

BIFIDOBACTERIUM LONGUM BI-05™

The strain *B. longum* BI-05 is deposited at the ATCC as SD5588.

In vitro trials

Prebiotic utilization

1. Vigsnaes LK, Nakai H, Hemmingsen L, Andersen JM, Lahtinen SJ, Rasmussen LE, Hachem MA, Petersen BO, Duus JØ, Meyer AS, Licht TR, Svensson B. 2013. *In vitro* growth of four individual human gut bacteria on oligosaccharides produced by chemoenzymatic synthesis. *Food Funct.* 4: 784-793.

Animal trials

Immune system modulation

1. Lollo PCB, de Moura CS, Morato PN, Cruz AG, Castro WdF, Betim CB, Nisishima L, Faria JAF, Maróstica Junior M, Fernandes CO, Amaya-Farfan J. 2013. Probiotic yogurt offers higher immune-protection than probiotic whey beverage. *Food Research International* 54: 118-124.
2. Lollo PC, Cruz AG, Morato PN, Moura CS, Carvalho-Silva LB, Oliveira CA, Faria JA, Amaya-Farfan J. 2012. Probiotic cheese attenuates exercise-induced immune suppression in Wistar rats. *J Dairy Sci.* 95(7): 3549-58.

Hypertension

1. Lollo PCB, Morato PN, Moura CS, Almada CN, Felício TL, Esmerino EA, Barros ME, Amaya-Farfan J, Sant'Ana AS, Raices RRS, Silva MC, Cruz AG. 2015. Hypertension parameters are attenuated by the continuous consumption of probiotic Minas cheese. *Food Res Int.* 76 (Pt 3): 611-617. doi: 10.1016/j.foodres.2015.07.015.

Human clinical studies

Sensory testing

1. Cruz AG, Cadena RS, Castro WF, Esmerino EA, Rodrigues JB, Gaze L, Faria JAF, Freitas MQ, Deliza R, Bolini HMA. 2013. Consumer perception of probiotic yogurt: Performance of check all that apply (CATA), projective mapping, sorting and intensity scale. *Food Research International* 54: 601-610.

Also listed under Product functionality.

2. Cruz AG, Cadena RS, Faria JAF, Bolin HMA, Dantas C, Ferreira MMC, et al. 2012. PARAFAC: Adjustment for modeling consumer study covering probiotic and conventional yogurt. *Food Research International*, 41: 211-215.

Product functionality

1. Holck J, Larsen DM, Michalak M, Li H, Kjærulff L, Kirpekar F, Gotfredsen CH, Forssten S, Ouwehand AC, Mikkelsen JD, Meyer AS. 2014. Enzyme catalysed production of sialylated human milk oligosaccharides and galactooligosaccharides by *Trypanosoma cruzi* trans-sialidase. *N Biotechnol.* 31(2): 156-65. doi: 10.1016/j.nbt.2013.11.006.
2. Jers C, Michalak M, Larsen DM, Kepp KP, Li H, Guo Y, Kirpekar F, Meyer AS, Mikkelsen JD. 2014. Rational design of a new *Trypanosoma rangeli* trans-sialidase for efficient sialylation of glycans. *PLoS One* 9(1): e83902. doi: 10.1371/journal.pone.0083902.
3. Gavligli HA, Meyer AS, Mikkelsen JD. 2013. Tragacanth gum: functionality and prebiotic potential. *Agro Food Industry hi-tech.* 24 (2): 46-48.
4. Cruz AG, Castro WF, Faria JAF, Bolini HMA, Celeghini RMS, Raices RSL, Oliveira CAF, Freitas MQ, Conte Júnior CA, Mársico ET. 2013. Stability of probiotic yogurt added with glucose oxidase in plastic materials with different permeability oxygen rates during the refrigerated storage. *Food Research International* 51: 723-728.

5. Cruz AG, Cadena RS, Castro WF, Esmerino EA, Rodrigues JB, Gaze L, Faria JAF, Freitas MQ, Deliza R, Bolini HMA. 2013. Consumer perception of probiotic yogurt: Performance of check all that apply (CATA), projective mapping, sorting and intensity scale. *Food Research International* 54: 601-610.

Also listed under Clinical trials/sensory testing

6. Michalak M, Thomassen LV, Roytio H, Ouwehand AC, Meyer AS, Mikkelsen JD. 2012. Expression and characterization of an endo-1,4- β -galactanase from *Emerizella nidulans* in *Pichia pastoris* for enzymatic design of potentially prebiotic oligosaccharides from potato galactans. *Enzyme Microb Technol.* 50(2): 121-129. doi: 10.1016/j.enzmictec.2011.11.001.

7. Espirito Santo AP, Silva RC, Soares FASM, Anjos D, Gioielli LA, Oliveira MN. 2010. Açai pulp addition improves fatty acid profile and probiotic viability in yoghurt. *International Dairy Journal* 20: 415-422.

8. Cruz AG, Faria JA, Walter EH, Andrade RR, Cavalcanti RN, Oliveira CA, Granato D. 2010. Processing optimization of probiotic yogurt containing glucose oxidase using response surface methodology. *J Dairy Sci.* 93 (11): 5059-68. doi: 10.3168/jds.2010-3336.

9. Ding WK, Shah NP. 2009. Effect of various encapsulating materials on the stability of probiotic bacteria. *J Food Sci.* 74: M100-107.

10. Zoellner SS, Cruz, AG, Faria JAR, Bolini HMA, Moura MRL, Carvalho LMJ, Sant'ana AS. 2009. Whey beverage with acai pulp as a food carrier of probiotic bacteria. *Aust. J. Dairy Technol.* 64 (2): 177-181

11. Ding WK, Shah NP. 2007. Acid, bile and heat tolerance of free and microencapsulated probiotic bacteria. *J Food Sci.* 72: M446-M450.

Review

1. Soccol CR, Prado MR, Garcia LM, Rodrigues C, Medeiros AB, Soccol VT. 2014. Current developments in probiotics. *J. Microb. Biochem. Technol.* 7: 011-20.

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