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Summary of Science

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Overview of Human Research on Bimuno Prebiotic Ingredient

Bimuno is a prebiotic ingredient resulting from over 20 years of scientific research and developed in collaboration with world renowned universities including the University of Reading, King's College London and Oxford University.

The efficacy and safety of Bimuno (also referred to as B-GOS in published studies) is supported by over 120 scientific publications, including more than 20 independent clinical trials. The ingredient has been clinically shown to improve gastrointestinal health and associated quality of life, strengthen anti-pathogenic activity, support immune function, as well as strengthen cognitive and mental wellbeing (stress, mood and anxiety).

How does Bimuno work?

Bimuno acts through several modes of action. One of its primary mechanisms is stimulating the growth of bifidobacteria in the large intestine, a species of bacteria that is associated with a wide range of health benefits.

The positive impact of Bimuno on human health lies in the by-products produced by beneficial bacteria, such as short-chain fatty acids, its direct and indirect effects on the immune system, including its anti-pathogenic activity, and its impact on digestive wellbeing.

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Digestive Discomfort

Bloating, Flatulence and associated abdominal pain

Bimuno has been shown to reduce the physical effects of digestive discomfort.

Clinical research with Bimuno has demonstrated that it reduces flatulence, bloating, and abdominal pain in individuals who experience gastrointestinal (GI) discomfort (Silk et al., 2009; Vulevic et al., 2018; Huaman et al., 2018; Wilson et al., 2020) and leads to a significant reduction in urgency (Vulevic et al., 2018; Wilson et al., 2021). Additionally, Bimuno has a positive effect on improving bowel habits in individuals with IBS (Silk et al., 2009; Wilson et al., 2021) and Ulcerative Colitis (Wilson et al., 2020). In elite athletes, Bimuno has been shown to reduce the incidence and severity of GI symptoms (Parker et al., 2023). Self-reported questionnaire data collected as part of a real-world evidence (RWE) study of Bimuno consumers is consistent with clinical findings that Bimuno can support GI health in individuals affected by IBS and its associated symptoms (Sloan et al., 2023).

It's important to note that by specifically targeting bifidobacteria (which do not contribute to gas production), Bimuno does not lead to increased gas (Mego et al., 2017), which could be a concern for some individuals.

People who experience digestive discomfort are often advised by nutrition professionals to temporarily follow a restrictive diet that avoids fermentable (FODMAP) foods. While this approach often yields short-term benefits, a low FODMAP diet has a number of challenges as it can alter the gut microbiota in ways that may not be beneficial, as well as impact nutrient intake and diet quality. It requires the patient to be adequately supported to follow the diet accurately and safely; despite this, not all patients respond to the diet¹.

However, for some patients experiencing GI discomfort, following a low FODMAP diet supplemented with Bimuno may increase the likelihood of responding and experiencing symptom relief compared to following a low FODMAP diet alone (Wilson et al., 2023; subsequent analysis of data from Wilson et al., 2020).



Travellers' Diarrhoea

Preclinical studies have shown that Bimuno reduces the adhesion of pathogens to gut cells and increases anti-inflammatory cytokines to prevent the invasion of pathogens. This strongly suggests a positive effect of Bimuno on the innate immune system. This effect is reflected in studies where Bimuno was shown to reduce the incidence (Hasle et al., 2017) and duration (Drakoularakou et al., 2010) of diarrhoea caused by pathogens.



Immune Function

Immunity can be affected by lifestyle, stress, poor nutrition, and it also changes as people age. Particularly with aging, the decline of immune function, known as immunosenescence, may start to play a bigger role and can affect all parts of the immune system, making a person more prone to illness. Bimuno provides diverse benefits to the immune system by increasing Natural Killer Cell activity and reducing levels of pro-inflammatory cytokines, while increasing the production of anti-inflammatory cytokines. As such, Bimuno has been shown to improve immune resilience in older adults (Vulevic et al., 2008; 2015) and reduce low-grade chronic inflammation in overweight individuals at risk of metabolic syndrome (Vulevic et al., 2013).

Furthermore, supplementation with Bimuno can reduce the duration of upper respiratory tract issues in elite athletes (Parker et al., 2023) and may attenuate the severity of exercise-induced bronchoconstriction (Williams et al., 2016). Additionally, many athletes typically follow a high-protein, low-fibre diet, and supplementation with Bimuno could help bridge the fibre gap.



Behaviour, Mood & Cognition

Research has demonstrated that modulation of the gut microbiota can affect behaviour, mood, and cognition through the microbiota-gut-brain axis. Bimuno supplementation has been shown to decrease waking cortisol levels in healthy individuals while also having a beneficial effect on the attentional processing of emotional information, and may therefore help to maintain a normal stress response through the modulation of the hypothalamic-pituitary-adrenal axis (Schmidt et al., 2015).

In another study involving autistic children, supplementation with Bimuno led to significant improvements in social skills (Grimaldi et al., 2018). In an IBS cohort, beneficial effects on anxiety and quality of life were evident following supplementation with Bimuno (Silk et al., 2009).

In a RWE study (Sloan et al., 2023) marked self-reported improvements in QoL were reported in individuals motivated to take Bimuno for GI health, chronic pain and sleep, with the majority attributing the improvement to Bimuno. Overall, consumers reported better health and wellbeing following Bimuno supplementation.

¹ Wilson et al., 2020. Challenges of the low FODMAP diet for managing irritable bowel syndrome and approaches to their minimisation and mitigation. The Nutrition Society Winter Meeting, Royal Society of Medicine, London, 2-4 December 2019, doi:10.1017/S0029665120006990

Scan here for
full references



The tables show a full reference of the preclinical and clinical research undertaken on Bimuno®

Key:



Digestive Discomfort



Immune Function



Behaviour, Mood & Cognition



Prebiotic Effect



Travellers' Diarrhoea

Reference	Area(s)
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<ul style="list-style-type: none"> Grimaldi R, Gibson GR, Vulevic J, Giallourou N, Castro-Mejia JL, et al. 2018. A prebiotic intervention study in children with autism spectrum disorders (ASDs). <i>Microbiome</i>, 6(1):133. DOI:10.1186/s40168-018-0523-3. 	
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Digestive Discomfort



Immune Function



Behaviour, Mood & Cognition



Prebiotic Effect



Travellers' Diarrhoea

Reference	Area(s)
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bimuno®



The most studied commercial prebiotic

120+ scientific publications, including
20+ human trials



High specificity

Bimuno exhibits a bifidogenic effect
at the lowest intake of any prebiotic



Highly versatile

Bimuno is resistant to heat and acid
and can be added to food and drink



Suitable for everyone

No gluten, no preservatives
Vegetarians-friendly
Kosher & Halal certified

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Explore the benefits that prebiotics can offer to your
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Clasado Ltd,
Imperium Building,
Worton Grange,
Imperial Way, Reading
RG2 0TD, UK

Contact us:

T: +44 (0)118 338 5085
E: info@clasado.com

bimuno.com/professionals