

Complete Multi Strain Probiotic Capsules



Product Summary:

Complete Multi Strain Probiotic Capsules contain 3 *Lactobacilli* strains for small intestine care, and 2 *Bifidobacteria* strains for colon care. It's specially designed to support immunity and healthy digestion by building healthy gut microflora throughout the digestive tract.

Properties/Uses:

The claim as approved by the *Natural Health Product Directorate* (NHPD): Source of probiotics providing live microorganisms that temporarily modify gut flora.



DIGESTIVE



Pharmacology:

Friendly bacteria of the human intestinal flora are referred to collectively as *probiotic bacteria*, where *probiotic* means “for life” or “in support of life”. Probiotic bacteria are the natural indigenous guardians of robust intestinal health and vitality, toiling 24 hours a day. The intestinal flora influences the body’s nutritional status, and beneficially affects immunity, cholesterol metabolism, risk for carcinogenesis, and aging.^{1,2}

The human intestinal tract contains billions of bacteria in a natural but delicate state of balance between the beneficial probiotic bacteria and their good effects, and the pathogenic microorganisms and their adverse effects. Under conditions of high or prolonged stress, antibiotic therapy, vacation or business travel, and encounter with food or water borne pathogens, this natural protective balance can be disrupted, resulting in a decline in the number of beneficial or *probiotic* bacteria and the opportunistic overgrowth of pathogenic microorganisms. In the short term, a reduced dominance of probiotic bacteria can result in digestive upset and diarrhea. However, prolonged absence of probiotic dominance in the intestinal tract can bring about or contribute to chronic constipation and the absorption of fecal toxins, including deconjugated estradiol, reduced immune functional vitality, degrees of fatigue, and compromised nutritional absorption and subtle declines in stamina and vitality. All of these effects, if prolonged, can adversely impact on the general health of the body. For this reason, commercial probiotic products have become well known and used by a growing number of Canadians.

Complete Probiotic is a blend of probiotic *Lactobacillus* and *Bifidobacterium* species, the two most important genres associated with the human intestinal tract. Each capsule supplies 5 billion active cells, otherwise called colony forming units (cfu). The species and their respective numerical distribution are shown below. Product activity (potency) is guaranteed until the date of expiry, and without refrigeration (store at room temperature).

<i>Lactobacillus casei</i>	1.50 billion cfu	30%
<i>Lactobacillus rhamnosus</i>	1.25 billion cfu	25%
<i>Lactobacillus acidophilus</i>	0.75 billion cfu	15%
<i>Bifidobacterium longum</i>	0.75 billion cfu	15%
<i>Bifidobacterium breve</i>	0.75 billion cfu	15%

Probiotic bacteria hold at bay and dominate the many pathogenic bacteria, yeast, viruses, and other pathogenic microorganisms.²⁻⁵ Given opportunity, these pathogens succeed in establishing themselves in the intestinal tract, compromising intestinal health, and indirectly threatening whole body health. Probiotic cultures have been shown to have significant clinical beneficial effects in the prevention and management of gastrointestinal and non-gastrointestinal conditions through powerful anti-pathogenic and anti-inflammatory capabilities.^{6,7,8} Probiotic cultures have demonstrated close interaction with *gut associated lymphoid tissue* (GALT) that suggest their ability to induce immunomodulatory effects on the systemic immune response.⁶





The regular use of probiotic bacteria has been associated with immune enhancement,^{9,10,11} including reduced incidence of *Candida albicans* yeast infections and vaginitis.^{12,13,14} Research on microbial ecology has grown rapidly since the early 1900's, particularly because of the inherent role of gastrointestinal flora in the development of the immune system.¹⁵

In addition to immune enhancement, Patrick Hanaway, MD, points out in the *Textbook of Functional Medicine*,¹⁶ that probiotic cultures have been shown to have beneficial effects in antibiotic-associated diarrhea,¹⁷ necrotizing enterocolitis (NEC),¹⁸ colon cancer risk reduction,¹⁹ lipid metabolism health,²⁰ preventing *H. pylori* infection,²⁰ improving the symptoms in irritable bowel syndrome (IBS),²¹ normalizing imbalances with inflammatory cytokine ratios,²² and improving the symptoms of inflammatory bowel disease (IBD).²³

Probiotic species work by tenaciously adhering to and colonizing the intestinal wall, competitively inhibiting pathogens from adhering and colonizing. They control intestinal pathogens through the production of natural antibiotic substances and the production of organic acids like acetic acid and lactic acid.^{1,2} When present in dominating numbers, these probiotic "workers" render the intestinal environment too acidic for opportunistic pathogens. With foiled adhesion, and a hostile chemical environment, pathogens succumb to the tide of forces against them, becoming incorporated in the passing fecal matter and are moved out of the body in the bowel movement. With the adhesion and colonization of probiotic bacteria dominating the intestinal tract, the following benefits can be expected:

- Improved lactose tolerance through probiotic production of lactase enzyme
- Diarrhea prevention or reduction in travelers, infants and children, and the elderly
- Reduced constipation, with reduced fecal toxin circulation and liver detox burden
- Prevention of or reduced incidence of *Candida albicans* infections and vaginitis
- Reduced incidence of diarrhea during antibiotic therapy
- Enhanced absorption of vitamins and minerals
- Enhanced general immune performance throughout the body





Manufactured product information:

Manufacturer:

WN Pharmaceuticals® Ltd.

