ALIMENTUM LABS

Terra µBiomic

Broad-Spectrum SBO Probiotic

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Terra µBiomic

Broad-Spectrum SBO Probiotic

Soil-based organism (SBO) probiotic designed to reset the gut microbiome, enhance biodiversity, improve digestion, maintain the gut lining, and reduce pathogenic microbes.

Gut | Detox | Immunity | Whole Body

Health Indications

- Alleviate Diarrhea
- Diversify the Microbiome
- Reduce Side-Effects of Antibiotics
- Ease Allergy Symptoms
- Fight Pathogens (Harmful Bacteria) and Their Toxins
- Support Healthy Digestive Function
- Support Healthy Bowel Transit Time
- Reduce Occasional Constipation, Gas and Bloating

Instructions For Use

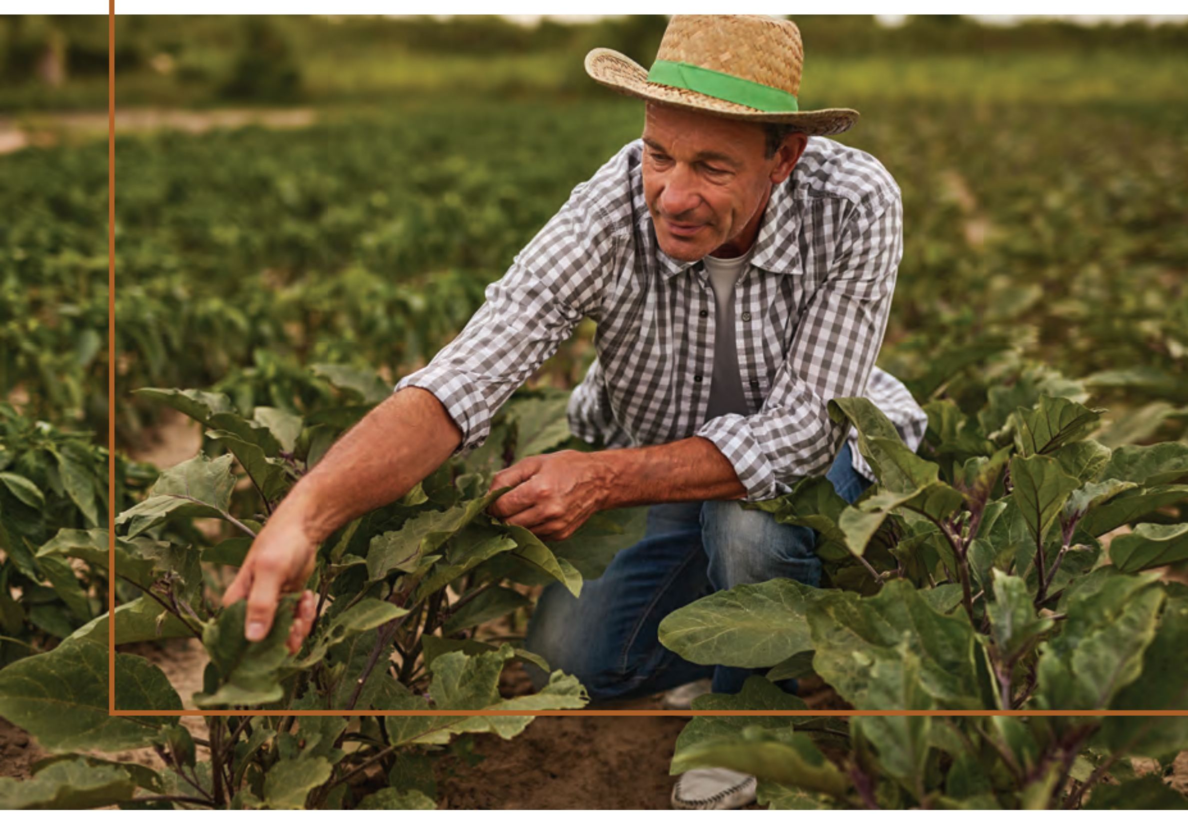
Take 1-2 capsules daily for 30 days with or without food. Refrigerate after opening to optimize shelf life. We recommend that Terra µBiomic be paired with its synergistic prebiotic formula, Terra Superfood, for unparalleled results and remarkable health benefits.

