

Product Summary

L-glutamine is the most plentiful amino acid in the body, a Krebs cycle intermediary of particular importance to intestinal and immune cells, and one known to be depleted following strenuous physical activity. L-glutamine supplementation has been shown to prevent an exercise-induced increase in intestinal permeability, by promoting tight junction stability, upregulating anti-inflammatory cytokine production, and suppressing inflammation, notably NF-κB activation. L-glutamine also stimulates protein synthesis pathways, while inhibiting protein degradation.

Curcumin has well-established anti-inflammatory effects with multiple molecular targets, including NF-κB, as well as cyclooxygenases and lipoxygenases.^{4,5} Curcumin supplementation has been shown to mitigate damage to muscles following exercise, reduce pain due to delayed onset muscle soreness, and enhance the recovery of muscle performance.⁶ Theracurmin specifically has been shown to prevent both an increase in creatine kinase and muscle degradation following eccentric exercise.⁷ Theracurmin has been proven effective for symptom relief and a reduced need for rescue medication among participants with knee osteoarthritis in a prospective clinical trial.⁸ L-glutamine and Theracurmin combined target multiple mechanisms associated with muscle repair and function.

Unique Features

- Provides 5 g L-glutamine and 30 mg Theracurmin per serving
- Targets multiple pathways of inflammation and protein synthesis to improve muscle repair and recovery following exercise
- Provides immune and digestive system support
- Theracurmin has higher bioavailability compared to standard curcumin in humans⁹
- Powder formulation allows for flexible and convenient dosing
- Suitable for vegetarians/vegans



L-Glutamine

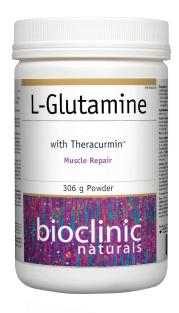
with Theracurmin™

306 g Powder

Code: 9252

NPN: 80065236







Actual size: 5.2 g

Feature: Easy to mix powder



Supplement Facts

Serving Size: 5.2 g

Servings per Container: Approximately 60

Each Serving (5.2 g) Contains:

Micronized L-Glutamine	. 5 g
Theracurmin™ Curcumin* from Turmeric (Curcuma longa) (rhizome)) mg
*A highly bioavailable form of curcumin – the most active curcuminoid in turmeric	

Non-medicinal Ingredients: Maltose, gum ghatti, dextrin, citric acid.

Contains no artificial colours, preservatives, or sweeteners; no dairy, starch, wheat, gluten, yeast, soy, egg, fish, shellfish, animal products, salt, tree nuts, or GMOs. Suitable for vegetarians/vegans. Sealed for your protection. Do not use if seal is broken. For freshness, store in a cool, dry place.

Recommended Adult Dose: Take 1 serving (5.2 g) per day or as directed by a health care practitioner. Mix product well in 375–500 ml of liquid (water, juice, etc.) immediately before consumption.

Note: The product is a brilliant yellow colour due to the turmeric.

Recommended Use: Helps restore plasma glutamine levels depleted after periods of physical stress (e.g., prolonged exhaustive exercise). Helps support immune and digestive system health after periods of physical stress. Helps to assist in muscle cell repair after exercise. Provides antioxidants for the maintenance of good health.

Contraindications: Ensure to drink enough fluid before, during, and after exercise. Consult a health care practitioner if you are following a low protein diet. Consult a health care practitioner prior to use if you are pregnant or breastfeeding, taking antiplatelet medication or blood thinners, have gallstones or a bile duct obstruction, or have stomach ulcers or excess stomach acid. Keep out of reach of children.

Drug Interactions: Caution is advised when taking with anticoagulant medications. Curcumin has been shown to enhance the effect of some chemotherapeutic medications, as well as inhibit the effect of others, and should only be used under medical supervision by those receiving chemotherapy. A reduction in the dose of medications used to treat diabetes may be necessary, as curcumin enhances the effect of insulin. Similarly, L-glutamine has been shown to reduce levels of HbA1c and fructosamine among well-controlled diabetics, thus requiring monitoring of anti-glycemic medication use.¹⁰

References:

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- 4. Shakibaei M, John T, Schulze-Tanzil G, et al. Suppression of NF-kappaB activation by curcumin leads to inhibition of expression of cyclo-oxygenase-2 and matrix metalloproteinase-9 in human articular chondrocytes: Implications for the treatment of osteoarthritis. Biochem Pharmacol. 2007 May 1;73(9):1434-45.
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- 6. Nicol LM, Rowlands DS, Fazakerly R, et al. Curcumin supplementation likely attenuates delayed onset muscle soreness (DOMS). Eur J Appl Physiol. 2015 Aug; 115(8):1769-77.
- 7. Tanabe Y, Maeda S, Akazawa N, et al. Attenuation of indirect markers of eccentric exercise-induced muscle damage by curcumin. Eur J Appl Physiol. 2015 Sep;115(9):1949-57.
- 8. Nakagawa Y, Mukai S, Yamada S, et al. Short-term effects of highly-bioavailable curcumin for treating knee osteoarthritis: a randomized, double-blind, placebo-controlled prospective study. J Orthop Sci. 2014 Nov;19(6):933-9. doi: 10.1007/s00776-014-0633-0.
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- 10. Samocha-Bonet D, Chisholm DJ, et al. Glycemic effects and safety of L-Glutamine supplementation with or without sitagliptin in type 2 diabetes patients-a randomized study. PLoS One. 2014 Nov 20;9(11):e113366.



· GUARANTEED ·

Bioclinic Naturals® products are guaranteed to meet or exceed Good Manufacturing Practices (GMP) of the U.S. Food and Drug Administration (FDA), Health Canada, and the Therapeutic Goods Administration (TGA) of Australia.



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