# Plexus VitalBiome™

### Healthy Gut. Happy Mind.™

A revolutionary probiotic supplement that contains clinically studied probiotic strains that help improve health and mood while reducing feelings of stress, nervousness, and tension.\*



# Health, Happiness, and...Gut Friendly Microbes?

Want health and happiness? (Who doesn't?) Start in your gut. Your microbiome (the trillions of microbes in your gut) has an enormous impact on how you feel—physically, and emotionally. That's because:

- 70% of immune cells live in your gut
- 90% of your body's Serotonin (a mood boosting neurotransmitter) is produced in your gut
- Gut microbes secrete neurotransmitters like GABA and Dopamine
- Gut microbes produce essential nutrients like Vitamins B12, Folate, and K
- Gut microbes aid nutrient digestion and absorption
- Certain gut microbes have the ability to actually reduce stress and tension

As long as your microbiome stays in balance, you're well on your way to health and happiness.

The problem is this: your microbiome is under attack every day. A typical modern lifestyle—with processed foods, artificial sweeteners, high stress, lack of sleep, and other environmental factors—weakens the beneficial microbes in your gut, leading to an imbalanced gut. What does this look like? Occasional GI discomfort, stress, bloating, digestive issues, mood swings, tension, the inability to relax, and any number of other problems related to your health or your mood. Sound familiar?

### **How VitalBiome Works**

VitalBiome is a revolutionary probiotic supplement that contains 8 probiotic strains, including 2 psychobiotic strains, *Lactobacillus helveticus* (Rosell-52) and *Bifidobacterium longum* (Rosell-175), which have been clinically studied to support improved health and mood, while reducing feelings of stress, nervousness, and tension.\*

- Lactobacillus helveticus (Rosell-52)
- Bacillus coagulans (MTCC 5856) Lactospore®
- Bifidobacterium lactis (Bl-04)
- Bifidobacterium longum (Rosell-175)
- Saccharomyces boulardii
- Bifidobacterium lactis Bi-07 (ATCC SD5220)
- Lactobacillus plantarum
- Lactobacillus acidophilus NCFM (ATCC 700396)

These powerful, clinically demonstrated probiotics help bring your microbiome into balance, boosting your immune and digestive systems, and improving your mood.\*

VitalBiome works to make you healthier—and happier— from the inside out.\*

## **VitalBiome Primary Benefits**

- Helps reduce feelings of stress, nervousness, and tension\*
- Promotes relaxation\*
- Stabilizes stress hormones\*
- Improves mood\*
- Helps reduce bloating and occasional bowel discomfort\*
- Boosts immune and digestive systems\*
- Helps reduce occasional GI discomfort\*

### **VitalBiome Advantage**

- Contains probiotic strains that have been clinically demonstrated to improve health and happiness\*
- Features two psychobiotic strains, Lactobacillus helveticus (Rosell-52) and Bifidobacterium longum (Rosell-175)
- 7 billion CFU or colony forming units<sup>^</sup>
- Clinically studied levels of key probiotics even at end of shelf life.
- Delayed release capsule protects living organisms from stomach acid
- · Gluten Free, Non-GMO, and Vegetarian



### **Gut Health**

## **Microbiome Activating Formula**

VitalBiome's formula has been tested in an independent, highly advanced and scientifically validated in vitro study created to mimic the gastrointestinal system. This study demonstrated VitalBiome's ability to help beneficial microbes flourish in the gut, improving your overall health.\*

Preliminary findings indicate:

- Increased beneficial Lactobacillus up to 418%<sup>◊</sup>\*
- Increased beneficial Bifidobacterium up to 158%<sup>◊</sup>\*
- Increased beneficial Akkermansia microbe up to 165%\*\*
- Increased Butyrate up to 67%<sup>◊</sup>\*
- Increased Propionate up to 45%<sup>◊</sup>\*

### **Who Should Use This Product?**

VitalBiome is the best probiotic choice for adults who want to bring their gut back in balance, so they can feel healthier and happier.\*

### **Did You Know?**

- An imbalanced gut is an increasingly common problem in North America, affecting as many as 60% of adults.
- Indications of an imbalanced gut include occasional bad breath, bloating, gas, constipation, and moodiness. If these conditions go unnoticed things like digestive problems, skin conditions, and impaired immune system may occur.
- Many probiotic products promise high CFU counts, but use cheap, ineffective strains that have little to no impact on the microbiome.



