

## Immuno-gG SBI

"Right now 55 million people, or one in seven, have developed some type of gut pathology or enteropathy in their intestinal tract"

I heard an interesting analogy; if you had a rock in your shoe, how much Tylenol would you be willing to take to get rid of the pain. Right now 55 million people, or one in seven, have developed some type of gut pathology or enteropathy in their intestinal tract.

It could be diarrhea, bloating, severe constipation or some form of digestive pain and they are treating the symptoms rather than address the cause. Sadly most people don't understand that pathogens, toxins, undigested proteins are at cause of the problem and so they use the "Tylenol approach".

I want to share an exciting product that binds and neutralizes toxins in the gut, without harming the good bacteria. As you know, the gut represents 70% of the immune system and if the gut is exposed to pathogens or environmental toxins, it will cause inflammation which often cascades into a leaky gut.

When toxins, pathogens, undigested or unrecognized



proteins cross the epithelial gut lining, the immune system responds appropriately by releasing a systemic immune response which creates further inflammation. Within the category of toxins is a class of bacterial byproducts called LPS or lipopolysaccharides.

As the name implies LPS is a molecule in which lipids and polysaccharides or long chain sugars are linked. It is a major component of the cell wall of gram-negative bacteria which are abundant in the bowel. LPS are endotoxins which are not secreted but are released when the cells are disrupted or die.

LPS are highly immunogenic and stimulate the production of endogenous interleukin-1 and tumor necrosis factor or TNF. It is a potent activator of macrophages. So LPS can cause inflammation, mitochondrial impairment, muscle dysfunction, and an increased perception or sensitization to pain.

In fact, if researchers want to give an animal arthritis, to test a drug they can inject a healthy animal with LPS and the animal will develop arthritis. The process of immune activation can also disrupts the body's ability to differentiate between self and non-self creating the perfect storm for autoimmunity of all kinds. So if we have a way to bind toxins, pathogens and LPS without harming the good bacteria in our microbiome we have a distinct advantage.

Biotics Research has reformulated Immuno-gG by increasing the amount of immunoglobulins from a dairy free source. The new product is called Immuno-gG SBI. The SBI stands for Serum-derived Bovine Immunoglobulin which is trade marked as ImmunoLin. ImmunoLin consists of 92% Protein and is over 60% Immunoglobulin. When taken orally Immunoglobulins bind and neutralize bacterial toxins in the gut. Historically the main source of immunoglobulins has been bovine colostrum.

But as you know many people are dairy sensitive and the amount of immunoglobulins is low compared to immunoglobulins in serum. ImmunoLin® contains the highest concentration of naturally sourced immunoglobulins in the world. ImmunoLin is backed by over 40 human clinical trials focused on digestive health and immune support. Immuno-gG SBI is free of lactose, gluten, soy, GMO's, dyes, pesticides, antibiotics, and hormones.

As we discussed in our LPS discussion, dysbiosis and degradation of the microbiome produces endotoxins that lead to immune activation. Immune activation causes changes in tight junction structure, and barrier function. By binding endotoxins whether they are the pathogens themselves or the microbial components or by products like LPS, ImmunoLin helps maintain GI immune balance, manage gut barrier function, and improve nutrient and fluid utilization.

You can see a more extensive list of pathogens and bacterial byproducts that are bound, neutralized and removed on the literature to the right. But in addition to LPS here is a list of ones to get your attention:

C difficile, Toxin A and B, E coli, Staphylococcus, Klebsiella Pneumonia and Salmonella.

The beauty of this product is its safety. Over 40 human clinical studies have shown it is safe and effective. One study showed safety for 8 month old babies. Immunog-G SBI also has the highest concentration of immunoglobulins over any other ingredient in the world. It is unique in that the mechanism of action; Immunoglobulins bind and neutralize bacterial toxins in the gut.

For now it comes in capsule form but it can be opened and placed in water or juice. It is a flavorless powder easily dissolved in liquids or soft foods. Since the protein source is so high the only person that can't take it are patients that are allergic to beef. But the part that I like is that Immuno-gG SBI will not disrupt the growth of commensal intestinal bacteria or common probiotics.

Although all the studies did not focus on diet, it is important to use an anti-inflammatory diet in addition to this product to allow the gut to heal. I will be adding either Children's or Adult ENT-Pro with Immuno-gG SBI for added microbiome support. In addition, we always want to be sensitive to digestive issues. Many, Many people have diarrhea, gas, and severe bloating due to a deficiency in hydrochloric acid. You can see a link to the right describing why HCL is so important.

I encourage you to talk to your patients about whether your patients are just "taking Tylenol" and enduring their symptoms and talk with them about taking the rock out of their shoe by binding, neutralizing and removing the toxins in their gut.. Thanks for watching I look forward to seeing you again next Tuesday.