



**Nutrition
Centre**

By TATE & LYLE

**PROMITOR**[®]
Soluble Fibre

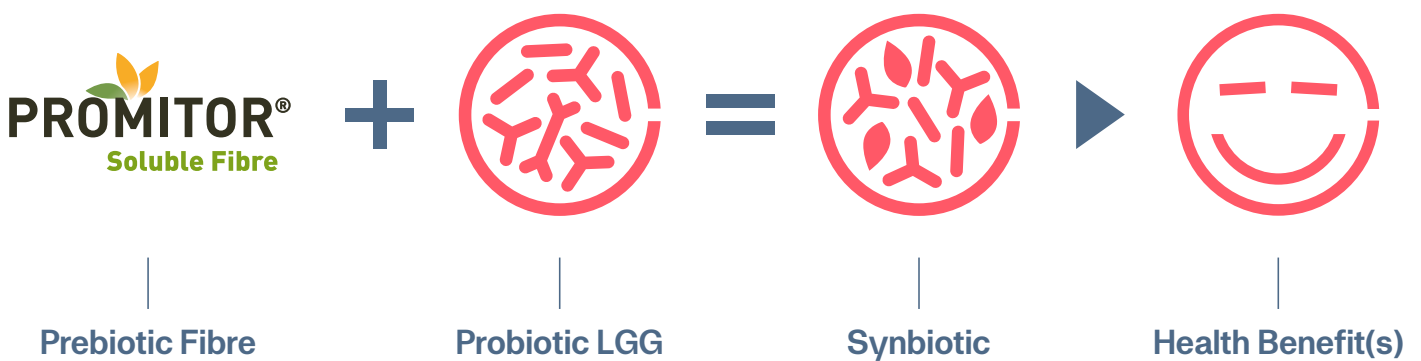
PROMITOR[®]
**Soluble Fibre
and Synbiotics**

Human clinical study shows the synbiotic combination of prebiotic PROMITOR® Soluble Fibre and probiotic *Lactobacillus rhamnosus*, LGG® supports improved marker of innate immunity and a decrease in pro-inflammatory cytokine IL-6.



The study:

Human intervention study with healthy elderly adults (aged 60–80), consumed 12 g/day of PROMITOR® Soluble Fibre with or without *L. rhamnosus* GG® for three weeks.¹



The results:

Significant changes in gut microbiota

All treatments (fibre alone or with probiotics) provided significant changes in gut microbiota, while a placebo did not.

Increased NK cell activity

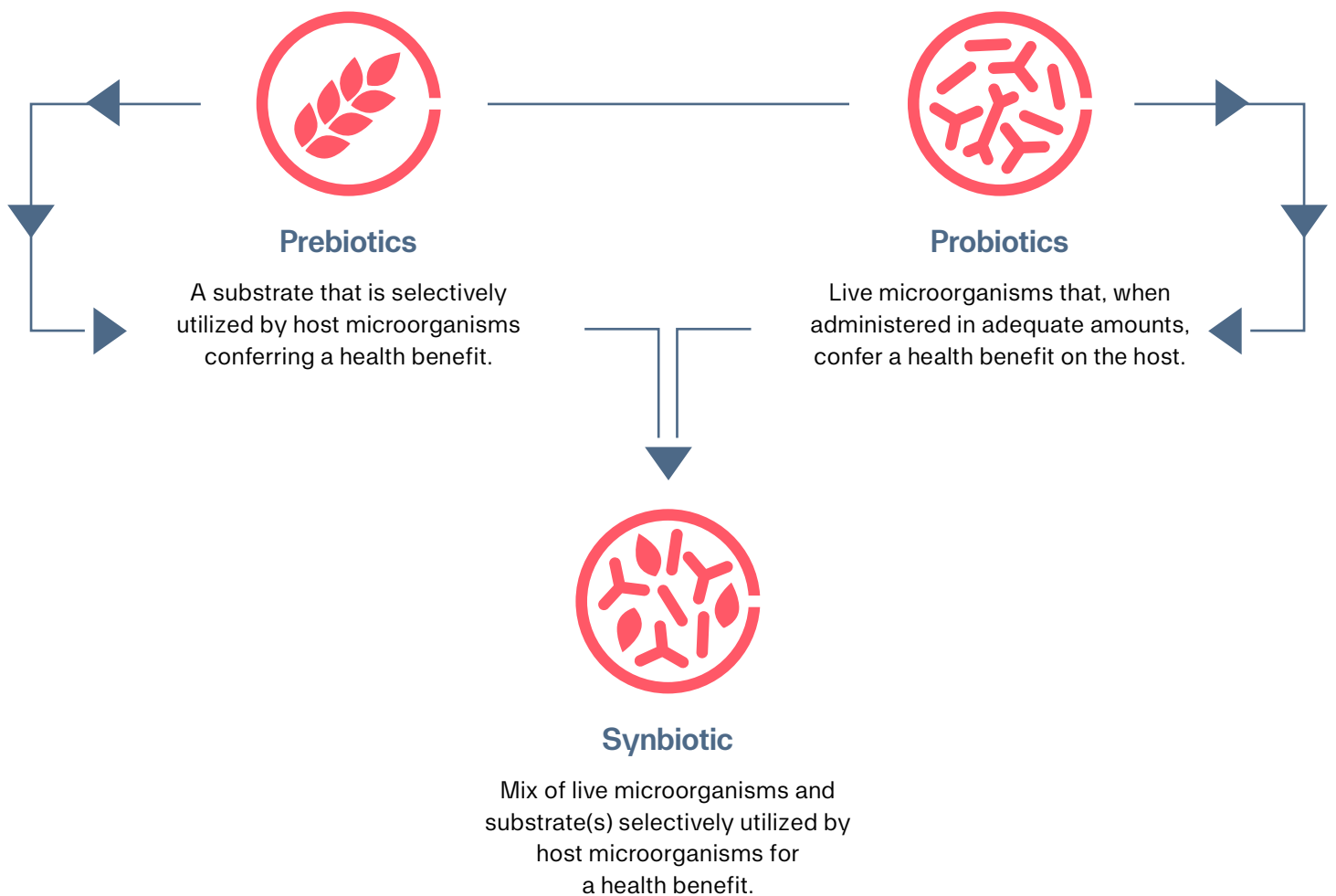
Consumption of *L. rhamnosus* GG® combined with PROMITOR® Soluble Fibre increased NK cell activity, a marker of innate immunity, compared to baseline in females and the older group.

