

# LACTOFERRIN

novel ingredient



SPORT  
NUTRITION

## Key Features:

- Easy-to-use odorless powder
- Purity up to 95 %
- High bioavailability
- Suitable for dry blending
- Neutral taste

**Lactoferrin a highly bioactive iron binding protein fraction of whey, can deliver nutritional benefits at all stages – and is finding new application as the latest must have ingredient in sports nutrition products.**

General wellness plays a significant role in people's overall performance, so a healthy, functioning immune system is an essential partner to successful training for people of all abilities. Sports enthusiasts will only be able to improve and continue training with a strong immune system that is able to maintain good overall health and help maintain the body's defences.

Lactoferrin is approved by **US FDA** and **EFSA** as dietary supplement in food products.

Our ingredient is:

- **IFS Food Certified**
- **Halal and Kosher** certified



## INNOVATE YOUR PRODUCT

### Lactoferrin - ingredient for Sport Nutrition Application

#### Popular forms for Sport Nutrition applications:

capsules/ tablets/ powder/ sachets/ RTDs

**Recommended dosage: 300-400 mg per a day**

#### Health benefits:

##### Energy production & Reduction of fatigue

Notably, lactoferrin produces sustained weight and fat loss, and attenuates the reduction in energy expenditure associated with calorie restriction. Researches demonstrate that protein quantity and quality are important for improving energy balance. Dietary lactoferrin improves energy balance and metabolism, and decreases adiposity, with the effects of lactoferrin being partly independent of caloric intake.

*Zapata R. C., et al., Whey Protein Components - Lactalbumin and Lactoferrin - Improve Energy Balance and Metabolism. Sci Rep. 2017 Aug 30;7(1):9917.*

##### Supports iron absorption

This study investigated whether intake of lactoferrin (LF) would improve or prevent anemia in female long distance runners who were training during the summer season and had a high risk of iron-deficiency anemia. These observations suggest the possibility that intake of LF increases the absorption and utilization of iron and would be useful in the prevention of iron deficiency anemia among female long distance runners.

*Koikawa N., et al., Preventive effect of lactoferrin intake on anemia in female long distance runners. Biosci Biotechnol Biochem. 2008 Apr;72(4):931-5.*

##### Bone health

Research over the last decade has found that lactoferrin helps support bone growth. How it appears to do this is very interesting. Lactoferrin has a double effect – it not only decreases osteoclast activity but also activates osteoblasts to increase bone formation. Currently, these effects have only been tested in animal studies, however in future we may see these benefits fully tested in humans.

*Hou, J.M., Y. Xue, and Q.M. Lin, Bovine lactoferrin improves bone mass and microstructure in ovariectomized rats via OPG/RANKL/RANK pathway. Acta Pharmacol Sin, 2012. 33(10): p. 1277-84.*

##### Healthy Gut Microbiota

The effect of Lactoferrin (Lf) on the growth and diversification of intestinal microbiota may have an impact on several issues, including strengthening the permeability of the epithelial cell monolayer, favoring the microbial antagonism that discourages the colonization and proliferation of enteric pathogens, enhancing the growth and maturation of cell-monolayer components and gut nerve fibers, and providing signals to balance the anti- and pro-inflammatory responses resulting in gut homeostasis.

*Vega-Bautista A., et al., The Impact of Lactoferrin on the Growth of Intestinal Inhabitant Bacteria. Int J Mol Sci. 2019 Sep 23;20(19):4707.*

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