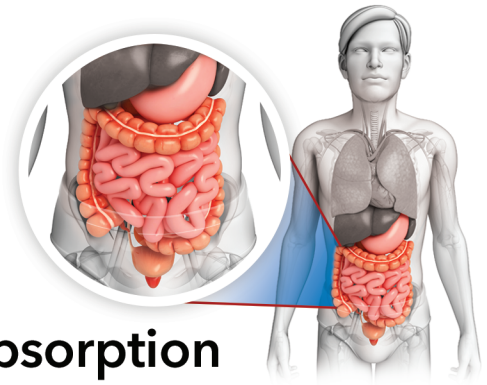




# TRENEV TRIO®

DAIRY FREE CAPSULES – Three Super Strains Oil Matrix Formula

## Maximizes digestion and supports absorption and regularity



### INGREDIENTS

*Bifidobacterium bifidum* Super Strain Malyoth, *Lactobacillus acidophilus* Super Strain NAS, *Lactobacillus bulgaricus* Super Strain LB-51 (*L. delbrueckii*, subspecies *bulgaricus*), sunflower oil, and mixed tocopherols.

### FORMAT

Available in 15, 30, 60 and 90 count capsules.

### POTENCY GUARANTEE

Each capsule supplies a minimum potency of live and active cells guaranteed through the expiration date of: 20 billion cfu of *B. bifidum* Super Strain Malyoth, five billion cfu of *L. acidophilus* Super Strain NAS, and five billion cfu of *L. bulgaricus* Super Strain LB-51 (*L. delbrueckii*, subspecies *bulgaricus*).

### SUGGESTED USE

Take one capsule daily during meals with unchilled, filtered (chlorine-free) water. Take at least two hours after herbs, garlic and prescription drugs. Do not give to children under eight years of age or to those who cannot swallow capsules.

### UNIQUE FEATURES

#### Oil Matrix Delivery System

This unique and proprietary probiotic delivery system micro-enrobes each probiotic super strain to keep them virtually 100% protected from the acidic and corrosive action of stomach acid and bile.

#### Micropure Technology

Genetic testing guarantees proper strain identification. Quality testing guarantees gluten free, soy free and dairy free probiotics with no GMOs\*\* and no FOS.

### STORAGE AND HANDLING

Keep **dry** and **refrigerated** to maintain potency guarantee. Do not freeze or expose to moisture, heat or direct sunlight. Do not accept if seal is broken.

### WHY ONLY THREE STRAINS?

Probiotic bacteria do not "play nice" together. Symbiosis is not common to bacteria. Antagonism is more common.<sup>(1)</sup> Bacteria that are mixed together fight for survival and may inhibit one another and decrease each other's growth, thereby decreasing health benefits. Therefore, blends of probiotics (multistrains) should be made so that each strain of probiotic is kept separate from one another for maximum potency.

That's why Natren mixes a maximum of only three organisms, and uses a unique and scientifically tested technology to micro-enrobe each organism in a protective **Oil Matrix Delivery System**. This keeps each strain separate and non-competitive.

### WHY TRENEV TRIO?

Natren's most potent probiotic for restoring and maintaining intestinal microbial balance. Advanced Natren probiotic technologies come together to create the most powerful probiotic you can recommend:

- Documented safe and effective super strains.



- Protective **Oil Matrix Delivery System** which not only provides an unstressed environment for our super strains, but also protects them from the damaging effects of gastric acid.
- Two-piece hard gelatin capsule protects the probiotic super strains from damaging UV light and moisture.
- Nitrogen-flushed, dark amber, glass bottles with metal lids for maximum protection.

### Acne Clinical Trial

Trenev Trio is clinically supported by a randomized human clinical trial published in *The Journal of Cutaneous Medicine and Surgery* in April 2013. In this study, Trenev Trio proved as effective as the antibiotic Minocycline for mild to moderate acne vulgaris in adult females (18-35 years old). Also, the Trenev Trio treatment group and the antibiotic (Minocycline) treatment group reported similar reductions in total lesion counts at week 12. Investigators reported that the Trenev Trio plus Minocycline treatment arm showed the best efficacy compared to the either the Trenev Trio or Minocycline alone. Also notable—the Trenev Trio group reported no side-effects while two patients in the Minocycline group withdrew due to vaginal candidiasis.<sup>(2)</sup>

