

Ther-Biotic® Synbiotic

Shelf-stable probiotic combined with low-FODMAP certified prebiotic Sunfiber®

INTRODUCTION

The human microbiome influences many factors required for health and well-being, including metabolic function, gastrointestinal (GI) barrier health, immunologic activities, and neurobehavioral balance.^{1,2} As research surrounding probiotic supplementation continues to develop, there is a growing body of evidence that supports the importance of prebiotic supplementation, the non-digestible fibers that provide the essential nourishment needed for healthy flora to survive and successfully colonize in the GI tract. By feeding the beneficial microbiota, prebiotics contribute to homeodynamic balance within the GI tract and, subsequently, throughout the body.³ As a result, microbiome-supportive products are continuously adapting to reflect the latest research. Klaire's Ther-Biotic Synbiotic combines strain-specific, targeted probiotics with Sunfiber[®] (partially hydrolyzed guar gum), the first fiber and first stand-alone ingredient to become Monash University low-FODMAP Certified™. This comprehensive, broad-spectrum synbiotic supports microbiome health and balance, promoting the downstream benefits of a healthy GI flora.¹



PRODUCT FEATURES

- · Comprehensive microbiome support in one capsule
- Powerful, broad-spectrum probiotic with strains identified and CFU declared per strain
- Hypoallergenic, non-GMO, and shelf-stable
- Includes seven probiotic strains selected for their supportive roles in holistic, GI, respiratory, and immune health[†]
- Contains Lactobacillus acidophilus DDS®-1 and Bifidobacterium lactis UABla-12™, two clinically proven strains that support healthy digestion, GI comfort, and immune function[†]
- Contains Sunfiber® (partially hydrolyzed guar gum), a water-soluble, galactomannan prebiotic (not a starch or sugar-based fiber) that is Monash University low-FODMAP Certified™
- Utilizes a delayed-release, vegetarian capsule that has been scientifically shown to enhance the survivability of probiotics and to deliver them effectively to the intestines
- · Specialized moisture-resistant and desiccant-lined packaging further enhances the survivability of the strains

MECHANISMS OF ACTION



Supports Immune Function[†]

L. plantarum UALp-05™
B. lactis UABla-12™
L. rhamnosus GG
L. acidophilus DDS®-1
L. paracasei UALpc-04™
B. bifidum UABb-10™



Supports Healthy Digestive Function During Antibiotic Therapy[†]

L. plantarum UALp-05™



Supports Healthy Digestion[†]

L. plantarum UALp-05™ L. acidophilus DDS®-1 B. bifidum UABb-10™



Supports Relief from Occasional Digestive Discomfort[†]

L. plantarum UALp-05™
B. lactis UABla-12™
L. acidophilus DDS®-1
L. reuteri UALre-16™
B. bifidum UABb-10™



Supports Respiratory Immune Function[†]

B. lactis UABla-12™
L. acidophilus DDS®-1
L. paracasei UALpc-04™
L. reuteri UALre-16™
B. bifidum UABb-10™



May Support Healthy Inflammation Modulation[†]

L. rhamnosus GG

PROBIOTIC STRAINS IN THER-BIOTIC® SYNBIOTIC

Lactobacillus acidophilus (DDS®-1) is a widely recognized probiotic that promotes the healthy functioning of the gut and is highly resistant to gastric acid, bile salts, and proteases.¹ It aids in the digestion of gluten and casein proteins and ferments a variety of carbohydrates that escape digestion in the upper gastrointestinal tract, including fructooligosaccharides (FOS) and galactooligosaccharides (GOS), releasing short chain fatty acids important for intestinal barrier function.¹ Studies have shown that *L. acidophilus* promotes the absorption of micronutrients such as vitamins and minerals. Studies have also demonstrated that *L. acidophilus* DDS®-1 has immunomodulatory effects and can support the immune system.¹

Lactobacillus plantarum (UALp-05™) is generally lacking in the gut microecology of individuals consuming a standard Western diet. *L. plantarum* effectively metabolizes oligofructans, semi-resistant polysaccharides found in vegetables. [†] A very hardy species, *L. plantarum* is highly resistant to gastric acid, bile, and proteases; it also has a strong ability to assimilate cholesterol under various intestinal conditions. *L. plantarum* induces the expression of genes regulating tight junction formation, thereby augmenting intestinal barrier function. [†] It strongly attaches to human colonocytes, competing with undesirable bacteria and promoting a balanced microbiota. [†] Through multiple mechanisms, such as the modulation of interleukins, natural killer (NK) cells, and cytokines, it supports a healthy immune response. [†]

Bifidobacterium lactis (UABla-12™) supports normal bowel movement frequency and stool consistency. It has excellent adherence to intestinal mucin, a prerequisite for competition with undesirable bacteria. It produces the endopeptidases that digest proteins rich in proline such as casein and gliadin. Supplementation with B. lactis has been shown to support cellular immunity in elderly individuals by increasing numbers of helper and activated T cells and NK cells and by intensifying the phagocytic activities of monocytes and polymorphonucleocytes. B. lactis may support a healthy plasma IgG response to vaccination. Studies have shown that dietary supplementation with B. lactis balances bifidobacterial/enterobacteria counts in elderly individuals.

