

IgG 2000 DF™

Proprietary Immunoglobulin Concentrate High Potency IgG



Available in 30 servings powder, 90 servings powder, 120 capsules & 360 capsules

Discussion

The basic functions of immunoglobulins are the neutralization and opsonization of harmful microbes. Unlike antibiotics, they allow the immune system to differentiate foreign microbes from the body's normal microflora.*

The transfer of immunity through oral supplementation is a natural, logical and effective process for obtaining immunity. In adults, the concentration of immunoglobulin in the digestive tract and on mucosal surfaces predicts the risk of infection.*

Almost 80% of all foreign microbes enter the body either through mucosal tissue or stay localized on mucosal surfaces. Each day, the G.I. tract immune cells produce about five grams of immunoglobulins. However, during times of stress, there is significantly reduced secretion. Supplemental immunoglobulins act first in the intestinal tract to eliminate or inhibit the proliferation of disease-causing organisms and toxins. This reduces the stimulation of the immune response in the gut so that the body's resources can be redirected toward challenges elsewhere.*

Many of the studies on immunoglobulins involving immune challenge have been animal rather than human studies because of the expense and difficulty using human subjects. Studies have shown oral immuno-protein supplementation restores appetite,^[7] supports the body's healthy response to inflammation^[8,9,11] and promotes improved protein metabolism under immunological stress.^[10,13] Oral supplementation has been shown to preserve gut wall integrity and provide intestinal humoral immunity.^[6] Extrapolated data from a human clinical trial on intestinal health demonstrated sufferers could experience 35 extra symptom-free days annually.*^[14]

Transferrin, a family of iron-binding, bacteriostatic proteins, regulate and reduce the amount of free iron available to the invading foreign microbes.*

Clinical Applications

- » Provides Immune Support (including during chemotherapy, strenuous physical activity)*^[1,2]
- » Binds and Neutralizes Foreign Microbes in the Gut*^[3,4,5]
- » Reduces G.I. Inflammation^{8,9,11} / Lessens Gut Permeability*^[6]
- » Supports Lean Muscle Mass*^[7,12]
- » Supports Healthy Cholesterol Level*^[15]

*IgG 2000 DF™ is a purified, highly concentrated (45%), very low saturated fat, dairy free, consistent source of bovine serum-derived immunoglobulin antibodies and immunoproteins that provide immune enhancement by directly boosting immunoglobulin levels in the GI tract. Oral immunoglobulins have proven efficacy against bacteria, viruses, protozoa, and fungus. This spray-dried powder with a neutral flavor and odor also contains beneficial growth factors and immune-regulating cytokines.**

Growth Factors, in proper combination, are thought to play an important role in digestive health and nutrient utilization. Those in IgG 2000 DF™ are similar to the level and balance found in healthy individuals. TGF-β and IGF-I are involved in the restitution of cells damaged in the digestive tract. An increase in the level of IGF-I in serum has been associated with increases in lean tissue mass and greater protein efficiency.^[13] TGF-β is known to stimulate the secretion of IgA.*

Female Health

Gastrointestinal Support

Immune System Support

EXCLUSIVE • PATENTED

*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.

XYMOGEN® Exclusive Professional Formulas

IgG 2000 DF™ capsules Supplement Facts

Serving Size: 2 Capsules

	Amount Per Serving	%Daily Value*
IgG 2000 DF™ (Serum-derived immunoglobulin concentrate providing IgG, IgA, IgM, IgE, IgD. Also provides Transferrins, IGF-1 and TGFβ-1)	1250 mg	**
Immunoglobulin G (IgG) (from 1250 mg IgG 2000 DF™)	562.5 mg	**

* Daily Value

** Daily Value not established.

OTHER INGREDIENTS: HPMC (capsule), magnesium stearate, stearic acid, and microcrystalline cellulose.**DIRECTIONS:** Take two capsules twice daily, or as directed by your healthcare practitioner.**DOES NOT CONTAIN:** Wheat, gluten, corn protein, yeast, soy, dairy products, artificial colors, sweeteners or preservatives.**CAUTION:** Keep out of reach of children.**STORAGE:** Keep tightly closed in a cool, dry place.**IgG 2000 DF™ powder Supplement Facts**