Size/UPC:

60's 7 77747 10287 7

NPN:

380011612

Expiry Date:

24 months from date of manufacture

Active Ingredients:

5 billion active cells* of the following specially cultured strains of probiotics:

<i>Lactobacillus casei</i> (HA-108) (whole cell)	30%.....	1.5 billion cfu
<i>Lactobacillus rhamnosus</i> (HA-111) (whole cell)	25%.....	1.25 billion cfu
<i>Lactobacillus acidophilus</i> (HA-122) (whole cell)	15%.....	0.75 billion cfu
<i>Bifidobacterium longum</i> (HA-135) (whole cell)	15%.....	0.75 billion cfu
<i>Bifidobacterium breve</i> (HA-129) (whole cell)	15%.....	0.75 billion cfu

cfu: colony forming units.

* Guaranteed potency up to the time of expiry.

Non-Medicinal Ingredients (in descending order):

Potato starch, vegetarian capsule (carbohydrate gum, purified water), magnesium stearate, silica, ascorbic acid.

Appearance:

Fine to granular ivory to beige powder with dark specks encapsulated in a #2 Vegi capsule.

Packaging:

175 cc white round bottle with safety seal under a 38 mm white induction sealed cap with vented interior seal and a label applied to the bottle. Lot number and expiry date are printed on label applied to exterior of bottle.

Storage:

No refrigeration required but can prolong freshness of product.





Dose:

Probiotic: Typical doses usually range from 1 to 10 billion viable organisms taken daily in 3-4 divided doses.²⁴

Directions:

(Adults): 1 capsule, 3 times daily, preferably with meals, or as recommended by a physician. Take at least 2–3 hours before or after antibiotics.

Caution:

The caution as approved by the *Natural Health Products Directorate* (NHPD): KEEP OUT OF THE REACH OF CHILDREN. This product has come into contact with milk and soy. Do not use this product if you have a milk or soy allergy. Discontinue use and consult a physician if symptoms of digestive upset (e.g., diarrhea) occur, worsen or persist beyond 3 days. Consult a physician prior to use if you have nausea, fever, vomiting, bloody diarrhea or severe abdominal pain. Do not use if you have an immune-compromised condition (e.g., AIDS, lymphoma, patients undergoing long-term corticosteroid treatment). STORE AT ROOM TEMPERATURE IN A DARK, DRY PLACE DO NOT USE IF SEAL UNDER CAP IS BROKEN OR MISSING.

Probiotic: Probiotic supplements should not be used to self-medicate conditions that should be managed by a physician, including intestinal pain or blood in the stool.

Deficiency Symptoms:

N/A



Drug Interactions/Contraindications:

Probiotic bacteria are indigenous to the human intestinal tract and their supplementation is not associated with adverse effects or considered a risk to health. However, for some people exceeding the recommended daily amount could cause irritation and possibly a change in stool characteristics. A reduction in the daily amount used will resolve overuse problems.

Used too soon before or after antibiotic dosing could result in loss of probiotic efficacy due to the partial or full killing of the supplemented probiotic bacteria, as well as dissipating the antibiotic dosing strength. The ideal recommended separation is three hours.

Toxicity/Adverse Reactions:

Well-tolerated- the most common side effect is flatulence; however, it is usually mild and subsides as therapy continues.

The Complete Probiotic bacteria are indigenous to the human intestinal tract and their introduction into the alimentary tract is not associated with adverse side effects, or considered a risk to health.

The daily recommended dose, or exceeding the recommended daily dose, may cause irritation and possibly a change in stool characteristics. Dose adjustments will resolve overuse problems.





