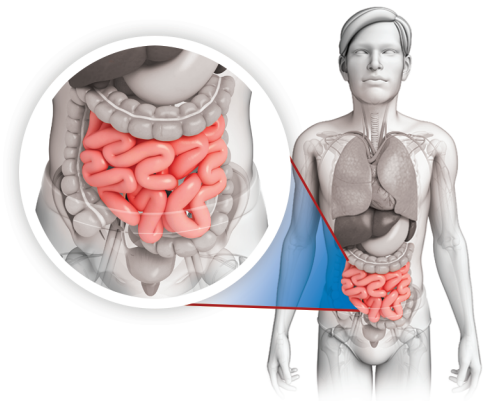




SUPERDOPHILUS[®]

DAIRY FREE POWDERS and CAPSULES, *Lactobacillus acidophilus* Super Strain NAS

Promotes nutrient absorption



INGREDIENTS

POWDER INGREDIENTS: *Lactobacillus acidophilus* Super Strain NAS, organic garbanzo bean (chick-pea) extract, and cellulose powder.

CAPSULE INGREDIENTS: *Lactobacillus acidophilus* Super Strain NAS, cellulose powder, dehydrated potato powder, organic garbanzo bean (chick-pea) extract, vegetable capsules (hypromellose), and L-leucine.

FORMAT

Available in 1.75 and 3.0 oz powder and 60 and 90 count vegetable capsules.

POTENCY GUARANTEE

Each serving/capsule supplies a minimum of two billion cfu of live and active *Lactobacillus acidophilus* Super Strain NAS guaranteed through the expiration date.

SUGGESTED USE

POWDER: Take one gram (approx. ½ level teaspoon) daily mixed with 6 oz. unchilled, filtered (chlorine-free) water, preferably before meals. Take at least two hours after herbs, garlic and prescription drugs.

CAPSULES: Take one capsule daily with 6 oz. unchilled, filtered (chlorine-free) water, preferably before meals. 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

Supernatant Delivery System

This unique and proprietary probiotic delivery system protects and nourishes probiotic bacteria by keeping them together with their original growth medium (supernatant) for maximum potency. Research shows that the supernatant can make a probiotic up to 50% more effective.

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 *Lactobacillus acidophilus* NAS?

Lactobacillus acidophilus is a beneficial microorganism predominant in the small intestine of adults and older children. *L. acidophilus* can help maintain healthy intestinal flora, aid digestion and absorption. It is also a resident organism in the oral cavity, the vaginal tract and part of the urinary system.

Lactobacillus acidophilus CHARACTERISTICS

- Helps destroy invading hostile bacteria by producing natural antibiotic substances.^{(1) (2) (3) (4) (5) (6)}
- Produces hydrogen peroxide (H₂O₂) found necessary to inhibit vaginal yeast.^{(7) (8)}
- As an antimicrobial, may suppress undesirable microorganisms in the intestines, by some competitive means, e.g., production of lactic acid and other inhibitory substances.^{(1) (2) (3) (4) (5) (6) (9) (10) (11) (12) (13) (14) (15) (16)}
- May help reduce levels of potentially harmful bacterial enzyme activity in the large intestine.^{(9) (10) (12) (13) (14) (15) (16) (17) (18) (19)}
- Helps lessen the production of hostile yeasts.^{(2) (7) (8) (20)}
- Helps maintain and support a healthy immune system.^{(21) (22) (23)}
- Produces the enzyme lactase, responsible for digestion of the milk sugar lactose.^{(24) (25) (26) (27) (28) (29) (30) (31)}
- May help maintain normal healthy cholesterol levels.^{(32) (33) (34) (35) (36) (37) (38) (39) (40)}
- An additional in vitro study showed, *L. acidophilus*, NAS Super Strain exhibited antimicrobial activity against *H. pylori*.⁽⁴¹⁾
- The NAS Super Strain also has proven ability to secrete a diverse array of bacteriocins.⁽⁴²⁾ Bacteriocins are a group of peptides or proteins that have natural antimicrobial activity, thereby eliciting additional probiotic benefits.⁽⁴²⁾

