ALPHA FACTOR BOVINE COLOSTRUM

a potent source of growth and immuno-factors from mother's first milk

Growth hormone and growth hormone releasers have recently achieved a great deal of worldwide popularity. Radio, television and print ads appear virtually everywhere expounding upon the amazing benefits of replenishing the body with human growth hormone. However, there exists a product that not only contains growth hormone plus a wide range of other significant growth factors at a much more affordable price, but it contains a wide range of potent immune factors as well. The product is Alpha Factor Bovine Colustrum.

WHAT IS COLOSTRUM?

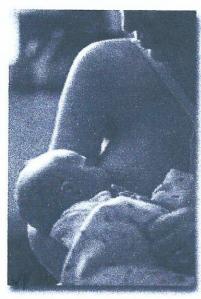
Colostrum is natures perfect first food. It is the premilk substance produced from the mother's breasts of all mammals during the first 24-48 hours of lactation. Colostrum supplies immune and growth factors and a perfect combination of vitamins and minerals to insure the health, vitality and growth of the newborn.

It is estimated that colostrum triggers at least fifty processes in the newborn, including transferring all the immune factors and the entire memory from the mother's own immune system.

Medical Research has shown that the most important immune and growth factors for humans can be provided from bovine colostrum. It is biologically transferable to all mammals including man and is much higher in immune factors than human mother's colostrum.

Laboratory analyses of both immune and growth factors from bovine colostrum indicate that they are identical to those found in human colostrum except for the fact that the levels of these factors are significantly higher in the bovine version. Bovine colostrum is actually 40 times richer in immune factors than human colostrum. For example, human colostrum contains 2% of IgG (immunoglobulin G) while cow colostrum contains 86% of IgG, the most important of the immuno-globulins found in the body.

Doctors also discovered that cows' colostrum contains special glycoproteins that are extremely effective at protecting the immune and growth factors in colostrum from destruction by adult human digestive enzymes.



WHY DO WE NEED COLOSTRUM AS ADULTS?

Experience has shown that nature knows best in many cases of healing. But as we age, we notice it takes us a little longer to fight off a cold or flu, we become more vulnerable to disease, our energy and enthusiasm lessen, our skin loses its elasticity, we gain unwanted

weight and lose muscle tone. This is because after maturity, we gradually lose the natural immune and growth factors in our body...Aging, illness and death occur with the loss of immune and growth factors in our bodies. Medical science has shown in hundreds of published reports worldwide that these can possibly be replaced in the human body with bovine colostrum... Dr. Olle Hernell, At the University of Ulmea, Sweden; Science

The past 20 years has witnessed the publication of over 2000 research papers strongly supportive of both colostrum and its <u>numerous components</u>. As one prestigious research institute stated... "Bovine colostrum offers tremendous possibilities for providing unparalleled support for the immune system that may be the deciding factor in the bodies war against illness."

Colostrum has antioxidant properties, natural antiinflammatory properties and is a source of many vitamins, minerals, enzymes and amino acids. Bovine colostrum rebuilds the immune system, helps the body ward off foreign invaders, accelerates healing of all body tissue, increases bone and lean muscle mass and replenishes an aging system.

Supplementation of colostrum enhances the efficiency of amino acid and carbohydrate fuel uptake by the intestine. More nutrients are made available for muscle cells and other vital tissues and organs. One of the reasons for the energy boost seen in most healthy individuals who use colostrum as a food supplement is this ability of colostrum to improve nutrient availability... "Colostrum stimulates the lymphoid tissue

providing benefits in aged or immuno-deficient people"....Drs. Bocci, Bremen, Corradeschi, Luzzi and Paulesu; Journal Biology

"Researchers reported that colostrum stimulates maturation of B Lymphocytes (type of white blood cell) and primes them for production of antibodies, enhances growth and differentiation of white blood cells. Similar activity in cow and human colostrum can also activate Macrophages" ...Dr. M. Julius, McGill University, Montreal: Science News

"Bovine colostrum contains high levels of growth factors that promote normal cell growth and DNA synthesis" ...Doctors, Oda, Shinnichi, et. al.; Comparative Biochemical Physiology.

