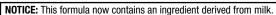
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IGG Gut Repair

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Clinical Applications

- Supports Immune Function by Providing Immunoglobulins and Other Immune Factors*
- Supports the Body's Normal Gut Repair Pathways*
- Helps Maintain a Healthy Microbial and Cytokine Balance in the Gut*
- Promotes Overall Health and Well-Being*

IGG Gut Repair is an immunoglobulin concentrate derived from colostral 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 Gut Repair a unique, GRAS formula that is superior in its bioactive composition and its purity.*

All Big Sky Natural Health's Formulas Meet or Exceed cGMP Quality Standards

Discussion

Beyond Colostrum: Immunoglobulin Concentrate from Colostral Whey Peptides

IGG Gut Repair is the result of advanced coagulation and filtration technologies that separate bioactive substances and then concentrate them. These precise systems produce a potent, pure, and generally recognized as safe (GRAS) immunoglobulin concentrate from colostral whey peptides. IGG Gut Repair provides immunoglobulins, including a minimum of 40% IgG; bioactive and growth factors; oligosaccharides; and gangliosides. Each of these components provides the user with different and complementary health benefits (see Chart).*[1]

Immunoglobulins

Oral consumption of immunoglobulins derived from colostrum is a means of supporting passive immunity. [2-5] Immunoglobulins flag antigens for the immune system. In doing so, immunoglobulins become key participants in protecting the body and eliminating unwanted molecules. IGG Gut Repair delivers immunoglobulins and is particularly high (minimum of 40%) in IgG. Among immunoglobulins, IgG is said to be the most versatile, carrying out all of the functions of immunoglobulin molecules.*

Bioactive and Growth Factors

Sialic acid is an essential component of mucins, glycoproteins, oligosaccharides, and gangliosides and is therefore important to the function of cell membranes and membrane receptors. It is also important for normal brain development. Sialic acid-containing oligosaccharides in bovine colostrum can prevent certain antigens from binding to host tissues. Lactoferrin is an immune-supporting, iron-binding glycoprotein naturally found in bovine colostrum. It plays an important role in immune regulation and in the body's defense mechanisms. [6] Studies suggest that growth factors from bovine colostrum, including IGF-1 (insulin-like growth factor) and TGF (transforming growth factor), stimulate cell growth in the gut to strengthen the gut lining, help build lean muscle mass, and slow protein catabolism. [1] Furthermore, improvements observed in exercise performance by athletes taking colostrum have been attributed to growth factors.*

Proline-Rich Peptides

Proline-rich peptides (PRPs), which were first isolated from ovine colostrum and later from bovine colostrum, are intercellular signaling molecules. They act as regulatory substances that have the unique ability to modulate and stabilize various biologic processes in the body, such as cytokine and immune processes. ^[1] The in vitro and in vivo effects of PRPs on immunoregulation, including their effects on the maturation and differentiation of thymocytes and humoral and cellular immune responses, have been demonstrated. Also of great interest are the many studies suggesting their beneficial effects on age-associated changes in neurological health. ^[7] For instance, in vivo work revealed that PRPs alleviate beta-amyloid cytotoxicity in hippocampal neuronal cells; in humans, PRPs provided an early beneficial effect on cognitive symptoms and daily functioning at a dose as low as 100 mcg/d every other day. ^[8,9] Five grams of powder or eight capsules of IGG Gut Repair provides 1% to 2% (50 to 100 mg) PRPs.*

Oligosaccharides

Bovine milk oligosaccharides, which are a component of lactose, are modulators of gut microbiota. They provide protection by acting as decoys to attract antigens and inhibit them from binding to epithelial surfaces of the intestine.^[10] Evidence also suggests that oligosaccharides act as growth promoters for a selected class of beneficial bacteria^[11] and contribute to the development and maturation of the intestinal immune response.^[12] Approximately 66 acidic and neutral oligosaccharides, including sialyloligosaccharides, which are known for their high biological activity in humans, have been detected in IgG concentrate from colostral whey peptides.*^[13]

Gangliosides

Gangliosides are vital to the structure and function of cell membranes. They support neural development, and they have roles in supporting gut integrity, influencing immune cell signaling, modulating cytokine activity and production, and affecting the adherence and toxin production of antigens.^[14-17] Research has demonstrated that providing gangliosides in the diet increases ganglioside content in the intestinal mucosa. Studies have indicated that low levels of gangliosides in the intestinal mucosa are associated with increased levels of cytokines, susceptibility to antigens, and poor gut integrity.^[14] The ganglioside composition of bovine milk is predominately GM3 and GD3.*^[15]

IGG Gut Repair Studies

Building on the extensive literature pointing to the health benefits associated with bovine-derived colostrum and colostral whey, scientists performed in vitro, in vivo, and human clinical studies using IGG Gut Repair to demonstrate its bioactivity and effectiveness. In vitro, IGG Gut Repair was shown to support the body's normal repair pathways by stimulating the migration and production of gut epithelial cells. [18] In an in vivo model of gut integrity challenge, rats administered IGG

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*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.



Chart: Bioactive Compounds in Product Name

Key Function(s)
Immune support*
Lean mass support, cell and tissue repair and rejuvenation*
Immune modulation, brain health, prebiotic*
Immune support*
Immune modulation, brain and thymus support*
Microbiota modulation*
Immune cell signaling*

...continued

Gut Repair showed significant improvements in both microscopic and macroscopic mucosal health.
[18] Supplemented dogs showed a significantly higher vaccine response and higher levels of fecal IgA when compared with the control group. These results were indicative of an enhanced immune status.
Researchers also observed increases in gut microbiota diversity and stability in the supplemented dogs.
[19] In humans (n = 12), 1000 mg/d of IGG Gut Repair increased salivary IgA by 30%, improved quality of life scores, significantly increased the ability to perform activities of daily living, improved hyperimmune responses, and reduced minor health complaints by 47%.
[20]

In a randomized, crossover trial (n = 7), a five-day challenge to gut integrity caused a three-fold rise from baseline in gut permeability as measured by lactulose/rhamnose ratios. Co-administration of a 15% lgG colostrum formula inhibited this increase. [21] When the same researchers compared the RPF† (repair and protection factor) of the 15% lgG colostrum formula to IGG Gut Repair, which is a 40% lgG formula, the IGG Gut Repair score was two times higher. This suggests that IGG Gut Repair would offer even greater results in supporting gut integrity than did the 15% lgG colostrum formula.*

[†]RPF is a novel (patent pending) analytical method that evaluates a product's bioactive properties to determine its effectiveness in repairing damaged cells and protecting healthy cells.

IGG Gut Repair Capsules

Supplement F Serving Size: 2 Capsules Servings Per Container: 60	ac	ts
Amount Pe	r Serving	%DV
Calories	5	
Protein	1 g	
Colostral whey peptides	1 g	**
(bovine-derived immunoglobulin concentrate) Immunoglobulin G (IgG)	400 mg	**
†Percent Daily Values are based on a 2,000 calorie ** Daily Value (DV) not established.	diet.	

Other Ingredients: Capsule (hypromellose and water), silica, and sunflower lecithin.

Contains: Milk

Directions

Take two capsules twice daily, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

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Formulated To Exclude

Wheat, gluten, corn, yeast, soy, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

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