All-Life Colostrum

Unparalleled Support for the Immune System

- Helps fight disease and infection
- Packed with immune boosters
- Reduces the risk of autoimmunity
- Promotes tissue healing

Details
Colostrum is occasionally and astutely known as 'first milk'. It is produced in mammalian mammary glands in the latest stage of pregnancy and in the first few days after birth, and is quite simply the most important meal in one’s life. It is in effect a whole food that is minuscule in size yet extremely high in vital nutrients, growth factors and antibodies essential for the early development of newborn life. All-Life Colostrum is 30% immunoglobulin G (IgG), making it approximately double the strength of typical colostrum supplements.

Colostrum is responsible for triggering no fewer than fifty biochemical processes in a newborn's body, which will provide the life-long foundation of the growth process and the immune system. Bovine colostrum is useful for boosting immunity, preventing autoimmunity, tissue healing, and as an agent for fighting infection and disease.

Label Info
All-Life Colostrum is collected from American pasture cows exposed to severe temperature changes, which results in higher quality colostrum with higher immune factor concentration. All-Life Colostrum is purified of all but trace amounts of lactose and is freeze dried to preserve the activity of its unique proteins. All-Life Colostrum helps to support the immune system and immune function within the upper respiratory tract.

**Product Variation**

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<tr>
<th>Product Code</th>
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<tr>
<td>AOR04295</td>
<td>120 VEGI-CAPS</td>
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**Supplements Facts**

**Serving Size:** 1 Capsule

<table>
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<tr>
<th>Amount</th>
<th>Bovine Colostrum†</th>
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<td>500 mg</td>
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†Also contains naturally occurring immunoglobulins G, M and A, lactoferrin and proline-rich peptides.

Non-medical ingredients:
sodium hydroxide, maltodextrin, sodium stearyl fumarate. Capsule: hypromellose.

**Guarantees**

AOR™ guarantees that all ingredients have been declared on the label. Contains no wheat, gluten, nuts, peanuts, sesame seeds, sulphites, mustard, soy, eggs or shellfish.

**Adult Dosage**

Take 1-10 capsules daily with/without food, or as directed by a qualified health care practitioner.

**Cautions**

Consult a health care practitioner for prolonged use or prior to use if you are pregnant or breastfeeding, have a history of cancer, diabetes, liver or kidney disease, an immune system disorder (e.g. Crohn's disease, myasthenia gravis, multiple sclerosis, rheumatoid arthritis, systemic lupus erythematosus, HIV/AIDS, etc.), are taking immunosuppressants or if you have been instructed to follow a low protein diet. Do not use if you have an allergy to dairy or cow milk.

**Source**

North American Bovine Milk

**Main Application**

Immune enhancement

Tissue repair/healing

Muscle development
Intestinal permeability ("leaky gut")

Disclaimer

The information and product descriptions appearing on this website are for information purposes only, and are not intended to provide or replace medical advice to individuals from a qualified health care professional. Consult with your physician if you have any health concerns, and before initiating any new diet, exercise, supplement, or other lifestyle changes.

Research

Background

It is estimated that Colostrum triggers fifty processes in the infant’s body, providing lasting benefits. The only food supplement with the power to destroy viruses, Colostrum is quite simply the most important meal in one’s life. When a mother gives birth, her mammary glands call into service important factors that she has acquired in her lifetime. Containing a perfect mix of life-giving growth factors, Colostrum helps to fight disease and infection and help newborn animals to survive, so much that most perish without it. In humans, as in other animals, Colostrum transmits immunity and stimulates normal healthy growth.

Immune Factors

Containing both broad spectrum and specific factors, Colostrum assists the body in combating bacterial, viral, fungal and allergenic marauders. Colostrum is the only food that augments the body with the immune factors needed to fight infection: Immunoglobulins, Leukocytes, Cytokines, Lactoferrin, Interferon and PRP. PRP (Polyproline-Rich Peptides) is the paramount legislator of the thymus gland, which is charged with producing cells to thwart viruses and antigens. PRP harmonizes the immune system, preventing the body from actually attacking itself, as is seen in diseases like MS, some inflammatory conditions, Lupus, Epstein-Barr, and Allergies.

