

L-Glutamine

100% pure L-Glutamine powder



Key Benefits

- » Supports muscle growth, repair, and overall protein metabolism
- » Strengthens immune function and helps fight infections
- » Promotes gut health and maintains intestinal lining integrity
- » Supports brain function and mental clarity
- » Aids in detoxifying ammonia from the body.

L-Glutamine is the most abundant free amino acid in the body. It is the only amino acid in human biology that has two amino groups. Glutamine is extremely versatile and is present in virtually all body structures and functions including the intestinal epithelium, the immune system and skeletal musculature. In addition glutamine is involved in the synthesis of NAD⁺, a key molecule in aerobic ATP generation. Its availability is of central importance for healthy maintenance and proliferation of cells. L-Glutamine can support immune and digestive health, brain function, muscle mass and liver detoxification and can be particularly useful following injury, surgery, infection or prolonged stress.

Nutritional Information

| Serving size: 1 scoop (5 ml) | Servings per container: 76 | |
|------------------------------|----------------------------|--------|
| | per serving | % NRV* |
| L-Glutamine | 3.9 g | † |

* Nutrient Reference Value. † NRV not yet established.

Ingredients:

100% L-Glutamine powder

Intestinal Permeability (Leaky Gut)

Dysbiosis / Microbiome Imbalance

Sarcopenia / Muscle Loss

Immune - Wound Healing & Tissue Repair

Malabsorption & Nutrient Deficiency

Post-surgical & Rehabilitation

Chronic Fatigue / Post-exertional Malaise

Clinical Application

L-Glutamine supports the immune system and wound healing processes

Glutamine is utilised by the cells of the immune system and is required for optimal lymphocyte proliferation as well as the production of cytokines by lymphocytes and macrophages. In the event of an infection, injury, burns or, for example, after surgery, significantly lower plasma concentrations are detected. The explanation for this may lie in the greatly increased demand for glutamine for immunological processes as well as for tissue repair. Supplementation with L-glutamine leads to significantly higher plasma levels and thus to improved recovery time and wound healing processes.

L-Glutamine supports the intestinal epithelial lining

Glutamine metabolism in the gut has been studied extensively. Its functions include maintenance of nucleotide metabolism (e.g. as a nitrogen donor for purines and pyrimidines), intestinal barrier function (leaky gut), modulating inflammatory processes and regulation of stress responses and apoptosis.

Dr. Leo Galland, who coined the term "leaky gut", postulates that glutamine plays a special role in restoring small intestine permeability and immune function.

Potential Benefits

- Promotes muscle protein synthesis and helps repair muscle tissue, making it beneficial for both those doing physical activity and those interested in longevity and preserving muscle mass. It also helps maintain a positive nitrogen balance in the body, which is also beneficial when it comes to muscle preservation/growth as well as overall protein metabolism
- Fuels immune cells, particularly lymphocytes and macrophages, enhancing immune function and helping the body to better address infections
- Supports the health of the intestinal lining by serving as a primary fuel source for enterocytes (the cells lining the intestines) which can help prevent leaky gut as well as restore microbiomal balance

- Serves as a precursor for neurotransmitters, potentially supporting brain function and mental clarity
- Assists in the detoxification of ammonia in the body, a byproduct of protein metabolism that can be harmful if accumulated.

Directions

Take one scoop (5 ml) daily. Dissolve in water, preferably between meals, at bedtime or as directed by your health care practitioner.

Allergens & Cautions

- Contains no known allergens
- Suitable for vegetarians & vegans.



Combines well with

Vitamin C, Zinc, SporeBiotic, Glycine, Branch Chain Amino Acids