Decrease of the pro-inflammatory cytokine IL-6

In addition, the study showed a decrease of the pro-inflammatory cytokine IL-6 with the dietary intervention of PROMITOR® Soluble Fibre alone.

Consensus:

A consensus statement released by The International Scientific Association for Probiotics and Prebiotics (ISAPP)* provides a definition and scope of synbiotics.²



*Association of academic and industrial scientists with a common interest in generating high-quality, collaborative, multidisciplinary science and guidance. Only scientific organization dedicated specifically to probiotics and prebiotics. Provides an objective, science-based, trusted voice to guide informed choices.

Overview:

PROMITOR® Soluble Fibre makes it easy to meet consumer demands for more fibre. Thanks to its superior digestive tolerance, clean taste, consumer-friendly labeling and ease of use, PROMITOR® Soluble Fibre is the ideal ingredient for fibre fortification and/or sugar and fat reduction.



Improve Nutritional Value

PROMITOR® Soluble Fibre enables manufacturers to make a variety of fibre content claims and health benefit claims including: low glycemic response,³ helps support healthy digestion,^{4,5} prebiotic fibre,⁶ helps boost calcium absorption (important for bone health).^{7,8,9}



Claim-Friendly Labeling

PROMITOR® Soluble Fibre can be labeled as soluble fibre or prebiotic fibre depending on regional regulatory guidelines.



Caloric Reduction

PROMITOR® Soluble Fibre helps to reduce calories, maintaining texture and mouthfeel in reduced-sugar/fat products.



Superior Digestive Tolerance

PROMITOR® Soluble Fibre has more than two times the digestive tolerance of inulin in adults.^{10,11}



Clean Taste

PROMITOR® Soluble Fibre has a neutral color and clean taste. Its solubility enables manufacturers to significantly boost fibre in a broad range of applications without compromising taste and texture.



Exceptional Process Stability

PROMITOR® Soluble Fibre has exceptional process and shelf stability, even in low pH conditions. Hence there is no need to overdose for loss of fibre, resulting in an attractive cost in use.



References

- 1 Costabile A, et al.
"Effects of Soluble Corn fibre alone or in Synbiotic Combination with Lactobacillus rhamnosus GG and the Pilus-Deficient Derivative GG-PB12 on Fecal Microbiota, Metabolism, and Markers of immune Function: a randomized, Double-Blind, Placebo-Controlled, Crossover Study in Healthy Elderly (Saimes Study) Front Immunol." 2017; 8: 1443.
- 2 Swanson, et al.
"The International Scientific Association for Probiotics and Prebiotics (ISAPP) consensus statement on the definition and scope of synbiotics." Nat Rev Gastroenterol Hepatol. 2020. 17, 687-701.
- 3 Kendall C, et al.
"Effect of novel maize-based dietary fibres on postprandial glycemia and insulinemia." J Am Coll Nutr. 2008;27:711-8.
- 4 Vester Boler BM, et al.
"Digestive physiological outcomes related to polydextrose and soluble maize fibre consumption by healthy adult men." Br J Nutr. 2011;106:1864-71.
- 5 Timm et al.
"Polydextrose and soluble corn fibre increase five-day fecal wet weight in healthy men and women." J Nutr. 2013;143:473-478.
- 6 Costabile A, et al.
"Prebiotic Potential of a Maize Based Soluble fibre and Impact of Dose on the Human Gut Microbiota." PLoS ONE 11 (1), 2016. and Whisner et al. "Soluble Corn Fibre Increases Calcium Absorption Associated with Shifts in the Gut Microbiome: A Randomized Dose-Response Trial in Free-Living Pubertal Females." J Nutr. 2016;146:1298-306.
- 7 Whisner CM, et al.
"Soluble corn fibre modulates calcium absorption by altering colonic microbiota." FASEB J 2013. 27:711-8.
- 8 Weaver CM, et al.
"Novel fibres increase bone calcium content and strength beyond efficiency of large intestine fermentation." J Agri Food Chem. 2010; 58:8952-8957.
- 9 Jakeman SA, et al.
"Soluble corn fibre increases bone calcium retention in postmenopausal women in a dose-dependent manner: a randomized crossover trial." Am J Clin Nutr. 2016 Sep;104(3):837-43.
- 10 H.A. Grabitske, et al.
"Gastrointestinal Effects of Low-Digestible Carbohydrates," Crit Rev Food Sci Nutr 2009, 49:327-360. cl G. Carabin, W.G. Flamm, "Evaluation of Safety of Inulin and Oligofructose as Dietary Fiber," z Regul Toxicol Pharmacol 1999, 30:268-282.
- 11 B. Housez, et al.
"Evaluation of Digestive Tolerance of a Soluble Corn Fiber." J Hum Nutr Diet 2012, 25:488-496.

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