Growth Factors

A variety of growth factors (including epithelial growth factor [EgF], insulin-like growth factor-1 [IGF-1], transforming growth factors A&B [TGF-A&B], and growth hormone [gH]) are present in Colostrum. Newborn calves and babies rely, in part, on these peptides to promote their early growth and development. For better or for worse, however, it is unlikely that adults using Colostrum supplements will absorb these growth factors, because the adult human stomach is far too acidic to allow for intact absorption. While some studies do exist to document improved anabolism in Colostrum-supplemented athletes, IGF-1 and other growth factors are unlikely to explain these benefits.

Why Bovine Colostrum?

Procuring Colostrum from human sources is quite simply unrealistic. Dairy cows are the only animals that meet all of the required criteria for transferring Colostrum to humans. Bovine Colostrum can be used to promote passive interspecies immunity because Colostrum from cows is accepted by virtually all other mammals. The key immunoglobulins in cows are identical in molecular combination to humans and are not species specific, but are transferable from one species to another.
A great deal of misinformation is out there regarding the sourcing of Colostrum. Some supplement companies claim that only New Zealand-sourced material can provide pure, high-quality Colostrum supplements — a claim that just doesn’t wash. Certainly, Colostrum should come from cows which are free-range fed, not exposed to synthetic growth hormones (rBGH/BST), and which are not routinely treated with antibiotics. Further, the raw Colostrum should be processed under cGMP conditions, and chemical solvents should not be used. In these respects, many North American Colostrum products are found wanting — but that doesn’t mean that no Colostrum from North America meets these stringent criteria. In fact, some North American suppliers offer Colostrum which is produced and processed using methods identical to those in New Zealand-sourced material.

And there are good reasons to prefer a North American source, provided that the sourcing and processing is up to snuff, because there is one key difference between the Colostrum used in our product and that from New Zealand: namely, the superiority of the Colostrum produced at more extreme latitudes. Harsher winter conditions cause cattle to produce greater levels of immune-supporting compounds than they do in more temperate zones. As a result, Colostrum sourced from many North American locations contains significantly more immunoglobulins (Igs) than are typically present in New Zealand Colostrum. Since the point of taking a Colostrum supplement is precisely to boost our levels of such immune-supporting peptides, this makes colder-climate Colostrum the clear choice for supporting health.

The Importance of Cold Processing

Still other companies will make claims about the processing of Colostrum which leave one bemused, because they contradict themselves. Arguing with these people is like confronting a defense lawyer who defends a client by saying, “My client’s dog didn’t bite you, and besides you deserved it; and in any case, my client doesn’t own a dog.” Such companies will claim, in one breath, that Colostrum should not be freeze-dried, or heat-treated, or extracted using chemical solvents. But one of these methods must be used to dry the material in order to make it into a powdered supplement!

Given these choices, the best Colostrum supplements are always lyophilized (a form of freeze-drying). It is simply false to claim that freeze drying causes protein denaturation; in fact, the exact opposite is the case! It is heat, not cold, which causes protein denaturation; freeze-drying is in fact the preferred way of drying everything from in backpacking foods to samples used in scientific studies for exactly this reason. Lyophilization protects more of the immune-enhancing proteins from denaturation, and guards intact more of the essential components of Colostrum, than does drying using either heat long drying periods.

It’s a difficult supplement market, and making a high-quality Colostrum supplement is not easy. High-quality North American Colostrum, derived from livestock raised under the best conditions and processed using the most rigorous quality control conditions, is the clear choice for purity and potency — from the dairy all the way to you.

Research

Research has demonstrated that bovine Colostrum is much richer in immune factors than human Colostrum. Furthermore, scientists have discovered that bovine Colostrum contains special inhibitors
that allow the substance to pass through the stomach and still remain active as it enters the bowel. It is very important that Colostrum be gathered during the first twenty-four hours after birth, as the digestive inhibitors are only present during this period. The International Institute of Nutritional Research stated in a published report that “bovine Colostrum offered tremendous possibilities for providing unparalleled support for the immune system that may be the deciding factor in the body’s war against illness and aging.”

