

Laktoferrin

Immune Peptide from Colostrum*

Laktoferrin contains lactoferrin, a peptide glycoprotein that belongs to the transferrin family, which is responsible for binding and transporting iron in the body. Small amounts are found in bovine colostrum ("mothers' first milk"). Additionally, lactoferrin occurs in mammalian exocrine secretions, and is released from neutrophil granules during inflammation.



#52840 90 vegetarian capsules

#52080 120 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*





Lactoferrin plays roles in multiple biochemical functions. For example, lactoferrin is crucial to the uptake of iron in the intestinal mucosa of breast-fed infants, through its iron-binding activity.* Lactoferrin also has other important iron-binding activities, as well as immunomodulatory and antioxidant activities.*

The gastrointestinal tract is a primary area of activity for supplemental lactoferrin. Lactoferrin binds strongly to iron, potentially depriving undesirable gut microbes from iron that they need for their growth.* It may also help inhibit these microbes from attaching to the intestinal lining.*

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 also in 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 potentially make it a powerful antioxidant substance.* Lactoferrin also produces the bioactive peptide lactoferricin.*

Lactoferrin has a molecular weight of 80 kiloDaltons, and is somewhat resistant to the action of proteolytic enzymes.

References:

Adamik B, Zimecki M, Wlaszczyk A, et al. Arch Immunol Ther Exp (Warcz). 1998; 46:169-176.

Baveye S, Elass E, Mazurier J, et al. Clin Chem Lab Med. 1999; 37:281-286. Britigan BE, Serody JS, Cohen MS. Adv Exp Med Biol. 1994; 357:143-156. Grange PA, Marcelin AG, Calvez V, Chauvel C, Escande JP, Dupin N. J Invest Dermatol. 2005 Jun;124(6):1249-58.

Ikeda M, Nozak A, Sugiyama K, et al. Virus Res. 2000; 66:51-63.

Ishibashi Y, Takeda K, Tsukidate N, Miyazaki H, Ohira K, Dosaka-Akita H, Nishimura M. Hepatol Res. 2005 Jun 1.

Kaito M. Hepatol Res. 2005 Jun 17.

Levay PF, Viljoen M. Haemtologica. 1995; 80:252-267.

Lonnerdal B, Iyer S. Annu Rev Nutr. 1995; 15:93-110.

Sherman MP, Petrak K. Med Hypotheses. 2005 Jun 9.

Stallmann HP, Faber C, Bronckers AL, de Blieck-

Hogervorst JM, Brouwer CP, Amerongen AV, Wuisman PI. Peptides. 2005 Jun 22. Superti F, Pietrantoni A, Di Biase AM, Longhi C, Valenti P, Tinari A. Res Microbiol. 2005 Jun-Jul;156(5-6):728-37.

Swart PJ, Kuipers EM, Smit C, et al. Adv Exp Med Biol. 1998; 443:205-213. Trumpler U, Straub PW, Rosenmund A. Eur J Clin Microbiol Infect Dis. 1989; 8:310-313.

Viejo-Diaz M, Andres MT, Fierro JF. Antimicrob Agents Chemother. 2005 Jul:49(7):2583-8.

Vorland LH, Ulvatne H, Andersen J, et al. Scand J Infect Dis. 1999; 31:179-184. Vorland LH. APMIS. 1999; 107:971-981.

Zimecki M, Artym J. Postepy Hig Med Dosw (Online). 2005 Jun 30;59:309-23. Polish. Zimecki M, Wlaszczyk A, Cheneau P, et al. Arch Immunol Ther Exp (Warcz). 1998; 46:231-240.

Zullo A, De Francesco V, Scaccianoce G, Hassan C, Panarese A, Piglionica D, Panella C, Morini S, Ierardi E. Dig Liver Dis. 2005 Jul;37(7):496-500. Epub 2005 Apr 1.

#52840 • 90 vegetarian capsules #52080 • 120 vegetarian capsules

Supplement Facts Serving Size Servings Per Container		psule or 120
Amount Per Serving	% Daily Value	
Lactoferrin (milk)	350 mg	†

Other ingredients: Hydroxypropyl methylcellulose, microcrystalline cellulose, rice hull concentrate, gum arabic, sunflower oil.

Suggested Use: As a dietary supplement, 1 capsule 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.