## CHARACTERISTICS OF STRAINS IN TRENEV TRIO

- Helps the body digest carbohydrates.<sup>(3) (4) (5) (6) (7)</sup>
- Helps in the production of B vitamins.<sup>(8) (9) (10) (11)</sup>
- Helps liver function and detoxification.<sup>(8) (12) (13)</sup>
- Helps lessen the production of hostile yeasts.<sup>(14) (15) (16) (17)</sup>
- May help maintain normal healthy cholesterol levels.  
<sup>(12) (13) (14) (15) (16) (17) (18) (19) (20)</sup>
- Helps maintain and support a healthy immune system.  
<sup>(21) (22) (23)</sup>
- May help promote regularity by stimulating peristaltic action.  
<sup>(24) (25)</sup>
- Produce hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) found necessary to inhibit vaginal yeast.<sup>(26) (27)</sup>
- Produce lactase, the enzyme responsible for digestion of the milk sugar lactose.<sup>(28) (29) (30) (31) (32) (33) (34) (35)</sup>
- Helps destroy invading hostile bacteria by producing natural antibiotic substances.<sup>(5) (14) (40) (41) (42) (43)</sup>
- May suppress undesirable microorganisms in the intestines.<sup>(5) (14) (40) (41) (42) (43) (44) (45)</sup>
- Acts as an antimicrobial agent by producing acetic acid and lactic acids, to lower the pH of the intestines and inhibit undesirable bacteria.<sup>(8) (9)</sup>
- Naturally helps in the digestion of protein. Mild proteolytic activity of these bacteria may aid the digestion of nutrients. The production of free-form amino acids also assists mineral absorption.<sup>(4) (47) (7)</sup>
- Distinct antimicrobial and antifungal activity against potentially pathogenic organisms including: *Clostridium difficile*, *Candida albicans*, *Escherichia coli*, *Pseudomonas aeruginosa*, *Salmonella typhimurium*, *Staphylococcus aureus* and *Helicobacter pylori*.  
<sup>(14) (17) (33) (44) (45) (46) (48) (49) (50) (51) (52) (53) (54) (55) (56) (47) (57) (58) (59)</sup>

Probiotics are commonly used as a nutritional adjunct to replenish normally occurring beneficial organisms in the gastrointestinal tract. This is vital, particularly during and following antibiotics, corticosteroids (cortisone), chemotherapy, diarrhea, and chronic yeast or bacterial overgrowth. Ongoing stress also negatively alters the delicate balance of beneficial bacteria.