**Market Trends**

Finding the best quality of colostrum requires knowledge of the source and the processing techniques used in the production of the colostrum product. High quality bovine colostrum, from dairy cows, has been shown to be safe and biologically transferable for human use.

**AOR Advantage**

AOR ‘s high-quality North American colostrum, derived from livestock raised under the best conditions and processed using the most rigorous quality control conditions, is the clear choice for purity and potency.

**References**


**Abstract**

The clinical efficacy of a bovine lactoferrin/whey protein Ig-rich fraction (Lf/IgF) for the common cold: a double blind randomized study.

**Vitetta L, Coulson S, Beck SL, Gramotnev H, Du S, Lewis S.**

**OBJECTIVE:** The aim of the study was to determine if a bovine lactoferrin/whey protein Ig-rich fraction (Lf/IgF) combination was effective in reducing the number of colds and in turn improving symptom recovery in a cohort of males and females that reported frequently contracting a cold.

**DESIGN:** A double blind randomized placebo-controlled clinical trial.

**SETTING:** One-hundred and twenty-six participants matched by age, BMI, dietary and physical parameters with self-reported frequent upper respiratory tract symptoms and infections were randomly assigned to receive 600 mg of Lf/IgF or a placebo daily for 90 days.

**MAIN OUTCOME MEASURES AND RESULTS:** A total of 90 participants (47 receiving the active and 43 placebo) completed the 90 day trial and 15 completed 45 days participation (6 in the active and 9 in the placebo group). The total number of colds recorded over the study period was 48 for the treatment group versus 112 for the placebo group ($p < 0.001$). The significant trend was retained when the data was corrected for medications returned ($p < 0.001$) and for guessing treatment allocations ($p < 0.001$). Non-parametric analysis demonstrated that the total number of cold-associated symptoms reported by participants that received Lf/IgF was significantly less than those in the placebo group ($p < 0.05$). Also, total days sick with a cold and cold severity were reduced over the clinical trial period for Lf/IgF over placebo, but the trend was not significant.

**CONCLUSIONS:** These findings demonstrate that the Lf/IgF combination significantly decreased the incidence of colds and the cumulative number of cold-related symptoms over placebo. This therapeutic combination may be indicated for the prevention of colds and its most common symptoms in the general population when administered as a preventative supplement.

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A novel extract from bovine colostrum whey supports innate immune functions. II. Rapid changes in cellular immune function in humans.

**Prev Med. 2012 May;54 Suppl:S124-9.**

**Jensen GS, Patel D, Benson KF.**

**OBJECTIVE:** To evaluate acute effects of bovine colostrum low-molecular weight fraction (CLMWF) on selected aspects of innate immune function in healthy human subjects.

**METHODOLOGY:** A placebo-controlled, double-blinded, randomized cross-over trial involving 12 healthy subjects, age 22-72, was conducted at NIS Labs during the year 2010. Placebo or 150 mg CLMWF was given orally. Blood was drawn immediately before and at 1 and 2h after consumption.

**RESULTS:** A single dose of CLMWF, when compared to placebo, resulted in rapid increase in phagocytic activity of monocytes at 1h ($P < 0.12$) and polymorphonuclear cells at 1h ($P < 0.08$) and 2h ($P < 0.03$) after consumption. Observations included increased numbers of CD3(−) T cells ($P < 0.05$), and a transient reduction in circulating CD3(−)CD56(−) natural killer (NK) cells at 1h ($P < 0.04$), returning to normal levels at 2h after consumption ($P < 0.96$). The relative increase of NK cells from 1 to 2h after consumption was not associated with an increase in CD69 or CD25 activation markers,
suggesting that new NK cells were mobilized into circulation.

CONCLUSION: The increased phagocytic activity and rapid transient changes in NK cell numbers suggest that upon consumption, interaction of CLMWF with immune cells in the gut mucosa triggers immediate events with systemic consequences.

