

ProBio PCC™

Live Probiotics

MAINTAINS HEALTHY GASTROINTESTINAL ENVIRONMENT*



Positioning Statement

Pharmanex® ProBio PCC™ contains a potent and proprietary probiotic bacteria culture of *Lactobacillus fermentum*, which is able to relieve symptoms associated with occasional gastrointestinal (GI) discomfort, occasional bowel irregularity, diarrhea, and other common digestive and non-digestive discomforts.*

Concept

The digestive system is your body's first line of defense against unwanted organisms consumed with food. An important component of your digestive defense system is friendly bacteria that aid digestion and enhance your body's own digestive immune response. As we encounter challenges to our digestive system we can severely disturb the delicate balance of our body's intestinal flora, which can cause occasional gastrointestinal (GI) discomfort. Fortunately, a healthy balance of intestinal flora can be supported through the consumption of food or food supplement products that contain friendly live bacteria cultures commonly referred to as probiotics.*

Pharmanex's unique strain of *Lactobacillus* has shown an extraordinary resilience to the growth of undesirable organisms in the gastrointestinal tract. Clinical research shows a decrease in common gastrointestinal problems and an increase in the growth of beneficial bacteria in the digestive tract after the introduction of this particular bacteria strain. Its ability to survive passage through the harsh environment of the stomach, its ability to colonize and act as a "friendly tenant," and its resilient and stable nature make ProBio PCC™ superior to many other probiotic products.*

Primary Benefits

- Clinically proven to encourage the proliferation of healthy "live" probiotic bacteria in the lower digestive tract, acting as a resilient and stable territorial colonizer*
- Reduces symptoms commonly associated with occasional GI discomfort and promotes digestive comfort and regularity*

- Fortifies the natural digestive defense system and assists with the absorption of key nutrients*
- Supports healthy function of the urinary tract*

What Makes This Product Unique?

- Pharmanex uses a totally exclusive (patent-pending), robust strain of *Lactobacillus fermentum* proven to survive gastric acid and effectively colonize in the gut
- Unique delivery system ensures more "live" cultures reach the gut than many other probiotic products
- Product packaging does not require refrigeration throughout shelf life (Store below 68°F/20°C)

Who Should Use This Product?

ProBio PCC™ is intended for individuals who experience occasional gastrointestinal discomfort. Individuals who travel frequently should benefit from this product.

Did You Know?

- There are 400 million different bacterial species in our bodies
- 70% of the human immune system is localized in the digestive tract
- 20 to 50% of travelers (approximately 10 million) develop gastrointestinal discomfort each year

Frequently Asked Questions

What is ProBio PCC™?

ProBio PCC™ is a probiotic dietary supplement that may help relieve symptoms associated with gastrointestinal discomfort.

What ingredients does ProBio PCC™ contain?

ProBio PCC™ provides a proprietary strain of friendly bacteria (*Lactobacillus fermentum* PCC) shown to be resistant to an acidic environment and can effectively colonize in the lower digestive tract. Each ProBio PCC™ capsule is guaranteed to contain a minimum of two billion CFUs (colony forming units) of the proprietary

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strain *L. Fermentum* PCC at the end of shelf life. Resistant starch is also provided as a non-digestible food medium, commonly known as a “prebiotic,” to promote the growth of friendly bacteria in the digestive tract.

Are there scientific studies validating ProBio PCC™?

The primary goal of probiotic therapy is to help establish the natural balance of intestinal microflora in order to have an optimally functioning digestive defense system; this effect is well established in independently published research. The health benefits of *L. fermentum* PCC are supported by 12 clinical studies and 16 animal and in vitro studies.

How does ProBio PCC™ work?

ProBio PCC™ has been clinically proven to encourage the proliferation of healthy probiotic bacteria in the lower digestive tract, thus helping to fortify the natural digestive defense system. By actively colonizing the lower digestive tract, ProBio PCC™ may be able to discourage the development of undesirable microorganisms.*

Why is ProBio PCC™ unique?

ProBio PCC™ has been developed through scientific and analytical methods to ensure the product meets label claims for live cultures (CFUs) at the end of shelf life, a more valid indicator of efficacy than claiming number of live cultures at manufacturing. Pharmanex's unique strain of *Lactobacillus* was isolated from a Swedish woman who showed an extraordinary resilience to undesirable organisms. This unique patent-pending strain of *Lactobacillus* called *Lactobacillus fermentum* has the ability to survive passage through the harsh environment of the stomach and has the ability to colonize in the intestine. Pharmanex has established an exclusive agreement with the supplier of *L. fermentum* PCC, making this unique strain proprietary to our company. This patent-pending strain of *Lactobacillus* bacteria has ten patents filed to date. In developing ProBio PCC™, Pharmanex has followed the probiotic guidelines as established by the FAO/WHO expert consultation for pH survival, colonization, identity, and dosing.

Is ProBio PCC™ safe?

ProBio PCC™ is safe and well tolerated at the recommended dosage. *Lactobacilli* have a long history of use as probiotics without established risk to humans, which remains the best proof of safety. If you are pregnant or lactating, or taking a prescription medication, consult a physician prior to use. There are no known side effects at the recommended dosage.

Key Scientific Studies

1. Charteris WP, Kelly PM, Morelli L, Collins JK. Development and application of an in vitro methodology to determine the transit tolerance of potentially probiotic *Lactobacillus* and *Bifidobacterium* species in the upper human gastrointestinal tract. *J Appl Microbiol*, 1998 May; 84(5):759–68.
2. Plant L, Conway PL. Association of *Lactobacillus* spp with Peyer's Patches in mice. *Clinical and Diagnostic Immunology*, 2002; 8(2): 320–324.
3. Plant L, C Lam, PL Conway, and K O'Riordan. Gastrointestinal microbial community shifts observed following oral administration of a *Lactobacillus fermentum* strain to mice. *FEMS Microbiology Ecology*, 2003; 43:133–140.
4. Conway PL. Effects of oral administration of the probiotic *Lactobacillus fermentum* Vri-002 on the immune system of endurance athletes. To be presented at the Australian Conference of Science and Medicine in Sport, October 7–9, 2004.
5. Joint FAO/WHO Expert consultation on evaluation of health and nutritional properties of probiotics in food including powder milk with live lactic acid bacteria. Córdoba, Argentina. October 1–4, 2001.
6. Marteau PR, et al. Protection from gastrointestinal disease with the use of probiotics. *Am J Clin Nutr*, 2001; 73(suppl): 430S–6S.
7. Isolauri E, et al. Probiotics: effects on immunity. *Am J Clin Nutr*, 2001; 73 (Suppl):444S–505.

Supplement Facts

Serving Size One Capsule

Amount Per Serving	%Daily Value*
<i>Lactobacillus fermentum</i> P.C.C.	100 mg **

*Percent Daily Value is based on a 2,000 Calorie Diet.

**Daily Values not established.

Other Ingredients: Microcrystalline Cellulose, Gelatin, Silicon Dioxide, Stearic Acid.

Directions for Use

As a dietary supplement, take one (1) capsule daily with food to promote normal gastrointestinal health. Use continuously for optimal results.*

Warnings

If you are pregnant or lactating, or taking a prescription medication, consult a physician before using this product.

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