Among non-communicable diseases, intestinal permeability (metabolic endotoxemia) is the #1 cause of morbidity and mortality worldwide. Metabolic endotoxemia is a condition that stems from dysbiosis and a breakdown of intestinal barrier function. Intestinal permeability is present in most chronic diseases and is believed to be a major driver of many conditions. MegaSporeBiotic is clinically shown to reduce intestinal permeability by 60%, when compared to the placebo control group, in just 30 days without any additional interventions.

The 1st probiotic to PROTECT its human host

Reduce LPS Translocation
Reduce Systemic Inflammation
Repair Leaky Gut

Conditions associated with Metabolic Endotoxemia/Intestinal Permeability:

- Autoimmunity
- Depression
- Anxiety
- Alzheimer's
- Memory Loss
- Anorexia
- Parkinson's
- Hypogonadism
- Leptin Resistance
- Chronic Pain

www.microbiomelabs.com
MegaSporeBiotic™ is formulated with nature in mind. Found naturally in the environment for millions of years, Bacillus spores have developed a symbiotic relationship with their human host. Our ancestors derived probiotic benefits from inadvertently consuming bacillus spores on a regular basis. In fact, the oldest bacterial spore ever documented was 250 million years old and found inside salt crystals in Carlsbad, New Mexico. Though it sounds like science fiction, scientists were actually able to isolate and grow the 250-million-year-old spores!

Bacillus spores are naturally designed to survive digestion. The reason for their inherent survivability comes from the spores’ bi-phasic life cycle. This means that the Bacillus spores can transition interchangeably from their dormant form to their active form, depending on the environment. In its dormant spore form, Bacillus will surround itself with an endospore, which is a tough, natural outer shell that protects it from light, heat, pressure, acid, lack of oxygen, and other environmental factors. This key feature is what allows MegaSporeBiotic™ to survive easily through digestion without the need for enteric-coated capsules. In fact, MegaSporeBiotic™ maintains its viability outside of its capsule and can even survive baking, up to 450°F.

Over 70% of the immune system can be found in the gut in the form of gut-associated lymphoid tissue, or GALT. Studies show that Bacillus subtilis promotes the development of GALT, which is critical to the formation of a properly functioning and robust immune system. MegaSporeBiotic™ also supports the immune system by stimulating Peyer’s patches, as well as Toll-like receptors, in order to improve pattern recognition, increase circulating T and B lymphocytes, and upregulate regulatory T cells. The end result is a healthier gut lining and a stronger immune system that is better equipped to handle unfavorable lifestyle and environmental factors that can lead to conditions like asthma, allergies, autoimmunity, and infections.

Leaky Gut Syndrome, a condition characterized by increased intestinal permeability, has become a major problem in the United States. Some studies even suggest that leaky gut plays a pivotal, and perhaps even causal, role in the development of many chronic diseases by triggering low-grade systemic inflammation. On the cellular level, leaky gut is the result of disrupted tight junctions between colonocytes, creating small holes in the protective intestinal wall. These small openings allow unwanted toxins to pass through the intestinal wall directly into the bloodstream, where they can increase inflammation. MegaSporeBiotic™ has been shown to heal leaky gut by closing tight junctions between colonocytes, increasing the thickness of intestinal mucosa, and up-regulating secretory IgA levels that support the body’s natural defense against infections. With a published, human clinical trial showing a 60% reduction in leaky gut in just 30 days, MegaSporeBiotic™ is the most effective leaky gut solution on the market today.
## The MEGA Difference

<table>
<thead>
<tr>
<th></th>
<th>Most Probiotics</th>
<th>MegaSpore Biotic</th>
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<tbody>
<tr>
<td><strong>Predominant Species</strong></td>
<td>Lactobacillus</td>
<td>Bifidobacteria</td>
</tr>
<tr>
<td><strong>Approach</strong></td>
<td>Reseed the gut</td>
<td>Recondition the gut</td>
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<tr>
<td><strong>Survivability</strong></td>
<td>Most do not survive digestion</td>
<td>Designed to survive digestion</td>
</tr>
<tr>
<td><strong>Adhesion</strong></td>
<td>❌</td>
<td>All humans have binding sites for bacillus</td>
</tr>
<tr>
<td><strong>Colonization</strong></td>
<td>❌</td>
<td>Effective colonization in the human gut</td>
</tr>
<tr>
<td><strong>Quality</strong></td>
<td>Few companies DNA verify their probiotics</td>
<td>Subject to 3rd party DNA verification</td>
</tr>
<tr>
<td><strong>Efficacy with antibiotics</strong></td>
<td>Most probiotics are destroyed by antibiotics</td>
<td>Strong enough to withstand broad-spectrum antibiotics</td>
</tr>
<tr>
<td><strong>Clinically shown to reduce intestinal permeability</strong></td>
<td>❌</td>
<td>Ask us about our Leaky Gut study</td>
</tr>
<tr>
<td><strong>Clinically shown to reduce serum cholesterol and triglycerides</strong></td>
<td>❌</td>
<td>Ask us about our Cholesterol study</td>
</tr>
<tr>
<td><strong>Provides powerful immune support</strong></td>
<td>❌</td>
<td>Ask us about our Hashimoto's study</td>
</tr>
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Spore-based probiotics are much more effective than conventional probiotics on the market because they are designed to survive through the harsh gastric system, colonize, and increase microbial diversity in the gut. Because these spores are so multi-functional, they maintain their efficacy for a broad spectrum of conditions. A mega-dose, spore formula with broad-spectrum activity has only been available for the past few decades as a pharmaceutical drug in Europe – until now. MegaSporeBiotic is the first mega-dose, multi-spore probiotic available as a dietary supplement.

A culmination of published research shows that the spores found in MegaSporeBiotic can support healthy function with a variety of health conditions.

**Healthy Brain**
Inhibits LPS from accumulating in the brain, where it can damage neurons and increase inflammation.

**Healthy Mood**
Reduces circulating LPS levels, shown to have a disruptive effect on serotonin and dopamine function.

**Healthy Heart**
Supports healthy inflammatory response and healthy triglyceride balance.

**Healthy Digestion**
Increases butyrate production, which has been shown to reduce the inflammatory process in the gut.

**Healthy Skin**
Reduces elevated LPS levels to support healthy skin.

**Balanced Gut Flora**
Supports healthy gut flora that are more resistant to unwanted overgrowths.

**Leaky Gut Solution**
Seals up the gut in just 30 days!

**Balanced Hormones**
Reduces circulating LPS associated with a variety of endocrine imbalances.

**Healthy Urinary Tract**
Balances the gut microbiome which controls the bladder microbiome.

**Immune Health**
Supports a healthy immune response to the environment and food. Spores have the ability to interact with and modulate the immune system.
Start with 1/2 capsule or 1 full capsule with food and slowly increase to 2 capsules per day using the following protocol.

**Week 1:** 1 capsule every other day | **Week 2:** 1 capsule daily
**Week 3:** 2 capsules daily (make the dosing schedule purple as well)

If 1 capsule every other day is too strong, try starting with 1/2 capsules or even 1/4 capsule in some cases. Possible symptoms may include abdominal cramping, loose stools, and changes in bowel movements. Though these symptoms may be uncomfortable, they are a sign that the product is working! Symptoms should resolve within 2-3 days.


