

# LACTOFERRIN

novel ingredient



INFANT  
FORMULA



## Key Features:

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

Lactoferrin is a naturally occurring, iron-binding glycoprotein that is produced by the human body. It is a known part of the immune system and plays an important role in the first line of defence against microbial infections.

The first years of life are critical for strong foundations. Research is beginning to show that one of the most important ways to support child's health is to start from the inside out – with their gut. Based on the science of breast milk Lactoferrin supports immune system and gut microbiota to fight illness.

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

Our ingredient is:

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

## THE GOLD STANDART OF NUTRITION

### Lactoferrin - ingredient for Infant Formula Application

#### Popular forms for Infant Formula applications:

infant formula/ sachet/ powder/ drops

**Recommended dosage:** 75-150 mg per a day

#### Health benefits:

##### Prevent Iron Deficiency

Lactoferrin helps in the delivery of iron to infants- a mineral that is super important in development of a healthy brain.

*Ke, C., et al, Iron metabolism in infants: influence of bovine lactoferrin from iron-fortified formula. Nutrition, 2015. 31(2):p. 304-9.*

##### Boosts Immune System

There is considerable evidence for lactoferrin being involved in the stimulation of the immune system, including enhancing production and/or activation of immune cells, such as lymphocytes.

*Sharon M Donovan, The Role of Lactoferrin in Gastrointestinal and Immune Development and Function: A Preclinical Perspective, J Pediatr. 2016 J Pediatr. 2016 Jun;173 Suppl:S16-28*

##### Positive effect on gut flora

Lactoferrin supports the infants developing digestive system where it promotes the growth of good bacteria such as the Bifidobacterium, and supports the growth of intestinal cells.

*Johnston, W.H., et al., Growth and tolerance of formula with lactoferrin in infants through one year of age: double-blind, randomized, controlled trial. BMC Pediatr, 2015. 15(1): p. 173.*

##### Cognitive system development

Emerging research indicates lactoferrin may even directly support the development of the infants brain and its ability to learn new thing.

*Chen, Y., et al., Lactoferrin Promotes Early Neurodevelopment and Cognition in Postnatal Piglets by Upregulating the BDNF Signaling Pathway and Polysialylation. Mol Neurobiol, 2015. 52(1): p. 256-69.*

##### Protection from infections

Lactoferrin helps prevent infections through its powerful anti-microbial affects, giving young infants a strong defence against disease causing bacteria and viruses.

*Pammi, M and S.A. Abrams, Oral lactoferrin for the prevention of sepsis and necrotizing enterocolitis in preterm infants. Cochrane Database Syst Rev, 2015. 2:p. CD007137.*

##### Bone health

Studies have shown that lactoferrin also acts on the skeleton to promote bone growth. Lactoferrin stimulates the proliferation and differentiation of the bone forming cells, the osteoblasts, and acts as a survival factor for these cells. Lactoferrin also inhibits osteoclastogenesis, reducing the number of cells that can actively resorb bone, thus producing a greater overall increase in bone volume. In a number of recent studies dietary lactoferrin supplementation improved bone mineral density and bone strength.

*Cornish J. and Naot D., Lactoferrin as an effector molecule in the skeleton. Biometals. 2010 Jun;23(3):425-30.*

## CONTACT US:

+420 556 778 500

sales@mcepharma.com

www.mcepharma.com