"Drs. suggest that an important role for growth factors is in promoting wound healing. Accelerated healing is possible for treatment with trauma and surgical wounds" ...Drs. Bhora, et. al.; Journal. Surg. Res

MAJOR COMPONENTS OF COLOSTRUM

The most important components of colostrum can basically be broken down into two major categories: growth factors and immune system factors.

Growth Factors:

Growth hormone (GH), Insulin-like growth factor-I and II (IGF-1 and IGF-II), Epithelial growth factor (EgF), Fibroblast growth factor (FgF), Platelet-derived growth factor (PDGF), Transforming growth factors A & B (TgA and B)

Immune Factors:

Immunoglobulins (A,D,E,G &M), Gamma Globulin, Cytokines: Interleukins 1,6,10; Interferon, G;lymphokines, Leukocytes, Lymphokines, Lactoferin, Proline-Rich-Polypeptides (PRP), Protease Inhibitors, Inhibitors, Trypsin Antibodies, Glycoproteins. Lactobacillus Bifidus Acidophilus, Oligo Polysaccharides, Glycoconjugates, Orotic Acid, secretory IgA, IgA specific helper, B Lactoglobulin, Lactalbumin, Albumin, Prealbumin, Alpha 1-Antitripsin, Alpha 1-Fetoprotein, Alpha 2-Macroglobulin, Alpha 2- AP Glycoprotein, C3 C4Orosomucoids, Lyozyme, Lactoperoxidase, Thiocyanate, Peroxidase, Xanthine Oxidase, Vitamins A, B12, E, Sulfur.

The body's growth factors are capable of increasing T-cell production, accelerating healing, balancing blood glucose, reducing insulin need, increasing growth and repair of vital tissues while metabolizing fat for fuel. Medical studies have shown the vital growth factors

IgF-1, TgF A & B and nucleotides from bovine colostrum to be identical to human in composition and helps provide the raw materials to repair vital DNA and RNA in the bodies cells. Further, by stimulating DNA formation it has been shown that they can help stimulate normal cell and tissue growth, regeneration and accelerated repair of aged or injured muscle, skin collagen, bone, cartilage, nerve tissues. heart muscle and new blood vessels for collateral coronary circulation. These growth factors facilitate the healing of tissues damaged by ulcers, trauma, burns, surgery or inflammatory disease... "Transforming Growth Factors A & B (TGF A & B) in bovine Colostrum were involved in normal cellular activities such as cell proliferation, and tissue repair. Also reported it promoted the synthesis and repair of DNA - the master code of the cell." ...July 1992 New England Journal of Medicine.

Colostrum provides a good source of IgF-1 as a complementary therapy for successful weight loss and building of lean muscle. IgF-1 is required by the body to metabolize fat for energy through the Krebs cycle but with aging, less IgF-1 is produced in the body. It helps stimulate the body to burn fat for fuel instead of the body's own muscle tissue in times of diet and fasting.. "High age is associated with reduced levels of growth hormones: GH and IgF-1. Induction of GH and IgF-1 increase body weight through muscle growth of aged subjects" ... Drs. Ullman, Sommerland & Skottner, Dept. of Pathology and Pharmacology, Univ. of Gothenburg, Sahlgren Hospital & HabiVitrum AB, Stockholm, Sweden

Human trials in 1990 reported that IgF-1 stimulates glucose utilization. It can help balance blood sugars (non insulin diabetics and hypoglycemia). Inadequate levels of IgF-1 are associated with an increased incidence of Type II diabetes and difficulty in losing weight despite a proper nutritional intake and adequate exercise.

Additionally, IgF-1 and GH in colostrum normalizes LDL-cholesterol while increasing HDL-cholesterol concentrations (the good cholesterol).

Genetically engineered versions of IGF-1 and GH are now marketed but they are found in high concentrations in colostrum. Biotechnology companies are currently selling IgF-1 for as much as \$800 per 50 cc vial. GH is also very expensive. Even less expensive products marketed as growth hormone releasers (designed to help the body to manufacture their own HGH) are markedly more expensive than Colostrum. None of these expensive products contain any of the vast array of immune factors.

