

new

# The multifunctional role of Lactoferrin



Lactoferrin is a multifunctional glycoprotein existing in all human bodily fluids. **Ferrin** refers to its ability to bind free iron ions.

**Lactoferrin acid resistant** contains 100 mg Lactoferrin per capsule, a pure and specific whey protein of bovine origin.

The use of acid resistant capsules ensures stability and targeted activity.



indication	Antiviral activity Antibacterial activity (including <i>Helicobacter pylori</i> ) Antifungal activity (including <i>Candida albicans</i> )
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dosage	3 x 2 caps per day
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packaging	84 acid resistant capsules per container
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composition (amount per 6 caps)	Lactoferrin – 600 mg
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Lactoferrin is **casein-free**. During the manufacturing process, Lactoferrin is washed of **lactose** to a content of **less than 0,1%**. People who may have a sensitivity to lactose should not react to this low level of lactose.

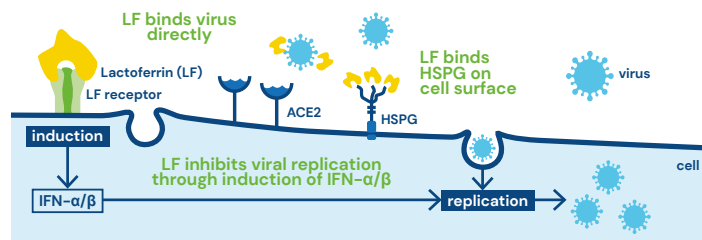
## Antiviral

### Mechanism:

The antiviral effect of LF lies mainly in the early phase of the infection. Lactoferrin prevents the infection of host cells by viruses, but also inhibits the growth of viruses after the host cells have been invaded.

Lactoferrin participates in the innate part of our immune defense, increasing NK-cell activity and TH1 cytokines. Lactoferrin partners very efficiently with Transfer Factors (Multimessenger: NK cell activity + IL-10).

Predetermined antiviral mechanism on 3 levels:



### Recommended daily dosage in viral threats

Lactoferrin acid resistant 100mg

- Preventive measures: 3 x 1 capsule/day separated from meal
- Curative treatment: 3 x 2 capsules/day separated from meal

## Antibacterial

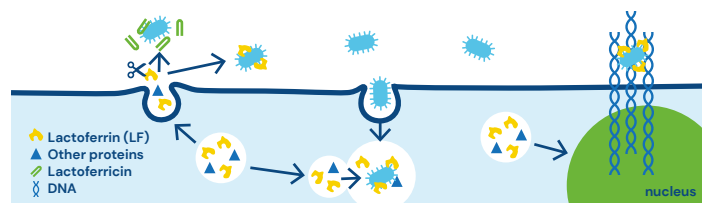
### Mechanism:

The 3 epitopes for Lactoferrin's antibacterial activity:

- Lactoferrin binds iron, required for the growth of bacteria
- Lactoferrin binds membrane proteins to disrupt permeability
- Competition for binding site(s)

Helicobacter pylori:

- Detaching the bacterium from the gastric epithelium
- Exerting a direct anti-bacterial effect



### Recommended daily dosage in bacterial threats

Lactoferrin acid resistant 100mg

- Preventive measures: 3 x 1 capsule/day during meal
- Curative treatment: 3 x 2 capsules/day during meal

## Antifungal

### Mechanism:

- Lactoferrin binds directly to the fungal cell surface, leading to cell membrane damage and leakage
- Lactoferrin sequesters iron resulting in a fungistatic effect and inhibition of fungal growth

Candida: synergistic fungistatic effects of Lactoferrin in combination with antifungal drugs.

### Recommended daily dosage in fungal threats

Lactoferrin acid resistant 100mg

- Preventive measures: 3 x 1 capsule/day during meal
- Curative treatment: 3 x 2 capsules/day during meal

Lactoferrin is included in different specific anti-infectious treatment plans, see page 4.

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# Viral infections

## General antiviral protocol for EBV, CMV, HSV1, HSV2

Promoting NK Cell activity & IL10 and optimizing cellular immune response

### Additionally

Specifically targeting reactivating infections incl. EBV, CMV, Herpes, Mycoplasma, Chlamydia, ...

