

# THE BIOTICS

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What are the differences between prebiotics, probiotics, synbiotics, paraprobiotics and postbiotics?

Biotics are substances that promote a healthy gut flora and prevent any of its unpleasant symptoms, which can include poor digestion, abdominal pain or food intolerance. They can also improve nutrient absorption and contribute to a strong immune system. Naturally found in our food, they also come in the form of food supplements.



## PREBIOTICS

*Non-digestible and fermentable food ingredients*

Utilised by microorganisms

Promote the growth of health-beneficial probiotics

*Examples :* Inulin, FOS (fructo-oligosaccharides), GOS (galacto-oligosaccharides), fructans, etc.

## PROBIOTICS

*Live microorganisms*

Confer a health benefit when consumed in sufficient quantities

Promote the development of good bacteria at the expense of pathogenic bacteria

Keep the gut microbiota balanced

*Examples :* Bacteria (Bifidobacterium or Lactobacillus) and yeast strains (*Saccharomyces boulardii*)

## SYNBIOTICS

A combination of live microorganisms and substrates selectively utilised by host microorganisms



## PARABIOTICS AND POSTBIOTICS

*Mixture of inactivated microorganisms and/or their components*

Obtained after the metabolism of prebiotics by probiotics

Contain inactivated microbial cells or cell components (cell walls, proteins, membranes)

*Examples of metabolites :* Short-chain fatty acids, enzymes, vitamins, etc.

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