SBI Protect

**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. 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. Broad-spectrum binding capabilities (See Table 1) demonstrate the positive influence of non-allergenic forms of immunoglobulins.1

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

**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.4,5,6,7,11

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

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

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

1 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.
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.\textsuperscript{7,8,9} 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,\textsuperscript{8} 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.

**Directions**

4 capsules per day 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

1. Detzel CJ, Horgan A, Henderson AL, Petschow BW, Warner CD, Maas KJ, Weaver EM. Bovine Immunoglobulin/Protein Isolate Binds Pro-Inflammatory Bacterial Compounds and Prevents Immune Activation in an Intestinal Co-Culture Model. PLOS One 10(4) April 2015; DOI:10.1371/journal.pone.0120278