Serving Size: 1 Tablespoon (5 g)

	Amount Per Serving	%Daily Value
IgG 2000 DF™ (Serum-derived immunoglobulin concentrate providing IgG, IgA, IgM, IgE, IgD. Also provides Transferrins, IGF-1 and TGFβ-1)	5000 mg	**
Immunoglobulin G (IgG) (from 5000 mg IgG 2000 DF™)	2250 mg	**

** Daily Value not established.

OTHER INGREDIENTS: Serum-derived immunoglobulin concentrate.**DIRECTIONS:** Take one tablespoon (5 g) mixed in 2-4 oz. of unchilled water daily, or as directed by your healthcare practitioner.**DOES NOT CONTAIN:** Corn protein, yeast, soy, dairy products, artificial colors, sweeteners or preservatives. Gluten-containing ingredients (including wheat) are not added to this formula.**CAUTION:** Consult with your healthcare practitioner before use. Keep out of reach of children.**STORAGE:** Keep tightly closed in a cool, dry place.**References**

1. Ungar, BLP, Ward, DJ, Fayer, R, Quinn, CA. Cessation of Cryptosporidium-associated diarrhea in an acquire immunodeficiency syndrome patient after treatment with hyperimmune bovine colostrum. *Gastroenterol.* 1990;98: 486
2. Weiner, C, Pan, Q, Hurtig, M, Boren, T, Boswick, E, Hammarstrom, L. Passive immunity against human pathogens using bovine antibodies. *Clin Exp. Immunol.* 116:193-205
3. Hammarstrom V, Smith CI, Hammarstrom L. Oral immunoglobulin treatment in Campylobacter jejuni enteritis. *The Lancet* 1993; 341:1036
4. Korhonen H, Syvaoja EL, Aloha-Luttilla H et al. Bactericidal effect of bovine normal and immune serum, colostrums and milk against Heliobacter pylori. *J Appl Bacteriol.* 1995;78:655-662
5. Bacteriostasis of Escherichia coli by bovine lactoferrin, transferring and immunoglobulins (IgG1, IgG2, IgM) acting alone or in combination. *Vet. Microbiol.* 1986;11:103-15
6. Dickinson EC, Gorga JC, Garrett M et al. Immunoglobulin A supplementation abrogates bacterial translocation and preserves the architecture of the intestinal epithelium. *Surgery* 1998;124:284-90
7. Kats LJ, Nelssen JL, Tokach MD, Goodband RD, Hansen JA, Laurin JL. The effect of spray-dried porcine plasma on growth performance in the early-weaned pig. *J anim.Sci* 1994;72:2075-81.
8. Tjellstrom B, Stenhannar L, Magnusson KE, Sundqvist T. Oral Immunoglobulin treatment in Chrohn's Disease. *Acta Paediatr* 1997;86:221-3
9. Peirce, JL, et al. Spray dried plasma protein globulin for early weaned pigs. *J animal Sci* 74 (Supp 1):258
10. Thompson JE, et al. Effect pf spray-dried porcine plasma protein on feed intake, growth rate and efficiency of gain in mice. *J Anim Sci* 1994;72:2960-5
11. Wolf HM, Eibl MM. The anti-inflammatory effect of an oral immunoglobulin (IgA-IgG) preparation and its possible relevance for the prevention of necrotizing enterocolitis. *Acta Paediatr Supple* 1994;396:37-40
12. 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):243-7
13. Jiang R, Chang X, Stoll B, et al. Dietary plasma protein is used more efficiently than extruded soy protein for lean tissue growth in early-weaned pigs. *J Nutr* 2000;130:2016-9
14. Weaver et al., The Effects of Bovine Ig Isolate on Diarrhea-Predominant Irritable Bowel Syndrome in a Double-Blind Placebo Controlled Clinical Trial. Unpublished . 2005.
15. Earnest C, Weaver, E. The Effect of bovine serum immunoglobulin on cholesterol indices in participants with hypercholesterolemia. *Am J clin Nutr* 2005;81:4 p 792

EXCLUSIVE • PATENTED**All XYMOGEN® Formulas Meet or Exceed cGMP Quality Standards.**

*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.