# **NutriDyn**<sub>®</sub>

# L-Glutamine Powder

Supports Healthy Digestive, Immune, and Muscular System Function\*

## **L-Glutamine Powder Supplementation**

NutriDyn's L-Glutamine Powder is an all-natural supplement providing pure L-glutamine, a key amino acid in the human body. L-glutamine is a conditionally essential amino acid, meaning the body's demand for it increases during instances of stress or prolonged physical activity.

L-glutamine plays a variety of roles in the human body and is particularly important for keeping the immune system and gastrointestinal (GI) tract healthy.

Given the importance of adequate amounts of L-glutamine in the diet, individuals stand to benefit from L-Glutamine Powder in a variety of ways. Below are some of the most pertinent research-backed benefits derived from L-glutamine:

- Supports immune health\*
- Supports digestion and GI tract function
- Supports proper neurotransmitter production
- Helps maintain protein and glycogen synthesis in the body













### **How L-Glutamine Powder Works**

Amino acids are the building blocks of protein. Amino acids are essential for repairing tissue, especially in the muscles, bones, skin, and hair. They also play a part in the function of organs, glands, tendons, and arteries.

L-glutamine is the most abundant amino acid in human muscle and blood plasma, supporting cellular integrity throughout the body and brain. L-glutamine is a necessary precursor of two key neurotransmitters in the body, gamma-aminobutyric acid (also referred to simply as GABA) and glutamate. Thus, low availability of L-glutamine in the body can disrupt the proper production of these neurotransmitters.

Research suggests that vigorous exercise can significantly deplete L-glutamine levels in the blood for up to six hours after the fact, making it wise for athletes and active individuals to supplement. L-glutamine is also necessary for proper protein and glycogen synthesis, both of which are imperative for active individuals.

#### **How L-Glutamine Powder Works Continued**

Moreover, depleted L-glutamine levels induced by intense exercise (or stress) can suppress the immune system.<sup>2</sup> When the immune system is suppressed, the body handles stress poorly, whether it's physical or emotional.

It's also been shown that L-glutamine is a crucial amino acid for supporting a healthy GI tract, particularly by maintaining the integrity of the intestinal wall.<sup>3</sup>



#### References:

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  Calder, P. C., & Yaqoob, P. (1999). Glutamine and the immune system. *Amino acids*,
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- Elia, M., & Lunn, P. G. (1997). The use of glutamine in the treatment of gastrointestinal disorders in man. Nutrition, 13(7), 743-747.

<sup>•</sup> 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.