## CONTACT US

**Ecotrend Ecologics**

**T:** 800-665-7065

**E:** info@ecotrend.ca

**www.natren.ca / www.ecotrend.ca**

## References:

1. *The concept of symbiosis: A survey of terminology used in description of associations of dissimilarly named organisms.* Rusch, V. s.l. : Microecology and Therapy, 1989, Vol. 19, pp. 33-59.
2. Jung, GW, Tse JE, Guha I, Rao J. *Prospective, Randomized, Open-Label Trial Comparing the Safety, Efficacy, and Tolerability of an Acne Treatment Regimen with and without a Probiotic Supplement and Minocycline in Subjects with Mild to Moderate Acne.* Journal of Cutaneous Medicine and Surgery 2013;Vol 17, 2: 114 -122.
3. **Axelsson, L.** *Lactic acid bacteria: Classification and physiology 2nd edition.* Lactic acid bacteria: microbiology and functional aspects. Basel : Marcel Dekker Inc, 1998, pp. 1-72.
4. *Casein degradation and amino acid liberation in milk by two highly proteolytic strains of lactic acid bacteria.* Chebbi, N. B., H. Chander, and B. Ranganathan. 3, s.l. : Acta microbiologica polonica, 1976, Vol. 26, pp. 281-284.
5. **De Vuyst, L. and Vandamme, Eerick J.** *Antimicrobial Potential of Lactic Acid Bacteria. Bacteriocins of Lactic Acid Bacteria.* London : Springer US, 1994, pp. 91-142.
6. **Ouwehand, Arthur C.** *Antimicrobial components from lactic acid bacteria. Lactic acid bacteria: microbiology and functional aspects.* New York : Marcel Dekker Inc., 1998, pp. 139-160.
7. *Cell-wall-bound proteinase of Lactobacillus delbrueckii subsp. lactisACA-DC 178: characterization and specificity for -casein.* Tsakalidou, E., R. Anastasiou, I. Vandenberghe, Jozef Van Beeumen, and G. Kalantzopoulos. 5, s.l. : Applied and environmental microbiology, 1999, Applied and environmental microbiology, Vol. 65.
8. *Role of bifidobacteria in nutrition, medicine and technology.* Arunachalam, Kantha D. 10, s.l. : Nutrition research, 1999, Nutrition research, Vol. 19, pp. 1559-1597.
9. *Bifidobacteria and probiotic action.* [book auth.] J. Ballongue. [ed.] and A. von Wright S. Salminen. Lactic acid bacteria. New York : Marcel Dekker, 1993, pp. 357-428.
10. *Probiotic spectra of lactic acid bacteria (LAB).* Naidu, A. S., W. R. Bidlack, and R. A. Clemens. 1, s.l. : Critical reviews in food science and nutrition, 1999, Vol. 39, pp. 13-126.
11. **Rasic, Jeremija Lj. and Kurmann, Joseph A.** *Bifidobacteria and Their Role - Microbiological, Nutritional-Physiological, Medical and Technological Aspects and Bibliography.* Basel : Birkhauser Verlag, 1983.
12. *Bifidobacterium bifidum administration in humans: A controlled clinical study in liver cirrhosis.* Muting, Dieter, et al. s.l. : Microecology and Therapy, 1986, Microecology and Therapy, Vol. 16, pp. 271-272.
13. *The effect of bacterium bifidum on intestinal bacterial flora and toxic protein metabolites in chronic liver disease.* Muting, Dieter, W. Eschrich, and J. P. Mayer. 5, s.l. : American journal of proctology, 1968, Vol. 19, p. 336.
14. *Inhibition of Candida albicans by Lactobacillus acidophilus: evidence for the involvement of a peroxidase system.* Fitzsimmons N, Berry D.R. s.l. : Microbios, 1994, Microbios, Vol. 80, pp. 125-133.
15. *Ingestion of yogurt containing Lactobacillus acidophilus as prophylaxis for candidal vaginitis.* Hilton, Eileen, Henry D. Isenberg, Phyllis Alperstein, Kenneth France, and Michael T. Borenstein. 5, s.l. : Annals of Internal Medicine, 1992, Annals of Internal Medicine, Vol. 116, pp. 353-357.
16. *Control of the microbial flora of the vagina by H<sub>2</sub>O<sub>2</sub>-generating lactobacilli.* Klebanoff, S. J., S. L. Hillier, D. A. Eschenbach, and A. M. Waltersdorff. 1, s.l. : Journal of Infectious Diseases, 1991, Journal of Infectious Diseases, Vol. 164, pp. 94-100.
