



## Publication list Functional Foods/Novel Foods

[www.tno.nl/food](http://www.tno.nl/food)

**This is a list of the most important publications of TNO on functional foods / novel foods in the areas:**

- **Gastro intestinal models**
- **Human intervention trails**
- **Complex flora analysis**

For more information,  
please contact:

Desirée Meijer-Michielsen

P +31 30 694 43 12

F +31 30 694 47 77

E [Desiree.Meijer@tno.nl](mailto:Desiree.Meijer@tno.nl)

**If you need more information on these or other publications of TNO, please contact us ([info-food@tno.nl](mailto:info-food@tno.nl)).**

### Gastro intestinal models

#### 2009

Profiling human gut bacterial metabolism and its kinetics using [U-(13)C]glucose and NMR. de Graaf AA, Maathuis A, de Waard P, Deutz NE, Dijkema C, de Vos WM, Venema K. **NMR Biomed.** 2009 Jul 10. [Epub ahead of print]

Butyrate modulates oxidative stress in the colonic mucosa of healthy humans. Hamer, H.M.; Jonkers, D.M.A.E.; Bast, A.; Vanhoutvin, S.A.L.W.; Fischer, M.A.J.G.; Kodde, A.; Troost, F.J.; Venema, K.; Brummer, R-J.M. **Clinical Nutrition** 28 (2009) p. 88-93.

Bioconversion of red ginseng saponins in the gastro-intestinal tract in vitro model studied by high-performance liquid chromatography-high resolution Fourier transform ion cyclotron resonance mass spectrometry. Kong H, Wang M, Venema K, Maathuis A, van der Heijden R, van der Greef J, Xu G, Hankemeier T. **J Chromatogr A.** 2009 Mar 13;1216(11):2195-203.

Linking phylogenetic identities of bacteria to starch fermentation in an in vitro model of the large intestine by RNA-based stable isotope probing. Kovatcheva-Datchary P, Egert M, Maathuis A, Rajilić-Stojanović M, de Graaf AA, Smidt H, de Vos WM, Venema K. **Environ Microbiol.** 2009 Apr;11(4):914-26.

Improving in vitro simulation of the stomach and intestines, pages 314-339 in **Designing functional foods**: Measuring and controlling food structure breakdown and nutrient absorption. K Venema, R Havenaar and M Minekus. Edited by D J McClements and E A Decker.

#### 2008

The role of colonic metabolism in lactose intolerance. He, T.; Venema, K.; Priebe, M.G.; Welling, G.W.; Brummer, R.J.M.; Vonk, R.J. **European Journal of Clinical Investigation** 38 (2008) 8, p. 541-547.

Antioxidant and anti-inflammatory potency of different wheat varieties and fractions. Mateo Anson, N.; Berg, R. v.d.; Havenaar, R.; Haenen, G.; Bast, A. **Proceedings of the Nutrition Society** 67 (2008) p. E56.

Efficient degradation of gluten by a prolyl endoprotease in a gastrointestinal model: implications for coeliac disease. Mitea, C.; Havenaar, R.; Drijfhout, J.W.; Edens, L.; Dekking, L.; Koning, F. **Gut** 2008;57:25-32.

## **Human Intervention Trials**

### **2009**

Lactotripeptides and antihypertensive effects: a critical review. Boelsma E, Kloek J. **Br J Nutr.** (2009) 101:776-86.

Short-chain fructo-oligosaccharides improve magnesium absorption in adolescent girls with a low calcium intake. Van den Heuvel EG, Muijs T, Brouns F, Hendriks HF. **Nutr Res.** (2009) 29:229-37.

Postprandial ghrelin responses are associated with the intermeal interval in time-blinded normal weight men, but not in obese men. Blom WA, de Graaf C, Lluch A, Stafleu A, Schaafsma G, Hendriks HF. **Physiol Behav.** (2009) 23:742-8.

Clustering of dietary intake and sedentary behavior in 2-year-old children. Gubbels JS, Kremers SP, Stafleu A, Dagnelie PC, de Vries SI, de Vries NK, Thijs C. **J Pediatr.** (2009) 155:194-8.

Short-term fatty acid intervention elicits differential gene expression responses in adipose tissue from lean and overweight men. Van Erk MJ, Pasman WJ, Wortelboer HM, van Ommen B, Hendriks HF. (2008) **Genes & Nutrition** 3 (3-4):127-137.

## **Complex Microflora Analysis**

### **2009**

Defining the healthy "core microbiome" of oral microbial communities. Zaura E, Keijser BJ, Huse SM, Crielaard W. **BMC Microbiol.** 2009 Dec 15;9:259.

Mixed-species genomic microarray analysis of fecal samples reveals differential transcriptional responses of bifidobacteria in breast- and formula-fed infants. Klaassens, E.S., Boesten, R.J., Haarman, M., Knol, J., Schuren, F.H.J., Vaughan, E.E., de Vos, W.M. **Appl Environ Microbiol.** 2009 May;75(9):2668-76 Epub 2009 Mar 13.

A Bifidobacterium mixed species microarray for high resolution discrimination between intestinal bifidobacteria. Boesten, R.J., Schuren, F.H.J., de Vos, W.M. **J Microbiol Methods.** 2009 Mar;76(3):269-77. Epub 2008 Dec 24.

### **2008**

Pyrosequencing analysis of the oral microflora of healthy adults. Keijser, B.J.F., Zaura, E., Huse, S.M., van der Vossen, J.M.B.M., Schuren, F.H.J., Montijn, R.C. ten Cate, J.M., Crielaard, W. **J Dent Res.** 2008 Nov;87(11):1016-20.