



# LACTOFERRIN VLF-1



SWISS  
MADE

**WE ARE DAIRY**

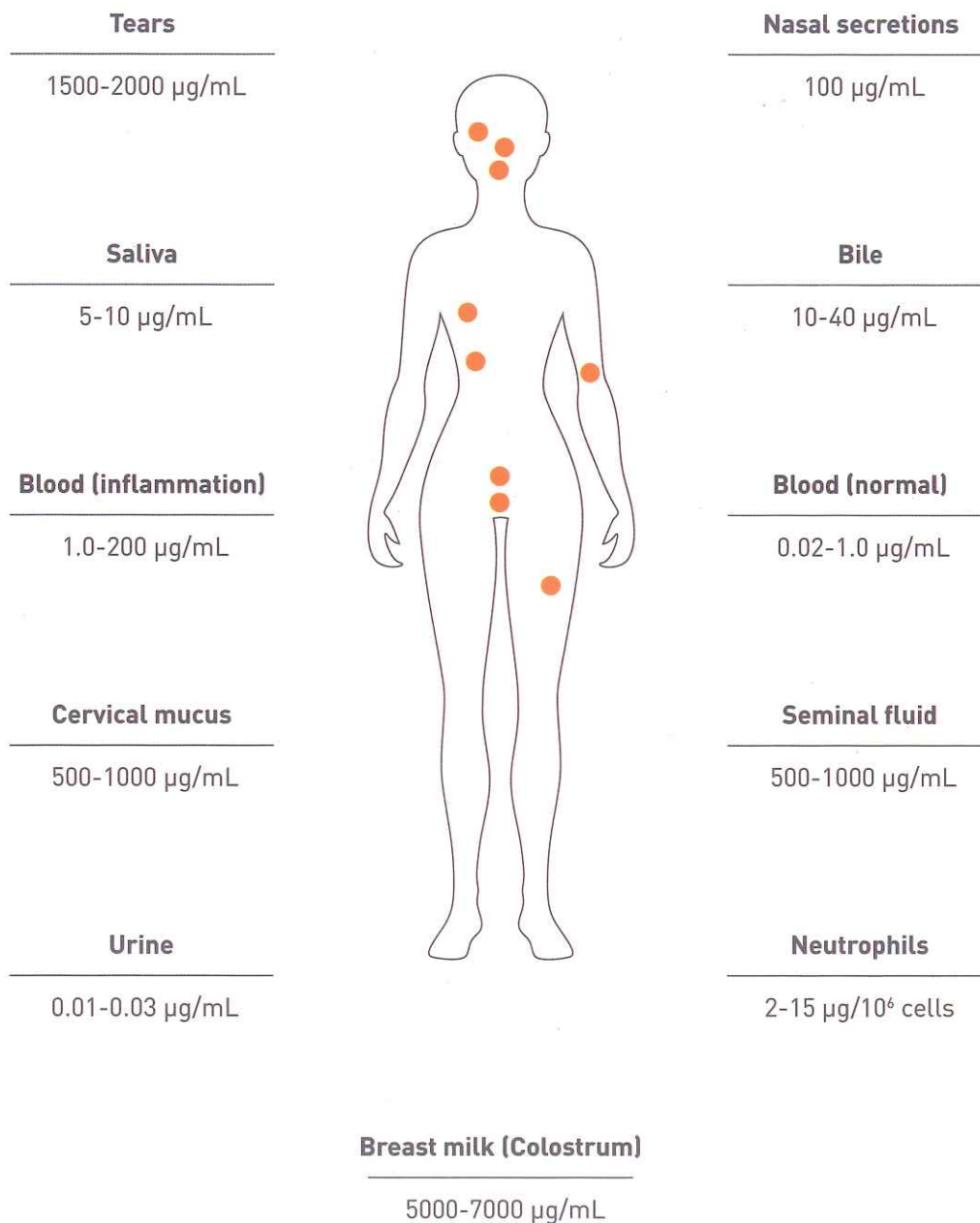
[www.valfoo.com](http://www.valfoo.com)

