



Unlock the holistic health potential of the gut microbiome with Humiome[®] biotics

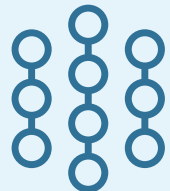
Discover how our revolutionary Humiome[®] biotics portfolio empowers you to bring leading-edge Health from the Gut solutions to consumers globally.

A new era in biotics innovation is here

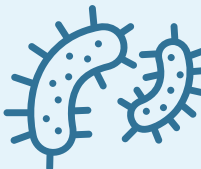
The biotics market is thriving

 +77
billion USD

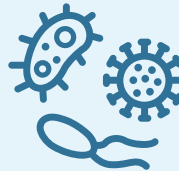
Probiotics market in 2022¹

 +14.9%

Prebiotics CAGR 2022-2030²

 +14%

Probiotics CAGR 2023-2030¹

 +11.5%

Postbiotics CAGR 2022-2032³



consumers recognize the link between good **gut health** and **overall wellness**.⁴

Biotics are essential components of the gut environment, which is increasingly recognized for its influence on human health beyond digestive support. Traditionally, biotics have been associated with digestive health. However, growing scientific evidence demonstrates that these ingredients influence health beyond digestion alone to unlock the holistic benefits the gut is truly capable of.

For this reason, biotic ingredients have become a key priority for research and development in the dietary supplement space. However, many players in the market continue to view gut health innovation through the lens of “good” and “bad” bacteria only, despite consumers progressively embracing a holistic health mindset and recognizing the role of the gut microbiome in unlocking this.

Biotics: The building blocks for a healthy gut microbiome

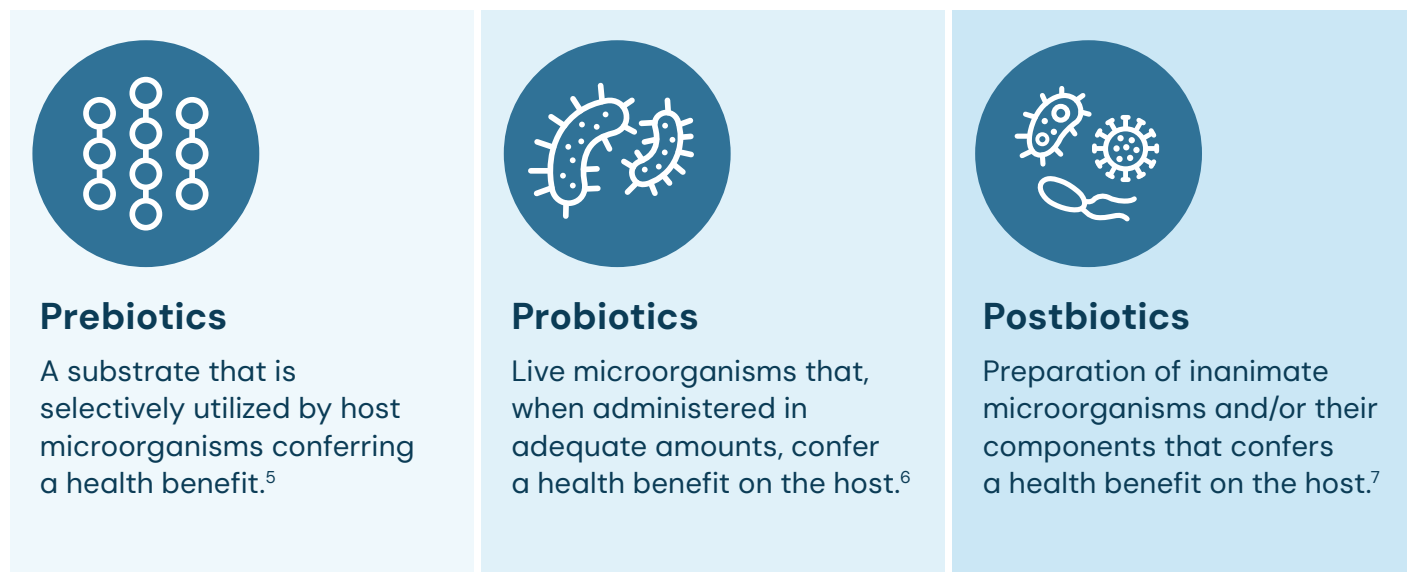


Figure 1: Collectively, biotics include probiotics, prebiotics and postbiotics.



Benefits associated with biotics



Digestive health



Metabolic heart health



Immune health



Brain health



Healthy aging



Women's health

At dsm-firmenich, we do things differently.

We believe there is a unique opportunity to push new boundaries in the biotics space and unlock the true holistic health potential of the gut. The dsm-firmenich difference? We know it takes more than a single ingredient view to help the gut function in perfect harmony and deliver on consumers' most pivotal health needs. It takes a science-based approach powered by multi-ingredient solutions, customized solutions and expert services.

Introducing Humiome® biotics

Our pioneering Humiome® biotics brand represents a new way of thinking in the holistic health market.

Humiome® is a next-generation, multi-ingredient portfolio of prebiotic, probiotic and postbiotic custom solutions, powered by science and backed by our expert services; and it's empowering innovators to craft advanced dietary supplement solutions. How? By unlocking the true holistic health possibilities of the gut.