**Individual needs may vary; please consult your practitioner before altering the prescribed doses or protocols.

Product Description

Soil-based probiotics are friendly bacteria found in the soil that have evolved alongside humans. There are over 100 types of beneficial soil-based probiotics naturally occurring in the soil. In the past, people had daily contact with these bacteria through activities like farming and hunting. Nowadays, our natural exposure to these probiotics is very limited.

Historically, humans have had a strong connection with the earth, sourcing their food from the land and not relying on disinfectants or pesticides. However, in modern times, soil-based probiotics are rare in our diets unless we grow our own food or eat fresh, organic produce straight from the ground. Due to the long history of interaction between humans and these microbes, soil-based probiotics can play a significant role in shaping the gut microbiome. The microbiome is a community of microorganisms in your digestive system that impacts every facet of your overall well-being.



Consuming these probiotics can help compensate for the reduced contact we now have with natural environments and dirt. What sets them apart is their ability to release spores protected by a tough shell, which is why they are also sometimes called 'spore-forming bacteria.' This shell allows them to survive the acidity of the stomach and the digestive enzymes that would normally harm other probiotics. This resilience ensures that they reach the colon, where they are most effective, unharmed and ready to provide their beneficial effects.

These soil-based organisms are especially good at producing enzymes, antimicrobial peptides, and possess unique detox abilities. Their ability to break down substances, produce important gut healing compounds, and fight harmful pathogens such as foreign bacteria, mold, yeast, and parasites are what makes SBO probiotic species special. They are an especially good place to start when looking to heal a damaged intestinal lining like leaky gut,[1] correct digestive issues related to pathogens, or address an unhealthy microbiome. SBO probiotics are essential when starting any type of detox, purge, or intestinal reset protocol.

Key Elements and Features of Terra µBiomic

Purge Pathogens

SBOs act as a biological defense force by producing antimicrobial substances, enhancing the body's ability to fend off pathogens like bacteria, mold, fungus, yeast and parasites. Their resilience in harsh conditions makes them adept at maintaining a healthy balance in the face of microbial challenges. Incorporating soil-based organisms into the microbiome fortifies the body's natural defenses against a full spectrum of pathogens to promote optimal health.

Heal the Gut Lining

Soil-based organisms (SBOs) exhibit unique properties that contribute to the healing of the intestinal lining, which is particularly beneficial for conditions like leaky gut. These microorganisms produce bioactive compounds and enzymes that support the restoration of gut integrity.

Detox and Drainage

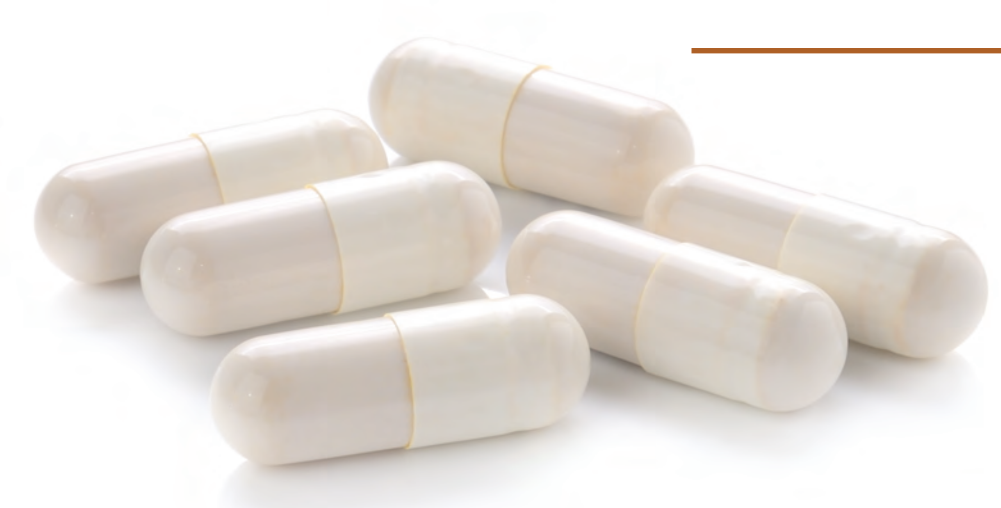
Soil-based organisms (SBOs) play a vital role in detoxification by producing unique enzymes that break down and eliminate toxins. They effectively bind and capture toxins, heavy metals, and harmful substances in the intestinal tract, contributing to the body's natural detox pathways. This helps reduce toxin exposure, supporting optimal genetic expression and metabolic functions. Additionally, SBOs optimize the drainage pathway of the colon, ensuring proper digestive functions. By capturing die-off, toxins, and excess waste hormones, they facilitate the excretion of these substances, promoting overall well-being.

