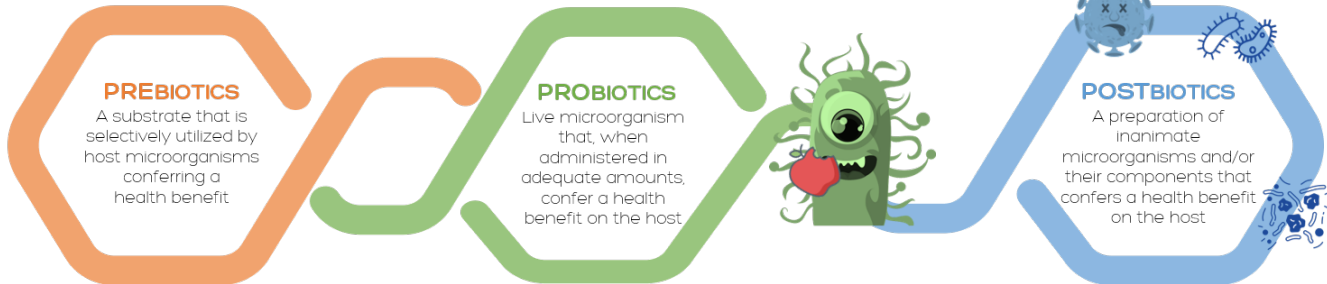


Pre-, pro-, post- biotics



PREBIOTICS

A substrate that is selectively utilized by host microorganisms conferring a health benefit

PROBIOTICS

Live microorganism that, when administered in adequate amounts, confer a health benefit on the host

POSTBIOTICS

A preparation of inanimate microorganisms and/or their components that confers a health benefit on the host

- **Prebiotics** are **non-digestible carbohydrates and/or dietary fibre** (but not all dietary fibres are prebiotics) naturally present in foods or added to food products/ supplements.
- There isn't recommended daily intake for prebiotics.
- **What can you look for?** Fructans: Inulin or FOS (Fructooligosaccharides); Chicory fibre; GOS (Galactooligosaccharides); OF (Oligofructose)
- **To come:** human milk oligosaccharides (HMOs); lactulose and other oligosaccharides; resistant dextrins; synthetic polysaccharides (polydextrose, arabinoxylans and resistant starches); polyphenols and polyols (lactitol & isomalt).

- **Probiotic bacteria** are identified by their genus, species and strain.
- **Key challenges:** Understand their mechanisms of action, to map which probiotic strains confer specific health benefits and to define the necessary intake levels to achieve those effects.

- **Postbiotics** include **inanimate microbes and other physiologically active microbial cell components** (such as cell wall fragments or enzymes) **or metabolites**.
- **Confirmatory studies** to make further **nutritional recommendations** are required. [doi: 10.3389/fnut.2022.1002213](https://doi.org/10.3389/fnut.2022.1002213)

Probiotics and Prebiotics can:

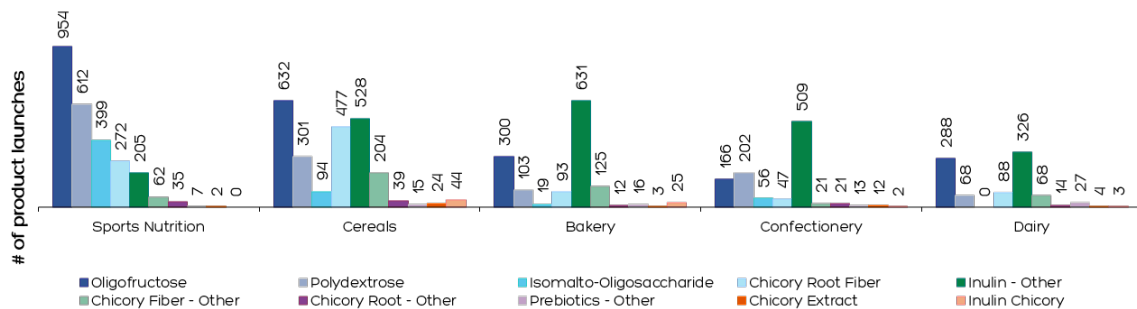
Help normalize a disturbed gut microbiota (*ISAPP*) | Improve mineral absorption | Modulate immune system | Modulate satiety | Improve bowel habits | Promote metabolic health

New products launches in Europe - 2020-2022 (Innova Market Insights Database)

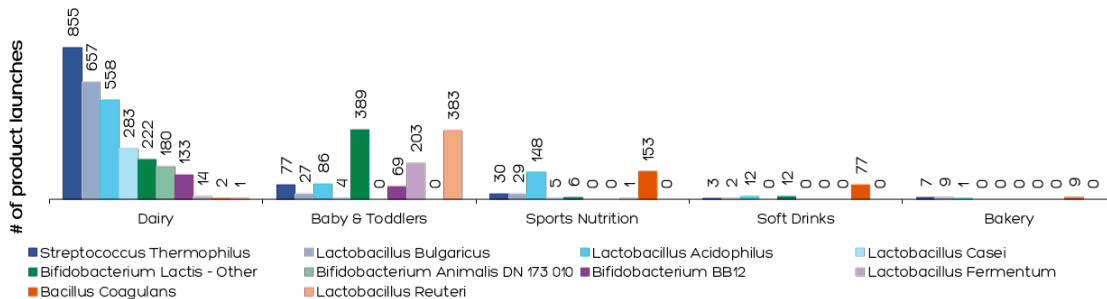
PREBIOTICS in F&D categories N = 9735

Category	Product Count	CAGR
Cereals	2 038	5.5%
Sports Nutrition	1 820	1.9%
Bakery	1 247	13.5%
Confectionery	866	9.1%
Dairy	821	-10.7%
Desserts & Ice Cream	719	9.5%
Soft Drinks	603	-7.0%
Baby & Toddlers	449	-15.5%
Hot Drinks	417	0.7%
Snacks	197	13.8%

PREBIOTICS in the ingredient list, in the 5 CATEGORIES with the highest incidence



PROBIOTICS in the ingredient list, in the 5 CATEGORIES with the highest incidence



PROBIOTICS in F&D categories N = 3968

Category	Product Count	CAGR
Dairy	1 840	-15.0%
Baby & Toddlers	1 356	-21.2%
Sports Nutrition	357	2.5%
Soft Drinks	135	-2.1%
Bakery	115	40.1%
Cereals	66	-38.4%
Alcoholic Beverages	26	-36.8%
Desserts & Ice Cream	23	-11.8%
Confectionery	20	-36.8%
Snacks	7	0.0%



Digestive health will continue to be one of consumers' wellness priorities in the coming year. Functional products with multi-ingredient and multi-benefit claims will be of high appeal.