In vitro studies have demonstrated that *L. acidophilus*, has 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*.^{(2) (9) (10) (11) (12) (13) (14) (25) (20) (41) (43) (44) (45) (46) (47) (48) (49) (50) (51)}

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References:

1. **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.
2. **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.
3. **Genetics of bacteriocins produced by lactic acid bacteria.** **Klaenhammer, Todd R.** 1, s.l. : FEMS microbiology reviews, 1993, Vol. 12, pp. 39-85.
4. **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.
5. **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.
6. **Biosynthesis of bacteriocins in lactic acid bacteria.** **Nes, Ingolf F, Dzong Bao Diep, Leiv Sigve Håvarstein, May Bente Brurberg, Vincent Eijsink, and Helge Holo.** 2-4, s.l. : Antonie van Leeuwenhoek, 1996, Antonie van Leeuwenhoek, Vol. 70, pp. 113-128.
7. **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.
8. **Control of the microbial flora of the vagina by H202-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.
9. **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.
10. ***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.
11. ***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.
12. **Adhering heat-killed human *Lactobacillus acidophilus*, strain LB, inhibits the process of pathogenicity of diarrhoeagenic bacteria in cultured human intestinal cells.** **Coconnier, Marie-Helene, Marie-Francoise Bernet, Gilles Chauviere, and Alain L. Servin.** s.l. : Journal of diarrhoeal diseases research, 1993, Journal of diarrhoeal diseases research, Vol. 11, pp. 235-235.
13. **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.
14. **Inhibition of bacterial pathogens by lactobacilli.** **Dembele, Tiecoura, Vlastimil Odrálek, and Miroslav Votava.** 3, s.l. : Zentralblatt für Bakteriologie, 1998, Zentralblatt für Bakteriologie, Vol. 288, pp. 395-401.
15. **Inhibition of initial adhesion of uropathogenic *Enterococcus faecalis* by biosurfactants from *Lactobacillus isolates*.** **Velraeds, M. M., H. C. Van der Mei, Gregor Reid, and Henk J. Busscher.** 6, s.l. : Applied and Environmental Microbiology, 1996, Applied and Environmental Microbiology, Vol. 62, pp. 1958-1963.
16. **Inhibition of initial adhesion of uropathogenic *Enterococcus faecalis* to solid substrata by an adsorbed biosurfactant layer from *Lactobacillus acidophilus*.** **Velraeds, Martine, Henny C. Van Der Mei, Gregor Reid, and Henk J. Busscher.** 5, s.l. : Urology, 1997, Urology, Vol. 49, pp. 790-794.
17. **Effect of diet and *Lactobacillus acidophilus* supplements on human fecal bacterial enzymes.** **Goldin, Barry R., Linda Swenson, Johanna Dwyer, Margaret Sexton, and Sherwood L. Gorbach.** 2, s.l. : Journal of the National Cancer Institute, 1980, Journal of the National Cancer Institute, Vol. 64, pp. 255-261.
18. **Alterations in fecal microflora enzymes related to diet, age, *Lactobacillus* supplements, and dimethylhydrazine.** **Goldin, Barry, and Sherwood L. Gorbach.** S5, s.l. : Cancer, 1977, Cancer, Vol. 40, pp. 2421-2426.
19. ***Lactobacilli*, anticarcinogenic activities and human intestinal microflora.** **Lidbeck, A., C. E. Nord, J. A. Gustafsson, and J. Raftar.** 5, s.l. : European Journal of Cancer Prevention, 1992, European Journal of Cancer Prevention, Vol. 1, pp. 341-354.
20. **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.
21. **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.
22. **Systemic augmentation of the immune response in mice by feeding fermented milks with *Lactobacillus casei* and *Lactobacillus acidophilus*.** **Perdigon, Gabriela, M. E. De Macias, S. Alvarez, G. Oliver, and A. Pesce de Ruiz Holgado.** 1, s.l. : Immunology, 1988, Immunology, Vol. 63.
23. **Enhancement of Immune Response in Mice Fed with *Streptococcus thermophilus* and *Lactobacillus acidophilus*.** **Perdigon, G., M. E. Nader de Macias, 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.