Drug manufacturers have tried to copy (genetically engineer) and market several of the individual components of colostrum, most notably interferon, gamma globulin, growth hormone, IgF-1 and protease

inhibitors. Some of the following colostrum components may very well be next on the list of major breakthroughs by the pharmaceutical/nutraceutical industry: Immunoglobulins (A, D, E, G and M) - the most abundant of the immune factors found in colostrum; IgG neutralizes toxins and microbes in the lymph and circulatory system; IgM destroys bacteria while IgE and IgD are highly antiviral.

Colostrum and breast milk (from cows and humans) stimulates the newborns immune system; as yet, unidentified proteins speed the maturation of cultured B Lymphocytes (type of white blood cell) and primes them for production of antibodies... "Clinical research by Dr. David Tyrell, in England, in 1980, revealed that a high percentage of the antibodies and immunoglobulins present in colostrum are believed not to be absorbed but remain in the intestinal tract where they attack disease causing organisms before they penetrate the body and cause disease. The remainder are believed to be absorbed and distributed to assist in our internal defense processes. It is this combination of action that is believed to make colostrum so unique and effective as an oral supplement."

... "Studies with human volunteers found that the preservation of the biological activity of IgG (Immunoglobulin), in the digestive secretions of adults receiving bovine colostrum orally, indicates passive enteral (intestinal) immunization for the prevention and treatment of acute intestinal diseases... Dr. L.B. Khazenson; Microbial & Epidemial Immunobiology.

Antibodies: Colostrum has been shown to contain specific antibodies that may help our body in its fight against specific diseases such as pneumonia, RVS, dysentery, candida, flu, and numerous other illnesses

Lactoferrin: an antiviral, anti-bacterial, anti-inflammatory, iron-binding protein with therapeutic effects in cancer, HIV, Cytomegalovirus, herpes, Chronic fatigue Syndrome, Candida albicans and other infections. Lactoferrin helps deprive bacteria of the iron they require to reproduce and releases iron into the red blood cells enhancing oxygenation of tissues. Lactoferrin modulates cytokine release and its receptors have been found on most immune cells including lymphocytes, monocytes, macrophages and platelets... "Concentration of Lactoferrin and Transferrin in bovine colostrum found necessary to transport iron into blood. Highest concentrations of both substances were found in the first milking after birth" ...Dr. Sanchez, et al, Biological Chemistry

Proline-Rich Polypeptide (PRP): a hormone that regulates the thymus gland (bodies central command for the immune system), stimulating an under active immune system or down-regulating an overactive immune system as seen in autoimmune disease (MS, rheumatoid arthritis, lupus, scleroderma, chronic fatigue syndrome, allergies, etc.). It has been

demonstrated to improve or eliminate symptomatology of both allergies and autoimmune diseases. PRP inhibits the overproduction of lymphocytes and T-cells and reduces the major symptoms of allergies and autoimmune disease: pain, swelling and inflammation... "PRP, in bovine colostrum, has the same ability to regulate activity of the immune system as hormones of the Thymus gland. It activates an underactive immune system, helping it move into action against disease-causing organisms. PRP also suppresses an overactive immune system, such as is often seen in the autoimmune diseases. PRP is highly anti-inflammatory and also appears to act on T-cell precursors to produce helper T-cells and suppresser T-cells" ...Drs. Staroscik, et. al., Molecular Immunology.

... "PRP turns white blood cells into functionally active T cells. Results were shown in treatment of auto-immune disorders and cancer. An important Immune modulator stimulates an underactive immune system and tones down an overactive one"...Drs. Janusz & Lisowski; Archives of Immunology

Glycoproteins: (Protease inhibitors) A digestive factor that has been shown to help immune and growth factors survive the passage through the highly acidic digestive system.

Lactalbumin: Research indicates tremendous possibilities that lactalbumins can be highly effective against numerous forms of cancer and viruses. Colostrum Lactalbumin has been found to be able to cause the selective death (paposes) of cancer cells, leaving the surrounding non-cancerous tissues unaffected.

Lactobacillus Bifidus Acidophilus: Friendly flora which is necessary for the digestion of food and in the reduction of the growth of harmful bacterial in the digestive system. Shown to effectively combat candida albicans.

