# **Bimuno Prebiotic**



#### What is Bimuno?

Bimuno® is a unique targeted prebiotic which contains a composition of galactooligosaccharides (GOS). Bimuno feeds and stimulates the growth of beneficial bacteria in the gut. As non-digestible fibre, it passes through the upper gastrointestinal tract until it reaches the large intestine, where it is utilised by beneficial bacteria. Bimuno can be used in a wide range of applications and is suitable from infants to elderly.

# What makes Bimuno unique?

The science behind Bimuno is one of the most comprehensive of any commercially available prebiotic. Bimuno's safety and efficacy is supported by over 110 scientific publications and more than 20 clinical studies. Its chemical structure ensures its specificity for bifidobacteria - a type of naturally occurring, beneficial intestinal bacteria. Other prebiotics lack this selectivity and can therefore be metabolised by many types of microbes, beneficial or otherwise.



## How does Bimuno work?

Bimuno acts through several modes of action. The main one is the stimulation of growth of bifidobacteria in the large intestine<sup>1-14, 22, 23</sup>. A higher presence of bifidobacteria in the gut microbiome has been associated to a wide range of health benefits<sup>1-15</sup>. The positive impact of Bimuno on human health has been associated with substances produced by beneficial bacteria such as short chain fatty acids (SCFAs), neuromodulators, its direct and indirect effects on the immune system as well as its anti-pathogenic activity.

# How is Bimuno produced?

Bimuno selectively targets bifidobacteria because it is actually produced by an enzyme from the probiotic species *Bifidobacterium bifidum*. When bifidobacteria are fed certain sugars, they can produce prebiotic GOS, containing structures similar to those found in milk. Bimuno's production process replicates bifidobacteria's natural mechanism of producing GOS.

### What are the benefits of Bimuno?

There are four key areas in which Bimuno consistently shows beneficial effects on human health.



**Gastrointestinal health:** Bimuno promotes gastrointestinal wellbeing by reducing abdominal pain, bloating, flatulence and improving bowel regularity<sup>4, 13, 14, 17-19</sup>.



**Immune defence:** Human trials have proven Bimuno's capacity to strengthen the body's defences<sup>3, 6, 8</sup> and prevent diarrhoea caused by pathogens<sup>17, 18</sup>.



**Cognitive health:** Bimuno reduces stress hormone levels, anxiety and improves brain health and function<sup>4, 5, 10, 13, 15, 16, 20-22</sup>



**Immune health:** Bimuno modulates the immune system, increasing anti-inflammatory and decreasing pro-inflammatory biomarkers<sup>3, 8, 10, 20</sup>.

# **Bimuno Prebiotic**



#### **Fast action**

Rapid onset of action. Results observed in 7 days

#### **GRAS**

Generally recognized as safe by FDA for food, beverage and infant formula

#### **Protected**

Bimuno° is a registered trademark and is patent-protected

### **Targeted**

Highly selective and potent bifidogenic effect

Non-GMO

#### Effective dose

Lowest clinically effective dose of GOS

#### Versatile

Suitable for many processing applications. Stable at low pH and high temperatures

#### Safe & Efficacious

Safety and efficacy backed by 110+ scientific publications and 20+ clinical trials

## Vegetarian

Suitable for vegetarians

Gluten free

#### References

[1] Tzortzis et al., 2005; [2] Depeint et al., 2008; [3] Vulevic et al., 2008; [4] Silk et al., 2009 [5] Savignac et al., 2013; [6] Vulevic et al., 2013; [7] Costabile et al., 2015; [8] Vulevic et al., 2015; [9] Grimaldi et al., 2016; [10] Savignac et al., 2016; [11] Liu et al., 2016; [12] Grimaldi et al., 2017; [13] Grimaldi et al., 2018; [14] Huaman et al., 2018; [15] Kao et al., 2018; [16] Drakoularakou et al., 2010; [17] Hasle et al., 2017; [18] Vulevic et al., 2018; [19] Schmidt et al., 2015; [20] Williams et al., 2016; [21] Gronier et al., 2018; [22] Kao et al., 2019; [23] Wilson et al., 2021

Full list of Bimuno references available upon request.

Clasado Ltd Imperium Building Imperial Way Worton Grange, Reading RG2 0TD, UK

#### Contact us:

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

clasado.com

