



10 probiotic strains + FOS prebiotic

APPLICATIONS / BENEFITS

- Helps balance intestinal microflora
- Promotes digestive health and comfort
- Supports immune and inflammatory response
- Support for lactose intolerance
- Shelf stable at room temperature

OVERVIEW

Patient One Flora Maintenance is a multi-strain, identity confirmed probiotic with a potency of 25 billion live bacteria per serving. Ten compatible, well-researched strains (7 found in the small intestine and 3 found in the large intestine) are combined with a fructo-oligosaccharide (FOS, a prebiotic). The combination of a prebiotic and a probiotic has been clinically proven to promote enhanced effectiveness.

Flora Maintenance supplies HardiStrain™ standardized bacteria cultures, produced with a proprietary system that promotes increased viability over an extended shelf life. Our freeze-dried probiotic cultures are provided in an acid-resistant, delayed release capsule to survive harsh stomach acids for effective delivery to the intestinal tract where the organisms can colonize and replicate.

Patient One's proprietary probiotic blend contains significant concentrations of *L. acidophilus*, *L. casei* and *L. rhamnosus*, three of the most well-documented strains. As strain identity is essential to link a culture to a specific health effect, the strains in our formula are genetically identified by a sophisticated RiboPrinter® microbial characterization system.

KEY INGREDIENTS

Lactobacillus acidophilus, a strain of lactic acid-producing microbes, offers many benefits for digestive health including digestion of lactose. *L. acidophilus* produces vitamin K, lactase and anti-microbial substances, such as acidolin, acidophilin, lactocidin and bacteriocin. Multiple human trials report benefits of *L. acidophilus* for bacterial vaginosis. Scientists have discovered that administering *L. acidophilus* orally helps reduce the colonization of pathogenic bacteria, such as *E. coli* within the digestive tract. It has been shown to support healthy immune response and digestive functions.

Lactobacillus casei is a lactic acid producer which aids in the digestion of lactose, promoting optimal digestive health, and it has been found to assist in the colonization of beneficial bacteria. *L. casei* supports the growth of *L. acidophilus*, which can help guard against conditions such as constipation and irritable bowel syndrome (IBS). Studies show that *L. casei* can counteract pro-inflammatory effects of *E. coli*.

Lactobacillus rhamnosus works to balance GI microflora. Perhaps most notable is its ability to tolerate and even thrive in the typically acidic conditions of the stomach. It is believed to greatly assist with immune function in healthy adults. Research has shown that *L. rhamnosus* can prevent apoptosis in gastric epithelial cells, improving the integrity of the stomach lining, and it can reduce the duration of diarrhea caused by rotavirus and other causes.

Bifidobacterium longum is among the first to colonize the sterile digestive tract of newborn infants. There is evidence that *B. longum* competes for attachment sites on the intestinal mucosal membrane, preventing the colonization of pathogenic coliform bacteria. It has a high resistance to gastric acid and shares similar functions as *B. bifidum*, such as boosting the immune system and providing barrier protection from pathogens.

Bifidobacterium breve appears to inhibit *E. coli* and an overgrowth of *Candida albicans* in women, the primary cause of yeast infections. In medical studies, antibiotic-associated diarrhea, allergies, gas and irritable bowel syndrome have been linked to a patient's shortage of the *B. breve* bacteria. The job of *B. breve* in the digestive tract is to ferment sugars and produce lactic acid as well as acetic acid. *B. breve* is like a champion among probiotic bacteria due to its superior ability to metabolize many types of food.

Lactobacillus plantarum promotes a normal digestive tract and has been shown to benefit those with irritable bowel syndrome, Crohn's and colitis. It is able to destroy pathogens while preserving vital nutrients, antioxidants and vitamins. One of the most remarkable traits of *L. plantarum* is its ability to synthesize L-lysine, an essential amino acid. It is able to ward off harmful bacteria in the intestine by preventing the pathogenic bacteria from attaching to the mucosal lining and also by competing for nutrients that the pathogenic bacteria live on. By doing so, harmful bacteria pass harmlessly through the body.

Lactobacillus salivarius has been shown effective in fighting off at least five harmful bacteria that are involved in producing plaque, thus assisting in dental health. It has the unique ability to fight off the *H. pylori* bacteria that are responsible for most peptic ulcers. Researchers studied animal response after induced colitis and septic shock and treatment with *L. salivarius* and concluded that *L. salivarius* may be related to the immune response.