17. *Influence of lactobacilli on the adhesion of Staphylococcus aureus and Candida albicans to fibers and epithelial cells.* Reid, G., C. Tieszer, and D. Lam. 3, s.l. : Journal of industrial microbiology, 1995, Journal of industrial microbiology, Vol. 15, pp. 248-253.
18. *Influence of yogurt and acidophilus yogurt on serum cholesterol levels in mice.* Akalin, A. Sibel, Siddik Gönç, and Selmin Düzcel. 11, s.l. : Journal of dairy science, 1997, Journal of dairy science, Vol. 80, pp. 2721-2725.
19. *Effect of fermented milk (yogurt) containing Lactobacillus acidophilus L1 on serum cholesterol in hypercholesterolemic humans.* Anderson, James W., and Stanley E. Gilliland. 1, s.l. : Journal of the American College of Nutrition, 1999, Journal of the American College of Nutrition, Vol. 18, pp. 43-50.
20. *Anticholesteremic property of Lactobacillus acidophilus yogurt fed to mature boars.* Danielson, A. D., E. R. Peo Jr, K. M. Shahani, A. J. Lewis, P. J. Whalen, M. A. Amer, and Win Butler. s.l. : Journal of Animal Science, 1989, Journal of Animal Science, Vol. 67, pp. 966-974.
21. *Hypocholesterolemic Action of Lactobacillus acidophilus ATCC 43121 and Calcium in Swine with Hypercholesterolemia Induced by Diet.* De Rodas, B. Z., S. E. Gilliland, and C. V. Maxwell. 12, s.l. : Journal of dairy science, 1996, Journal of dairy science, Vol. 79, pp. 2121-2128.
22. *Effects of a mixture of organisms, Lactobacillus acidophilus or Streptococcus faecalis on cholesterol metabolism in rats fed a fat- and cholesterol-enriched diet.* Fukushima, Michihiro, and Masuo Nakano. 6, s.l. : British Journal of Nutrition, 1996, British Journal of Nutrition, Vol. 76, pp. 857-867.
23. *Factors to Consider When Selecting a Culture of Lactobacillus acidophilus as a Dietary Adjunct to Produce a Hypocholesterolemic Effect in Humans.* Gilliland, S. E., and D. K. Walker. 4, 1990, Journal of dairy science, Vol. 73, pp. 905- 911.
24. *Assimilation of cholesterol by Lactobacillus acidophilus.* Gilliland, S. E., C. R. Nelson, and C. Maxwell. 2, s.l. : Applied and Environmental Microbiology, 1985, Applied and Environmental Microbiology, Vol. 49, pp. 377-381.
25. *Anticarcinogenic, hypocholesterolemic, and antagonistic activities of Lactobacillus acidophilus.* Mittal, Brjij K., and Satyendra K. Garg. 3, s.l. : Critical reviews in microbiology, 1995, Critical reviews in microbiology, Vol. 21, pp. 175-214.
26. *Inhibition of Candida albicans by Lactobacillus acidophilus.* Collins, E. B., and Pamela Hardt. 5, s.l. : Journal of dairy science, 1980, Journal of dairy science, Vol. 63, pp. 830-832.
27. *Modulation of a specific humoral immune response and changes in intestinal flora mediated through fermented milk intake.* Link-Amster, H., F. Rochat, K. Y. Saudan, O. Mignot, and J. M. Aeschlimann. s.l. : FEMS immunology and medical microbiology, 1994, FEMS immunology and medical microbiology, Vol. 10, pp. 56-64.
28. *Systemic augmentation of the immune response in mice by feeding fermented milks with Lactobacillus casei and Lactobacillus acidophilus.* Perdigón, Gabriela, M. E. De Maclás, S. Alvarez, G. Oliver, and A. Pesce de Ruiz Holgado. 1, s.l. : Immunology, 1988, Immunology, Vol. 63.
29. *Enhancement of Immune Response in Mice Fed with Streptococcus thermophilus and Lactobacillus acidophilus.* Perdigón, G., M. E. Nader de Maclás, S. Alvarez, G. Oliver, and A. A. Pesce de Ruiz Holgado. 5, s.l. : Journal of dairy science, 1987, Journal of dairy science, Vol. 70, pp. 919-926.
30. **Alm, L. and Robinson, R. K.** *The therapeutic effects of various cultures-an overview. Therapeutic properties of fermented milks.* London : Elsevier Science Publishers Ltd., 1991, pp. 45-64.
31. *The effects of lactulose-sweetened yogurt on the rate of gastric emptying and intestinal transit in healthy human volunteers.* Pörkka, L., E. Salminen, and S. Salminen. 3, s.l. : Zeitschrift für Ernährungswissenschaft, 1988, Vol. 27, pp. 150-154.
