Think of the Miracle

It was not very long ago that a human baby was born in a non-sterile environment. In fact, this is still true in most of the world. That tender newborn is thrust from a warm, protected environment, into a world of germs and microbes anxious to attack the unprotected. With no immune system, the infant is easy prey. As usual, Mother Nature has a plan. The first instinct of all newborns, human or animal, is to breathe. The second is to nurse. It is built into us, and for good reason. The moment your son or daughter, your kitten or pup, calf or doe, begins to nurse, nature unleashes a cocktail of nutrients that transfer the mothers’ immunities and other essential nutrients to the newborn.

Mothers’ first milk: what an incredible moment this is

Colostrum, better known as Mothers’ Milk, is created by all mammals at birth. This fluid gives the newborn an instant set of immunities, plus growth factors that aid the newborn's body to rejuvenate during the stressful process of growth. “Growth factors supply the necessary building blocks for the newborn, enhancing the growth of cells, muscle, tissue, bone and cartilage.”

What does this have to do with non-infants and adults?

“As we age, our bodies produce less and less of these vital factors, increasing signs of aging, and making it more difficult for us to fight disease.”

Why you should hug a cow!

Colostrum from cows is loaded with immune, growth and repair factors and provides humans most of the same benefits that it provides the newborn calf. Think about it. You likely spend your time in a mostly sterile environment, washing your hands, bathing regularly. Does this sound like the life of a cow? They are out there with the dirt and germs. As they encounter these ‘pathogens’, the bad guys, they develop ‘antigens’, the good guys. They pass the ‘antigens’, immune factors in their Colostrum. When you consume the Colostrum, your immune system has an opportunity to “get familiar” with the antigens and enhance your immune response.

What are the growth factors?

Growth factors including FGF and IGF-1 are substances necessary for cell-to-cell interaction. Bovine Colostrum is the only natural source for IGF-1. FGF is a cell-regenerating factor. FGF targets the replacement of older damaged cells with young healthy cells. FGF promotes and supports the rejuvenation of all organs and tissues: immune system, circulatory system, neuro-muscular system, retina, skeletal system, gastrointestinal tract, urinary tract, skin, hair and nails.
The IGF-1 is comprised of a family of peptides that play an important role in growth, development and metabolism. IGF-1 has a direct effect on fat cells. It stimulates them to break down triglycerides and suppresses their ability to store dietary fats. IGF-1 also appears to be the key player in muscle growth. IGF-1 is one of a battery of hormones that serves to maintain blood glucose within a normal range. IGF-1 may affect the levels of serotonin and dopamine and may thereby brighten the mood.

**Autoimmune Disease**

When the immune system attacks healthy tissue, it can cause very serious, and often debilitating damage. Research has shown that colostrum, with its amazing immune factors, may be able to provide relief. Researchers at the University of Alabama and the University of Warsaw in Poland discovered a small protein chain in colostrum, Proline Rich Polypeptide (PRP), which may help regulate the immune system.

**Immune Factors**

- **Immunoglobulins - IgG, IgA, IgM** - substances that neutralize toxins, viruses, and bacteria, particularly in the digestive and respiratory systems.
- **Transfer factors** - allow the body to react quickly to bacteria, viruses and other pathogens for which immunity has already been established.
- **Cytokines** - small proteins that affect the behavior of other cells. Cytokines act as an anti-inflammatory and help boost the production of other antibodies. As we grow older, however, cytokine production is reduced. Cytokines may also be responsible for regulating the immune and metabolic responses.
- **Lactoferrin** - a substance that neutralizes bacteria and helps release cytokines.
- **Proline Rich Polypeptides (PRP)** - help regulate the immune system, especially when the immune system is hyperactive.

**Essential Glyconutrients**

Glyconutrients are polysaccharides that the body must have for proper cell to cell communication. Recent scientific research has demonstrated that essential glyconutrients can have a significant effect on the health of every organ and system. (Lefkowitz, S), (Gardiner, T)

"... one of the 10 technologies that will change the world." MIT’s Technology Review ~ February 2003

"...could have an impact on health problems ranging from rheumatoid arthritis to the spread of cancer cells." MIT’s Technology Review ~ February 2003

The Ultra-Pure Colostrum™ sold by Rejuvenetics® is of the highest quality available and is from 1st milking post parturient cows, thereby containing the greatest abundance of immune factors (specific and nonspecific) available. First milking colostrum is in perfect balance, and when ingested in small amounts it can help normalize, regulate and maintain body functions – if not by direct action, then by the combined action of regulating and supporting other organs, glands and systems.

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**Supplement Facts**

<table>
<thead>
<tr>
<th>Serving Size: 1 Capsule</th>
<th>Servings Per Container: 120</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amount Per Serving</strong></td>
<td><strong>% Daily Value</strong></td>
</tr>
<tr>
<td>Colostrum</td>
<td>500 mg</td>
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</tbody>
</table>

*Daily Value not established.

Other Ingredients: Gelatin

**DIRECTIONS:** As a dietary supplement, take 1 capsule one to three times daily with meals, or as directed by your healthcare practitioner.