Streptococcus thermophilus appears to be resistant to gastric acidity when consumed with meals and is supportive for lactose intolerant people. Moreover, primary in vitro results have shown that *S. thermophilus* could be highly effective in modulating the immune response. The role of *S. thermophilus* is to rapidly acidify the intestinal environment and to create one that is favorable to lactic acid bacteria.

Peddiococcus acidilactici is a hearty lactic acid bacterium that can grow in a wide range of pH and temperatures, thereby able to survive harsh gastric conditions and colonize the entire digestive tract. This probiotic strain has been shown to function as an immune modulator, to resist pathogens such as Salmonella and *E. Coli*, provide digestive support, promote a healthy inflammatory response in the intestines, and help balance intestinal microflora.

Lactobacillus bulgaricus effectively metabolizes sugars (including starches and fibers) to produce lactic acid. The generation of lactic acid in the intestine decreases the pH of the intestinal tract making it less suitable for growth of acid-tolerant microbes including those that can act as pathogens. *L. bulgaricus* is also effective at reducing the lactose load in individuals who are lactose intolerant, thereby allowing them to ingest higher quantities of dairy products.

Fructo-oligosaccharide (FOS), a prebiotic from Jerusalem artichoke, acts as a nutrient source for the probiotics. FOS feeds the microflora in the intestines and prevents the overgrowth of yeast. FOS promotes calcium absorption due to an increase of lactic acid levels in the gut. Studies have found that probiotics are more effective when taken with a fructo-oligosaccharide.

REFERENCES

1. Altieri C., Bevilacqua A., Sinigaglia M. Prolonging the Viability of Lactobacillus plantarum through the Addition of Prebiotics into the Medium. Journal of Food Science, 2011; 76, Nr.6, M336-M345.

2. Sherman PM., Johnson-Kenry KC. Yeung HP. Ngo SC., Goulet J., Tompkins TA. Probiotics reduce enterohemorrhagic Escherichia coli (EHEC) O157:H7- and enteropathogenic E. coli O127:H6-induced changes in polarized T84 epithelial cell monolayers by reducing bacterial adhesion and cytoskeletal rearrangements. Infect. Immun., 2005; 73: 5183—8.

3. Waldemar G., Kordowska-Wiater M., Koziol J. The influence of selected prebiotics on the growth of lactic acid bacteria for bio-yoghurt production. Acta Sci. Pol. Technol. Aliment. 2011; 10(4) 455-466. Nature Med. 2003 Mar;9(3):294-9.

4. Wallace TD. Bradley S., Buckley ND. Green-Johnson JM. Interactions of lactic acid bacteria with human intestinal epithelial cells: Effects on Cytokine production. Journal of Food Protection, 2003; 66, 3; 446-472.

5. Wood C., Keeling S., Bradley S., Johnson-Green P., Green-Johnson JM. Interactions in the mucosal microenvironment: Vasoactive intestinal peptide modulates the down regulatory action of Lactobacillus rhamnosus on LPS induced interleukin-8 production by intestinal epithelial cells. Microbial Ecology in Health and Disease, 2007; 1-10.

Supplement Facts

Serving Size: 1 Capsule

Amount Per Serving	% DV
Bacterial Culture Blend: 25 Billion Live Organisms* **	
<i>L. acidophilus, L. casei, L. rhamnosus, B. longum, B. breve, L. plantarum, L. salivarius, S. thermophilus, P. acidilactici, L. bulgaricus</i>	
Fructo-oligosaccharides (FOS)	250 mg **

* At the time of encapsulation

** Daily Value not established

Other Ingredients: rice flour, vegetable cellulose (capsule), leucine

Free of: milk, egg, fish, peanuts, crustacean shellfish, soy, tree nuts, wheat, yeast and gluten. Free of ingredients derived from GMOs.

Suggested Use: Take 1 capsule daily as a dietary supplement, with or between meals, or as directed by your health practitioner. Store in a cool, dry place. Refrigeration may enhance long-term stability.

Caution: If you are pregnant, nursing, or taking any medications, consult your health practitioner before use. Discontinue use and consult your health practitioner if any adverse reactions occur.

Keep out of reach of children. Use only if safety seal is intact.

Vegetarian

Gluten Free

Non-GMO

Vegetable Caps

The statements in this document have not been evaluated by the FDA. This product is not intended to diagnose, treat, cure, or prevent any disease.

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