

## REFERENCE

**P136**

## Prebiotics – from concept to product: the BIOLIFE project

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Nutrition has progressed from the discovery of essential nutrients and prevention of dietary deficiency to the promotion of a state of well-being and health and the reduction of the risk of disease. In this context the functional food concept emerges: a food or drink product that, when ingested, exerts particular benefits on some physiological functions. The gastrointestinal functions are associated with a balanced colonic microflora that plays a key role in individual health. This complex ecosystem can be modulated by the ingestion of dietary components that favour the growth and metabolism of beneficial indigenous species such as bifidobacteria and lactobacilli. These components of saccharidic nature are called prebiotics. The BIOLIFE project involves the development of novel biotechnological processes, enzymatic and fermentative, for the production of prebiotics, namely, galacto-oligosaccharides (GOS) and fructo-oligosaccharides (FOS) from food industry by-products. Produced oligosaccharides will be incorporated in liquid and solid food formulations in order to obtain functional foods targeted towards gut function.

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