**Effects of bovine colostrum supplementation on immune variables in highly trained cyclists.**

**J Appl Physiol. 2007 Mar;102(3):1113-22.**


The aim of this study was to investigate the influence of low-dose bovine colostrum protein concentrate (CPC) supplementation on selected immune variables in cyclists. Twenty-nine highly trained male road cyclists completed an initial 40-km time trial (TT(40)) and were then randomly assigned to either a supplement (n = 14, 10 g bovine CPC/day) or placebo group (n = 15, 10 g whey protein concentrate/day). After 5 wk of supplementation, the cyclists completed a second TT(40). They then completed 5 consecutive days of high-intensity training (HIT) that included a TT(40), followed by a final TT(40) in the following week. Venous blood and saliva samples were collected immediately before and after each TT(40), and upper respiratory illness symptoms were recorded over the experimental period. Compared with the placebo group, bovine CPC supplementation significantly increased preexercise serum soluble TNF receptor 1 during the HIT period (bovine CPC = 882 ± 233 pg/ml, placebo = 468 ± 139 pg/ml; P = 0.039). Supplementation also suppressed the postexercise decrease in cytotoxic/suppressor T cells during the HIT period (bovine CPC = -1.0 ± 2.7%, placebo = -9.2 ± 2.8%; P = 0.017) and during the following week (bovine CPC = 1.4 ± 2.9%, placebo = -8.2 ± 2.8%; P = 0.004). Bovine CPC supplementation prevented a postexercise decrease in serum IgG(2) concentration at the end of the HIT period (bovine CPC = 4.8 ± 6.8%, P = 0.88; placebo = -9.7 ± 6.9%, P = 0.013). There was a trend toward reduced incidence of upper respiratory illness symptoms in the bovine CPC group (P = 0.055). In summary, low-dose bovine CPC supplementation modulates immune parameters during normal training and after an acute period of intense exercise, which may have contributed to the trend toward reduced upper respiratory illness in the bovine CPC group.

**The effects of bovine colostrum supplementation on body composition and exercise performance in active men and women.**

**Nutrition 2001 Mar;17(3):243-7.**

Antonio J, Sanders MS, Van Gammeren D.

The purpose of this study was to determine the effect of 8 wk of bovine colostrum supplementation on body composition and exercise performance in active men and women. Subjects were randomly assigned to a placebo (whey protein) and colostrum group (20 g/d in powder form). Each subject participated in aerobic and heavy-resistance training at least three times per wk. Body composition was assessed via dual x-ray absorptiometry analysis. Treadmill time to exhaustion, one repetition
maximum strength (bench press), and the total number of repetitions performed during one set to exhaustion at a submaximal load for the bench press (50% and 100% of body weight for women and men, respectively) were ascertained. The whey protein group experienced a significant increase (P < 0.05) in body weight (mean increase of 2.11 kg), whereas the colostrum group experienced a significant (P < 0.05) increase in bone-free lean body mass (mean increase of 1.49 kg). There were no changes in any of the other parameters measured. Thus, supplementation with bovine colostrum (20 g/d) in combination with exercise training for 8 wk may increase bone-free lean body mass in active men and women.

Modulation of human humoral immune response through orally administered bovine colostrum.


He F, Tuomola E, Arvilommi H, Salminen S.

Eighteen healthy volunteers were randomized into two treatment groups and consumed liquid prepackaged bovine colostrum whey and placebo for 7 days. On days 1, 3 and 5, an attenuated Salmonella typhi Ty21a oral vaccine was given to all subjects to mimic an enteropathogenic infection. The circulating antibody secreting cells and the expression of phagocytosis receptors of the subjects before and after oral immunization were measured with the ELISPOT assay and flow cytometry. All subjects responded well to the vaccine. No significant differences were observed in ELISPOT values for IgA, IgG, IgM, Fcgamma and CR receptor expression on neutrophils and monocytes between the two groups. There was a trend towards greater increase in specific IgA among the subjects receiving their vaccine with bovine colostrum. These results suggest that bovine colostrum may possess some potential to enhance human special immune responses.

