

Ther-Biotic® Complete

Broad-spectrum synergistic multispecies probiotic formula

Introduction

Ther-Biotic® Complete is a broad-spectrum, high-CFU, multispecies probiotic supplement containing 12 probiotic microbial species each selected for well-documented supportive health benefits. A synergistic blend of health-promoting *Lactobacillus* and *Bifidobacterium* species together with *Streptococcus thermophilus* formulated with InTactic® acid-stable technology, Ther-Biotic® Complete supplies essential intestinal microorganisms to support a more favorable balance of intestinal microbiota and healthy gastrointestinal (GI) and immune function.[†]

Product features

- The probiotic species in Ther-Biotic® Complete are supplied in a base of inulin derived from chicory root and encapsulated in a Kosher-certified vegetarian capsule.
- InTactic® acid-stable delivery technology, a proprietary hypoallergenic polysaccharide complex from seaweed, protects microorganisms during transit through the acidic gastric environment.[†]
- Hypoallergenic product free of the following common allergens: milk/casein, eggs, fish, shellfish, tree nuts, peanuts, wheat, gluten, and soybeans. Contains no artificial colors, flavors, preservatives, sugar, or salicylates are used.

Background

Probiotics are living microorganisms that when consumed in adequate amounts have beneficial effects on the health of their host.¹¹ Probiotics promote a more favorable balance of intestinal microbiota by competing with populations of less desirable microorganisms,² by producing lactic acid, acetic acid, formic acid, hydrogen peroxide, and bacteriocins.¹ Probiotics compete with these less favorable organisms for nutrients and inhibit binding of less desirable species to enteric mucosal cells.¹³⁻⁵ Probiotic bacteria support innate and adaptive immune responses by modulating circulating lymphocytes, antigen-specific antibodies, phagocytes, and natural killer (NK) cells.^{15,6} Probiotics and commensal bacteria ferment sugars, digestible and non-digestible carbohydrates, and amino acids into formate, lactate, and the short-chain fatty acids (SCFAs) acetate, propionate, and butyrate.¹⁷⁻⁹ The proteolytic enzymes secreted by probiotics support digestion by metabolizing dietary proteins, including gluten and casein.^{110,11} Probiotics also synthesize vitamin K, folates, thiamin, biotin, and vitamin B₁₂.¹¹²

How Ther-Biotic® Complete works

Lactobacilli are the predominant microbial genus in the upper GI tract,¹³ and comprise less than 1% of the microbiota in the colon and feces.^{14,15} Most Lactobacilli used as probiotics are not indigenous to the human GI tract, but only colonize the intestines when regularly consumed.¹⁶ The consumption of *Lactobacillus*-containing foods or probiotics significantly affects the number of lactobacilli in the small intestine.^{116,17} Vegetarians and people consuming traditional plant-based diets have high numbers of *L. plantarum*, *L. rhamnosus*, and *L. acidophilus*. Colonization rates with these important microorganisms are lower in individuals consuming a standard Western diet of more highly processed foods.^{17,18} Lactobacilli metabolize proteins and carbohydrates,^{19,20} hydrolyze bile salts,²¹ antagonize disadvantageous microbes,²² enhance innate and acquired immunity,^{23,24} and beneficially modulate cytokines.¹²⁵

Bifidobacteria colonize the GI tract of newborns within days of birth and play a pivotal role in the development of the GI and immune systems.^{26,27} They are a predominant genus of the infant gut microbiota and profoundly affect the physiology and immunology of the infant host.^{28,29} The species most frequently isolated from infants are *B. longum*, *B. bifidum*, and *B. breve*.²⁸ Bifidobacteria are highly adapted to the colonic environment and possess numerous properties that facilitate their own colonization.^{30,31} *Bifidobacterium* species metabolize carbohydrates that cannot be digested by the host or by microorganisms in the upper GI tract.^{132,33} They convert dietary fiber to acetate which helps support the growth of commensal butyrate-producing species through cross-feeding.^{134,35} They modulate intestinal epithelial inflammation metabolism³⁶ and colonization by less desirable species.^{131,34} Bifidobacteria numbers significantly decline with age and antibiotic use.³⁷⁻⁴⁰

Transient microorganisms do not colonize the GI tract, but instead exert beneficial functions as they pass through. Two of the best recognized transient bacteria with a very long history of use are *Streptococcus thermophilus* and *Lactobacillus bulgaricus*. These 2 species metabolize lactose, improving lactose intolerance, and produce a variety of fermentation end-products.¹⁴¹ They also appear to display synergistic cooperation.¹⁴²

†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.