# **Frequently Asked Questions**

### Why do I need a probiotic supplement?

Things like poor diet, medications, lack of exercise, and even stress directly impact the number of beneficial microbes found in our microbiome. This imbalance keeps us from enjoying life at its fullest. Reseeding our GI tract with VitalBiome helps restore balance and helps our body function optimally.\*

### How does VitalBiome "seed" the gut?

The majority of Americans experience an out of balance gut. To help get your gut back in balance you need to weed, seed, feed and protect your gut. VitalBiome helps seed your gut with 7 billion CFU^ beneficial microbes that help crowd out unwanted ones making your gut more healthy. The clinically studied strains selected in VitalBiome provide significant health benefits, and were also selected because of their ability to survive the journey through your GI tract and be able to adhere to the gut wall.\*

### What are the strains used in VitalBiome?

VitalBiome contains eight beneficial probiotic strains that include: Lactobacillus helveticus (Rosell-52), Bacillus coagulans (MTCC 5856) LactoSpore®, Bifidobacterium lactis (Bl-04), Bifidobacterium longum (Rosell-175), Saccharomyces boulardii, Bifidobacterium lactis Bi-07 (ATCC SD5220), Lactobacillus plantarum, and Lactobacillus acidophilus NCFM (ATCC 700396).

### What is a psychobiotic probiotic strain?

Psychobiotic strains are live bacteria (probiotics) which, when ingested, confer mental health benefits through interactions with commensal gut bacteria. In VitalBiome, both *Lactobacillus helveticus* (Rosell-52) and *Bifidobacterium longum* (Rosell-175) are psychobiotic probiotic strains.<sup>8\*</sup>

### What is the difference between VitalBiome and ProBio 5?

VitalBiome is a probiotic supplement that is formulated to seed your gut with significant levels of beneficial microbes. It contains 7 billion CFU^ (from 8 different probiotic strains), some of which help reduce feelings of stress and tension, improve mood, reduce occasional GI discomfort, gas, and bloating, and help improve immune health. VitalBiome utilizes clinically studied probiotic strains protected in a delayed release capsule. ProBio 5 is a powerful enzyme blend, paired with probiotics and Grape Seed Extract, that is designed to help keep intestinal yeast in balance to help keep your gut microbiome healthy. ProBio 5 contains 2 billion CFU at the time of manufacture from 5 different probiotic strains.\*

### Can I take VitalBiome with other Plexus® products?

Absolutely! VitalBiome is the perfect complement to other Plexus products. We recommend taking VitalBiome with Bio Cleanse, ProBio 5®, and Slim Microbiome Activating or Slim Hunger Control.\*

VitalBiome is a great companion to TriPlex. We understand it is difficult to remember which supplements to take throughout the day so we recommend taking VitalBiome in the morning, Slim 30-60 minutes before a meal, Bio Cleanse between meals, and ProBio 5 at night.



# **Frequently Asked Questions**

### When can I expect to see results?

Results can vary from individual to individual, but participants of the strain clinical tests reported reduced feelings of stress, improved mood, and improved digestive health after 30 days.\*

### What is CFU count and is it important?

CFU, or colony-forming units, is a term often seen in conjunction with probiotic supplements. It is a measurement of viable microbial cells that can replicate to form one visible colony. CFU count is as important as the clinical study it is tied to. VitalBiome was formulated to deliver clinically demonstrated CFU counts at the time of expiration.

### What is the CFU count of VitalBiome?

VitalBiome contains over 7 billion CFU per capsule at time of expiration.

### What is a delayed-release capsule and why is it important?

VitalBiome utilizes a delayed release capsule that has been engineered to better withstand the harsh acidic conditions found in the stomach. Studies show these capsules take 45 minutes to dissolve while traditional capsules are less than 30 minutes. Protecting probiotics from these harsh conditions insures the maximum number of live probiotics make it to the intestinal tract.

### Will I experience any side effects with VitalBiome?

No, however those not used to consuming higher doses of probiotics may experience some gas and bloating. Interestingly, this is good as it indicates the beneficial microbes are crowding out unwanted microbes and improving your GI tract. Be sure to drink plenty of water and give it some time. These conditions usually pass within a few days as your GI tract gets rebalanced with more beneficial microbiota. Consult a physician if you have concerns with taking probiotic supplements.\*

### When is the best time to take VitalBiome?

While VitalBiome is best taken on an empty stomach, it can also be taken with food.

### Do I need to refrigerate VitalBiome?

It is not necessary to refrigerate VitalBiome.

### Can I take half a serving or multiple capsules?

VitalBiome was formulated to deliver product claims based on individual strain clinical testing results. Therefore, we recommend taking the suggested serving of one capsule per day.

# I don't like swallowing pills; can I break open the capsule to take it?

While not recommended, you can open the capsule to consume. You simply lose the benefits of added stomach acid protection that the capsule provides.

# Does VitalBiome contain any of the common food allergens (Dairy, Egg, Peanut, Soy, Fish, Shellfish, Tree Nut, and Wheat)?

