

BIFIDOBACTERIUM ANIMALIS SSP. LACTIS 420 (B420)[™]

In vitro trials

Probiotic selection, survival, stability

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11. Hunger W. 1989. Bifidobakterien und *Lactobacillus acidophilus* für Sauermilchprodukte. *Deutsche Molkerei-Zeitung DMZ* 38: 21st Sept. [Article in German]
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Safety

1. Ouwehand AC, Saxelin M and Salminen S. 2004. Assessment of Potential Risk Factors and Related Properties of Clinical, Faecal and Dairy *Bifidobacterium* Isolates. *Biosc Microfl.* 23: 37-42.

Prebiotic utilization

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2. Saarinen MT, Lahtinen SJ, Sørensen JF, Tiihonen K, Ouwehand AC, Rautonen N & Morgan A. 2012. Treatment of Bran Containing Bread by Baking Enzymes; Effect on the Growth of Probiotic Bacteria on Soluble Dietary Fiber Extract *in vitro*. *Bioscience, Biotechnology and Biochemistry*, 76: 6, 1135-1139.

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Adherence

1. Collado MC, Meriluoto J, Salminen S. 2008. Adhesion and aggregation properties of probiotic and pathogen strains *Eur Food Res Technol*. 226: 1065-1073.
Also listed under Antipathogenic/antitoxic activity.

2. Collado MC, Meriluoto J, Salminen S. 2007. Role of commercial probiotic strains against human pathogen adhesion to intestinal mucus. *Lett Appl Microbiol*. 45: 454-460.
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Cox-expression

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Also listed under Intestinal permeability.

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Intestinal permeability

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Antipathogenic/antitoxic activity

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Genomics

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Proteomics

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Animal trials

Weight management and glucose intolerance

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Intestinal permeability and protection

- Lyra A, Saarinen M, Putaala H, Olli K, Lahtinen SJ, Ouwehand AC, Madetoja M and Tiihonen K. 2012. *Bifidobacterium animalis* ssp. *lactis* 420 Protects against Indomethacin-Induced Gastric Permeability in Rats. *Gastroenterology Research and Practice* Vol. 2012, Article ID 615051.
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Cardiovascular health

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Human Clinical Studies

Safety

- Roessler A, Forssten SD, Gleis M, Ouwehand AC, Jahreis G. 2012. The effect of probiotics on faecal microbiota and genotoxic activity of faecal water in patients with atopic dermatitis: A randomized, placebo-controlled study. *Clin Nutr.* 31 (1): 22-29.
Also listed under Gastrointestinal ecology.

Weight management

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Immune system enhancement

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Antipathogenic/antitoxic activity

1. Barbuti RC, Oliveira MN, Perina NP, Haro C, Bosch P, Bogsan CS, Eisig JN, Navarro-Rodriguez T. 2015. *Bifidobacterium lactis* Fermented Milk Was Not Effective for *Helicobacter pylori* Eradication: A Prospective, Randomized, Double-Blind, Controlled Study. *International Journal of Biological, Food, Veterinary and Agricultural Engineering* Vol: 9, No: 3.

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Gastrointestinal functionality

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Gastrointestinal Ecology

1. Roessler A, Forssten SD, Gleis M, Ouwehand AC, Jahreis G. 2012. The effect of probiotics on faecal microbiota and genotoxic activity of faecal water in patients with atopic dermatitis: A randomized, placebo-controlled study. *Clin Nutr*. 31 (1): 22-29.

Also listed under Safety.

2. Casiraghi MC, Canzi E, Zanchi R, Donati E, Villa L. 2007. Effects of a symbiotic milk product on human intestinal ecosystem. *J Appl Microbiol*. 103: 499-506.

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Strain detection

1. Duez H, Pelletier C, Cools S, Aissi E, Cayuela C, Gavini F, Bouquelet S, Neut C, Mengaud J. 2000. A colony immunoblotting method for quantitative detection of a *Bifidobacterium animalis* probiotic strain in human faeces. *J Appl Microbiol*. 88: 1019-1027.

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Reviews

1. Stenman LK, Burcelin R, Lahtinen S. 2016. Establishing a causal link between gut microbes, body weight gain and glucose metabolism in humans – towards treatment with probiotics. *Benef Microbes*. 7: 11-22.

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Product Functionality

1. Tamminen M, Salminen S and Ouwehand AC. 2013. Fermentation of Carrot Juice by Probiotics: Viability and Preservation of Adhesion. *International Journal of Biotechnology for Wellness Industries*, 2, 10-15.
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