reduce Alzheimer’s symptoms and to delay their onset. It is a cell signaling peptide that is involved in arterial wall and brain cell integrity.

**Growth Factors: Other US sourced colostrum lack growth factors due to improper processing.** Igf-1 is the most prominent factor that helps retain and increase lean muscle tissue, burn fat stores for fuel rather than muscle tissue (stop catabolism), reduce insulin needs, balance blood sugar, and increase strength and stamina. Growth factors heal and protect delicate intestinal lining from damage, help reduce risk of colon cancer and are involved in angiogenesis (reduction of blood vessel growth to cancer tissue) and apoptosis cell signaling that allows our immune system to clean out cancer cells before they become tumors.

Most importantly, without an adequate protective delivery mechanism, colostrum products are either digested or simply pass through the body intact, destroying the protective delivery mechanism, delay their onset. It is a cell signaling factor in cow colostrum, when taken orally, are effective against disease-causing organisms in the intestinal tract. Ingestion of bovine colostrum’s immunoglobulins may be a new method of providing passive immunoprotection against a host of gut-associated disease-causing antigens (viral and bacterial).” — Dr. R. McClead, et. al.; Pediatrics Research

“Clinical studies show that IgM (immunoglobulin), found in bovine colostrum, may be responsible for regulating allergic reactions.” — Drs. Tortora, Funke & Cast; Microbiology

“Colostrum contains non-specific inhibitors that inhibit a wide range of respiratory illnesses, notably influenza viruses. Colostrum is specifically cited for its unique effectiveness against potentially deadly outbreaks of Asian flu viruses that emerge from animal/human mutations.” — Drs. Shortridge, et. al.; Journal of Tropical Pediatrics

“Glycoproteins in bovine colostrum inhibit the attachment of the Helicobacter Pylori bacteria that cause stomach ulcers. Colostrum (also) contains significant amounts of interleukin-10 (a strong inflammation inhibitor agent found significant in reducing inflammation in arthritic joints and injury areas.)” — Dr. Olof Hennel, University of Umeå, Sweden; Science

“Colostrum and breast milk (from cows and humans) stimulates the newborn’s immune system; as yet unidentified proteins speed the maturation of cultured B lymphocytes (type of white blood cell) and prime them for production of antibodies.” — Dr. Michael Julius Of McGill University, Montreal; Science News

“Immunoglobulins found in colostrum are able to neutralize the most harmful bacteria, viruses, and yeasts.” — Dr. Per Brandtzæg; Annals of the New York Academy of Sciences

“Immune factors in cow colostrum, when taken orally, are effective against disease-causing organisms in the intestinal tract. Ingestion of bovine colostrum’s immunoglobulins may be a new method of providing passive immunoprotection against a host of gut-associated disease-causing antigens (viral and bacterial).” — Dr. R. McClead, et. al.; Pediatrics Research

“Clinical studies show that IgE (immunoglobulin), found in bovine colostrum, may be responsible for regulating allergic reactions.” — Drs. Tortora, Funke & Cast; Microbiology

“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 & Epidermal Immunobiology

“Colostrum stimulates the lymphoid tissue, providing benefits in aged or immunodeficient people. Nature has used the oral route for the development of the immune system since the origin of mammals. Oral administration of immunofactors is simple, inexpensive, free of side effects and may be vastly beneficial in veterinary and human medicine, to correct immunodeficiency.” — Drs. Bocc, Brennen, Corradeschi, Luzzi and Paulesu; Journal of Biology

“Immunoglobulin from bovine colostrum effectively reduces and prevents viral and bacterial infections in immune deficient subjects; bone marrow recipients, premature babies, AIDS, etc.” — New England Journal of Medicine

### Growth Factors

<table>
<thead>
<tr>
<th>Sovereign Labs</th>
<th>Other U.S.</th>
<th>New Zealand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lactoferrin</td>
<td>1.75%</td>
<td>0.5%</td>
</tr>
<tr>
<td>IgG</td>
<td>25 - 40% HPLC</td>
<td>15 - 30% ND</td>
</tr>
<tr>
<td>PRA</td>
<td>3.25%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Growth factors</td>
<td>3.3 - 4.9%</td>
<td>&lt;0.005%</td>
</tr>
</tbody>
</table>