## What is Lactoferrin?

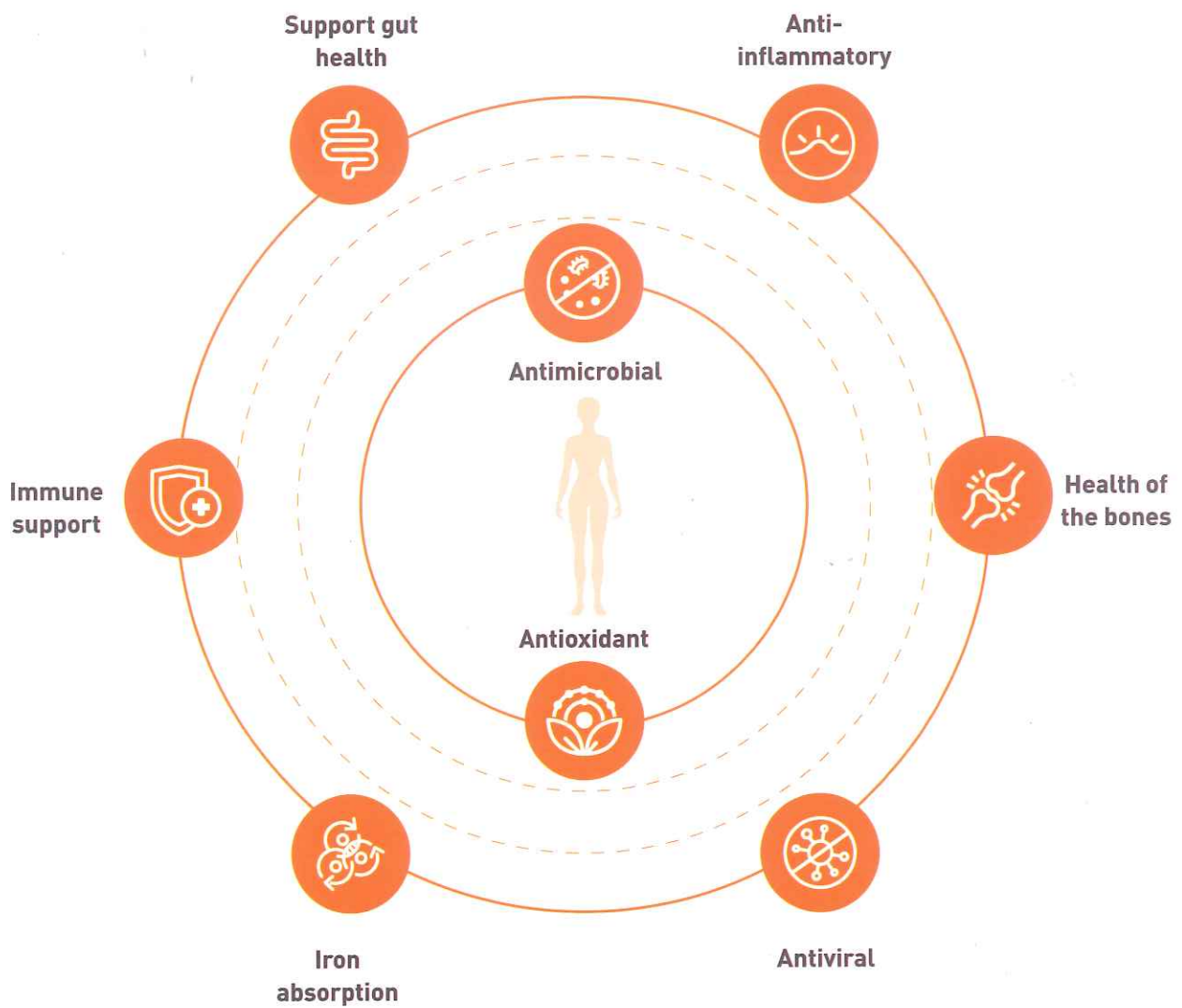
Lactoferrin is an iron-binding glycoprotein that can be found in the milk of most mammals. It is also known as a multifunction protein and a key component of the body's immune system, helping to support immunity, health, and nutrition.

Lactoferrin is considered to be an important host defense molecule. Over the past decade, the oral administration of Lactoferrin displayed numerous beneficial effects on human and animal health, including anti-infective, anticancer, and anti-inflammatory effects. Lactoferrin is widely applied in food industry and has additionally shown potential in other sectors like skincare, oral health, or even food packaging.

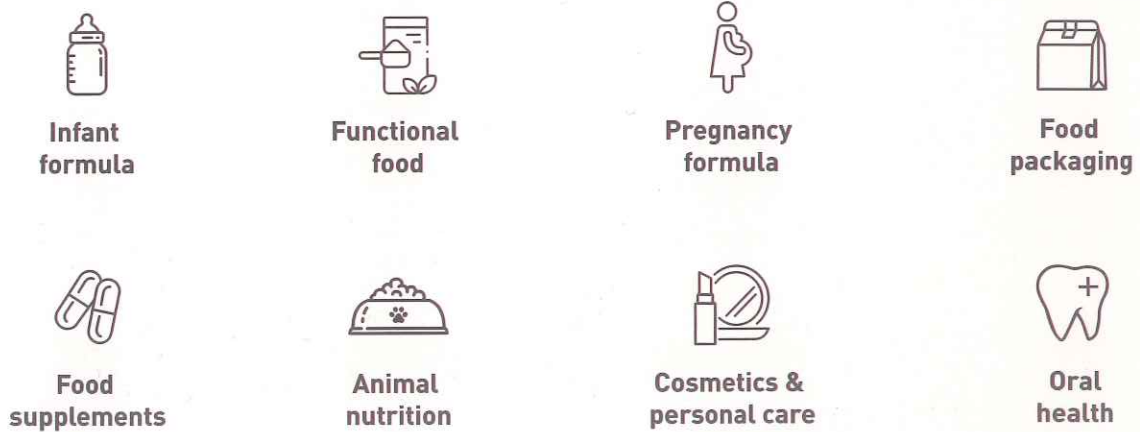
### Lactoferrin levels in the body



# Key functions of Lactoferrin\*



## Applications areas



\*reference  
Aleksa Ristic, MS (Pharmacy), 8 Lactoferrin Health Benefits + Sources & Side Effects , last updated 30 July 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2915836/>

# Valfoo Lactoferrin VLF-1

Valfoo Lactoferrin VLF-1 is 100% made in Switzerland, from raw material to finished product. VLF-1 is produced from fresh, undenatured Swiss cow milk by using pharmaceutical-grade processing technologies. With our brand new state-of-the-art spray drying equipment, we are one of the largest Lactoferrin plants in Europe.

