

Critical aspects of developing novel food products with probiotics

Martin Macouzet

Institute for the development of probiotic food products, Quebec, Canada

Published online May 2012
www.idpf-idap.com

Abstract

Interest in the intimate and vital relationship that we maintain with microbial organisms living in our digestive system grows as science advances and emphasizes our dependency on the so-called gut microbiota. The consumption of probiotics in our diet has proven effective as means of shaping and maintaining the population of the gut microbiota according to consumer lifestyle or health needs. Consumer interest in probiotics has opened a huge market opportunity for the food industry, which promptly responded by supplementing processed foods with probiotics as a marketing strategy. However, inexperience and poor judgment have resulted in numerous costly mistakes proving that probiotics cannot be used or marketed like other food ingredients. The living nature and various health effects of probiotics require special consideration in food product development. Only by understanding their implications in each stage of the development process will it be possible to launch successful products. This article outlines crucial points that should be understood before attempting the development and marketing of any food product containing probiotics. These points will be examined in greater depth in upcoming articles.

Key words: probiotic foods; food product development; positioning; health claims; consumer awareness.

The innovation opportunity

It has become conventional wisdom that businesses will have to rely more and more on innovation in order to increase or even to maintain their market share. While innovations have revolutionized some

sectors of the economy in a relatively short time, the food industry remains one of the least innovative, focused primarily on packaging material and design rather than on product content (Fig. 1). The food industry has a long tradition of low investment in research and development, typically less than 1% of total revenue, compared to an average of 3% in more dynamic industries (DGPAAT, 2010). This suggests that food-related innovations are difficult to achieve, represent risk in the marketplace, and that consumers are less

Correspondence: Martin Macouzet,
Institute for the Development of Probiotic Food Products,
1015 Desranleau Est,
Saint-Hyacinthe, Quebec, J2T 4Y8
Canada
martin.macouzet@idpf-idap.com

receptive to them. If product innovation is to be a successful corporate strategy in the food sector, businesses must adopt a rational and systematic approach to product development.

References

DGPAAT (2010). Enjeux des industries agroalimentaires. Direction générale des politiques agricole, agroalimentaire et des territoires, Ministère de l'alimentation, de l'agriculture et de la pêche, Fr. 44 p.

<http://alimentation.gouv.fr/panorama-iaa>

Lagnevik, M., Sjöholm, I., Lareke, A. and Ostberg, J. (2003). The dynamics of innovation clusters: a study of the food industry. Edward Elgar Publishing Ltd., Montpellier Parade, Cheltenham, UK. 213 p. ISBN 1 84376 367 2

Mallentin, J. (2008). Probiotics: Successful strategies from the global marketplace.

New Nutrition Business, The Centre for Food & Health Studies, London, UK. 112 p. ISBN 978-1-906297-11-4

Moskowitz, H.R., Saguy, I.S. and Straus, T. (2009). An integrated approach to new food product development. CRC press, Taylor & Francis Group. Boca Raton, FL, USA. 479 p. ISBN 978-1-4200-6553-4

Sparling, D., Laughland, P., Schaufele, B. and Cheney, E. (2010) Advancing Canada's food and health agenda: Case studies in healthy foods. The Canadian Agri-Food Policy Institute.

<http://www.capi->

[icpa.ca/pdfs/Sparling_et_al%202010_Food_and_Health_Case_Studies_Eng.pdf](http://www.capi-icpa.ca/pdfs/Sparling_et_al%202010_Food_and_Health_Case_Studies_Eng.pdf)

The Chimp Sequencing and Analysis Consortium (2005). Initial sequence of the chimpanzee genome and comparison with the human genome. Nature 437, 69-87

[Get full pdf article](#)



**Institute for the Development
of Probiotic Food Products**

The meeting point of science, industry and communication

www.idpf-idap.com