Digestive Function and Transit Times

Soil-based organisms (SBOs) produce specialized enzymes that specifically target and break down a diverse range of food and food allergens. This not only enhances the digestive process but also facilitates improved nutrient absorption. By effectively addressing unique food allergens, SBOs play a crucial role in optimizing digestive function. Additionally, these organisms promote a balanced composition of gut bacteria, ensuring ideal transit times for food within the digestive system. In doing so, SBOs support the body in efficiently extracting essential elements from the diet, thereby enhancing overall digestive efficiency.

Guaranteed Viability

Soil-based organisms (SBOs) possess a remarkable resilience that allows them to endure the harsh conditions of the gastrointestinal tract. These hardy microorganisms have evolved mechanisms to withstand the acidic environment of the stomach, enabling them to reach the intestines intact where they exert their beneficial effects.



Probiotic Spotlight

SBO probiotics are believed to closely mimic the ancestral environment in which humans evolved, where exposure to diverse microorganisms in the soil played a crucial role in shaping the gut immune system and overall health. This connection to the natural environment suggests that SBO probiotics offer a more holistic approach to microbiome support.

By introducing these unique strains that are adapted to thrive in soil, SBO probiotics contribute to the overall function of the gut and its microbiome on top of what is commonly offered by conventional probiotic supplements.

This is not to say that conventional probiotics are not also beneficial. We recommend them, as they are essential and provide their own unique health benefits. However, we highly recommend starting with SBO probiotics to reset the gut microbiome and heal the gut lining first. Then, introduce our other prebiotic and probiotic systems directly after.

How Terra µBiomic Works

SBOs promote a balanced gut microbiome, enhance digestion, support immune health, stabilize gut pH, have a strong ability to combat harmful bacteria, and contribute to the production of short-chain fatty acids.

Key Ingredients

Weizmannia coagulans (Bacillus coagulans)

Weizmannia coagulans (previously known as *Bacillus coagulans*) is the most studied soil-based probiotic. It is a spore-forming probiotic that produces lactic acid and helps alleviate symptoms and complications associated with irritable bowel syndrome (IBS).[2–7] *W. coagulans* can also inhibit the growth of harmful bacteria.[2,7] Additionally, it can synthesize specific vitamins like B1, B2, B3, B6, and B12, while producing various enzymes (e.g., amylases, proteases, and lipases) that assist in digesting carbohydrates, proteins, and fats.[3,8,9] Furthermore, certain metabolites generated by *W. coagulans* possess antioxidant properties, contributing to the reduction of oxidative stress and in turn, promoting gut repair.[2,3] Studies have shown that *W. coagulans* has a positive effect on gastrointestinal issues like diarrhea, bloating, abdominal pain, small intestinal bacterial overgrowth (SIBO), and constipation.[3,4,10,11]

Bacillus pumilus

B. pumilus is an aerobic, spore-forming probiotic commonly found in the soil, known for its high resistance to environmental stresses. It is highly efficient at producing antimicrobial fungal compounds that support the elimination of pathogenic mold and yeast.[12,13] Additionally, *B. pumilus* produces two strong antioxidant compounds: riboflavin (vitamin B2) and C30 carotenoids.[14]

Alkalihalobacillus clausii

Also known as *Bacillus clausii*, *A. clausii* inhibits the growth of various pathogens and opportunistic pathogens by producing antimicrobial compounds,[15–17] in addition to synthesizing the potent antioxidant riboflavin, also known as the essential vitamin B2.[16] *A. clausii* has been shown to modulate both the pro- and anti-inflammatory balance of the gut.[17,18] It is also known to reduce the duration of diarrheal illness and help control small intestinal bacterial overgrowth (SIBO).[17]

