lgG Pure™

Pure, New Zealand-Sourced Whey Protein



Available in 15 servings powder

Discussion

Whey protein is one of the two major proteins in cow's milk. The New Zealand herds used for producing IgG Pure™ are not given hormones and are not intentionally infected with a pathogen to force them to make antibodies specific to that pathogen. IgG Pure is a whey protein, rich in immunoglobulins (antibodies) derived from very careful processing techniques under controlled temperature and pH. During a series of ultrafiltration steps, lactose and water are removed from a slurry of whey. Special care is taken to maintain the integrity of the antibodies and to optimize the protein complex. In comparison to fluid cow's milk and ordinary whey protein concentrate, IgG Pure contains significantly greater concentrations of proteins and immunoglobulins.*

IgG Pure can be used not only as a high biological value protein source for healthy individuals but also to provide immunoglobulins to those in need. The immunoglobulins it contains are almost identical to those of the mammalian species and resist peptic digestion. The immune-balancing effect of immunoglobulins supports the body's normal defense mechanisms.*[1,2]

Each antibody in IgG Pure (IgG1, IgG2, IgM, and IgA) has a specific role in immune function. IgM responds quickly to an antigen and specifically to bacteria and viruses. Later in the response, IgG1 and IgG2 attack viruses and toxins. IgA is critical in the body's immune system. The immunoglobulins also contribute to the humoral immunity of the gut-associated lymphoid tissue (GALT).*

Among IgG Pure's ingredients is a high concentration of the branchedchain amino acids leucine, isoleucine, and valine, which can be used by skeletal muscle during stress and to support nitrogen utilization. The semi-essential amino acid arginine increases the activity of natural killer and lymphokine-activated cells as well as IGF-1.*[1]

Cysteine and glutamate are found in higher concentrations in IgG Pure than in other high-biological—value proteins. These amino acids serve as precursors to glutathione, [3] an endogenous antioxidant especially needed during stress, exercise, and poor nutrition. Lactoferrin, alpha-

Clinical Applications

- » Source of High-Quality Protein for Individuals Requiring Protein Supplementation*
- » Promotes/Supports Healthy Body Composition*
- » Supports Immune Response*
- » Supports Healthy Intestinal Function*
- » Improves Glutathione (GSH) Levels*

IgG Pure™, a natural, nutritionally advanced, bioactive whey protein concentrate, contains immunoglobulins that support the delicate balance of the body's immune system. The whey is sourced from New Zealand cows where herds are free from environmental contaminants and are not subjected to hormones and antibiotics that are commonly used elsewhere. This undenatured protein is a rich source of amino acids, including those needed for the synthesis of glutathione, an important antioxidant that can be depleted by stress. This formula is resistant to stomach acid and supports intestinal health. The 80% protein content supports lean body mass*

lactalbumin, beta-lactoglobulin, and bovine serum albumin are other proteins in IgG Pure $^{\text{\tiny TM}}$ that contribute to glutathione synthesis and support immune function.* $^{[3,4]}$

In addition, supplementation with whey protein may support glucose metabolism and muscle protein synthesis in humans.^[5] In a group of women, whey protein improved body composition, but soy protein did not.*^[6]

Immune System Support

IgG Pure™ Supplement Facts

Serving Size: 2 scoops (about 20 g)

	Amount Per Serving	%Daily Value [†]
Calories	80	
Calories from Fat	10	
Total Fat	1 g	2%
Saturated Fat	1 g	5%
Cholesterol	35 mg	12%
Total Carbohydrate	2 g	1%
Protein	16 g	32%
Calcium	55 mg	6%
Sodium	75 mg	3%
Potassium	140 mg	4%
Immunoglobulins (40% IgG)	1.6 g	**
† Percent Daily Values are based on a 2,000 calorie diet. ** Daily Value not established.		

Other Ingredients: Whey protein concentrate and sunflower lecithin. Contains: Milk.

DIRECTIONS: Mix 2 scoops with a cold beverage or add to your favorite recipe once daily or as recommended by your healthcare practitioner. To prevent protein denaturation and maintain the protein activity level, do not mix in hot drinks or recipes that require baking or boiling. Also, do not mix with pineapple or papaya because their enzymes may deactivate the protein.

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 tightly closed in a cool, dry place out of reach of children.

DOES NOT CONTAIN: Wheat, gluten, corn, yeast, soy, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, or preservatives.

Typical Amino Acid Profile Per Serving:

Alanine	1060 mg	Lysine	1820 mg
Arginine	540 mg	Methionine	500 mg
Aspartic Acid	2220 mg	Phenylalanine	680 mg
Cysteine	560 mg	Proline	1280 mg
Glutamine	3620 mg	Serine	864 mg
Glycine	400 mg	Threonine	1460 mg
Histidine	380 mg	Tryptophan	480 mg
Isoleucine	1380 mg	Tyrosine	700 mg
Leucine	2240 mg	Valine	1260 mg

References

- Bell SJ. Whey protein concentrate enriched with immunoglobulins. Unpublished review article. [Accessible upon request]
- Bell SJ, Forse RA. Positive Nutrition for HIV-Infected & AIDS: A Medically Sound Take-Charge Plan to Maintain Weight and Improve Your Quality of Life. Minneapolis, MN: Chronimed; 1996.
- 3. Bounous G, Gold P. The biological activity of undenatured dietary whey proteins: role of glutathione. *Clin Invest Med.* 1991 Aug;14(4):296-309. [PMID: 1782728]
- Zimecki M, Właszczyk A, Cheneau P, et al. Immunoregulatory effects of a nutritional preparation containing bovine lactoferrin taken orally by healthy individuals. Arch Immunol Ther Exp (Warsz). 1998;46(4):231-40. [PMID: 9779289]
- Graf S, Egert S, Heer M. Effects of whey protein supplements on metabolism: evidence from human intervention studies. *Curr Opin Clin Nutr Metab Care*. 2011 Nov;14(6):569-80. [PMID: 21912246]
- Baer DJ, Stote KS, Paul DR, et al. Whey protein but not soy protein supplementation alters body weight and composition in free-living overweight and obese adults. J Nutr. 2011 Aug;141(8):1489-94. [Epub 2011 Jun 15] [PMID: 21677076]

Additional references available upon request