Cytokine's: Interlukin 1 & 6, Interferon Y and Lymphokines: Shown to stimulate the lymph glands and are thought to be highly effective antiviral immune substance. Interleukins that regulate the duration and intensity of the immune response, are responsible for cell to cell communication, boost T-cell activity and the production of immunoglobulins. Interleukin-10 is strongly anti-inflammatory, especially in arthritic joints.

The benefits of cytokines in the treatment of cancer was first popularized by the 1985 Steven Rosenberg Book, Quiet Strides in the War on Cancer. Since that time, the same cytokines found in colostrum (Interleukins 1, 6, 10, Interferon G and Lymphokines) have been the single most researched protocols in scientific research for the cure for cancer.

Vitamins and Minerals: Colostrum is not a supplement... it is the whole food for the newborn... its combination of vitamins and minerals are naturally occurring and in perfect combination. Vitamins - A, B12 and E are found in small amounts while traces of all others are also present in colostrum.

Sulfur: A mineral with multiple uses in metabolism and as part of many structural body proteins.

Leukocytes: Stimulate the production of interferon, which slows viral reproduction, and penetration of cell walls.

Enzymes:Lactoperoxidase-thiocyanate, peroxidase and xanthine oxidase oxidize bacteria through their ability to release hydrogen peroxide.

Lysozyme: A hydrolyzing agent and immune system booster capable of destroying bacteria and viruses on contact.

Trypsin Inhibitors and Protease Inhibitors: Prevent the destruction of immune and growth factors in colostrum from being broken down in the GI tract; they also prevent H. pylori from attaching to the walls of the stomach and can have a beneficial role in the treatment of peptic ulcers.

Lymphokines: Hormone-like peptides produced by activated lymphocytes which mediate the immune response.

Oligo Polysaccharides and Glycoconjugates: attract and bind to pathogens (Strep., E. Coli), Salmonella, Cryptosporidia, Giardia, Entamoeba, Shigella, Clostridium Difficile Toxins A & B and Cholera) preventing them from attaching or entering the mucous membranes.

Orotic Acid: Stops the formation of pyrimidine nucleotides and prevents hemolytic anemia.

QUALITY CONTROL

High quality bovine Colostrum is collected only from veterinary certified healthy grade A dairy cows that are pesticide, herbicide, steroid, antibiotic and hormone free. Collected only during the first 24 hours after the second calving (and only after the calf has obtained all that's necessary for its survival). Bovine Colostrum is immediately frozen and shipped to a USDA inspected processing plant where it is gently spray dried to insure a maximum of immune activity. Colostrum is then processed to remove the maximum fat and lactose and laboratory tested to insure the highest quality and purity of content.

Not all colostrum products on the market are

biologically active due to improper processing through the use of high temperatures and pasteurization or the formation of colostrum into tablets, a method that requires high pressure and generates heat, destroying biological activity. Colostrum in liquid form is also less than ideal. It is not as concentrated as the powdered versions of this substance and must be kept refrigerated due to its short shelf life. Preservatives must be added which further dilute and destroy its biological capabilities. Low heat processing, the removal of fat, whey and lactose as well as laboratory testing to insure biological integrity and safety are the rigid standards set for our colostrum. High quality Colostrum must be certified to contain a minimum of 27% immunoglobulins. Alpha Factor Colostrum is produced in an FDA approved facility and has been assayed at 27+% IgG as opposed to some colostrum products that assay at less than 7%.

Dosage: Take one 425 mg. capsule twice daily on an empty stomach (preferably take it with Megazyme Forte).

Ordering Information 60 Capsules 425 mg.

1 bottle \$16.00 4 bottles (\$15.00 each) \$60.00 12 bottles (\$14.00 each) \$168.00

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Note: Colostrum and all its ingredients are substances that naturally occur the human body and have a specific function as designated by nature to fight disease. Any reference to any disease in this article is part of a nutritional discussion of these normal body chemicals and what nature intended for them to do. Any health claims which may be inferred by supplementing the diet with colostrum are made in relation to the body deficiency of these natural ingredients. As provided by federal Law, health claims regarding deficiency diseases can be made as long as the appropriate disclaimer is made. These health claims have not been evaluated by the FDA. This product is not intended for the cure prevention or mitigation of any disease. It is intended for nutritional supplementation only.