Conclusion

Ther-Biotic® Complete is indicated as a foundation to support GI health by contributing to a balanced, healthful intestinal microbiota.¹ Anyone who is not consuming a diet rich in probiotics, such as are found in fresh fruits/vegetables and fermented foods, could benefit from Ther-Biotic® Complete. People with gut dysbiosis may benefit from the probiotic support offered by Ther-Biotic® Complete.¹ It may be used in conjunction with medications known to adversely affect the intestinal microbiota, such as antibiotics.

Formula CAPSULES

Supplement Facts

Serving Size 1 Capsule

Amount Per Capsule

Probiotic Blend (25 billion CFU) in a base of inulin (derived from chicory root)	280 mg*
<i>Lactobacillus rhamnosus</i>	6.0 billion CFU*
<i>Bifidobacterium bifidum</i>	5.0 billion CFU*
<i>Lactobacillus acidophilus</i>	3.0 billion CFU*
<i>Lactobacillus casei</i>	2.5 billion CFU*
<i>Lactobacillus plantarum</i>	2.0 billion CFU*
<i>Lactobacillus salivarius</i>	2.0 billion CFU*
<i>Bifidobacterium longum</i>	1.0 billion CFU*
<i>Streptococcus thermophilus</i>	1.0 billion CFU*
<i>Lactobacillus bulgaricus</i>	1.0 billion CFU*
<i>Lactobacillus paracasei</i>	0.5 billion CFU*
<i>Bifidobacterium lactis</i>	0.5 billion CFU*
<i>Bifidobacterium breve</i>	0.5 billion CFU*

*Daily Value not established.

Other ingredients: Vegetarian capsule (hydroxypropyl methylcellulose, water), InTactic® proprietary polysaccharide complex, and L-leucine.

V775-06 60 vegetarian capsules
V775-12 120 vegetarian capsules

POWDER

Supplement Facts

Serving Size 1/4 Teaspoon (Approx. 1 g)

Servings Per Container 60

Amount Per 1/4 Teaspoon

Probiotic Blend (100 billion CFU) in a base of inulin (derived from chicory root) and InTactic® proprietary polysaccharide complex	1 g*
<i>Lactobacillus rhamnosus</i>	24.0 billion CFU*
<i>Bifidobacterium bifidum</i>	20.0 billion CFU*
<i>Lactobacillus acidophilus</i>	12.0 billion CFU*
<i>Lactobacillus casei</i>	10.0 billion CFU*
<i>Lactobacillus plantarum</i>	8.0 billion CFU*
<i>Lactobacillus salivarius</i>	8.0 billion CFU*
<i>Bifidobacterium longum</i>	4.0 billion CFU*
<i>Streptococcus thermophilus</i>	4.0 billion CFU*
<i>Lactobacillus bulgaricus</i>	4.0 billion CFU*
<i>Lactobacillus paracasei</i>	2.0 billion CFU*
<i>Bifidobacterium lactis</i>	2.0 billion CFU*
<i>Bifidobacterium breve</i>	2.0 billion CFU*

*Daily Value not established.

Other ingredients: None.

K-TCP 2.25 oz. (64 grams) powder



Suggested use

Capsules: Adults: 1 capsule daily with food or as directed by a healthcare professional. **Children:** As directed by a healthcare professional.
Powder: Adults: 1/4 teaspoon daily with food or as directed by a healthcare professional. **Children:** As directed by a healthcare professional.
Caution: If you are pregnant, nursing, have a medical condition, or taking prescription drugs, consult your healthcare professional before using this product. Keep out of reach of children.

How supplied

Capsule: 60 or 120 vegetarian capsules per bottle. **Powder:** Powder net weight 2.25 ounces (64 grams) per bottle.

Storage

Keep refrigerated with the lid tightly shut to minimize entry of moisture into the bottle. Ther-Biotic® Complete is shipped with temperature-control packs to minimize exposure to high temperatures during transit.

References

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