**NOTE:** Do not use with aluminum-containing drugs, or any other medication, without your doctor’s approval. High doses of magnesium can have a laxative effect. Reduce dosage if this occurs.
REFERENCES:

Research on Bovine Colostrum

GENERAL BENEFITS
Bovine colostrum offers broad-spectrum benefits for wide-ranging ailments.

Active chromium complex from bovine colostrum help to regulate blood glucose levels.

Antioxidant properties of colostrum.

Treatment of severe eye dryness and problematic eye lesions with bovine colostrum.


Bovine colostrum has anti-inflammatory benefits and prevents NSAID induced gut damage.
Gut. 44:653-658. PubMed Reference

GROWTH FACTORS
Effect of growth factors on wound healing.

Insulin-like growth factor-1 blood levels are not associated with prostate specific antigen (PSA) levels or prostate cancer: (Cass TL)

Insulin and IG F-1 enhance human skeletal muscle synthesis.

IMMUNE FACTORS
Transfer Factors
Structural nature and functions of transfer factors.

Cytokines
Cytokines useful in immunodeficient individuals.

Cytokines effect in rheumatoid arthritis.

Bovine colostrum and its antibacterial effect.
Infection and Immunity. 57:1227-1234. PubMed Reference

Proline-rich polypeptide from bovine colostrum benefit the immune system.
Immunology. 36:879-881. PubMed Reference

Proline-rich polypeptide (PRP)- from bovine colostrum has an immunomodulatory effect.
Archivum Immunologiae et Therapiae Experimentalis. 41:275-279.

Proline-rich polypeptide from colostrum has immunoregulatory properties.
Molecular Immunology. 12:1277-1282. PubMed Reference

Bovine colostrum used for wound healing in vivo.

Bovine colostrum containing antibodies to human rotavirus.
Lancet. 2(8665):709-12. PubMed Reference

Prevention of rotavirus infection with bovine colostrum containing antibody against human rotavirus.

Bovine colostrum to treat rotavirus gastroenteritis in infants.
Journal of Infectious Diseases. 156:158-166. PubMed Reference

Immunoglobulin components and anti-viral activities in bovine colostrum.
64:274-279. PubMed Reference

IgA from colostrum used to treat E coli.

INTESTINAL
Bovine colostrum benefits the human stomach and small intestine.

Bovine colostrum provides passive immunity against diarrhoea.

Treatment of Helicobacter pylori infection with oral immunoglobulins from bovine colostrum.

Helicobacter pylori (H. pylori).
The Journal of Infectious Diseases. 177: 955-961. PubMed Reference

Colostrum benefits the Leaky gut of alcoholism.
REFERENCES: continued

Bovine colostrum has anti-inflammatory benefits and prevents NSAID induced gut damage.

**Bactericidal effect of bovine colostrum against Helicobacter pylori.**

Treatment diarrhea in AIDS patients with bovine colostrum patients.
*AIDS.* 4:581-584. PubMed Reference

**Bovine colostrum and its effect in the human digestive tract.**
ZH Microbiology Epidemiology Immunobiology. 9:101-106. PubMed Reference

**Bovine colostrum ameliorates diarrhea caused by E coli.**

**Glyconutrient a novel immune-enhancing polysaccharide.**

**Colostrums affect against herpes simplex virus.**
*Journal of Clinical Laboratory Immunology.* 1:221-224. PubMed Reference

**Low colostral IgA associated with cow’s milk allergy.**

**Protective potential of colostrum against prospective influenza viruses.**

**Siber G. (1992) Immune globulin to prevent nosocomial infection.** *(Accuaired during hospitalization)*

**Colostrums affect against herpes simplex virus.**
*Journal of Clinical Laboratory Immunology.* 1:221-224. PubMed Reference

**Bovine colostrum containing antibodies to human rotavirus.**

**Prevention of rotavirus infection with bovine colostrum containing antibody against human rotavirus.**

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**Immunoglobulin components and anti-viral activities in bovine colostrum.**
64:274-279. PubMed Reference

**Allergies**

**Low colostral IgA associated with cow’s milk allergy.**

**Lactoferrin**

**Lactoferrin is a lipid A-binding protein.**

**Lactoferrin and it’s functions.**

**Lactoferrin shows potent activity against both human immunodeficiency virus and human cytomegalovirus replication in vitro.**

**Lactoferrin is studied against human herpes virus.**

**Lactoferrin markedly inhibits hepatitis C virus.**
*Biochemical and Biophysical Research Communications.* 245:549-553. PubMed Reference

**Lactoferrin: A general review.**

**Effects of bovine Lactoferrin on colon carcinoma 26 lung metastasis in mice.**

**Lactoferrin in the human colon carcinoma.**

**Anti Viral**

**Treatment diarrhea in AIDS patients with bovine colostrum patients.**
*AIDS.* 4:581-584. PubMed Reference

**Protective potential of colostrum against prospective influenza viruses.**

**Siber G. (1992) Immune globulin to prevent nosocomial infection.** *(Accuaired during hospitalization)*

**Bovine colostrum containing antibodies to human rotavirus.**

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**Immunoglobulin components and anti-viral activities in bovine colostrum.**
64:274-279. PubMed Reference

**Athletics**

**Body Composition.**

**Endurance running in marathioners.**

**IGF-1, IgG levels during training.**

**Marathon racing and the effects of fluid replacement, immune function, and psychological factors.**