### Multimessenger

90 capsules

Dose: 3 capsules in the morning, right before breakfast

### Messenger N°1

60 capsules

Dose: 2 capsules before sleep

Decreasing viral replication

### L-Lysine

60 tablets

Dose: 2 - 3 x 2 tablets times per day, separated from food

Protecting Natural Killer cell against oxidative damage

Optimizing detoxification

### Tri-Fortify Watermelon or Orange

236 ml

Dose: 1 teaspoon (5ml) per day, separated from meals

### AO Defense

60 vcaps

Dose: 2 x 1 capsule per day

Oxidative damage to mitochondria due to increased oxidative load - Lipid Replacement Therapy

### ATP 360

90 vcaps

Dose: 3 capsules per day during meal

Lactoferrin prevents the infection of host cell by viruses, but also inhibits the growth of viruses after host cells have been invaded

### Lactoferrin acid resistant

100 mg DR 42 caps

Dose: 3 x 2 DR caps, 20 minutes before meal

Eradication of HSV1 and HSV2

### Houttuynia

antiviral activity against HSV1 and HSV2<sup>5,6</sup>

### Myc-P

120 ml

Dose: start with 2 x 5 drops/day, 30 minutes before meals + gradually increase the daily dose until 2 x 40 drops/day

Neuropathic pain  
in viral infections

**PEA – certified grade 300 mg**  
vcaps  
Dose: 1 – 4 capsules per day

## References

*Eradication of HSV1 and HSV2 with Myc-P*

<sup>5</sup> Hayashi K, Kamiya M, Hayashi T. Virucidal effects of the steam distillate from *Houttuynia cordata* and its components on HSV-1, influenza virus, and HIV. *Planta Med.* 1995 Jun;61(3):237–41.

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*PEA: this review is a summary of 23 trails and case reports*

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# Helicobacter pylori

H. Pylori's virulence and pathogenicity are ascribed to its ability to evade to our immune response. In particular due to:

- specialized adherence proteins
- cytologic injury and inflammation induced by toxic proteins
- intracellular appearance
- mechanisms used to survive acidity
- biofilm formation
- resistance to antibiotics

Survival of Bacteria was reduced in acidic PH

The gastric juices showed bactericidal activity

## Guttae pepsini

30 ml

Dose: 3 x 10 – 20 drops at the start of the meal and with a small amount of water (swallow immediately)

Lactoferrin is one of the antibacterial peptides produced by the gastric mucosa to limit proliferation of HP

Lactoferrin restricts the availability of extracellular iron

## Lactoferrin acid resistant

100 mg DR 42 caps

Dose: 3 x 2 DR caps, during meals

Artemisia annua  
demonstrates strong  
activity against  
Helicobacter pylori

#### Artemisinin SOD

120 vcaps

Dose: 2 x 2 capsules per day, in the morning and in the evening –  
5 days in a row and interrupt the treatment during the weekend

Epigallocatechin-3-gallate  
(EGCG) is a major catechin  
of green tea; it shows  
protective effects against  
injury and exhibits  
antiinflammatory  
activity in H. pylori-  
infected gastritis  
EGCG & CurcuWIN™  
extract 95%Turmeric  
Extract, (molecular  
dispersion technology)  
both decrease the  
ureolytic activity of urease  
quercetin downregulates  
the mast cell activation  
induced by Helicobacter  
pylori components

In case Artemisinin SOD , containing EGCG / Green tea – is not used

Epigallocatechin-3-gallate  
(EGCG) is a major catechin  
of green tea; it has  
protective effects against  
injury and exhibits anti-  
inflammatory activity in  
H. pylori-infected gastritis  
EGCG decreases the  
ureolytic activity of urease

#### AO Defense

60 vegecaps

Dose: 2 x 2 vegecaps during meals

Chelated compound  
contains Zinc and  
Carnosine  
Anti-inflammatory activity  
Restores gastric lining in  
gastric ulcers

#### Zinc Carnosine 75 mg

60 vegecaps

Dose: 1st week 2 x 2 vcaps  
then: 2 x 1 vcaps/day

Biofilms are assumed to  
play an important role in  
increased tolerance to  
antibiotic treatments

#### BioDisrupt

120 vcaps

Dose: 2 x 2 capsules per day, separated from meals

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# Candida

Gut protocol

## Guttae Pepsini

30 ml

Dose: 3 x 10 – 20 drops at the start of the meal and with a small amount of water (swallow immediately)

## Gluten DPP IV Complex

90 vcaps

Dose: 3 x 1 capsule per day, at the beginning of the meal

## Perm Plus Coated tablets

90 coated tablets

Dose: first month 3 x 2 tablets per day  
then 3 x 1 tablet per day, 20 minutes before the meal

Molybdenum is a cofactor necessary for the breakdown of acetaldehyde

## Physician's Daily

60 vcaps

Dose: 1 capsule per day with food

Compensation of induced deficiencies

## Co-Factor B Complex

30 tablets

Dose: 1 tablet per day during breakfast

Eradication of pathogens

## Microbinate (2 – 4 months)

120 vcaps

Dose: first week: 2 x 1 capsules per day  
then: 2 x 2 capsules per day

## Lactoferrin acid resistant 100mg

84 acid resistant caps

Dose : 3 x 2 per day during meals

Breaking down the biofilm  
Interfering with quorum sensing

## BioDisrupt

120 vcaps

Dose: 2 x 2 capsules per day, separated from meals

After antimycotic treatment:

Rebuilding the microbiome

## CoreBiotic

60 vcaps

Dose: 1 x 2 capsules per day, at least 30 minutes before the meal

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## Multi-biome

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