

Health Benefits of NUTRIOSE® Soluble Fiber: Clinical Studies Summary

Prebiotic Benefits and Digestive Health

Clinical studies have shown that NUTRIOSE is a prebiotic fiber, fermented by beneficial colonic *Lactobacilli* and *Saccharolytic* flora to produce short chain fatty acids in the colon. Fermentation also results in decreases in colonic and fecal pH, and a decrease in pathogenic *Clostridium perfringens*. Short and long term tolerance studies show that NUTRIOSE does not cause digestive distress at up to 45 g per day.

A prebiotic and digestive health label claim can be made with NUTRIOSE at 2.5 g per serving.

Glycemic Response Benefits

NUTRIOSE results in lowered glycemic and insulinemic response. Clinical data in beverage, bakery and pasta show that NUTRIOSE has a glycemic response about 25 % that of sugar. It also results in considerable decrease in insulin response, averaging 13 % that of sugar.

Satiety, Fullness and Caloric Reduction Benefits

NUTRIOSE clinical trials show a significant decrease in body weight, caloric intake, body fat and BMI. In addition, NUTRIOSE increases feelings of satiety and fullness. It is therefore an important ingredient in managing body weight and related conditions such as metabolic syndrome. A satiety claim can be made with NUTRIOSE.

Fiber Source

NUTRIOSE is an easy-to-use source of fiber in all foods. A Good Source of Fiber claim (10 % of RDA) or an Excellent Source of Fiber claim (20 % of the RDA) can be made with 3g or 6 g NUTRIOSE per serving respectively.

Emerging Benefits:

Cholesterol Reduction and Cognition Benefits

Research with NUTRIOSE in animals resulted in significant reduction in plasma cholesterol levels. NUTRIOSE has also been shown to improve cognition ability in animal models.

Selected Studies:

- P Rozan, L Deremaux, D Wils, A Nejd, M Messaoudi, M Saniez (2008). *British Journal of Nutrition*, **100**, 1004-1010.
- C Lefranc-Millot (2008). *Nutrition Bulletin*, 33 (3), 234-239
- WJ Pasman, D Wils, MH Saniez, AM Kardinaal (2006). *European Journal of Clinical Nutr*, **60**, 1024-1034.
- EG Van den Heuvel, D Wils, WJ Pasman, MH Saniez, AFM Kardinaal (2005). *European Journal of Nutrition*, **44**, 445-451.
- EG Van den Heuvel, D Wils, WJ Pasman, M Bakker, MH Saniez, AFM Kardinaal (2004). *European Journal of Clinical Nutrition*, **58**, 1046-1055.
- M Vermorel, C Coudray, D Wils, S Sinaud, JC Tressol, C Montaurier, J Vernet, M Brandolini, C Bouteloup-demange, Y Rayssiguier (2004). *European Journal of Nutrition*, **43**, pp. 344-352.
- C Lefranc-Millot, D Wils, C Neut, MH Saniez (2006). *Research poster presented at Dietary Fiber 2006, Helsinki, Finland*



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