Co-administration of the health food supplement, bovine colostrum, reduces the acute non-steroidal anti-inflammatory drug-induced increase in intestinal permeability.


Playford RJ, MacDonald CE, Calnan DP, Floyd DN, Podas T, Johnson W, Wicks AC, Bashir O, Marchbank T.

Non-steroidal anti-inflammatory drugs (NSAIDs) are effective analgesics but cause gastrointestinal injury. Present prophylactic measures are suboptimal and novel therapies are required. Bovine colostrum is a cheap, readily available source of growth factors, which reduces gastrointestinal injury in rats and mice. We therefore examined whether spray-dried, defatted colostrum could reduce the rise in gut permeability (a non-invasive marker of intestinal injury) caused by NSAIDs in volunteers and patients taking NSAIDs for clinical reasons. Healthy male volunteers (n=7) participated in a randomized crossover trial comparing changes in gut permeability (lactulose/rhamnose ratios) before and after 5 days of 50 mg of indomethacin three times daily (tds) per oral with colostrum (125 ml, tds) or whey protein (control) co-administration. A second study examined the effect of colostral and control solutions (125 ml, tds for 7 days) on gut permeability in patients (n=15) taking a substantial,
regular dose of an NSAID for clinical reasons. For both studies, there was a 2 week washout period between treatment arms. In volunteers, indomethacin caused a 3-fold increase in gut permeability in the control arm (lactulose/rhamnose ratio 0.36 /-0.07 prior to indomethacin and 1.17 /-0.25 on day 5, P < 0.01), whereas no significant increase in permeability was seen when colostrum was co-administered. In patients taking long-term NSAID treatment, initial permeability ratios were low (0.13 /- 0.02), despite continuing on the drug, and permeability was not influenced by co-administration of test solutions. These studies provide preliminary evidence that bovine colostrum, which is already currently available as an over-the-counter preparation, may provide a novel approach to the prevention of NSAID-induced gastrointestinal damage in humans.

Passive immunisation of children with bovine colostrum containing antibodies to human rotavirus.

Lancet 1989 Sep 23;2(8665):709-12

Davidson GP, Whyte PB, Daniels E, Franklin K, Nunan H, McCloud PI, Moore AG, Moore DJ.

The efficacy of a 10-day course of bovine colostrum with high antibody titre against the four known human rotavirus serotypes in protecting children against rotavirus infection was examined in patients admitted to hospital. Children aged 3 to 15 months were blocked in pairs according to ward accommodation (ie, isolation or open area). Each block contained 1 treated and 1 control child. The allocation to treatment or control (an artificial infant formula) was randomised. 9 of 65 control children but none of 55 treated children acquired rotavirus infection during the treatment period (p less than 0.001). The importance of protecting against rotavirus infection was highlighted by the fact that parents of symptomatic rotavirus-positive children sought medical attention seven times more often than did parents of symptomatic rotavirus-negative children (p less than 0.05).

Activity of bovine colostral IgG in the human digestive tract.

Zh Mikrobiol Epidemiol Immunobiol 1980 Sep;(9):101-6

Khazenson LB, Gennad’eva Tla, RoshchinVV, Krasheniuk Al, Semenova NL.

The biological activity of cow IgG administered orally to 11 volunteers in the colostrum of cows vaccinated with Sh. sonnei was studied. At the same time the degree of immunologic protection was determined on the experimental model of pepsin fragments of this IgG active against Sh. sonnei. IgG, introduced orally, could be regularly found in gastric and intestinal juices, as well as in coprofiltrates. A decrease in the concentration of IgG and related antibodies was observed as this IgG moved down along the digestive tract: the maximum loss of biological activity occurred in the lower sections of the intestine. The products of pepsin hydrolysis of immune cow IgG ensure pronounced protection against Sh. sonnei. The preservation of the biological activity of IgG in the digestive secretions of adults receiving immune colostrum orally indicates the expediency of further studies in the field of passive enteral immunization for the prevention and treatment of acute intestinal diseases.