



Immune
health

The Benefits of Lactoferrin

What is it?

Lactoferrin is a naturally occurring globular glycoprotein found in whey protein. It's widely known as a nutritional supplement in many parts of the world, as evidence has shown lactoferrin reduces the risk of infections and vulnerability to diseases, and improves overall health and recovery.¹



What are the benefits?

Immune health

Lactoferrin has been shown to support the immune response and to have immune-modulatory effects³⁻⁷, meaning it contributes to an antiviral response, and it may support resilience, thus better coping with immune stressors, and a beneficial immune status.

Research shows that lactoferrin can provide multiple beneficial effects for immune health:

Antiviral effects

It reduces the risk of viral^{2,8,9} infections by affecting the entry of a virus into host cells, 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 proliferation of these bacteria.^{11,12} 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.¹³

Ongoing research

Trials are running globally to investigate the effect of lactoferrin on COVID-19 as cell-based experiments have demonstrated that lactoferrin can help protect against coronavirus infections like SARS-COV-2.¹⁴

More benefits of lactoferrin



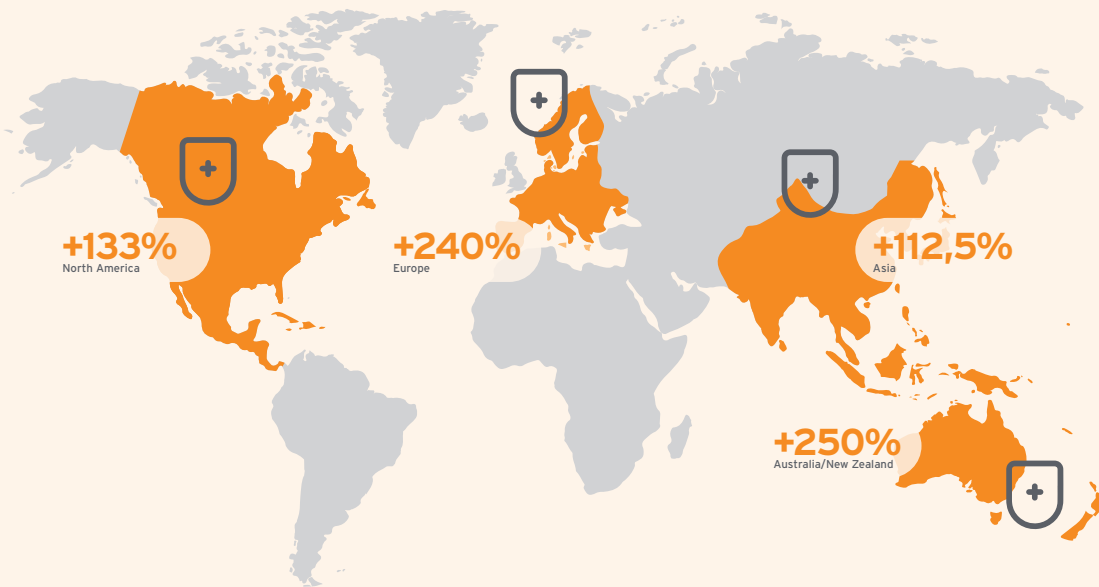
Oral care: Tablets with bovine lactoferrin contribute to reducing malodor and improving the oral hygiene status in adults.¹⁵⁻¹⁹



Weight loss: Lactoferrin has been shown to help promote the reduction of visceral fat in obese adults.²⁰



Skin care: Studies have shown that lactoferrin may help improve skin condition in healthy adults.²¹



Global research on growth of new products with lactoferrin from 2018 - 2020

Growth in new products with lactoferrin has been steady around the world, with the greatest increase of new products seen in Europe (+240%) and Australia and New Zealand (+250%).²²

What formats are popular in the market?



Lactoferrin innovations are most commonly available as a supplement. In North America, capsules and powders account for the most new product launches, and in Europe, capsules and RTDs are popular. In Asia, powders and tablets are most common.

Get Inspired : Biotis™ Immune Plus Powder Drink



The Immune-Plus Powder Drink is a new application suggestion based on Biotis™ Lactoferrin that fits easily into the diet and lifestyles of consumers.

With six out of ten consumers increasingly looking for food and drink products that support immune health²³, a powder drink is an ideal option.

References

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| 3 Splunter van et al., 2018 | 11 Saito et al., 1996 | 19 Nakano et al., 2019 |
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| 6 Dix & Wright. 2018 | 14 Mirabelli et al., 2020 | 22 Innova, 2020 |
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| 8 Oda et al., 2020 | 16 Nakano et al., 2016 | |

Interested in learning more?

Reach out to us to request a sample and learn how you can create a unique application for your brand:

<https://www.biotis.com/immune-health/>



Health benefit solutions from



Please visit www.biotis.com or email info@biotis.com

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The Netherlands
Stationsplein 4
3818 LE Amersfoort
The Netherlands
Tel: +31 (0)33 713 33 33

Asia-Pacific
3 Temasek Avenue
#11-01 Centennial Tower
Singapore 039190
Tel: +65 6580 8100

China
2506, West Tower of
Twin Towers
B12 Jianguomenwai Ave,
Chaoyang Dist.
Beijing 100022 China
Tel: +86 10 6566 6099

North America
61 S. Paramus Road,
Suite 535
Paramus, NJ 07652, USA
Tel: +1 551 497 7300

Latin America
Rua Fradique Coutinho
30 - 6° - Cj. 61
Condomínio Edifício WinWork
Pinheiros
05416-000 São Paulo, Brasil
Tel: +55 11 2395 1700