

# Laktoferrin with Colostrum

## Enhanced Colostrum\*

**Laktoferrin with Colostrum** contains purified lactoferrin in a base of colostrum, and is prepared with lysozyme.

Lactoferrin, a peptide glycoprotein that belongs to the transferrin family, plays a role in binding and transporting iron in the body, as well as immunomodulatory and antioxidant activities.\*

Colostrum is the fluid produced from the mammary glands of mammals during the first few days after birth, before the first milk is produced. Colostrum supplies nutrients, growth factors, and antibodies that start development of passive immunity in the breast-fed newborn.\*



#51950  
90 vegetarian capsules

### Key Features

- Supports iron binding and transport, and has antioxidant activity\*
- May help deprive undesirable gastrointestinal microbes from needed iron\*
- May enhance and modulate immune activities\*



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Many substances found in bovine colostrum have been shown to be similar or identical to those found in human and other mammalian colostrum.\* Bovine colostrum contains three to four times more protein than does regular cow's milk, and most of this protein is immunoglobulin-rich whey protein. Colostrum contains many components that support the immune system, including insulin-like growth factors IGF-1 and IGF-2, transforming growth factor beta (TGFbeta), epidermal growth factor (EGF), lactoferrin, alpha-lactalbumin, beta-lactoglobulin, immunoglobulins IgG, IgA, and IgM, nucleotides, gamma-interferon, orotic acid, enzymes, and vitamins.\* In addition, colostrum may contain colostrinin, also known as proline-rich polypeptide (PRP), another potential immunomodulator.\* The combination of specific and nonspecific immunomodulatory components may together enhance protection and microbial balance of the gastrointestinal tract.\*

Lactoferrin is a peptide glycoprotein found in small amounts in colostrum, in mammalian exocrine secretions, and in neutrophil granules during inflammation. Lactoferrin has important iron-binding, immunomodulatory, and antioxidant activities.\* Lactoferrin has a molecular weight of 80 kiloDaltons, and is somewhat resistant to the action of proteolytic enzymes in the gut, where the activity of supplemental lactoferrin first occurs.\* Lactoferrin binds strongly to iron, potentially depriving undesirable gut microbes from iron needed for their growth, and may also help inhibit these microbes from attaching to the intestinal wall.\* Lactoferrin also produces the bioactive peptide lactoferricin.\*

Receptors for lactoferrin are found in intestinal tissue, on some bacteria, and on immune system cells such as monocytes, lymphocytes and neutrophils. Lactoferrin is involved in the growth and differentiation of T lymphocytes, and the regulation of cytokines and lymphokines, such as tumor necrosis-alpha and interleukin-6.\* Because free iron can generate reactive oxygen species via the Fenton reaction, lactoferrin's iron-binding properties also make it a powerful antioxidant.\*

Lysozyme is an enzyme found in tears, saliva, egg whites and in the lysosomes of phagocytic cells. It can hydrolyze the 1,4-beta links between N-acetylmuramic acid and N-acetylglucosamine, thus cleaving an important polymer of the cell wall of many bacteria.\*

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## Supplement Facts

Serving Size 4 Capsules  
Servings Per Container 22

Amount Per Serving	% Daily Value*
Colostrum (Bovine) (Milk)	1 g †
Lactoferrin (Bovine) (milk)	400 mg †
Lysozyme (Egg White)	20 mg †

† Daily Value not established.

\* Percent Daily Value are based on a 2,000 calorie diet

Other ingredients: Hydroxypropyl methylcellulose, L-leucine.

**Suggested Use:** As a dietary supplement, 1 to 4 capsules at night before bed, or as directed by a healthcare practitioner.

**CAUTION:** Do not use while pregnant or breast-feeding. Lactoferrin may be contraindicated by lymphocytic leukemia or pancreatitis. Individuals with autoimmune or allergic conditions should start with small doses and consult their healthcare practitioner.