ProSynbiotic[®]





MICROBIOME SUPPORT



- Useful in maintaining a healthy gut microbial environment*
- Helps support the body's natural absorption of calcium and magnesium
- Improves nutrient digestion and absorption
- Supports normal bowel regularity and consistency
- Supports the body's natural immune system response function
- Contains inulin (a nondigestible soluble fiber from chicory root) and galactooligosaccharides (non-digestible carbohydrates), both of which are used by probiotic bacteria as food*

Supporting the Microbiome: Pre- and Probiotics

Standard Process

PROSYNBIOTIC

ProSynbiotic incorporates four clinically studied probiotic strains with two prebiotic fibers to support a healthy microbiome in the gut. It contains a synergistic blend of probiotics which include Lactobacillus and Bifidobacterium - two bacteria strains with strong scientific support and safety records - as well as Saccharomyces cerevisiae var. boulardii. It also incorporates two well-researched prebiotics: inulin and galactooligosaccharide (GOS).

Seventy percent of the human immune system is thought to reside in the gut.¹ Over 39 trillion bacterial cells reside within the human body, particularly in the GI tract, which is close to a 1:1 ratio of human to bacterial cells.² When the gut microbiome (aggregate of all microbiota) is out of balance, this is called dysbiosis: a condition linked to several health concerns. A well-balanced microbiome can support healthy digestion, absorption, elimination, and support overall immune function.

NOTES

Prebiotics and probiotics both can contribute to the total balance of the microbiome. Probiotics may produce shortchain fatty acids (SCFA) that further convert to butyrate. Butyrate has an influence on the gut's immune function and other body systems.^{3,4}

Key Definitions

- **Microbiome** is the whole habitat that includes all microorganisms and their genomes and the conditions of the environment.^{4,5}
- **Probiotics** consist of microorganisms that have a perceived health advantage to their human host. Probiotics are ingested either as a food (in yogurt or other fermented foods) or through a supplement.⁶
- **Prebiotics** are food components or supplements that cannot be digested by the human host, typically as a fiber. Not all fibers are prebiotics nor are all prebiotics fibers. Prebiotics have been described as a food source for the beneficial bacteria.⁶
- **Fiber** is defined as a non-digestible carbohydrate that is either soluble or insoluble in water. The recommendation for fiber is between 20-28 grams per day for adult women or 25-30 grams for men.⁷

Supplement Facts

Serving Size: 3 Capsules Servings per Container: 30

der hinge per der taller de		
	Amount per Serving	% Daily Value
Calories	5	
Total Carbohydrate	2g	<1%
Dietary Fiber	2g	7%

Proprietary Blend 1,689mg † Inulin (chicory root fber), galactooligosaccharides (GOS) (milk) yeast (Saccharomyces boulardii), Lactobacillus acidophillus Lactobacillus paracasei, and Bifidobacterium (190 mg live microorganisms, 4 billion CFU).

*Percent Daily Values are based on a 2,000 calorie diet. †Daily Value not established.

Other Ingredients: Gelatin, maltodextrin, water, calcium stearate, sucrose, sodium ascorbate, and sorbitan monostearate.

With Lactobacillus acidophillus LA-5®, Lactobacillus paracasei L. casei 431®, Bifidobacterium BB-12®.

Available Size:

Prosynbiotic
90 Capsules

Please consult the actual product label for the most accurate product information

DOSAGE AM

PM

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

ProSynbiotic[®]



MICROBIOME SUPPORT

Probiotics

Lactobacillus acidophilus (LA-5[®])

Lactobacillus acidophilus (LA-5) was first isolated from the human gastro-intestinal tract in the early 1900s.8 It is a well-characterized probiotic strain with over sixty clinical studies,⁸ and has been utilized in the food industry and as capsulated probiotics for many years. As a lactic acid-producing bacteria, it helps to promote a healthy microbiome.8-10

LA-5 and Bifidobacterium lactis (BB-12®) have often been studied synergistically and have shown multiple GI benefits.⁸⁻¹⁰