Yes, it contains dairy and soy in minor amounts, due to them being used in the cultivation of some of the probiotic strains.

### Which VitalBiome ingredient contains dairy?

Bifidobacterium longum (Rosell-175) utilizes dairy products during the fermentation process. The clinically demonstrated benefits that this strain provides are so incredible, this strain was thus added to the formula. Anyone with dairy allergies should consult a physician prior to using VitalBiome.

### Which VitalBiome ingredients contain soy?

Lactobacillus helveticus (Rosell-52) and Bifidobacterium longum (Rosell-175) utilize soy products during the fermentation/manufacturing process. The clinically demonstrated benefits that these strains provide are so incredible, these strains were thus added to the formula. Anyone with soy allergies should consult a physician prior to using VitalBiome.

### Can I use VitalBiome with my medication?

Consult with your physician if you have any questions or concerns with medication interactions.

### Is VitalBiome safe for pregnant or nursing women?

While most physicians approve the use of probiotics with pregnant or nursing women, please consult with your physician prior to use.

### What is the benefit of using probiotic yeast?

VitalBiome contains *Saccharomyces boulardii*, a hardy probiotic yeast that can survive the harsh journey to the intestinal tract where it is shown to support digestive health. Yeast, along with bacteria, are part of a natural gut microbiome.\*

# Does VitalBiome contain magnesium stearate or silicon dioxide?

No, VitalBiome contains no magnesium stearate or silicon dioxide.

# **Ingredient Glossary**

### **VitalBiome**

VitalBiome consists of probiotic strains that have been demonstrated to positively rebalance the gut microbiome and help improve overall health. Not all probiotic strains are alike. To be effective, strains need to be selected that can survive the journey through the gastrointestinal tract (stomach pH and bile acid) to reach the colon, and adhere to the intestinal tract lining to exert health benefits and act as a barrier against unwanted microorganisms. It is also important that they have been clinically demonstrated - many products on the market do not identify the specific probiotic strains used in their products.\*

VitalBiome highlights both the probiotic species as well as the strains (the specific type) from clinically demonstrated probiotic cultures which are supported by multiple human clinical studies published in leading journals. VitalBiome strains are of the highest quality; they are well-suited for intestinal survival, high tolerance to the gastrointestinal conditions (e.g., stomach acid, and bile acids), and strong adhesion to intestinal cell lining. VitalBiome is designed to deliver verified health benefits as well as improve mood and reduce feelings of stress and tension.\*

#### **Probiotics**

Probiotics are beneficial, live microorganisms, also known as beneficial bacteria or beneficial microbes, and are normally found in a healthy human gastrointestinal tract. Probiotics help achieve a normal, balanced gut microbiome and are essential to good health. Probiotics help promote healthy digestive and immune function, improve mood, suppress biological stress response, and act as a barrier against unwanted microorganisms, along with impacting your metabolism.\*

### Lactobacillus

Lactobacillus are 'friendly' microbes that live in our digestive system. Lactobacillus produce lactic acid which helps make your digestive system less hospitable for unwanted microbes. Lactobacillus help improve the digestion of foods and also help support a healthy immune system. Lactobacillus stimulate powerful defense cells like natural killer cells to help counter unhealthy invaders. VitalBiome includes the following highly studied strains of Lactobacillus to deliver a number of health benefits.\*

Lactobacillus acidophilus NCFM (ATCC 700396) is one of the most highly studied probiotic strains that are supported by over 100 scientific studies, including 50 human clinical studies. L. acidophilus NCFM (ATCC 700396) survives the journey through the gastrointestinal tract and helps crowd out unwanted microbes while producing compounds that overpower unwanted microbes to help improve gut health and maintain the balance of healthy microbiota.\*

Lactobacillus helveticus (Rosell-52) has been validated by 82 scientific studies, 45 of which are human clinical studies, to enhance gut microbiome health and help improve mood.\*

L. helveticus (Rosell-52) can adhere to the intestinal cell lining, thereby helping to maintain the intestinal barrier of the gut, while promoting immune and gut health. L. helveticus (Rosell-52) has also been clinically demonstrated to help reduce feelings of stress and tension while helping improve mood when combined with Bifidobacterium longum (Rosell-175).5,6\*

**Lactobacillus plantarum** has been validated by four scientific studies, and has a long history of safe use. L. plantarum has exceptional survival ability through stomach acid and helps produce lactic acid which helps inhibit growth of unwanted microbes. L. plantarum has excellent adhesion to the intestinal lining, which brings this healthy bacterium in close contact with the intestinal immune system, giving the probiotics a better opportunity to modulate immune response.\*

