post-production assays and clinical bioassays assure product integrity.

YOUR QUALITY ASSURANCE

Every **PERQUE** product is produced following or exceeding the FDA's pharmaceutical GMP (Good Manufacturing Practices) regulations.



Feel the **PERQUE** Difference!

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

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