32. *Effect of viable starter culture bacteria in yogurt on lactose utilization in humans.* Gilliland, Stanley E., and H. S. Kim. 1, s.l. : Journal of Dairy Science, 1984, Journal of Dairy Science, Vol. 67, pp. 1-6.
33. *Lactic acid bacteria and human health.* Gorbach, Sherwood L. 1, s.l. : Annals of Medicine, 1990, Annals of Medicine, Vol. 22, pp. 37-41.
34. *Lactobacillus acidophilus as a Dietary Adjunct for Milk to Aid Lactose Digestion in Humans.* Kim, Hyung Soo, and Stanley E. Gilliland. 5, s.l. : Journal of dairy science, 1983, Journal of dairy science, Vol. 66, pp. 959-966.
35. *Influence of nonfermented dairy products containing bacterial starter cultures on lactose maldigestion in humans.* Lin, Meel-Yn, Dennis Savalano, and Susan Harlander. 1, s.l. : Journal of dairy science, 1991, Journal of dairy science, Vol. 74, pp. 87-95.
36. *Strains and species of lactic acid bacteria in fermented milks (yogurts): effect on in vivo lactose digestion.* Martini, Margaret C., Eric C. Lerebours, Wei-Jin Lin, Susan K. Harlander, Nabil M. Berrada, Jean M. Antoine, and Dennis A. Savalano. 6, s.l. : The American journal of clinical nutrition, 1991, The American journal of clinical nutrition, Vol. 54, pp. 1041-1046.
37. *Alleviation of lactose malabsorption from sweet acidophilus milk.* McDonough, F. E., N. P. Wong, A. Hitchins, and C. E. Bodwell. 2, s.l. : The American journal of clinical nutrition, 1985, The American journal of clinical nutrition, Vol. 42, pp. 345-346.
38. *Effect of Milks Inoculated with Lactobacillus acidophilus or a Yogurt Starter Culture in Lactose-Maldigesting Children.* Montes, R. G., T. M. Bayless, J. M. Saavedra, and J. A. Perman. 8, s.l. : Journal of dairy science, 1995, Journal of dairy science, Vol. 78, pp. 1657-1664.
39. *Improvement of Lactose Digestion by Humans Following Ingestion of Unfermented Acidophilus Milk: Influence of Bile Sensitivity, Lactose Transport, and Acid Tolerance of Lactobacillus acidophilus.* Mustapha, Azlin, Tianan Jlang, and Dennis A. Savalano. 8, s.l. : Journal of dairy science, 1997, Journal of dairy science, Vol. 80, pp. 1537-1545.
40. *Genetics of bacteriocins produced by lactic acid bacteria.* Klaenhammer, Todd R. 1, s.l. : FEMS microbiology reviews, 1993, Vol. 12, pp. 39-85.
41. *In vitro inhibition of Helicobacter pylori NCTC 11637 by organic acids and lactic acid bacteria.* Midolo, P. D., J. R. Lambert, R. Hull, F. Luo, and M. L. Grayson. 4, s.l. : Journal of Applied Microbiology, 1995, Journal of Applied Microbiology, Vol. 79, pp. 475-479.
42. *Inhibition of Shigella sonnei by Lactobacillus casei and Lact. acidophilus.* Macías, María E. Nader, María C. Apella, Nora C. Romero, Silvia N. González, and G. Oliver. 5, s.l. : Journal of Applied Microbiology, 1992, Journal of Applied Microbiology, Vol. 73, pp. 407-411.
43. *Biosynthesis of bacteriocins in lactic acid bacteria.* Nes, Ingolf F., Dzung Bao Diep, Leiv Sigve Håvarstein, May Bentø Brurberg, Vincent Eljsink, and Helge Holo. 2-4, s.l. : Antonie van Leeuwenhoek, 1996, Antonie van Leeuwenhoek, Vol. 70, pp. 113-128.
44. *Growth inhibition of food borne pathogens by lactic and acetic acids and their mixtures.* Adams, M. R., and C. J. Hall. 3, s.l. : International Journal of Food Science & Technology, 1988, International Journal of Food Science & Technology, Vol. 23, pp. 287-292.
45. *Lactobacillus acidophilus LA 1 binds to cultured human intestinal cell lines and inhibits cell attachment and cell invasion by enterovirulent bacteria.* Bernet, M. F., D. Brassart, J. R. Neeser, and A. L. Servin. 4, s.l. : Gut, 1994, Gut, Vol. 35, pp. 483-489.
