

## ***Multifunctional starters***

### **2009**

Raulio, M., Wilhelmson, A., Salkinoja-Salonen, M., Laitila, A. 2009. Ultrastructure of biofilms formed on barley kernels during malting with and without starter culture. Food Microbiology. In Press.

Saarela, M., Alakomi, H.-L., Puhakka, A., Mättö, J. 2009. Effect of the fermentation pH on the storage stability of *Lactobacillus rhamnosus* preparations and suitability of *in vitro* analyses of cell physiological functions to predict it. Journal of Applied Microbiology 106 (4), 1204-1212.

### **2008**

Alakomi, H.-L., Saarela, M. 2008. On the functionality of probiotic bacteria. Influence of processing conditions. Nutrafoods 7 (2/3), 59-64.

Saarela, M. 2008. Keeping probiotics alive. Challenges and solutions to incorporate probiotics into functional foods - with a special focus on dairy- and fruit-based beverages. International Review of Food Science & Technology. International Union of Food Science and Technology (IUFoST). Oakville, Ontario, Canada, pp. 45-48.

### **2007**

Alakomi, H.-L., Saarela, M. 2007. Control of harmful food-borne gram-negative bacteria by weakening cell membranes. Food Microbiology Research Trends. Palino, Marta V. (ed.). NOVA Science Publishers. New York, pp. 189-216.

Katina, K., Laitila, A., Juvonen, R., Liukkonen, K.-H., Kariluoto, S., Piironen, V., Landberg, R., Åman, P., Poutanen, K. 2007. Bran fermentation as a means to enhance technological properties and bioactivity of rye. Food Microbiology 24, 175-186.

Katina, K., Liukkonen, K.-H., Kaukovirta-Norja, A., Adlercreutz, H., Heinonen, S.-M., Lampi, A.-M., Pihlava, J., Poutanen, K. 2007. Fermentation-induced changes in the nutritional value of native or germinated rye. Journal of Cereal Science 46 (3), 348-355.

Laitila, A., Sarlin, T., Kotaviita, E., Huttunen, T., Home, S., Wilhelmson, A. 2007. Yeasts isolated from industrial maltings can suppress *Fusarium* growth and formation of gushing factors. Journal of Industrial Microbiology and Biotechnology 34, 701-713.

Saarisalo, E., Skyttä, E., Haikara, A., Jalava, T., Jaakkola, S. 2007. Screening and selection of lactic acid bacteria strains suitable for ensiling grass. Journal of Applied Microbiology 102, 327-336.

Saarela, M. 2007. Methods to improve the viability and stability of probiotics. Functional Dairy Products. Volume 2. Saarela, Maria (Ed.). Woodhead Publishing Limited. Cambridge, UK (2007), pp. 391-403.

## 2006

Katina, K., Salmenkallio-Marttila, M., Partanen, R., Forssell, P., Autio, K. 2006. Effects of sourdough and enzymes on staling of high-fibre wheat bread. *LWT - Food Science and Technology* 39, 479-491.

Laitila, A., Sweins, H., Vilpola, A., Kotaviita, E., Olkku, J., Home, S., Haikara, A. 2006. *Lactobacillus plantarum* and *Pediococcus pentosaceus* starter cultures as a tool for microflora management in malting and for enhancement of malt processability. *Journal of Agricultural and Food Chemistry* 54, 3840-3851.

Laitila, A., Wilhelmson, A., Kotaviita, E., Olkku, J., Home, S., Juvonen, R. 2006. Yeasts in an industrial malting ecosystem. *Journal of Industrial Microbiology and Biotechnology* 33, 953-966.

Maukonen, J., Alakomi, H.-L., Nohynek, L., Hallamaa, K., Leppämäki, S., Mättö, J., Saarela, M. 2006. Suitability of the fluorescent techniques for the enumeration of probiotic bacteria in commercial non-dairy drinks and in pharmaceutical products. *Food Research International* 39, 22-32.

Saarela, M., Virkajärvi, I., Nohynek, L., Vaari, A., Mättö, J. 2006. Fibres as carriers for *Lactobacillus rhamnosus* during freeze-drying and storage in apple juice and chocolate-coated breakfast cereals. *International Journal of Food Microbiology* 112, 171-178.

Saarisalo, E., Jalava, T., Skyttä, E., Haikara, A., Jaakkola, S. 2006. Effect of lactic acid bacteria inoculants, formic acid, potassium sorbate and sodium benzoate on fermentation quality and aerobic stability of wilted grass silage. *Agricultural and Food Science* 15, 185-199.

## 2005

Alakomi, H.-L., Mättö, J., Virkajärvi, I., Saarela, M. 2005. Application of a microplate scale fluorochrome staining assay for the assessment of viability of probiotic preparations. *Journal of Microbiological Methods* 62, 25-35.

Katina, K., Arendt, E., Liukkonen, K.-H., Autio, K., Flander, L., Poutanen, K. 2005. Potential of sourdough for healthier cereal products. *Trends in Food Science and Technology* 16, 104-112.

## 2004

Kariluoto, S., Vahteristo, L., Salovaara, H., Katina, K., Liukkonen, K.-H., Piironen, V. 2004. Effect of baking method and fermentation on folate content of rye and wheat breads. *Cereal Chemistry* 81, 134-139.

Katina, K., Poutanen, K., Autio, K. 2004. Influence and interactions of processing conditions and starter culture on formation of acids, volatile compounds, and amino acids in wheat sourdoughs. *Cereal Chemistry* 81, 598-10.

## 2002

Katina, K., Sauri, M., Alakomi, H.-L., Mattila-Sandholm, T. 2002. Potential of lactic acid bacteria to inhibit rope spoilage in wheat sourdough bread. *Lebensmittel-Wissenschaft und -Technologie* 35, 38-45.

Laitila, A., Alakomi, H.-L., Raaska, L., Mattila-Sandholm, T., Haikara, A. 2002. Antifungal activities of two *Lactobacillus plantarum* strains against *Fusarium* moulds *in vitro* and in malting of barley. *Journal of Applied Microbiology* 93, 566-576.

**Doctoral theses**

Katina, Kati. 2005. Sourdough: a tool for the improved flavour, texture and shelf-life of wheat bread. VTT Biotechnology, Espoo. 92 p. + app. 81 p. VTT Publications: 569

Pdf: <http://www.vtt.fi/inf/pdf/publications/2005/P569.pdf>

Laitila Arja. 2007. Microbes in the tailoring of barley malt properties. VTT Biotechnology, Espoo. 107 p. + app. 79 p. VTT Publications : 645 Pdf: <http://www.vtt.fi/inf/pdf/publications/2007/P645.pdf>