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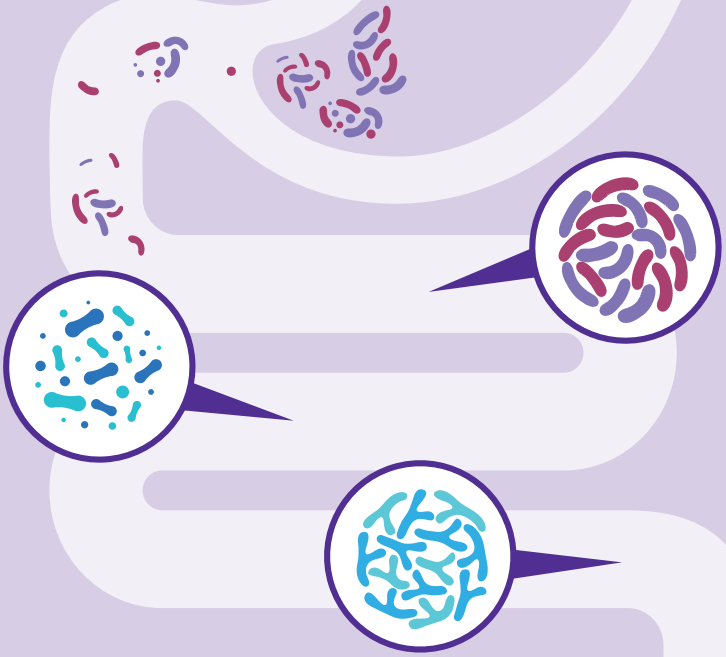
THE GUT MICROBIOME: AN INTRODUCTION

Microbes are found on every external surface in the body including the skin and the gut[1].

The gut is the area with the highest levels of bacteria in the body[1], with 1,000 different species of known bacteria present[2], and it is thought we have 10-100 times more bacterial cells than human cells on our body[3].

The combination of all the genetic information of these gut bacteria is termed the 'gut microbiome'[1].



PREBIOTICS are substrates that pass to the gut where they stimulate the growth or activity of beneficial bacteria[4].

GALACTO-OLIGOSACCHARIDES & FRUCTO-OLIGOSACCHARIDES (GOS/FOS) are prebiotic fibres that promote the growth of beneficial bacteria in the large intestine.

HUMAN MILK OLIGOSACCHARIDES (HMOS) are the third most abundant component of human milk[5]. They are a group of structurally diverse oligosaccharides with prebiotic effects, amongst other benefits[6].

PROBIOTICS are beneficial bacteria that affect the host gut microbiome when ingested in adequate amounts[7].

POSTBIOTICS are bioactive compounds produced by beneficial bacteria, which have biological activity in the host[8].

SYNBIOTICS are a combination of prebiotics and probiotics that work synergistically together[4].

The gut microbiome can be influenced by a range of environmental factors including mode of delivery, diet and gestational age at birth[9].

A healthy gut microbiome has implications for overall health and can be influenced by nutrition.

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