

Which VitalBiome™ ingredients contain soy?

Lactobacillus helveticus (R0052) and *Bifidobacterium longum* (R0175) utilize soy products during the fermentation/ manufacturing process. They, along with brown rice flour, are also produced in a facility that processes soy containing ingredients. 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 children?

Consult with your pediatrician prior to giving VitalBiome to your child.

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* (I-3799), a hardy probiotic yeast that can survive the harsh journey to the intestinal tract where it is shown to support digestive health.

Does VitalBiome contain magnesium stearate or silicon dioxide?

No, VitalBiome contains no magnesium stearate or silicon dioxide.

INGREDIENT GLOSSARY

NATURAL INGREDIENTS

Our number one priority of Plexus® is to use natural, non-GMO ingredients in our products whenever possible. Ingredients in this category are primarily obtained directly from a natural source, or they may be obtained through simple chemical reactions like fermentation. Such reactions do not significantly alter the chemical structure of the original natural ingredient. For example, probiotics often utilize fermentation during the manufacturing process. Ingredients like this are categorized as natural.

NATURALLY DERIVED INGREDIENTS

Although an ingredient may be found in nature, it may not occur in a concentration that is high enough for our high potency formulations. Fortunately, such ingredients can often be derived from natural sources through a series of chemical processes including many of those described for natural ingredients.

Naturally derived also includes ingredients originating from natural sources which undergo significant modifications so that their final form is structurally and functionally different from the starting material. Although properties of such ingredients have been changed, they are extensively tested for safety and efficacy. This subcategory of “naturally sourced” ingredients like cellulose which is a natural plant fiber, originating from wood pulp. In this case, it is custom tailored by a series of chemical modifications so that it takes on different properties that make it functionally advantageous to certain products.

SCIENTIFICALLY FORMULATED INGREDIENTS

Sometimes, a sufficiently concentrated source of an ingredient cannot be found in nature, nor can it be derived from natural sources. In these instances, advances in nutritional technology allow us to use highly bioavailable ingredients formulated from biochemical building blocks. Whenever we use these types of ingredients, they are tested thoroughly to ensure bioavailability, purity, and potency.

VITALBIOME™

VitalBiome consists of 8 clinically studied 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 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 harmful 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 anxiety.*

Probiotics

Probiotics are beneficial, live microorganisms, also known as good bacteria or good microbes, and are normally found in the 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 harmful microorganisms. Probiotics can also impact your metabolism and help protect against harmful microorganisms.*

LACTOBACILLUS

Lactobacillus is a 'friendly' microbe that lives in our digestive system. *Lactobacillus* produce lactic acid which helps make your digestive system less hospitable for undesirable microbes. *Lactobacillus* helps improve the digestion of foods and also help support a healthy immune system. *Lactobacillus* stimulates 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 (Natural)** 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 survives the journey through the gastrointestinal tract and helps crowd out bad microbes

while producing compounds that overpower bad microbes to help improve gut health and maintain the balance of healthy microbiota.*

***Lactobacillus helveticus* R0052 (Natural)** 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* R0052 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* R0052 has also been clinically demonstrated to help reduce feelings of stress and anxiety while helping improve mood when combined with *Bifidobacterium longum* R0175.*

***Lactobacillus plantarum* LP-115 (Natural)** has been validated by four scientific studies, and has a long history of safe use. *L. plantarum* LP-115 has exceptional survival ability through stomach acid and helps produce lactic acid which helps inhibit growth of undesirable microbes. *L. plantarum* LP-115 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 is one of the best-studied probiotics. *Bifidobacterium* attaches to the cells of the intestine and helps protect the physical lining of your intestine against damage from bad microbes. *Bifidobacterium* also helps produce important vitamins like vitamins 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.*

***Bifidobacterium lactis* BI-04 (Natural)** has been validated by 13 scientific studies, and well 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* BI-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* BI-04 has been shown in clinical studies to improve immune system health.^{1*}

***Bifidobacterium lactis* Bi-07 (Natural)** is a very powerful probiotic that has been demonstrated in over 36 scientific studies to help improve digestion and enhance immune

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

system response. In a human clinical study, *B. lactis* Bi-07 has been shown to help reduce bloating, improve intestinal regularity and provide relief for gastrointestinal problems.^{1*}

***Bifidobacterium longum* R0175 (Natural)** is clinically shown to support mood and relaxation when combined with *L. helveticus* R0052. Stress and anxiety 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* R0052 and *B. longum* R0175 helps reduce stress induced digestive distress. The combination also helps reduce stress hormone (cortisol) levels while significantly decreasing stress reaction, promoting greater sense of relaxation and improving mood.^{2,3*}

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 gut-healthy probiotic that helps regulate intestines microbiota and protect against harmful microbes.*

***Saccharomyces boulardii* I-3799 (Natural)** 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* forms reproductive structures called spores. Spores are very hardy and are activated in the acidic environment of the stomach and begin germinating and proliferating in the intestine. *B. coagulans* is a lactic acid producing probiotic which provides a wide range of intestinal health benefits.*

***Bacillus coagulans* MTCC 5856 (Natural)** has been demonstrated by 11 clinical studies to reduce GI distress and relieve bowel discomfort and benefit health^{1*}.

Hydroxypropyl Methylcellulose (Natural)

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, vegan, kosher and halal.

Brown Rice Flour (Natural)

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

Medium Chain Triglycerides (Natural)

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

SOURCES

- ¹ <http://www.globalhealingcenter.com/natural-health/bifidobacterium-bifidum-the-health-benefits-of-probiotics/>
- ² http://www.probion.com/files/2012/01/TM_BI-04_June20101.pdf
- ³ <https://www.ncbi.nlm.nih.gov/pubmed/21436726>
- ⁴ <https://www.ncbi.nlm.nih.gov/pubmed/22483040>
- ⁵ <https://www.ncbi.nlm.nih.gov/pubmed/21983070>
- ⁶ <https://www.ncbi.nlm.nih.gov/pubmed/20974015>
- ⁷ <https://www.ncbi.nlm.nih.gov/pubmed/26922379>

ADDITIONAL CLINICAL STUDY REFERENCES

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- <https://www.ncbi.nlm.nih.gov/pubmed/24322191>
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