

# IgG PRO DF

- Provides Concentrated Immunoglobulins to Enhance Mucosal Immunity
- Helps Maintain Microbial Balance
- Supports GI Barrier Health and Integrity
- Helps Maintain Normal Inflammatory Balance



This product is the only purified, dairy-free source of immunoglobulin G (IgG) available as a dietary supplement. Serum-derived bovine immunoglobulins (SBI) provide the highest IgG concentration available for GI and immune challenges where allergens are a significant concern. Pure IgG helps to maintain a healthy intestinal immune system by binding a broad range of microbes and toxins within the gut lumen. This product provides 1,200 mg IgG in a one-scoop serving.

## Overview

Autoimmunity is on the rise globally, and recent research demonstrates a connection between autoimmunity and intestinal permeability. The discovery that the gut barrier plays a key role in immune health fueled the search to strengthen it. In that search, researchers found that the binding capabilities of immunoglobulins have a positive effect on gut barrier function.<sup>1</sup> Immunoglobulins bind microbes and toxins in the GI tract and eliminate them prior to immune system activation. As these unwanted triggers are removed, it resets healthy immune tolerance and builds a stronger barrier to the external environment.

## SBI and GI Health

The GI tract acts as the gateway to the rest of the body, making the health of the gut barrier critical to overall health. Environmental triggers like poor diet, high stress and toxin exposure can lead to GI challenges. In practice, probiotics are a natural choice for supporting beneficial bacteria in the gut, but supplementation to eliminate unwanted microbes should also be considered. SBI has been shown to bind microbes and toxins, further enhancing microbiome balance and facilitating gut barrier strength.<sup>2,3</sup> Broad-spectrum binding capabilities

(See Table 1) demonstrate the positive influence of non-allergenic forms of immunoglobulins.<sup>1</sup>

As seen in several studies, SBI has the potential to bind many types of microbes and toxins.<sup>1</sup> This binding and elimination decreases microbe and toxin encounters by the immune system and resets immune tolerance.<sup>2,3</sup>

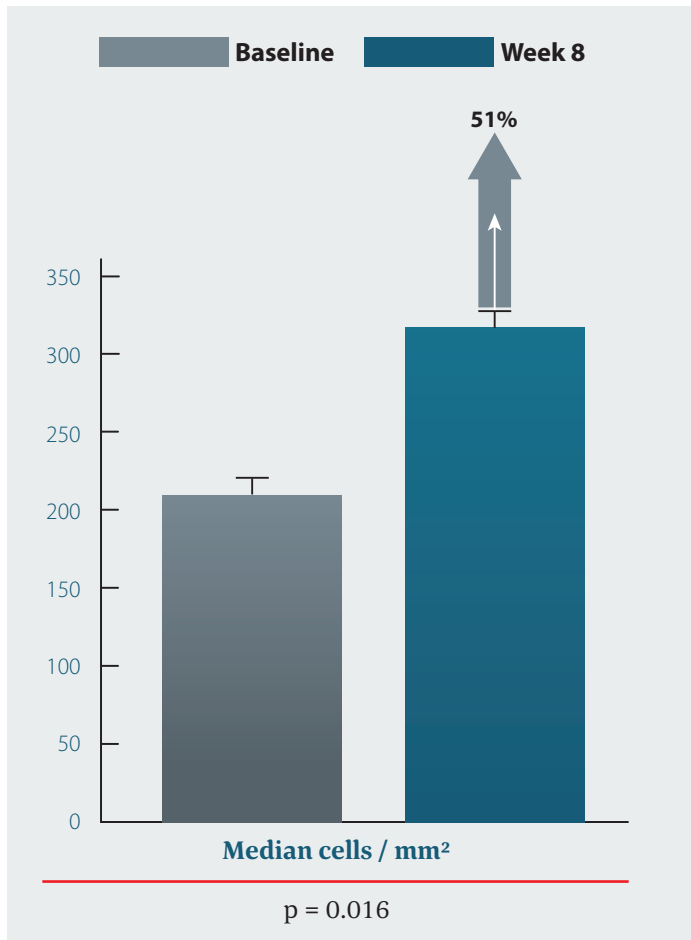
## SBI and Immune Health

Occasionally, the immune system becomes overactive and immune tolerance drops. When immune tolerance is lost, the checks and balances of antibody production can be affected. To reestablish immune tolerance and appropriate activation, the burden on the immune system must be reduced. Reducing the reasons to respond allows the tissue to maintain normal inflammatory balance and creates an environment for normal tissue repair and immune reconstitution.<sup>4,5,6,7,8,11</sup>

**Table 1: Serum-derived Bovine Immunoglobulin Binding Capacity**

Microbial Component	Description
Lipopolysaccharide (LPS)	Bacterial cell wall component
<i>C. difficile</i> Toxin A and B	<i>C. diff</i> virulence factors
Peptidoglycan	Bacterial cell wall component
Flagellin	Antigenic bacterial component
Zymosan	Fungal cell wall component
c-di-AMP	Bacterial messenger molecule
CpG	Bacterial DNA motif
Pam3CSK4	Bacterial lipoprotein
MDP	Bacterial cell wall component

**Figure 1: Duodenal GALT Immune Reconstitution with SBI<sup>†</sup>**



In studies evaluating the effect of SBI on immune function, subjects showed positive outcomes in several areas, including inflammatory balance, gut barrier function and immune cell counts.<sup>7,8,9</sup> In an open-label human clinical study, GI-challenged patients were given 2.5 mg SBI twice daily. They had increased CD4+ counts in the duodenum after eight weeks, indicating a regenerative effect on the tissue and immune function in the intestines. In a large, multicenter, placebo-controlled follow-up study,<sup>8</sup> SBI led to significant increases in peripheral CD4+ cells, when compared to placebo-controlled subjects. Findings of immune reconstitution in these patient demographics is promising for the future of establishing a healthy immune system in patients with GI and immune challenges.

## Supplement Facts<sup>V1</sup>

Serving Size 1 Scoop (2.5 Grams)  
Servings Per Container About 30/60

1 scoop contains	Amount Per Serving	% Daily Value
Calories	10	
Protein	2 g	4%*
Serum-Derived Bovine Immunoglobulin Concentrate (ImmunoLin®)	2.5 g	**
Immunoglobulin G (IgG)	1.2 g	**

\* Percent Daily Values are based on a 2,000 calorie diet.

\*\* Daily Value not established

### Directions

1 scoop (2.5 grams) in 4 ounces of water or the beverage of your choice 2 times daily or as recommended by your health care professional.

### Does Not Contain

Gluten, corn, yeast, artificial colors and flavors.

### Cautions

If you are pregnant or nursing, consult your health care professional before taking this product.

## References

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9. Bosi P, Casini L, Finamore A, Cremokolini C, Meriardi G, Trevisi P, et al. Spray-dried plasma improves growth performance and reduces inflammatory status of weaned pigs challenged with enterotoxigenic *Escherichia coli* K88. *Journal of animal science*. 2004;82(6):1764-72.