46. *Lactobacillus acidophilus inhibits growth of Campylobacter pylori in vitro.* Bhatia, S. J., N. Kochar, P. Abraham, N. G. Nair, and A. P. Mehta. 10, s.l. : Journal of clinical microbiology, 1989, Journal of clinical microbiology, Vol. 27, pp. 2328-2330.
47. *Yoghurt: Scientific grounds, technology, manufacture and preparations.* Rasic, Jeremija Lj. and Kurman, Joseph A. Denmark : Technical Dairy Publishing House, 1978, Yoghurt: Scientific grounds, technology, manufacture and preparations.
48. *Adhering heat-killed human Lactobacillus acidophilus, strain LB, inhibits the process of pathogenicity of diarrhoeagenic bacteria in cultured human intestinal cells.* Coconnier, Marie-Hélène, Marie-Françoise Bernet, Gilles Chauvière, and Alain L. Servin. s.l. : Journal of diarrhoeal diseases research, 1993, Journal of diarrhoeal diseases research, Vol. 11, pp. 235-235.
49. *Inhibition of adhesion of enteroinvasive pathogens to human intestinal Caco-2 cells by Lactobacillus acidophilus strain LB decreases bacterial invasion.* Coconnier, Marie-Hélène, Marie-Françoise Bernet, Sophie Kernéis, Gilles Chauvière, Jacky Fourniat, and Alain L. Servin. 3, s.l. : FEMS Microbiology Letters, 1993, FEMS Microbiology Letters, Vol. 110, pp. 299-305.
50. *Inhibition of bacterial pathogens by lactobacilli.* Dembele, Tiegoura, Vlastimil Odráček, and Miroslav Votava. 3, s.l. : Zentralblatt für Bakteriologie, 1998, Zentralblatt für Bakteriologie, Vol. 288, pp. 395-401.
51. *The human Lactobacillus acidophilus strain LA1 secretes a nonbacteriocin antibacterial substance (s) active in vitro and in vivo.* Bernet-Camard, Marie-Françoise, Vanessa Lievin, Dominique Brassart, Jean-Richard Neeser, Alain L. Servin, and Sylvie Hudault. 7, s.l. : Applied and environmental microbiology, 1997, Applied and environmental microbiology, Vol. 63, pp. 2747-2753.
52. *Isolation and characterization of two bacteriocins of Lactobacillus acidophilus LF221.* Bogovi -Matijašić, Bojana, Irena Rogelj, I. F. Nes, and H. Holo. 5, s.l. : Applied microbiology and biotechnology, 1998, Applied microbiology and biotechnology, Vol. 49, pp. 606-612.
53. *Adherence of human vaginal lactobacilli to vaginal epithelial cells and interaction with uropathogens.* Boris, Soledad, Juan E. Suárez, Fernando Vázquez, and Covadonga Barbés. 5, s.l. : Infection and immunity, 1998, Infection and immunity, Vol. 66, pp. 1985-1989.
54. *Antibacterial effect of the adhering human Lactobacillus acidophilus strain LB.* Coconnier, Marie-Hélène, Vanessa Lievin, Marie-Françoise Bernet-Camard, Sylvie Hudault, and Alain L. Servin. 5, s.l. : Antimicrobial agents and chemotherapy, 1997, Vol. 41, pp. 1046-1052.
55. *Antimicrobial effect of Lactobacillus acidophilus and Lactobacillus delbrueckii subsp. bulgaricus against Helicobacter pylori in vitro.* Rasic, Jeremija, et al. 4, s.l. : Arch. Gastroenterohepatol, 1995, Arch. Gastroenterohepatol, Vol. 14, pp. 158-160.
56. **Rasic, Jeremija.** Laboratory Studies. 1989-1993.
57. *Natural antibiotic activity of Lactobacillus acidophilus and bulgaricus. III. Production and partial purification of bulgaricus from Lactobacillus bulgaricus.* Reddy, G. V., K. M. Shahani, B. A. Friend, and R. C. Chandan. s.l. : Cultured Dairy Products Journal, 1983, Cultured Dairy Products Journal, pp. 15-19.
58. *Natural antibiotic activity of Lactobacillus acidophilus and Bulgaricus. II. Isolation of acidophilin from Lactobacillus acidophilus [Milk].* Shahani, K. M., J. R. Vakli, and A. Kilara. 2, s.l. : Cultured Dairy Products Journal, 1977, Cultured Dairy Products Journal, Vol. 12, pp. 8-11.
59. *Biotherapeutic effects of probiotic bacteria on candidiasis in immunodeficient mice.* Wagner, R. Doug, Carey Pierson, Thomas Warner, Margaret Dohnalek, Jeffrey Farmer, Lisa Roberts, Milo Hilty, and Edward Balish. 1, s.l. : Infection and immunity, 1997, Infection and immunity, Vol. 65.