Bacillus licheniformis

The spores of *B. licheniformis* are able to withstand the presence of bile salts and low gastric pH, allowing them to reach the gut intact. This soil-based probiotic produces a wide range of digestive enzymes, antimicrobials, and organic acids that help heal and manage the gut lining while regulating the microbiome.[19,20] *B. licheniformis* has also shown promise in weight control and improved glucose tolerance.[21]

Bacillus amyloliquefaciens

Bacillus amyloliquefaciens is known for its metabolic diversity that allows it to produce a wide range of compounds with antioxidant, antimicrobial, and anti-inflammatory properties, while also inhibiting biofilm formation by pathogenic bacteria, making it a valuable microorganism for potential health applications.[22–24]

Bacillus megaterium

Also known as *Priestia megaterium*, research shows that this probiotic increases the activity of digestive enzymes and enzyme production.[25] *B. megaterium* produces mannitol and C30 carotenoids, which help reduce oxidative stress in the gut. This powerful antioxidant action promotes the growth of the *Faecalibacterium prausnitzii*, a highly beneficial keystone probiotic that is also found in Alimentum Labs' Neuro µBiomic.[14]

Paenibacillus mucilaginosus

Also known as *Bacillus mucilaginosus*, this probiotic is typically found in the soil and provides dynamic support to the digestive system. *P. mucilaginosus* produces a bacteriocin that inhibits the growth of opportunistic pathogens, such as *Clostridioides difficile*.[26] It also produces exopolysaccharides (EPS) that have been shown to provide immunomodulatory effects.[27]

Bacillus subtilis

Among *Bacillus* bacteria, *B. subtilis* is the species that produces the most antimicrobial compounds to fight off harmful bacteria in the microbiome.[28–30] Research shows these probiotics also possess strong properties that promote healthy inflammatory responses in the intestine and strengthen the gut barrier.[31] *B. subtilis* has a unique ability to produce a potent antiviral peptide called P18 that can help provide protection against viral pathogens.[32] It is also an excellent producer of proteolytic enzymes (proteases) that assist in breaking down proteins during digestion, or biofilms on an empty stomach.[29,30] Furthermore, it shows potential in reducing inflammation in the intestinal tract.[33]

Bacillus indicus

A very hardy spore-forming bacterium that thrives in the harsh conditions of the digestive tract,[34,35] *B. indicus* produces antioxidant and anti-inflammatory compounds, such as xanthorhamnin and carotenoids.[34,36] It is also capable of forming biofilms that can inhibit the growth of pathogens and interact with the host immune system.[37]

Brevibacillus laterosporus

Research shows that the *B. laterosporus* species, (previously known as *Bacillus laterosporus*) in particular, exhibits a wide variety of antimicrobial features. Consequently, it plays a crucial role in maintaining a healthy GI tract by protecting the microbiome from human pathogens and food spoilage microbes.[38–40]

Paenibacillus polymyxa

Recent research shows that this probiotic assists in controlling pathogenic microorganisms through the secretion of antimicrobial compounds.[41,42] Additionally, *P. polymyxa* has demonstrated antioxidant and immune-stimulating properties.[42]

Kefir

While it has been consumed for centuries, ongoing research continues to report numerous benefits associated with its consumption. These include antimicrobial activity against human pathogens and some promising evidence suggesting that it may have the potential to improve lactose intolerance. As a mesophilic symbiotic culture, kefir serves a dual role as both a probiotic and a unique prebiotic food source for bacteria.[43]

Kombucha SCOBY

Enhances gut health and supports a normal immune system response. Research shows that the drink is characterized by a high content of bioactive compounds that provide strong antioxidant and antimicrobial properties.[44]

Warnings/Contraindications

When used as directed there are no known contraindications for Terra µBiomic.

It is always recommended that you consult your practitioner prior to adding any new supplement to your regimen if you are pregnant, breastfeeding, experiencing renal failure, undergoing an organ transplant(s), managing diabetes with insulin, or are taking medication(s) for any pre-existing conditions.

Safety

All ingredients are tested before use for:

- Pathogenic microbial contaminants
- Heavy metals and/or chemical contaminants
- Correct genus and species of probiotic microbes
- Purity

Additional Information

- Gluten Free
- Dairy Free
- Vegan
- No Sugar
- Non-GMO
- cGMP Facility
- No Egg

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