**Lactoferrin helps deliver iron to the body where needed. It binds and removes the excess iron that harmful bacteria such as E. Coli, Salmonella, Staph and Strep need in order to reproduce. The powerful antioxidant properties of lactoferrin help prevent the formation of free radicals in the body that can lead to disease and premature aging. It helps protect other antioxidants such as vitamins C, E and CoQ-10 in the digestive tract to remain bioactive. It has clinically been proven to destroy HIV, Herpes, Hepatitis and other pathogenic viruses and to help prevent colon cancer in animal studies.**

**IgA: 100 times more powerful than IgG and more important for humans. It provides long-term protection against infection in the GI tract. It is the source of most of the truly active anti-bodies for disease prevention and is sometimes called transfer factor for its ability to transfer immunity to the recipient.**

**PRP (Prolylproline-Rich Polypeptide) is the only true immune modulator. It helps balance the immune function by regulating the thymus gland, which produces T-cells. It also helps balance an overactive immune response which characterizes auto-immune disease. It does this by inhibiting overproduction of T-cells and lymphocytes, which leads to a reduction in pain and (Studies...can’t) swelling. It has been shown to help...”

**Sovereign Laboratories**

**Dr. Donald Henderson: Colostrum is safe and effective for all ages.**

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Bovine colostrum contains substances that are effective against many of the different microorganisms that are now resistant to antibiotics on the market. Bovine colostrum is not species specific. That means it can be consumed safely by every mammal, including humans. In particular, the molecular structure of antibodies in bovine colostrum is very similar to those found in humans. In a sense, cows are universal donors of colostrum.

The effectiveness of Bovine colostrum

Bovine colostrum contains greater levels of some factors than does human colostrum. This fact is especially important for the immunoglobulin (a protein that acts as an antibody) called IgG. It is now discovered that while human colostrum contains only 2 percent of this critical immunoglobulin, bovine colostrum contains up to 36 percent. IgG is considered to be one of the body’s most important immunoglobulins, because it is active against so many different microorganisms, many of which are now resistant to antibiotics on the market. Increasingly resistant to antibiotics. New pathogens and stop disease before they can take hold. Bovine colostrum immunoglobulins help prevent and treat diarrheal disease and colitis associated with C. difficile.

There is a link between infections of the bowel and those in the lungs. Once colostrum is in the bowel its immunoglobulins stimulate the production of antibodies in both the intestinal tract and the lungs.

The most convincing proof of the link between GI health and overall health is the existence of leaky gut syndrome. Leaky gut syndrome is a condition in which your bowels are full of holes and leaking out the contents. This is a very common condition; at least as common as all the immune diseases combined. This condition allows toxic substances such as bacteria, viruses, parasites, and other harmful factors to enter the bloodstream and reach every part of the body. In a healthy gut these toxins are eliminated.

Leaky gut also allows undegated fats and proteins to enter the body resulting in allergies.

Food allergies develop when protein molecules from food pass through the gut’s normal barrier and are absorbed before they are completely metabolized. The immune system recognizes these proteins as invaders and creates antibodies against them and an allergy is born.

Leaky gut and intestinal inflammation is triggered by the immune system of antibodies that are created, and the IgA antibodies created by the body in response to intestinal wall and are absorbed before they are completely metabolized. The immune system recognizes these proteins as invaders and creates antibodies against them and an allergy is born. Leaky gut and intestinal inflammation is triggered by the immune system of antibodies that are created, and the IgA antibodies created by the body in response to intestinal wall and are absorbed before they are completely metabolized.

The Center of Health: The Bowel: It is important to know that nearly 80 percent of all pathogens enter the body through or around the mucosal surfaces and the largest of mucosal surfaces is the gastrointestinal tract. The GI tract is where most infectious organisms enter the body and where the antibodies and beneficial bacteria work to attack invading pathogens and stop disease before they can take hold. Bovine colostrum immunoglobulins help prevent and treat diarrheal disease and colitis associated with C. difficile.

Gastrointestinal Health / Leaky Gut Syndrome and its relation to chronic disease:
Nature offers us another chance to restore our health and to create a healthy internal environment that continually promotes health. Colostrum provides that solution.

The most convincing proof of the link between GI health and overall health is the existence of leaky gut syndrome. Fortuna...