

### The 1st probiotic to

## **PROTECT**

### its human host

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.

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

## MegaSporeBiotic





# Designed by Nature



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!

### Stomach Survivor



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.

## Immune Support



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 Solution



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





	<b>Most Probiotics</b>	MegaSpore Biotic
Predominant Species	Lactobacillus   Bifidobacteria	Bacillus
Approach	Reseed the gut	Recondition the gut
Survivability	X Most do not survive digestion	Designed to survive digestion
Adhesion	×	All humans have binding sites for bacillus
Colonization	×	Effective colonization in the human gut
Quality	Few companies DNA verify their probiotics	✓ Subject to 3rd party DNA verification
Efficacy with antibiotics	Most probiotcs are destroyed by antibiotics	Strong enough to withstand broad-spectrum antibiotics
Clinically shown to reduce intestinal permeability	×	Ask us about our Leaky Gut study
Clinically shown to reduce serum cholesterol and triglycerides	×	Ask us about our Cholesterol study
Provides powerful immune support	×	Ask us about our Pre-Autoimmune study

## The Missing Link

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

#### Immune Health

Supports a healthy immune response to the environment and food. Spores have the ability to interact with and modulate the immune system.

#### **Balanced Gut Flora**

Supports healthy gut flora that are more resistant to unwanted overgrowths

#### **Balanced Hormones**

Reduces circulating LPS associated with a variety of endocrine imbalances.

#### **Healthy Urinary Tract**

Balances the gut microbiome which controls the bladder microbiome

### 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.

#### **Leaky Gut Solution**

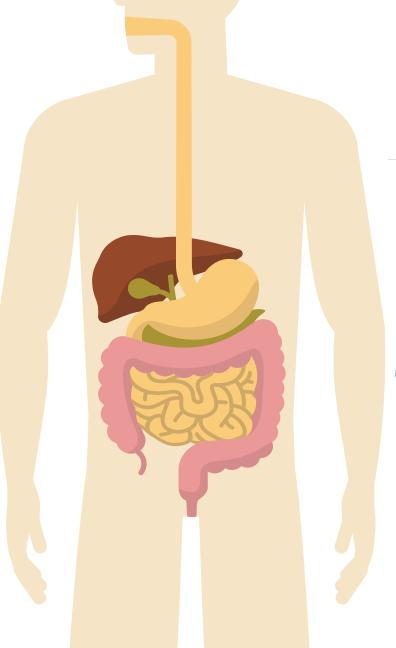
Seals up the gut in just 30 days!

#### **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



## What's in MegaSporeBiotic?

#### Bacillus Indicus HU36

- Produces lycopene, astaxanthin, beta-carotene, and lutein.
  - Produces quinols and vitamins.

#### **Bacillus Coagulans**

Used to support the bowel in conditions like IBS, Crohn's, and UC.

 Produces L+ optical form of lactic acid.

## MEGA sporebiotic

#### Bacillus Licheniformis

- Produces protease and improves protein digestion.
- Produces whole spectrum of B vitamins.

#### **Bacillus Clausii**

- Potent immune modulator.
- Maintains efficacy during antibiotic treatment.

#### Bacillus Subtilis HU58

- Produces over 12 effective antibiotics.
- Produces nattokiase and vitamin K2.

The statements made regarding these products have not been evaluated by the Food and Drug Administration. The efficacy of these products has not been confirmed by FDA-approved research. These products are not intended to diagnose, treat, cure or prevent any disease. All information presented here is not meant as a substitute for or alternative to information from health care practitioners. Please consult your health care professional about potential interactions or other possible complications before using any product. The Federal Food, Drug and Cosmetic Act requires this notice.

## Frequently Asked Questions

#### **Dosing Instructions**

Start with 1/2 or 1 full capsule with a meal and slowly increase using the following protocol:

Week 1: Take 1 capsule every other day with a meal

Week 2: Take 1 capsule daily with a meal

Week 3+: Take 2 capsules daily with a meal

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 subside within 2-3 days. If symptoms persist, simply discontinue for a few days and start again at a smaller dose. If 1 capsule every other day is too strong, try starting with 1/2 capsule or even 1/4 of a capsule.

#### Frequently Asked Questions

#### Q: What is the shelf life of MegaSporeBiotic?

5 Years. The expiration date will be indicated on the bottle.

#### Q: What is the source of bacterial strains found in MegaSporeBiotic?

The original bacterial strains were isolated from healthy human subjects. They are kept in a bacteria bank at London University Royal Holloway. When it is time for production, the bacteria are checked again for proper characterization and DNA verified to be the strains we require. Those strains are shipped individually to our pharmaceutical-grade facility, where they are grown to the quantities we require and then shocked back into their spore form for 100% spore delivery. The final product then undergoes 3rd party DNA verification to ensure that it meets label claims.

#### Q: Is this a soil-based probiotic?

No. Although the strains found in MegaSporeBiotic can survive in the soil, they are not soil-based organisms (SBOs) – organisms that are meant to thrive in the soil. Unlike SBOs, the strains in MegaSporeBiotic are natural, gut commensal organisms that are meant to thrive in the human gut. Some SBOs can withstand the harsh environment of the digestive tract, but they are not built to thrive in the human gut.

#### Q: Why are there only 4 billion CFUs in MegaSporeBiotic? I thought you wanted at least 20 billion CFUs?

There is actually no scientific data to support the idea that probiotics with higher CFUs are more effective. In fact, many of these probiotics contain Lactobacillus or Bifidobacter, which tend to die off during digestion. Because the human gut naturally contains trillions of these species, you would need to supplement with trillions of Lactobacillus or Bifidobacter to see a noticeable improvement in immune function. Bacillus species, on the other hand, only exist in the human gut around 10 million CFUs, so we see a noticeable improvement by supplementing with 4 billion CFUs.



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