Allergen Content/Ingredient Sensitivity:

NO	YES
Artificial Colors	Milk Products
Artificial Flavors	Soy Products
Artificial Sweeteners	Starch/Modified Starch
Corn Products	Yeast
Egg Products	
Fish	
Gluten	
Hydrolyzed Plant Protein	
Lecithin	
Peanuts	
Preservatives	
Sesame Products	
Shellfish	
Sulphites	
Tartrazine	
Tree Nuts	
Wheat Products	

NOT ACCEPTABLE FOR THE FOLLOWING DIETARY RESTRICTIONS:

Free of animal products

Kosher





References:

1. Murray, Michael T., *Encyclopedia of Nutritional Supplements*, Prima Publishing, Rocklin, CA, 1996
2. Shahani, Khem M., et al, Role of dietary lactobacilli in gastrointestinal microecology, *Am J Clin Nutr*, Nov; 33:2448-57, 1980
3. Clements, M.L., et al, Lactobacillus prophylaxis for diarrhea due to enterotoxinogenic *Escherichia coli*, *Antimicrob Agents Chemother*, 20:104-108,1981
4. Dios, Pozo-Olano, et al, Effect of a lactobacilli preparation on traveler's diarrhea: a randomized, double-blind clinical trial, *Gastroenterol*, 74:829-830,1978
5. Thompson, G.E., Control of intestinal flora in animals and human: Implications for toxicology and health, *J Environ Path Toxicol*, 1:113-123,1977
6. Saavedra, J.M., Tschernia, A., Human studies with probiotics and prebiotics: clinical implications, *Br J Nutr*, May; 87 (Suppl 2):S241-6 , 2002
7. Isolauri, E., et al, Probiotics: a role in the treatment of intestinal infection and inflammation?, *Gut*, 50:iii54-iii59, 2002
8. Dugas, Bernard, Immunity and probiotics, *Immunology Today* Sept 1; 20(9):387-429, 1999
9. Perdigon, G., et al, Symposium: Probiotic bacteria for humans: Clinical systems for evaluation of effectiveness: Immune system stimulation by probiotics, *Journal of Dairy Science*, 78: 1597-1606, 1995
10. Perdigon, G., et al, Enhancement of immune response in mice fed with *Streptococcus thermophilus* and *Lactobacillus acidophilus*, *Journal of Dairy Science*, 70: 919-926, 1987
11. Perdigon, G., et al, Systemic augmentation of the immune response in mice by feeding fermented milks with *Lactobacillus casei* and *Lactobacillus acidophilus*, *Immunology*, 63: 17-23, 1988
12. Collins, E.B., Hardt, P., Inhibition of *Candida albicans* by *Lactobacillus acidophilus*, *Journal of Dairy Science*, 63: 830-832, 1980
13. Neri, A., et al, Bacterial vaginosis in pregnancy treated with yoghurt, *Acta Obstetrics and Gynecology*, 72: 17-19, 1993
14. Huppert M., et al, Pathogenesis of *C. albicans* infection following anti-biotic therapy, *Journal of Bacteriology*, 70: 440-447, 1955
15. Hanaway, Patrick, Microorganisms, in *Textbook of Functional Medicine*, Chapter 13: Environmental Inputs, David S. Jones, Editor in Chief, Institute for Functional Medicine, Gig Harbor, WA, 2005



16. Hanaway, Patrick, Balance of Flora, GALT, and Mucosal Integrity, in *Textbook of Functional Medicine*, Chapter 28: Clinical Approaches to Gastrointestinal Imbalance , David S. Jones, Editor in Chief, Institute for Functional Medicine, Gig Harbor, WA, 2005
17. Katz, J.A., Probiotics for the prevention of antibiotic-associated diarrhea and *Clostridium difficile* diarrhea, *J Clin Gastroenterol*, Mar; 40(3):249-55, 2006
18. Hoyos, A.B., Reduced incidence of necrotizing enterocolitis associated with enteral administration of *Lactobacillus acidophilus* and *Bifidobacterium infantis* to neonates in an intensive care unit, *Int J Infect Dis*, 3:197-202, 1999
19. McGarr, S.E., et al, Diet, anaerobic bacterial metabolism, and colon cancer: a review of the literature, *J Clin Gastroenterol*, 39:98-109, 2005
20. Teitelbaum, J.E., Walker, W.A., Nutritional impact of pre- and probiotics as protective gastrointestinal organisms, *Annu Rev Nutr*, 22:107-138, 2002
21. Spiller, R., Probiotics: an ideal anti-inflammatory treatment for IBS?, *Gastroenterology*, 128:783-785, 2005
22. O'Mahony, L., et al, *Lactobacillus* and *Bifidobacterium* in irritable bowel syndrome: symptom responses and relationship to cytokine profiles, *Gastroenterology*, 128:541-551, 2005
23. Sator, R.B., Probiotic therapy for intestinal inflammation and infection, *Curr Op Gastroenterol*, 21:44-50, 2005
24. Fetrow CW, Avila JR. Professional's Handbook of Complementary & Alternative Medicines. 1st ed. Springhouse, PA: Springhouse Corp., 1999

Revision # 00