Lactobacillus paracasei (UALpc-04TM) has excellent acid-tolerance and is highly resistant to pepsin and pancreatin. It is able to ferment inulin and phleins (plant-derived hexofructans with β-linked fructosyl residues), releasing short chain fatty acids required for intestinal barrier function. It supports the immune response through the production of compounds that support the immune balance, while activating the innate immune system. I

Lactobacillus rhamnosus (GG) produces more peptidases than any other Lactobacillus species, aiding in the digestion of proteins.[†] This species supports healthy immune function by activating antigenpresenting cells (APCs) and immature dendritic cells to promote Th1-type immune response markers, as well as healthy Th1/Th2 balance. *L. rhamnosus* has been shown to promote stronger epithelial barrier function, as well as reduce the risk of antibiotic-associated diarrhea.[†]

Bifidobacterium bifidum (UABb-10TM) aids in the digestion of casein proteins through the production of a variety of β-galactosidases and other enzymes which degrade lactose and other substrates such as galactobiose and galactosyllactose. † B. bifidum has been shown to efficiently degrade mucin, and due to their proximity to the immune system, mucin-degrading bacteria are in a prime location to influence the epithelial barrier and host response. † Studies have shown that B. bifidum strengthens intestinal barrier function and promotes a healthy microbiome balance. †

Lactobacillus reuteri (UALre-16™) is found in different body sites including the gastrointestinal tract, urinary tract, skin, and breast milk. With the production of organic acids, ethanol, and reuterin, it supports a balanced microbiome. It also may benefit the immune system, by influencing cytokine production while promoting regulatory T-cell development and function. In addition, by bearing the ability to strengthen the intestinal barrier, the colonization of *L. reuteri* may decrease the microbial translocation from the gut lumen to the surrounding tissues, supporting a healthy inflammatory response. ¹

CONCLUSION

Ther-Biotic Synbiotic provides a powerful, broad-spectrum probiotic with Sunfiber®, the prebiotic nutrition that the microbiome requires to maintain healthy homeodynamic balance. This product answers the question of how to best supplement pre- and probiotics with one convenient product.

FORMULA

SKU V777 30 CAPSULES

SERVING SIZE 1 CAPSULE	AMOUNT PER SERVING
Probiotic Blend (50 billion CFU)	323 mg*
Lactobacillus plantarum UALp-05™‡	15.5 billion CFU*
Bifidobacterium lactis UABla-12™‡	13.3 billion CFU*
Lactobacillus rhamnosus GG	9.2 billion CFU*
Lactobacillus acidophilus DDS®-1‡	5.0 billion CFU*
Lactobacillus paracasei UALpc-04™‡	5.0 billion CFU*
Lactobacillus reuteri UALre-16™‡	1.0 billion CFU*
Bifidobacterium bifidum UABb-10™‡	1.0 billion CFU*
Sunfiber®‡ (partially hydrolyzed guar gum/PHGG)	200 mg*

^{*}DAILY VALUE NOT ESTABLISHED

OTHER INGREDIENTS: Delayed release capsule (hydroxypropyl methylcellulose, gellan gum, and water), silica, and ascorbyl palmitate.

¹DDS® and all UA strains are trademarks of UAS Laboratories LLC and used under license. ¹¹Sunfiber®, a water-soluble dietary fiber, is a registered trademark of Taiyo International, Inc.

Suggested Use: Adults: 1 capsule daily or as directed by a healthcare professional. Children: As directed by a healthcare professional.

Free of the following common allergens: Milk/casein, eggs, fish, shellfish, tree nuts, peanuts, wheat, gluten, soybeans, and corn. Contains no artificial colors, flavors, or preservatives.

Storage: Store in a cool, dry place (59°F-85°F) away from direct light.

Hypoallergenic, Non-GMO, Vegan

Health Categories: Essential Health Basics, GI Health





REFERENCES

- 1. Barko P, McMichael M, Swanson KS, Williams D. J Vet Intern Med. 2018 Jan;32(1):9-25.
- 2. Malan-Muller S, et al., OMICS. 2018 Feb;22(2):90-107.
- 3. Holscher H. Gut Microbes. 2017 Mar 4;8(2):172-184.





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