

GI Protect™

Featuring IgG 2000 CWP™ and L-Glutamine

NOTICE: This formula contains an ingredient derived from milk.



Sugar- and Stevia-Free | Available in Peach and Cherry

Discussion

Immunoglobulins, also known as antibodies, defend the body directly through opsonization and neutralization. They also activate the complement system. A special quality about these methods by which immunoglobulins defend the body is that they allow the immune system to differentiate between antigens and the body's normal microflora.*

Most antigens enter the body through mucosal tissue or stay localized on mucosal surfaces. It makes sense, then, that mucosal tissues are heavily populated with immune cells. In fact, it is estimated that the intestinal lining produces more antibodies than any other organ in the body. Aside from producing antibodies, the mucosal surface serves as a barrier that physically prevents antigens from entering circulation.

Though the body itself produces antibodies, supplementation may be beneficial in some individuals. It has been shown that the concentration of immunoglobulins in the digestive tract and on mucosal surfaces in adults is indicative of immune health status.^[1,2] Stress and other conditions can reduce immunoglobulin secretion and antibody production.^[3] In addition, damage to the intestinal wall resulting from stress, strenuous exercise, medications, or other causes affect gut barrier function and can make the body more vulnerable to antigens.*

IgG 2000 CWP™ is an immunoglobulin concentrate from colostrum whey peptides that delivers a minimum of 40% IgG immunoglobulin along with an array of compounds, including growth factors, sialic acid, lactoferrin, proline-rich peptides, oligosaccharides, and gangliosides. Each of these components provides the user with different and complementary health benefits, such as fundamental support of immune function and modulation, lean body mass, brain and thymus health, microbiota modulation, and cytokine balance.*^[1]

Clinical Applications

- » Supports Immune Function, Including During Strenuous Physical Activity*
- » Helps Maintain the Integrity of the Gut Mucosa*
- » Supports Lean Muscle Mass*

*GI Protect™ features XYMOGEN's IgG 2000 CWP™, with the added benefit of the amino acid L-glutamine. IgG 2000 CWP™ is an immunoglobulin concentrate derived from colostrum whey peptides. It delivers natural immunoglobulins (standardized to a minimum of 40% IgG), bioactive proteins, and growth factors. These components support immune function, healthy cytokine activity, gut barrier function, and gastrointestinal health and tissue repair. Advanced coagulation and filtration techniques make IgG 2000 CWP a unique, GRAS ingredient that is superior in its bioactive composition and its purity.**

*One daily dose of GI Protect provides over 2 g of IgG 2000 CWP as well as 2.5 g of L-glutamine, which is added to support intestinal mucosal barrier integrity. GI Protect is naturally flavored and tastes great, making it easy to consume.**

Oral consumption of immunoglobulins derived from colostrum is a means of supporting passive immunity, protecting the body, and eliminating unwanted molecules.^[4-7] As one of the most versatile immunoglobulins, IgG is capable of carrying out all of the functions of immunoglobulin molecules, accounting for IgG 2000 CWP's broad range of immune-supportive effects.^[8] Review of the research confirms that bovine colostrum supplementation confers other benefits, such as the maintenance of gastrointestinal integrity.^[9-11] Oral immunoglobulins have been used in sports nutrition to support lean body mass,^[12] physical exercise, and physical recovery following high-intensity training.^[8,13] The 2.5 grams of immunoglobulins in each serving of GI Protect contribute to individual dosing requirements.*

L-Glutamine, the most abundant free-form amino acid in the body, is very important for maintaining gastrointestinal health and stimulated immune cell functioning. Animal and human studies also demonstrate the benefits of glutamine supplementation in gut barrier function.^[14-16] Because it is an important transporter of nitrogen (and carbon) in the body, glutamine is vital to the body's normal tissue healing processes. Although glutamine can be synthesized by the intestinal mucosa, supplementation during periods of physiological stress—when needs of the gut epithelia are increased—can be of benefit.*

GI Protect is sugar- and stevia-free and is sweetened with a natural, high-potency sweetener extracted from monk fruit. This generally recognized as safe (GRAS) monk fruit extract offers a high-quality sweetness and flavor without the bitter aftertaste associated with some natural sweeteners.

*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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GI Protect™ Peach Sugar- and Stevia-Free Supplement Facts

Serving Size: 1 Scoop (about 5.8 g)

	Amount Per Serving	%Daily Value
Calories	25	
Protein (from IgG 2000 CWP™)	2 g	
IgG 2000 CWP™ (bovine-derived immunoglobulin concentrate)	2.5 g	**
Immunoglobulin G (IgG)	1 g	**
L-Glutamine	2.5 g	**

†Percent Daily Values are based on a 2,000 calorie diet.

