

## Probiotics and health – introductory comments and aim of the conference

## Nils-Georg Asp and Torkel Wadström

Probiotics are defined as live microbes that, when given orally or topically to skin or mucosal surfaces of human or animals, confer health benefits on the host (1, 2). Health effects of probiotics are subject to extensive research aiming at the development of "functional foods" as well as medicinal products, not the least in Asia and the European Union.

A previous international conference, 14-15 November 2000 in Malmö, Sweden, specifically addressed the scientific evidence in humans as a basis for health claims for probiotic (and prebiotic) products. Proceedings from this conference were published in the Scandinavian Journal of Nutrition/ Näringsforskning 2001; 45: 8–24, 57–88, 108. Before the conference, a group of scientists, appointed by the National (Swedish) Food Administration's expert group on diet and health issues, and the Swedish Nutrition Foundation, had reviewed available human effect studies (3, 4).

The present conference was arranged in connection with the 16th Annual European Helicobacter Study Group (EHSG) Workshop in Stockholm 3-6 September 2003. Possible effects of probiotics in eradicating and preventing Helicobacter pylori infections were indeed one important aspect presented by Gasbarrini et al. (see full paper, pp. 26) and Koga et al. The aim of the conference, however, was to bring clinicians and scientists from universities and industries together for a broad and interdisciplinary definition and discussion of the state of the art regarding health effects of probiotics, especially in relation to gastric and intestinal disorders.

The scientific substantiation of health claims for functional foods and medicinal products was specifically addressed at the conference. Products intended and marketed to alleviate, prevent or cure a disease are by definition medicine. However, it is increasingly recognised that foods may have specific health-promoting properties. Thus, the "functional food" concept was conceived in Japan, and in 1991 a specific category of foods - Foods for Specified Health Use, FOSHU – was defined legally. Probiotic products have become a leading group of FOSHU. In July 2003, the Commission of the European Communities released a proposed directive on nutrition and health claims for foods. The implementation of this directive will provide opportunities for two types of health claims in the labelling and marketing of foods - (1) regarding well-established physiological effects of nutrients and other substances (including probiotics), and (2) regarding claims to reduce disease risk. A prerequisite is that the claimed effects are scientifically substantiated. Awaiting such regulations, some European countries such as Sweden, the Netherlands and the United Kingdom have voluntary Codes of Conduct regarding health claims for foods in operation. The scientific substantiation of claims is a key issue regarding medicinal products as well as "functional foods", and the discussions at the conference were focused on the need for welldesigned clinical intervention trials in children and adults. Thanks to participation of experts from different parts of Europe, as well as from Japan and North America, the meeting provided opportunities for a global view of the present status and future developments in the most dynamic area of probiotics.

## References

- 1. Tannock GW. Probiotics and prebiotics. Where are we going?. Norfolk, UK: Caister Acad Press; 2002.
- 2. Reid G, Sanders M, Gaskins HR, Gibson G, Merceiner A, Rastall R, et al. New scientific paradigms for probiotics and prebiotics. J Clin Gastroent 2003; 37: 105-18.
- 3. Andersson H, Asp N-G, Bruce Å, Roos S, Wadström T, Wold AE. Health effects of probiotics and prebiotics. A literature review on human studies. Scand J Nutr 2001; 45: 58-75.
- 4. Wold AE. Immune effects of probiotics. Scand J Nutr 2001; 45: 76-85.