Bifidobacterium lactis (BB-12®)

BB-12 is the best characterized probiotic available in the market with over 300 overall studies, including 130 human studies.^{11,12} Bifidobacterium is a lactic acid-producing bacteria isolated from a human gastro-intestinal tract in 1899. BB-12 easily gains access to the colon, allowing the bacteria to attach to the intestinal lining supporting the immune system, barrier protection, and to promote a healthy microbiome.^{11,12} BB-12 has been shown to support bowel regularity in a randomized, double-blind, placebocontrolled trial (n=1,000).13

Lactobacillus paracasei paracasei (L. casei 431®)

This a well-characterized lactic acid-producing strain with over twenty clinical studies.^{14,15} This strain has been studied across the human lifespan, showing support for acute immune function and overall immune function.14-17

Saccharomyces cerevisiae var. boulardii

Yeast has been utilized for many centuries in fermented foods and traditionally used to support GI health. S. boulardii has been studied to support the immune system, overall bowel health, and support nutrient absorption and digestive enzymes.¹⁸⁻¹⁹

Prebiotics

Inulin

Inulin is prebiotic that is found naturally in many plants such as chicory root. Inulin is a complex carbohydrate that is fermented in the gut by certain microorganisms to provide them with energy. Inulin also supports the absorption of calcium and magnesium.20

Galactooligosaccharide (GOS)

GOS is a type of complex carbohydrates called oligosaccharides, which is utilized by Bifidobacterium and Lactobacillus bacteria in the colon. GOS can increase short chain fatty acids (SCFAs) that further convert to butyrate that, in turn, supports the immune system.^{20,21}

REFERENCES

- Vighi, G., Marcucci, F., Sensi, L., Di Cara, G., & Frati, F. (2008). Allergy and the gastrointestinal system. Clinical and experime immunology, 153 Suppl 1(Suppl 1), 3–6. doi:10.1111/j.1365-2249.2008.03713.x ntal
- Abbott, A. (2016). Scientists bust myth that our bodies have more bacteria than human cells. Nature. doi:10.1038/nature.2016.19136 Wong, J. M., Souza, R. D., Kendall, C. W., Emam, A., & Jenkins, D. J. (2006). Colonic Health: Fermentation and Short Chain Fatty Acids. Journal of Clinical Gastroenterology, 40(3), 2
- Marchesi, J. R, & Ravel, J. (2015). The vocabulary of microbiome research: a proposal. Microbiome, 3(1). doi:10.1186/s40168-015-
- Lederberg J, McCray AT. 'Ome sweet 'omics- a genealogical treasury of words. Scientist. 2001;15(7):8–8. Frei, R, Akdis, M, & O'Mahony, L. (2015). Prebiotics, probiotics, synbiotics, and the immune system. Current Opinion in Gastroen-terology, 31(2), 153-158. doi:10.1097/mog.0000000000000151 6.
- htenstein, A. H., & Karpyn, A. (2018). History and Development the 2015–2020 Dietary Guidelines for Americans. Oxford holarship Online. doi:10.1093/ oso/9780190626686.003.0002
- Bull, M., Plummer, S., Marches, J., & Mahenthinalingam, E. (2013). The life history of Lactobacillus acidophilusas a probiotic. A tale of revisionary taxonomy. misidemtification and commercial success. FEMS Microbiology Letters, 349(2), 77-87. doi:10.1111/1574-6968.12295 8.
- Lactobacillus acidophilus (LA-5®), (2015, July), Retrieved July 23, 2019, from https://www.chr-hansen.com/en/probiotic-supple-ments- and-infant-formula/cards/product-cards/ lactobacillus-acidonhilus_la_5
- Lactobacillus acidophilus LA-05. (2019, February 19). Retrieved July 23, 2019, from https://www.optibacprobiotics.co.uk/profession-als/probiotics-database/lactobacillus- acidophilus-la-05 10.
- Jungersen, M., Wind, A., Johansen, E., Christensen, J. E., Stuer-Lau-ridsen, B., & Eskesen, D. (2014). The Science behind the Probiotic Strain Bifidokaterium animalis subsp. Lactis BB-12(®). Microor-ganisms, 2(2), 92–110. doi:10.3390/microorganisms2020092
- Bifdobacterium (BB-12®). (n.d.). Retrieved July 23, 2019 from https://www.chr-hansen.com/ en/probiotic-supplements-and-in-fant-formula/ cards/product-cards/bifdobacterium-animalis- sub-sp-lactis-bb-12 12

