

# BENEFITS OF SELECTED SPECIALTY FOOD INGREDIENTS FOR GUT HEALTH

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There are more microbes in the human body than there are stars in the Milky Way. So it's no surprise that the microbiome's vital contribution to overall wellbeing has become an important topic for both scientists and consumers in recent years. But did you know that an individual's gut microbiota is as unique as a fingerprint? And that specialty food ingredients such as fibre, probiotics, prebiotics, synbiotics and postbiotics can support gut health? Let's take a closer look...

## KNOWING THE CORRECT TERMS

### MICROBIOTA

The human microbiota refers to the totality of all microorganisms (bacteria, fungi, viruses, etc.) living in and on the human body.

### MICROBIOME

The term microbiome includes the microbiota and its genetic material, metabolites, activities, interactions and environmental conditions, which function as an ecosystem.



**95%** of microbiota is located in the gastrointestinal (GI) tract.

**THE GUT MICROBIOME, WHICH INCLUDES BACTERIA, FUNGI AND VIRUSES IN THE DIGESTIVE SYSTEM, IS VITAL FOR DIGESTION AND WELLBEING.**

## THESE MICROORGANISMS...

- Support vitamin production
- Aid in mineral absorption
- Protect against pathogens
- Boost the immune system
- Produce beneficial metabolites such as short chain fatty acids.

## FACTORS THAT INFLUENCE GUT MICROBIOME COMPOSITION:



**LIFESTYLE**



**AGE**



**ENVIRONMENT**



**MEDICATION**

## DIET

### 5 SPECIALTY FOOD INGREDIENTS CAN SUPPORT A BALANCED GUT MICROBIOME:



**1 Probiotics**  
Probiotics occur naturally in fermented foods like yoghurt, kefir and sauerkraut. These live microorganisms provide health benefits when consumed in sufficient amounts.



**2 Prebiotics**  
Prebiotics can be found in certain vegetables and legumes. Manufacturers also use them as functional ingredients in baked goods, dairy products and bars. They are the 'food' for microorganisms. When metabolised, prebiotics can improve bowel regularity, increase calcium absorption and bone mineral density, improve inner defence and metabolic health including blood glucose and body weight management.



**3 Dietary Fibre**  
Whole grains, pulses, vegetables and functional bakery products are all high in dietary fibre. Defined as non-digestible carbohydrates, they support a healthy gut. Some dietary fibres can also be prebiotics.



**4 Synbiotics**  
Synbiotics combine probiotics with specific prebiotics, enhancing their health benefits in functional foods and supplements.



**5 Postbiotics**  
Postbiotics are inanimate microorganisms. Their components, such as metabolites, short chain fatty acids (SCFAs), microbial cell fractions and functional proteins, are produced during fermentation.

**These specialty food ingredients contribute to a diverse and healthy diet.**