

Foreword

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Foods or food ingredients that can enhance health, so-called 'functional foods', is without doubt one of the leading trends in the food industry today (Kevin, 1997). This is driven, in part, by the increasing consumer awareness and interest in the link between diet and health. The practice of self-medication in disease prevention is at an all time high. In the 1996 HealthFocus Trends Report, over one-half of those surveyed believed that foods could be used as a drug substitute (Gilbert, 1996). In a more recent consumer survey, 90% of shoppers believed they could improve their health by making small changes in their diet (FMI/PREVENTION, 1997). Thus, it is not surprising that interest in pre- and probiotics is increasing at a rapid rate and is considered to be a leading trend in the natural products industry, a market whose annual sales are growing at a rate of 10–15%.

Among those functional foods receiving widespread research, consumer and marketing interest worldwide are those which exert a favourable effect on the colonic microflora. They include probiotics (e.g. lactobacilli and bifidobacteria) defined as 'A live microbial feed supplement which beneficially affects the host animal by improving its intestinal microbial balance' (Fuller, 1989); prebiotics (e.g. oligosaccharides), defined by Gibson & Roberfroid (1995) as 'nondigestible food ingredients that beneficially affects the host...' and synbiotics, also defined by Gibson and Roberfroid as 'a mixture of probiotics and prebiotics that can beneficially affect the host...'. It is hypothesized that consumption of these 'colonic foods' impart various positive physiological effects which may, in turn, reduce the risk of diseases such as cancer and heart disease – chronic ailments that exert an enormous burden on the health-care system.

Compared to the USA, the market for pre- and probiotics is clearly more developed in Europe, where dozens of products are currently available, generating annual revenues of \$US2 billion. There are indications, however, that this trend is catching on across the Atlantic. The December issue of Food Technology cited 'nutraceuticals/functional foods with "bioactivity" (e.g. probiotics/cultured dairy products) ...' as a leading development in the dairy industry during 1996 (Mermelstein, 1997). This will be further stimulated by recent recommendations by the National Academy of Sciences to increase calcium consumption by those aged 9–50 years of age (Kennedy, 1997).

This supplement, 'Prebiotics and Probiotics, Where Are We Today', summarizes the highlights of a symposium that I had the privilege of co-chairing with Professor Marcel Roberfroid at the Institute of Food Technologists (IFT) Annual Meeting & Food Expo in June of 1997. Dr Roberfroid and I were pleased that the leading scientific and marketing experts in the field of pre- and probiotics from both the USA and Europe agreed to convene in Orlando, Florida, to share their expertise during that forum. More importantly, these individuals were willing to compile their remarks for publication in this issue of the *British Journal of Nutrition*. It is hoped that this supplement will provide a state-of-the-art perspective of the most recent scientific and marketing developments in the field of pre- and probiotics, and I am pleased to have been a part of this effort.

Last but not least, I would like to extend my sincere appreciation to the generous sponsors who not only made possible the publication of this supplement, but also helped to support expenses associated with the presentation of this information at the IFT. They are: Arla (Sweden), CHR Hansen (Denmark), ConAgra Trading & Processing Companies (USA), Kraft (USA), Nestlé (Switzerland and USA), Nutricia-Galenko (Belgium), Orafti (Belgium) and Valio (Finland).

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