

Consumer Insights: Strengthening Immune Health



Immune health
Solutions for natural immune support

Consumers recognize that all elements of health are **interlinked** and are not to be treated in isolation. Key global areas of concern are: **healthier for longer, digestive health and mental wellbeing**¹



82%
Tried to **improve** their overall health and wellness



77%
Would like to **improve** their digestive health



85%
Looked to improve their mental sharpness & awareness

Our health is protected by our immune system, and as such consumer interest in immune health products is growing²

A growing number of consumers want to learn **how to improve** their immune health.

2022: **70%**
2020: **62%**

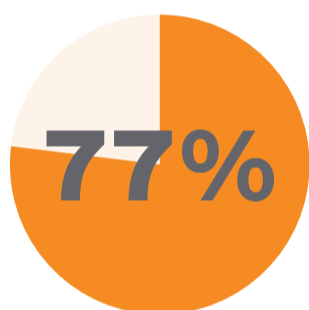
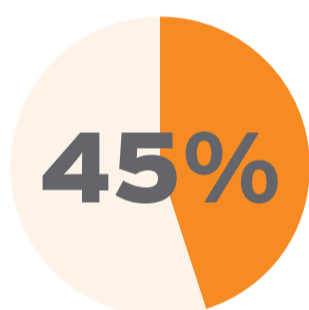
In order to improve their immune health consumers, use

50% more Functional food & beverages
24% more Nutritional Supplements



How can brands deliver for consumers?

Consumers can feel confused by brands in the health and wellness markets, therefore, transparent, ingredient-led claims will be **key** to build trust and credibility¹:



45% would be more likely to buy immune supporting products if they contained a **branded health ingredient**¹
77% would be more likely to buy immune supporting products if there were **scientific claims** to support the effectiveness of ingredients¹

Making the case for lactoferrin

Lactoferrin has been shown to support the **immune response**³ and to have immune-modulatory effects⁴⁻⁸. This means it can **contribute to an antiviral response**, and it may **support resilience**, thus better coping with immune stressors, and a **beneficial immune status**.

Lactoferrin has been shown to provide multiple beneficial effects for immune health:

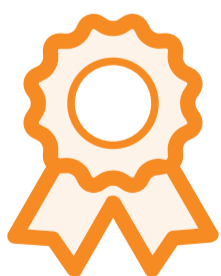
Antiviral effects It reduces the risk of viral infections^{9,10,11} by affecting the entry of a virus into host cells¹², or by enhancing the response of certain immune cells.³

Antibacterial effects Lactoferrin's iron-binding capacity inhibits the growth of several pathogenic bacteria.¹⁰ It sequesters iron necessary for bacterial survival, and disrupts the ability of these bacteria to grow.^{13,14} This can reduce the risk of bacterial infection.

Supports iron absorption As an iron-binding protein, lactoferrin supports iron absorption, relevant to those at risk for anemia, such as female athletes.¹⁵

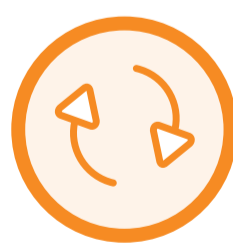


Why Biotis[®] Lactoferrin?



The industry benchmark

As the first to be positively assessed by the EFSA, we are the benchmark for quality.



Complete process control

FrieslandCampina Ingredients **controls the entire supply chain** for Biotis[®] Lactoferrin, using fresh milk for production.



> 95% purity level

Biotis[®] Lactoferrin has a high purity level of 96% for total proteins, and a high iron-binding capacity of approximately 80%.



Green electricity

Our factories run on green electricity—contributing to a more sustainable carbon footprint for your business.

Reach out to us to request a sample and learn how you can create a unique application for your brand: www.biotis.com/immune-health

¹ FMCG Gurus, Active Nutrition survey, 2023. 24,000 respondents globally

² Innova Market Insights platform, 2024

³ Splunter van et al., 2018

⁴ Kawakami et al., 2015

⁵ Mulder et al., 2008

⁶ Dix & Wright. 2018

⁷ Zimecki et al., 1999

⁸ Oda et al., 2020

⁹ Vitetta et al., 2013

¹⁰ Ali et al., 2021

¹¹ Kell et al., 2020

¹² Saito et al., 1996

¹³ Wang et al., 2019

¹⁴ Koikawa et al., 2008

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