ALFA-LATTOALBUMINA

È la sieroproteina più concentrata nel latte, soprattutto materno , ma anche vaccino. Nel colostro infatti rappresenta fino al 40% del contenuto proteico del latte materno. Migliora la funzionalità intestinale regolandone fisiologicamente il pH, la flora batterica e la permeabilità. Dalla sua proteolisi a livello intestinale le peptidasi producono 4 peptidi con proprietà antinfettive e antibatteriche. In letteratura è sempre più evidente e documentato il suo ruolo positivo nell'immunità, in sinergismo con l'altra proteina del latte la lattoferrina, e col Lisozima, con proprietà antibatteriche e antivirali. Attraversa agevolmente la barriera emato-encefalica regolando la concentrazione cerebrale di serotonina per l' elevata concentrazione di triptofano, aminoacido precursore della serotonina con cui concorre a regolare la funzione di neurotrasmettitori e di neuropeptidi. Potrebbe pertanto migliorare il tono dell'umore e limitare lo stress soprattutto in situazioni, come l'attuale, di grave e generalizzata ansia. Può esercitare pertanto, in assenza di tossicità o eventi avversi, anche un discreto effetto antidepressivo

Consigliabile una dose di 500-750 mg 3 volte al dì, possibilmente insieme a Lattoferrina e Lisozima

da una revisione aggiornata della letteratura sull'alfalattoalbumina:-

12/03/20 https://pubmed.ncbi.nlm.nih.gov/?term=alpha-lactalbumin+ **pubbl. 4.031**

Bibliografia

1. Ng TB, et al. Appl Microbiol Biotechnol 2015 - Review. PMID 26198883

Antiviral activities of whey proteins.
Many milk proteins encompassing native or chemically modified casein, lactoferrin, **alpha**-**lactalbumin**, and beta-lactoglobulin demonstrated **antiviral** activities. ...Lactoferrin, methylated **alpha**-**lactalbumin** and methylated beta-lactoglobulin inhibited human cytomegalovirus. Chemically modified **alpha**-**lactalbumin**, beta-lactoglobulin and lysozyme, lactoferrin and lactoferricin, methylated **alpha**-**lactalbumin**, methylated and ethylated beta-lactoglobulins inhibited HSV.

2. Sitohy M, et al. J Agric Food Chem 2007. PMID 17990848

Antiviral activity of esterified **alpha**-**lactalbumin** and beta-lactoglobulin against herpes simplex virus type 1. Comparison with the effect of acyclovir and L-polylysines.
The **antiviral** activity of methylated **alpha**-**lactalbumin** (Met-ALA), methylated and ethylated beta-lactoglobulins (Met- and Et-BLG) was evaluated against acyclovir (ACV)-sensitive and -resistant strains of herpes simplex virus type 1 (HSV-1) and compared to that of ACV and L-polylysines (4-15 kDa) using fixed or suspended Vero cell lines.

3. Oevermann A, et al. Antiviral Res 2003. PMID 12834857

The **antiviral** activity of naturally occurring proteins and their peptide fragments after chemical modification.
Chemical modification of the proteins bovine serum albumin, **alpha**-**lactalbumin**, beta-lactoglobulin and chicken lysozyme by 3-hydroxyphthalic anhydride (3-HP) yielded compounds which exerted **antiviral** activity in vitro as compared with the native unmodified proteins.

Proteolytical digestion of albumin, **alpha**-**lactalbumin**, beta-lactoglobulin and lysozyme by trypsin, chymotrypsin and pepsin yielded several peptide fragments with antiherpetic activity.

4. Newburg DS. J Nutr 2005. PMID 15867330

Innate **immunity** and human milk.

Human neonates are born with an immature and naive acquired **immune** system, and many of the innate components of mucosal **immunity** are not fully developed. ...An alternate conformer of **alpha**-**lactalbumin** forms from milk in the stomach and inhibits cancer cells. Many of the protective constituents of human milk inhibit different aspects of a pathogenic process, creating a synergy, where much lower concentrations of each component become protective.

5. Sahu PP and Prasad M. Mol Biol Rep 2015 - Review. PMID 25652324

Application of molecular **antiviral** compounds: novel approach for durable resistance against geminiviruses.

In recent years, several **antiviral** molecules have been developed for the treatment of plant virus infections. These molecular **antiviral** compounds target various geminiviral-DNA and -protein via interacting with them or by cleaving viral RNA fragments. ...In this context, the present review provides epigrammatic information on these **antiviral** compounds and their mode of action in modulating virus infection.

6. Hill DR and Newburg DS. Nutr Rev 2015 - Review. PMID 26011900 Free PMC article.

Clinical applications of bioactive milk components

The ongoing characterization of the mechanistic process through which milk components promote development and **immunity** has revealed numerous milk-derived compounds with potential applications as clinical therapies in infectious and inflammatory disease, cancer, and other conditions.