The production process is designed to obtain the **highest available bioactivity** combined with **ideal tablet-forming ability** and **excellent solubility**.

## VLF-1 advantages



### RAW MATERIAL

#### Daily fresh Swiss milk

- Milk is collected from local dairy farms with high animal welfare standards
- Lower daily milk production for higher lactoferrin concentration levels and lower endotoxins
- Reliable and stable supply of milk to secure production

#### Advanced extraction & purification

- High-performance liquid chromatography to extract the maximum available Lactoferrin content
- Cutting-edge membrane technologies for purification to reach higher Lactoferrin bioactivity and reduce the risk of contamination

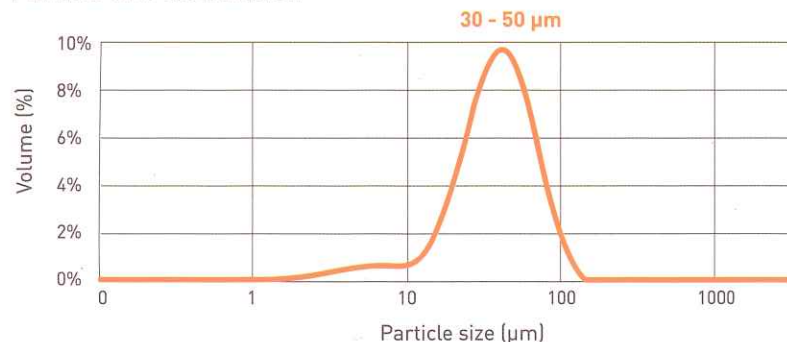
#### State-of-the-art Spray-drying technology

- Gentle drying process without product denaturation
- Produces an even particle size distribution with good solubility
- Ideal for blending with bright milk powder
- Ideal for white oral and skincare products
- Ideal for pressing tablets with a good tablet-forming ability



### PROCESSING TECHNOLOGY

#### Particle size distribution



ZEISS 100 µm EHT = 1.00 kV WD = 5.0 mm Mag = 100 X Stage at T = 0.0° Signal A = SE2 Signal B = SE2



# We are the largest Lactoferrin production plant in Switzerland.



## Global trust certifications

Our Valfoo Lactoferrin production line is embedded in the second largest Swiss milk processing plant with 800 dedicated and skillful employees, processing around 400 million kg milk and 31 million kg cream per year.

VLF-1 fulfills the requirements of various well-known and trusted certifications and labels, including for food safety, quality and environmental management, and social responsibility.

Product labels



Certifications

ISO 9'001 Quality management

ISO 17'025 Laboratory accreditation

FSSC 22'000 Food safety system certification

ISO 26'000 Social Responsibility

ISO 14'001 Environmental management

## Quality during processing

Quality management and control are a fundamental part of Valfoo's modern production process. Valfoo guarantees a reliable selection and control of raw material sources and processing plants through three important steps:



**Regular site visits  
and audits**



**Strict  
monitoring**



**Microbiological  
analysis**

Every step of the production process is traceable and well-designed, to comply with each country's specific food safety standards and legislation.



## VLF-1 Specification

	Value
<b>Parameters:</b>	
Appearance and Colour	Creamy pink to salmon pink
Texture	Free flowing powder
<b>Chemical-physical Parameters:</b>	
Protein	≥ 97 %
Lactoferrin (% of Protein)	≥ 95.0 %
Loss of Drying	≤ 4.2 %
Ash	≤ 1.3 %
Iron	≤ 0.015 %
Iron Saturation	10 - 20 %
Solubility	Clear, transparent solution 0.8g LF + 40mL 20°C water
pH-Value	5.2 - 7.2
Lead (Pb)	≤ 0.2 µg / g
Arsenic (As)	≤ 0.03 µg / g
Monomer ratio	The ratio of lactoferrin monomer to the total protein is not less than 80%.
<b>Microbiological Parameters:</b>	
Total Plate Count	≤ 500 CFU / g
Yeasts & Moulds	≤ 1 CFU / g
Coliforms	Negative
Salmonella	Absent / 25 g
Staphylococcus aureus	Absent / 25 g
Aflatoxin M1	≤ 0.02 µg / kg
Bacillus cereus	≤ 10 CFU / g



**Weight**

5 kg / bag; 1 bag / carton

**Packaging**

Aluminum inner bag; cardboard box with PE bag inside

**Shelf Life**

24 months after production date

**Conditions**

In closed package, dry, clean and protected from light and off flavours (rel. humidity max.65 % at 25 °C)

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We are certified worldwide

