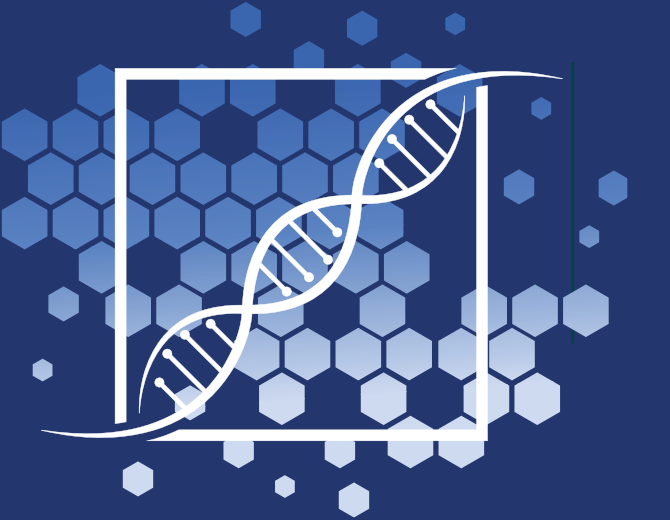




PRECISION COLOSTRUM

CLINICAL APPLICATIONS

- Provides Concentrated Immunoglobulins to Enhance Mucosal Immunity
- Stimulates the Body's Normal Gut Repair Mechanisms
- Helps Maintain Microbial Balance

This product is a highly concentrated (40%) immunoglobulin G (IgG) formula that provides essential nutrition for improved immune health. The immunoglobulin and growth factors in colostrum extract can promote passive immunity, or the transfer of immunity from one organism to another.¹ This product's pure and high-concentration formula provides improved immune modulation and strengthens the gut-immune barrier. Consistency in potency and purity of colostrum extracts is a primary concern for clinicians; advanced filtration and purification techniques make IgG Protect a superior clinical tool. This product provides 2,000 mg of IgG and 4 g of protein per serving.

Overview

Traditionally, colostrum is considered the "first food" of newborns because it is easily digestible and enhances the immune system. More recently, colostrum has been shown to regulate the immune system and provide vital growth and healing factors.² An optimally functioning immune system prevents unwanted toxins and molecules from disturbing the body's natural homeostasis. Colostrum naturally includes immune factors, amino acids, nucleotides and growth factors, which provide several benefits to human immune health by functioning against microorganisms. There are five main immunoglobulins, but the most common is IgG, which accounts for 75-80% of all serum antibodies in the body. IgG plays a major role in immune system function because it defends the body against foreign substances.

Broad-Range Specificity Immunoglobulins[†]

Research has shown that IgG can be effective in neutralizing microorganisms found in the gastrointestinal tract.³ Colostrum not only includes high quantities of IgG but also several factors that may positively impact the immune system. Many studies note the use of bovine colostrum to enhance passive immunity to prevent immune challenges, especially when entering by way of the gastrointestinal tract.³

Lactoferrin[†]

Lactoferrin is an iron-binding glycoprotein that facilitates iron absorption.⁴ Lactoferrin modulates cytokine release, and its receptors have been found on many immune cells, including lymphocytes, monocytes, macrophages and platelets.⁵

Proline-Rich Peptides (PRPs)^{†*}

PRPs are signaling peptides produced by activated macrophages and the T cells that control the production of all cytokines. PRPs have the unique ability to modulate the immune system by increasing activity level in case of certain challenges and decreasing activity level when health is maintained.⁶ PRPs are the main regulators of cell protein synthesis and convey appropriate cell functions. PRPs also have antioxidant properties that can address lipid peroxidation products, which inhibit glutathione production.⁷

Growth Factors^{†*}

Growth factors in colostrum extract, such as insulin-like growth factor 1 and 2 (IGF-1 and IGF-2) and transforming growth factor-beta 2 (TGF-β2), function to stimulate normal epithelial tissue growth in addition to upregulating B-cell growth and differentiation to increase antibody production by the body.⁸ They have also been shown to affect rates of protein synthesis, protein degradation and DNA synthesis.⁸ In addition, TGF-β2 may be beneficial in reducing gut permeability and enhancing cell rejuvenation.

Sialic Acid^{†*}

Sialic acid is an essential component of glycoproteins, which may function to influence growth and enhance learning ability and memory formation.⁹ Sialic acid has been shown to assist in enhancing synaptic pathways.¹⁰ It may also assist in immune regulation when necessary.

*Not standardized in colostrum extracts

Directions

1 scoop per day in 4 ounces of water or the beverage of your choice or as recommended by your health care professional.

Does Not Contain

Gluten, corn, yeast, artificial colors or flavors.

Cautions

If you are pregnant or nursing, consult your physician before taking this product.

Supplement Facts ^{v2}		
Serving Size 1 Scoop (5 Grams) Servings Per Container About 30		
	Amount Per Serving	% Daily Value
Calories	20	
Cholesterol	10 mg	3%
Total Carbohydrate	<1 g	<1%*
Protein	4 g	
Sodium	10 mg	<1%
Colostrum concentrate (Bovine)	5 g	**
Immunoglobulin G (IgG)	2 g	**
Lactoferrin	25 mg	**
* Percent Daily Values are based on a 2,000 calorie diet. ** Daily Value not established.		

Other Ingredients: Sunflower Lecithin.

Contains: Milk.

References

1. Godhia ML, Patel N. Colostrum - its Composition, Benefits as a Nutraceutical - A Review. *Curr Res Nutr Food Sci*. 2013;1(1):37-47.
2. Schaller JP, Saif LJ, Cordle CT, et al. Prevention of human rotavirus-induced diarrhea in gnotobiotic piglets using bovine antibody. *J Infect Dis*. 1992, 165, 623–630.
3. Hurley WL, Theil PK. Perspectives on immunoglobulins in colostrum and milk. *Nutrients*. 2011;3(4):442-474.
4. Arnold RR, Brewer M, Gauthier JJ. Bactericidal activity of human lactoferrin: sensitivity of a variety of micro-organisms. *Infect Immunol*. 1980;28:893–8.
5. Ronz ZP. Bovine Colostrum Emerges as Immune System Modulator. *Am J. Natr Med*. Mar1998;5(2):19-23
6. Keech A, Buhmeyer JI, Kolt R. 2008. The Role of Colostrum Proline-Rich Polypeptides in Human Immunological and

Neurological Health. Proceedings of Light-Activated Tissue Regeneration and Therapy Conference. *Springer US*. 233-243.

7. Bamdad F, Shin SH, Suh JW, Nimalaratne C, Sunwoo H. Anti-Inflammatory and Antioxidant Properties of Casein Hydrolysate Produced Using High Hydrostatic Pressure Combined with Proteolytic Enzymes. *Molecules*. 2017;22(4):609. Published 2017 Apr 10.
8. Francis GL, Upton FM, Ballard FJ, McNeil KA, Wallace JC. (1988). Insulin-like growth factors 1 and 2 in bovine colostrum. Sequences and biological activities compared with those of a potent truncated form. *Biochemical Journal*. 251(1), 95–103.
9. Morgan BL, Winick M. Effects of administration of N-acetylneuraminic acid (NANA) on brain NANA content and behavior. *J Nutr*. 1980;110:416–24.
10. Schauer R. *Sialic Acids*. Springer; 2012.