

Glutamine Plus



Clinical Applications

- Gastrointestinal Support*
- Enhanced Production of Short Chain Fatty Acids*

*Glutamine Plus features four specialized ingredients for enhanced gastrointestinal support. This unique formula contains a concentrated extract of licorice that has been processed to remove glycyrrhizin—thus reducing risk of side effects associated with licorice. Glutamine serves as the predominant fuel and nitrogen source for the mucosal lining of the gastrointestinal (GI) tract. Arabinogalactan from the North American larch tree is a naturally occurring polysaccharide that provides excellent support for GI health. Research suggests that arabinogalactan plays a role in the promotion of gut microflora and may increase beneficial short-chain fatty acid production. The Aloe vera leaf extract in Glutamine Plus has been processed to remove the bitter principles and prevent a laxative effect.**

All Ingels Family Health Formulas Meet or Exceed cGMP Quality Standards

Discussion

L-Glutamine, the most abundant free form amino acid in the body, is very important for maintaining gastrointestinal and stimulated immune cell functioning. It is an important transporter of nitrogen (and carbon) in the body and therefore, is vital in wound healing. Although glutamine can be synthesized by the intestinal mucosa, during periods of physiological stress when needs can not likely be met by the body alone, gut epithelial atrophy, ulceration and even necrosis are possible.^[1] L-glutamine is metabolized to ammonia and glutamate.*

Arabinogalactan, a polysaccharide derived from the Larch tree, contributes fermentable fiber to this formula in addition to having immuno-stimulatory properties. It minimizes ammonia synthesis and absorption, enhances production of short chain fatty acids and increases the gut microflora population.*^[2]

Licorice Root Extract 10:1(deglycyrrhized) is a concentrated extract that has been processed to remove glycyrrhizin, thus eliminating any risk of licorice-associated side effects. It is anti-inflammatory, antispasmodic and has laxative and soothing effects. Aspirin-induced mucosal damage has been shown to be reduced by administration of deglycyrrhized licorice.*^[3]

Aloe Leaf Extract (standardized to 50% polysaccharides), used for thousands of years, is perhaps most well-known for healing of damaged epithelial tissue, including the bowel lining. Despite the lack of scientific published studies there is anecdotal evidence to suggest that aloe vera helps inflammatory conditions of the gastrointestinal tract. In some individuals it may increase G.I. transit time, improve protein digestion and absorption, increase stool bulk and normalize stool bacteria where high levels of yeasts previously existed.^[4] The aloe extract used in Glutamine Plus does not have a laxative effect because the bitter principles have been removed.*

***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.**

Distributed By
Ingels Family Health
22 Fairfield Place
Fairfield, CT 06824
203-254-9957
www.DarinIngelsND.com

Glutamine Plus



Supplement Facts

Serving Size: 1 Scoop (about 5.8 g)
Servings Per Container: About 30

	Amount Per Serving	%Daily Value
Calories	5	
Total Carbohydrate	2 g	1% [†]
Dietary Fiber	1 g	4%
Sodium (naturally occurring)	5 mg	<1%
L-Glutamine	3 g	**
Arabinogalactan (from <i>Larix laricina</i>)(heartwood)	2 g	**
Deglycyrrhizinated Licorice 10:1 Aqueous Extract (<i>Glycyrrhiza glabra</i>)(root)	500 mg	**
Aloe Vera 200:1 Aqueous Extract (<i>Aloe barbadensis</i>)(leaf gel)	100 mg	**

[†]Percent Daily Values are based on a 2,000 calorie diet.
^{**} Daily Value not established.

Other Ingredients: Stevia leaf extract.

Directions

Mix one scoop in 2-4 oz water once daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner prior to use. Individuals taking medication should discuss potential interactions with their healthcare practitioner. Do not use if tamper seal is damaged.

Does Not Contain

Wheat, gluten, yeast, soy, animal or dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, or artificial sweeteners

References

1. L-Glutamine. www.naturaldatabase.com {accessed 4.3.07}
2. Arabinogalactan. www.naturaldatabase.com {accessed 4.3.07}
3. Rees WD, et al. Effect of deglycyrrhizinated liquorice on gastric mucosal damage by aspirin. *Scand J Gastroenterol.* 1979;14(5):605-7. [PMID: 493863]
4. Davis K, et. al. Randomised double-blind placebo-controlled trial of aloe vera for irritable bowel syndrome. *Int J Clin Pract.* 2006 Sep;60(9):1080-6 [PMID: 16749917]

***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.**

Distributed By
Ingels Family Health
22 Fairfield Place
Fairfield, CT 06824
203-254-9957
www.DarinIngelsND.com

DRS-157
REV. 11/30/18