- Ouwehand, A. C., Bergsma, N., Parhiala, R., Lahtinen, S., Gueimonde, M., Finne-Soveri, H., Salminen, S. (2008). Bifdobac-teriummicrobiota and parameters of immune function in elderly subjects. FEMS Immunology & Medical Microbiology, 53(1), 18-25. doi:10.1111/j.1574-655x2008.00392x 14. Lactobacillus (L. CASEI 431[®]). (n.d.). Retrieved July 23, 2019, from https://www.chr-hansen.com/en/probiotic-supple-ments-and-infant-formula/cards/product-cards/lactobacillus
 - from https://www.chr-hansen.com/en/ ments-and-infant- formula/cards/produ paracasei-subsp-paracasei-l-casei-431 Lactobacillus paracasei CASEI 431. (2019, February 19). Retrieved July 23, 2019, from https://www.optibacprobiotics. co.uk/professionals/probiotics-database/ lactobacillus-paracas-
- co.uk/profess ei-casei-431 16
- ei-case-31 Jegersen, L., Tarnow, L. Eskesen, D., Morberg, C. M., Michelsen, B., Bugd, S., Calder, P. C. (2015). Effect of Latexbacility paracases subsp. paracases, L. casel 435 on immune response to influenza vaccination and upper respiratory track infections in healthy marile-groups parallely group study. The American Journal of Clinical Nucriton, 101(6), 1188-1196. doi:10.3945/ajar.114.105551 17
- . Haro, C., & Medina, M. (2019). Lactobacillus casei CRL 431 improves endothelial and platelet functionality in a preumo-coccal infection model Beneficial Microbes, 10(5), 533-541. doi:10.3920/bm2018.0099 18.
- Lazo-Velez, M., Serna-Saldivar, S., Rosales-Medina, M., Tinoco-Alvear, M., & Briones-Carcía, M. (2018). Application of Saccharomyces cerevisiae var. boulardli in food processing. A review, Journal of Applied Microbiology, 125(4), 943-951. doi:10.1111/j.jam.14037 19.
- Ukaszewicz, M. (2012). Saccharomyces cerevisiae var. boulardii Probiotic Yeast. Probiotics. doi:10.5772/50105 Carlson, J. L., Erickson, J. M., Lloyd, B. B., & Slavin, J. L. (2018). Health Effects and Sources of Prebiotic Dietary Fiber. Current 20.
- Health Effects and Sources of Prebiotic Dietary Fiber. Current developments in nutrition, 2(3), nzy005. doi:10.1093/cdn/nzy005 Maathuis, A. J., Heuvel, E. G., Schoterman, M. H., & Venema, K. (2012), Galacto-Oligosaccharides Have Prebiotic Activity in a Dynamic In Vitro Colon Model Using a 13C-Labeling Technique. The Journal of Nutrition, 142(7), 1205-1212. doi:10.3945/ jn111.157420 21



Freshly picked crops are often processed within a day to maintain vital nutrients



Healthy Soil. Healthy Plants. Healthy Lives.

Standard Process is a family-owned company dedicated to making high-quality and nutrient-dense therapeutic supplements for three generations.

We apply a holistic approach to how we farm, manufacture and protect the quality of our products. This comprehensive strategy ensures that our clinical solutions deliver complex nutrients as nature intended. It's how we define the whole food health advantage.

standardprocess.com fin 🕨 🥑

©2020 Standard Process Inc. All rights reserved. LN00166 04/20