Key advantages of Humiome® biotics

- Clinically-documented
- IP-protected
- Multi-ingredient
- Scalable
- Expert-powered



Consumers that said they would purchase a **dietary supplement with HMOs** after learning about their unique **health benefits**⁸



Humiome® Prebiotics

We're harnessing the power of human milk oligosaccharides (HMOs) nutrients – a specialty prebiotic – to deliver enhanced gut support throughout life. dsm-firmenich is the leader in global HMO approvals, and our portfolio of commercially available HMOs – accessible in more than 165 countries – is the largest worldwide. We also continue to spearhead research in the field, contributing to 100+ research projects to date.

Humiome® Probiotics

We offer a portfolio of research-backed probiotic strains, including the most extensively studied probiotics strains globally with demonstrated benefits for immunity, digestion, gut-brain-axis communication and more.

Humiome® Postbiotics

Our innovative postbiotic solutions are composed of unique combinations of patented bacterial strains, together with their fermented culture medium and active metabolites. High quality is guaranteed via a proprietary ECHO fermentation process that enriches, concentrates and heat-treats micro-organisms for fully-stabilized products with consistency batch-to-batch.

Part of our Health from the Gut platform

dsm-firmenich is reimagining gut health innovation.

We understand the complex interactions of a healthy and balanced gut ecosystem; and more importantly, how to restore and maintain balance in the microbiome to support holistic wellbeing. To further realize the health benefits that start in the gut, we're driving forward research in this space, remaining at the forefront of new developments leveraging the gut's natural and unique microbiome community.

Our Health from the Gut platform delivers combinations of proven, gut-supporting ingredients – fueled by unmatched scientific capabilities, end-to-end expert services and deep consumer insights – to take dietary supplement innovation to the next level.

**Explore our unique
Health from the Gut offering**

> Visit our hub



Health from the Gut



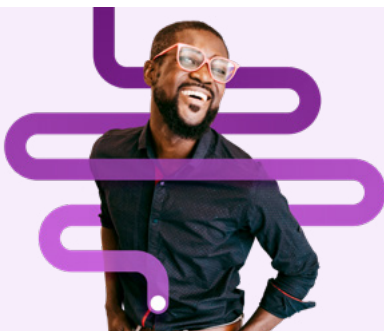
High quality products

Leverage our portfolio of premium ingredients targeted towards healthy gut function, including Humiome® bionics, Tolerase® digestive enzymes, GlyCare™ HMOs and Quali® vitamins.



Customized solutions

We offer quality customized multi-ingredient solutions and finished products – powered by our Premix and Market-ready Solutions – designed to help bring Health from the Gut products to market faster.



Expert services

Our Health from the Gut platform is championed by a team of passionate experts and scientists that know it takes more than just delivering an ingredient to stay ahead – it takes a dynamic team with experience and a deep understanding of the market.

Biotics innovation starts with **dsm-firmenich**

Together, we're excited to explore new frontiers in the rapidly expanding Health from the Gut category through cutting-edge biotics innovation.

Unleash the true power of the gut microbiome and bring progress to life with dsm-firmenich.

Partner with us to benefit from our leading-edge Humiome® biotics offering.

Connect with an expert

www.dsm-firmenich.com

dsm-firmenich 

This publication does not constitute or provide scientific or medical advice, diagnosis, or treatment. This information is based on dsm-firmenich's current knowledge and only contains scientific and technical information for business-to-business use. dsm-firmenich makes no representation or warranty of the accuracy, reliability, or completeness of the information and as to results to be obtained. Use of this information shall be at your discretion and risk. It does not relieve you of your obligation to comply with all applicable laws and regulations and to observe all third-party rights. Nothing herein relieves you from carrying out your own suitability determinations and tests including the stability testing of the finished product. Country or region-specific information should also be considered when labelling or advertising to final consumers. The content of this document is subject to change without further notice. All trademarks listed in this document are either registered trademarks or trademarks of dsm-firmenich in the Netherlands and/or other countries.

© 2023 DSM Nutritional Products Ltd

References

1. Grand View Research. Probiotics Market Size, Share & Trends Analysis Report By Product (Food & Beverages, Dietary Supplements), By Ingredient (Bacteria, Yeast), By Distribution Channel, By End-use, By Region, And Segment Forecasts, 2023 – 2030.
2. Grand View Research. Global Prebiotics Market Size, Share & Trends Analysis Report by Ingredients (FOS, Inulin, GOS, MOS), by Application (Food & Beverages, Dietary Supplements, Animal Feed), by Region, and Segment Forecasts, 2022 – 2030.
3. Future Market Insights. Probiotics Market Size, Share & Trends Analysis Report By Product (Food & Beverages, Dietary Supplements), By Ingredient (Bacteria, Yeast), By Distribution Channel, By End-use, By Region, And Segment Forecasts, 2023 – 2030.
4. FMCG Guru Digestive Health in 2022 and Beyond Global Report.
5. Gibson, G., Hutkins, R., Sanders, M. et al. Expert consensus document: The International Scientific Association for Probiotics and Prebiotics (ISAPP) consensus statement on the definition and scope of prebiotics. *Nat Rev Gastroenterol Hepatol* 14, 491–502 (2017).
6. Hill, C., Guarner, F., Reid, G. et al. The International Scientific Association for Probiotics and Prebiotics consensus statement on the scope and appropriate use of the term probiotic. *Nat Rev Gastroenterol Hepatol* 11, 506–514 (2014).
7. Salminen S, Collado MC, Endo A, et al. The International Scientific Association of Probiotics and Prebiotics (ISAPP) consensus statement on the definition and scope of postbiotics. *Nat Rev Gastroenterol Hepatol*. 18(9):649–667 (2021).
8. Qualtrics Custom HMOs Survey reflective of global audience, November 2020. n=417.