#### **Bifidobacterium**

Bifidobacterium are some of the best-studied probiotics. Bifidobacterium attach to the mucous lining and help protect the physical lining of your intestine against damage from unwanted microbes. Bifidobacterium also help produce important Vitamins like B12, Biotin and K. When you were born, Bifidobacterium made up 95% of your intestinal bacteria which helps to promote gut microbiome health. Bifidobacteria are broadly recognized for their key role in the gut microbiome throughout life. VitalBiome uses highly studied strains of the Bifidobacterium to promote balance in the intestinal tract and benefits health.4\*

Bifidobacterium lactis (Bl-04) has been validated by 13 scientific studies, and is suited for intestinal survival with its ability to tolerate stomach acid and for its ability to adhere to the human intestinal tract. B. lactis (Bl-04) helps improve gastrointestinal health and has been shown in a clinical study to help maintain and more rapidly restore microbiota after antibiotic treatment. B. lactis (Bl-04) has been shown in clinical studies to improve immune system health.1\*

**Bifidobacterium lactis Bi-07 (ATCC SD5220)** is a very powerful probiotic that has been demonstrated in over 36 scientific studies. It helps improve digestion and intestinal regularity, and helps enhance immune system response.\*

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- 2. http://www.probion.com/files/2012/01/TM Bl-04 June20101.pdf
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- 7. https://www.ncbi.nlm.nih.gov/pubmed/26922379
- 8. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5102282



# **Ingredient Glossary**

**Bifidobacterium longum** (Rosell-175) is clinically shown to support mood and relaxation when combined with *L. helveticus* (Rosell-52). Stress and tension impacts a significant percent of Americans, and an imbalance of gut microbiota can negatively impact the biochemical functioning of brain cells. The combination of *L. helveticus* (Rosell-52) and *B. longum* (Rosell-175) helps reduce stress induced digestive discomfort. The combination also helps reduce stress hormone (cortisol) levels while significantly decreasing stress reaction, promoting greater sense of relaxation and improving mood.<sup>2,3,5,6\*</sup>

### Saccharomyces boulardii

Saccharomyces boulardii is not considered a bacteria, but is a yeast that happens to function like a probiotic in the body, and survives passage through stomach acid to deliver its benefits to the intestinal tract. S. boulardii is a gut-healthy probiotic that helps regulate intestinal microbiota and protect against unwanted microbes. S. boulardii is a highly studied probiotic which protects and maintains normal intestinal microbiota, helps restore disruptions to microbiota imbalance, and supports digestive health.\*

### Bacillus coagulans

Bacillus coagulans is a spore-forming bacterial species within the genus Bacillus. B. coagulans form resistant structures called spores. Spores are very hardy and are resistant in the acidic environment of the stomach and begin germinating and proliferating in the intestine. B. coagulans are lactic acid producing probiotics that provide a wide range of intestinal health benefits.\*

**Bacillus coagulans (MTCC 5856) Lactospore®** has been demonstrated by 11 clinical studies to reduce occasional GI discomfort and benefit health.<sup>1,7\*</sup>

### Hydroxypropyl Methylcellulose

Hydroxypropyl Methylcellulose is found in the delayed release veggie capsule shell and is made from natural cellulose obtained from softwood trees, mainly pine and spruce. The natural cellulose is then modified to a form of gum or gel like material. VitalBiome's delayed release capsule is Non-GMO, vegetarian, and kosher.

#### **Brown Rice Flour**

Brown Rice Flour is made from rice hulls that are sterilized and ground into a fine powder. Brown Rice Flour is used as an excipient to ensure consistent capsule fill weight.

### **Medium Chain Triglycerides**

This is used as an excipient that prevents both powder and capsules from sticking to surfaces during encapsulation.

Suppleme	nt Fac	ts
Serving Size 1 Capsule Servings Per Container 30		
	Amount Per Serving	% DV
Probiotic Blend	7 billion CFU <sup>^</sup>	
Lactobacillus helveticus (Rosell-52)		
Bacillus coagulans (MTCC 5856) LactoS	Spore®	†
Bifidobacterium lactis (BI-04)		
Bifidobacterium longum (Rosell-175)		
Saccharomyces boulardii		†
Bifidobacterium lactis Bi-07 (ATCC SD5	220)	Ť
Lactobacillus plantarum	,	Ť
Lactobacillus acidophilus NCFM (ATCC	700396)	Ť
	,	
† Daily Value (DV) not established		

Other Ingredients: Brown rice flour, hypromellose (vegetarian capsule), and medium chain triglycerides.

**Contains: Milk and Soy** 

Saccharomyces boulardii is a source of yeast.

#### Sources

1. http://www.globalhealingcenter.com/natural-health

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### **Additional Clinical Study References**

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