**Daily Value not established.

Other Ingredients: Citric acid, natural peach flavor (no MSG), malic acid, monk fruit extract, silica, red beet powder, sunflower lecithin, and natural beta-carotene color.**Contains:** Milk.**DIRECTIONS:** Briskly stir one scoop (5.8 g) into at least 6 oz of water and consume twice daily, or take 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.

STORAGE: Keep closed in a cool, dry place out of reach of children.**DOES NOT CONTAIN:** Wheat, gluten, yeast, soy, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.**GI Protect™ Cherry Sugar- and Stevia-Free Supplement Facts**

Serving Size: 1 Scoop (about 6.3 g)

	Amount Per Serving	%Daily Value
Calories	25	
Protein (from IgG 2000 CWP™)	2 g	
IgG 2000 CWP™ (bovine-derived immunoglobulin concentrate)	2.5 g	**
Immunoglobulin G (IgG)	1 g	**
L-Glutamine	2.5 g	**

†Percent Daily Values are based on a 2,000 calorie diet.

**Daily Value not established.

Other Ingredients: Natural cherry flavor (no MSG), red beet powder, citric acid, malic acid, monk fruit extract, silica, and sunflower lecithin.**Contains:** Milk.**DIRECTIONS:** Briskly stir one scoop (6.3 g) into at least 6 oz of water and consume twice daily, or take 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.

STORAGE: Keep closed in a cool, dry place out of reach of children.**DOES NOT CONTAIN:** Wheat, gluten, yeast, soy protein, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or artificial preservatives.**References**

- Godhia ML, Patel N. Colostrum—its composition, benefits as a nutraceutical: a review. *Curr Res Nutr Food Sci*. 2013;1(1):37-47. <http://dx.doi.org/10.12944/CRNFSJ.1.1.04>
- Cantey JR. Prevention of bacterial infections of mucosal surfaces by immune secretory IgA. *Adv Exp Med Biol*. 1978;107:461-70. [PMID: 369313]
- Jemmott JB 3rd, Borysenko JZ, Borysenko M, et al. Academic stress, power motivation, and decrease in secretion rate of salivary secretory immunoglobulin A. *Lancet*. 1983 Jun 25;1(8339):1400-02. [PMID: 6134179]
- Hurley D. Establishment of the effects of colostrally derived protein food supplements on human and animal health [dissertation]. Brookings, SD: South Dakota State University; 1994.
- Hurley WL, Theil PK. Perspectives on immunoglobulins in colostrum and milk. *Nutrients*. 2011 Apr;3(4):442-74. Review. [PMID: 22254105]
- Rump JA, Arndt R, Arnold A, et al. Treatment of diarrhoea in human immunodeficiency virus-infected patients with immunoglobulins from bovine colostrum. *Clin Investig*. 1992 Jul;70(7):588-94. [PMID: 1392428]
- Schaller JP, Saif LJ, Cordle CT, et al. Prevention of human rotavirus-induced diarrhea in gnotobiotic piglets using bovine antibody. *J Infect Dis*. 1992 Apr;165(4):623-30. [PMID: 1313067]
- Lotze MT. *Measuring Immunity: Basic Science and Clinical Practice*. London, UK: Academic Press; 2004:160.
- Davison G. Bovine colostrum and immune function after exercise. *Med Sport Sci*. 2012;59:62-9. [PMID: 2307556]
- Greenberg PD, Cello JP. Treatment of severe diarrhea caused by *Cryptosporidium parvum* with oral bovine immunoglobulin concentrate in patients with AIDS. *J Acquir Immune Defic Syndr Hum Retrovirol*. 1996 Dec 1;13(4):348-54. [PMID: 8948373]
- Kelly GS. Bovine colostrums: a review of clinical uses. *Altern Med Rev*. 2003 Nov;8(4):378-94. Review. [PMID: 14653766]
- Antonio J, Sanders MS, Van Gammeren D. The effects of bovine colostrum supplementation on body composition and exercise performance in active men and women. *Nutrition*. 2001 Mar;17(3):243-47. [PMID: 11312068]
- Shing CM, Hunter DC, Stevenson LM. Bovine colostrum supplementation and exercise performance: potential mechanisms. *Sports Med*. 2009;39(12):1033-54. [PMID: 19902984]
- Zuhl MN, Lanphere KR, Kravitz L, et al. Effects of oral glutamine supplementation on exercise-induced gastrointestinal permeability and tight junction protein expression. *J Appl Physiol* (1985). 2014 Jan 15;116(2):183-91. [PMID: 24285149]
- Beutheu S, Ouelaa W, Guérin C, et al. Glutamine supplementation, but not combined glutamine and arginine supplementation, improves gut barrier function during chemotherapy-induced intestinal mucositis in rats. *Clin Nutr*. 2013 Sep 25. pii: S0261-5614(13)00241-0. [PMID: 24095638]

Additional references available upon request