## Raspberry or Lemon Lime

**Advanced Immune Modulation Powder** 





## Available in Lemon Lime or Raspberry 30 Powder Servings

**Nutritional Frontiers' IgG contains ImmunoLin®**, a protein-based dietary supplement that contains over 90% protein and 50% immunoglobulins, along with peptides and other growth factors, derived from bovine serum.

- · Binds, neutralizes, and removes bacteria
- · Supports healthy gut barrier function
- Helps restore gut homeostasis
- Aids in uptake and utilization of nutrients
- Over 40 Published studies including IBS, IBD, H Pylori, SIBO, C Diff
- 1st flavored powder with ImmunoLin® for enhanced compliance and bioavailability

This completely dairy-free product was designed to support a healthy mucosal immune system in the gut, therefore targets healthy digestive function and immune response, as well as potential benefits for sports performance.\* IgG by Nutritional Frontiers may have clinical applications in people with diarrhea, immune challenges, GI infections, training for endurance sports, and more.\*

Serum-derived bovine immunoglobulin (ImmunoLin®), also called SBI, is manufactured at a pharmaceutical-grade, FDA-inspected facility using a tightly-controlled and reproducible process and in accordance with cGMP standards. It is derived from non-GMO ingredients from bovine serum collected in the United States and New Zealand. The safety of ImmunoLin® is supported by studies spanning more than 20 years and by its GRAS (Generally Recognized as Safe) status by the FDA.

ImmunoLin® contains SBI- serum-derived bovine immunoglobulin isolate, sunflower lecithin, and an array of amino acids including alanine, arginine, aspartic acid, cystine, glutamic acid, glycine, histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine, and valine. It is soy-free, dairy-free, gluten-free, and dye-free.

Immunoglobulins and other peptides found in serum-derived bovine immunoglobulin may help maintain adequate gut barrier function by binding potentially damaging microbial components found in the digestive tract. Normal breakdown and turnover of typical bacteria in the gastrointestinal tract, as well as ingestion of contaminated food or water results in microbial antigens (e.g., "foreign" bodies such as bacterial endotoxins) in the intestines. These antigens activate the intestinal immune system and can contribute to damaging the intestinal epithelium. According to research in animals, SBI can bind to these potentially toxic antigens and prevent them from crossing the epithelium; this action keeps the toxic antigens in the lumen of the digestive tract to be excreted, rather than being absorbed into the bloodstream and provoking inflammatory cytokines.

Many animal studies demonstrate the effectiveness of serum-derived bovine immunoglobulins in protecting gut barrier function. Supplementing with SBI may decrease expression of pro-inflammatory cytokines in gut mucosal tissue. A healthy intestinal tract is essential for nutrient optimization and overall immune function. Some studies in human subjects demonstrated increased CD4+ T cells both in the gut and in peripheral circulation therefore improving immune status of these patients.

For athletes, IgG may be an important feature in a sports nutrition program because high intensity exercise can provoke immune-suppressive levels of pro-inflammatory cytokines (like TNF-a, IL-1 $\beta$ , and IL-6) and bacterial endotoxins. Since cytokines may contribute to muscle protein breakdown and delayed recovery, the use of a product like ImmunoLin $^{\circ}$  in IgG by Nutritional Frontiers may be indicated after vigorous workouts to promote intestinal homeostasis and reduced inflammation.  $^{\star}$ 

**What about probiotics?** Even though serum-derived bovine immunoglobulins bind to a variety of microbial antigens, SBI does not negatively affect the growth of probiotic or commensal bacteria in the GI tract.

## SUPPLEMENT FACTS

Serving Size: 1 Scoop (1.8g) Servings Per Container: 30 Amount Per Serving

Serum-derived immunoglobulin 1g concentrate (ImmunoLin®)
Immunoglobulin G (IgG) 506mg
Immunoglobulin M (IgM) 9.2mg
Immunoglobulin A (IgA) 46mg
Transferrin 55.2mg

**Other Ingredients:** Natural Flavoring, Citric Acid, Stevia, and Beet (for color)

**Suggested Use:** As a dietary Supplement, mix one scoop (1.8g) with cold water or juice, once or twice daily, or as directed by your healthcare practitioner.

**Warning:** If pregnant or nursing, consult your healthcare practitioner before taking this product.

**Caution:** Jar contains desiccant to reduce moisture and clumping. Do not eat desiccant.

In summary, while bovine colostrum is well-researched and proven in multiple commercial product formulations, evidence from composition studies indicates that in a head-to-head comparison, Immunolin® is the superior alternative for digestive health and immmune support dietary supplement applications.

	SBI	Colostrum Product #1 A	Colostrum Product #2 <sup>A</sup>
Product Description	Serum-Derived immunoglobulin/Protein Isolate (SBI)	Immunoglobulin Concentrate from Colostral Whey Peptides	Highly Concentrated Colostrum IgG
No. lots tested	3	3	2
% Protein (w/w)	90.6 ± 1.1	72.4 ± 3.7	74.1 ± 0.9
% lgG (w/w)	52.4 ± 0.7	31.5 ± 2.9	35.3 ± 3.5
Lactose %	Below LD <sup>8</sup>	8.1 ± 1.9	8.3 ± 0.7
Endotoxin (EU/mg)	0.3 ± 0.1	2.4 ± 0.5	1.8 ± 0.7





NutritionalFrontiers.com • (412) 922-2566 This flyer was created on 1/14/2022 APM

 $<sup>{}^*\</sup>text{These statements have not been evaluated be the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.}$