24. **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.
25. **Lactic acid bacteria and human health.** **Gorbach, Sherwood L.** 1, s.l. : Annals of Medicine, 1990, Annals of Medicine, Vol. 22, pp. 37-41.
26. ***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.
27. **Influence of nonfermented dairy products containing bacterial starter cultures on lactose maldigestion in humans.** **Lin, Mei-Yn, Dennis Savaiano, and Susan Harlander.** 1, s.l. : Journal of dairy science, 1991, Journal of dairy science, Vol. 74, pp. 87-95.
28. **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. Savaiano.** 6, s.l. : The American journal of clinical nutrition, 1991, The American journal of clinical nutrition, Vol. 54, pp. 1041-1046.
29. **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.
30. **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.
31. **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 Jiang, and Dennis A. Savaiano.** 8, s.l. : Journal of dairy science, 1997, Journal of dairy science, Vol. 80, pp. 1537-1545.
32. **Influence of yogurt and acidophilus yogurt on serum cholesterol levels in mice.** **Akalin, A. Sibel, Siddik Göng, and Selmin Düzel.** 11, s.l. : Journal of dairy science, 1997, Journal of dairy science, Vol. 80, pp. 2721-2725.
33. **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.
34. **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.
35. **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.
36. **Effects of a mixture of organisms, *Lactobacillus acidophilus* or *Streptococcus faecalis* on cholesterol metabolism in rats fed on 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.
37. **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.
38. **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.
39. **Anticarcinogenic, hypocholesterolemic, and antagonistic activities of *Lactobacillus acidophilus*.** **Mitali, Brij K., and Satyendra K. Garg.** 3, s.l. : Critical reviews in microbiology, 1995, Critical reviews in microbiology, Vol. 21, pp. 175-214.
40. **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.
41. **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.
42. **Quantitative profiling of bacteriocins present in dairy-free probiotic preparations of *Lactobacillus acidophilus* by nanoliquid chromatography-tandem mass spectrometry.** **Nandakumar, R., & Talapatra, K. A.** s.l. : Journal of dairy science, 2014, Journal of dairy science, Vol. 97, pp. 1999-2008.
43. **The human *Lactobacillus acidophilus* strain LA1 secretes a nonbacteriocin antibacterial substance (s) active in vitro and in vivo.** **Bernet-Camard, Marie-Francoise, 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.
44. **Isolation and characterization of two bacteriocins of *Lactobacillus acidophilus* LF221.** **Bogović-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.
45. **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.
46. **Antibacterial effect of the adhering human *Lactobacillus acidophilus* strain LB.** **Coconnier, Marie-Helene, Vanessa Liévin, Marie-Francoise Bernet-Camard, Sylvie Hudault, and Alain L. Servin.** 5, s.l. : Antimicrobial agents and chemotherapy, 1997, Vol. 41, pp. 1046-1052.
47. **Rasic, Jeremija.** Laboratory Studies. 1989-1993.
48. **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.
49. **Natural antibiotic activity of *Lactobacillus acidophilus* and *bulgaricus*. III. Production and partial purification of bulgarican 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.
50. **Natural antibiotic activity of *Lactobacillus acidophilus* and *Bulgaricus*. II. Isolation of acidophilin from *Lactobacillus acidophilus* [Milk].** **Shahani, K. M., J. R. Vakili, and A. Kilara.** 2, s.l. : Cultured Dairy Products Journal, 1977, Cultured Dairy Products Journal, Vol. 12, pp. 8-11.
51. **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.