



## Colostum Helps Boost Growth Hormone & IGF-I Levels

by Tom Stone, N.D.

*Rejuvenating the body's levels of **human growth hormone (hGH)** is one of the hottest therapies today for helping aging men and women maintain a more youthful vitality, trim muscular body, and strong immune and cardiovascular function.*

The wealthy spend thousands of dollars on growth hormone injections. Others use homeopathic formulas or formulas with small amounts of hGH delivered sublingually in spray form. Some effervescent formulas provide secretagogues—small proteins that stimulate the body's natural hGH production.

But what if I were to tell you that hGH is only a small part of the anti-aging story? What if I were to tell you that there many other agents, known as growth factors, that can help you to achieve a youthful vigor and appearance at almost any age?

Human growth hormone is responsible for many effects on growth, physical development, immunity, and metabolism, both in the growing child and in adults. Produced and secreted by the anterior pituitary gland in the brain, hGH is normally released in pulses in response from signals from the hypothalamus, usually during sleep. It exerts anabolic effects throughout the body favoring the tissues, bones and muscles.

Studies show that an aging person exhibits lower levels of growth hormone than a younger one. Over time this decreased hGH level has significant negative effects on fat deposition, immunity and overall energy.

Indeed, a remarkable amount of data has been compiled that indicates that many of the diseases of aging, which we begin to experience in middle age—including loss of bone density, poor sleep, abdominal weight gain, muscle loss and lessened sex drive, as well as prostate and heart conditions—are directly related to hormone-endocrine-glandular imbalances. These can be corrected with currently available medical drugs and nutritional therapies. That's why so many people are now interested in replenishing their bodies' stores of hGH naturally.



### TBR LABS Colostrum: Beyond Growth Hormone

Human growth hormone works in concert with **insulinlike growth factor-I (IGF-I)**, a second messenger, carrying out growth hormone effects. IGF-I, which is found naturally in TBR Labs complete colostrum, is the captain of many of our body's metabolic processes. With adequate amounts of IGF-I, your muscles have more energy; the body builds more proteins; and the survival of cells is enhanced. As the human body ages, it process less IGF-I, so supplementation becomes absolutely essential to limit the toll aging takes on the body's metabolic processes.

Both hGH and its mediator, IGF-I may actually help treat the blueprint of aging, keeping the cells in as healthy a state as possible. Both hGH and IGF-I not only help feed and rejuvenate the cell's DNA. While hGH initiates transport of amino acids and nucleic acids into cells, IGF-I takes the work of hGH one step further and

facilitates the transport of nucleic acids into the actual nucleus of the cell where the DNA is located, giving it the raw materials needed to repair damage to the DNA and initiate cell division.

But, as I mentioned, most people are only focusing on hGH and, possibly, IGF-I. However, there is much more to the growth factor story than simply these two agents. By increasing your intake of these other growth factors, you can do so much more for your overall health. Each appears to play a specific role in your overall health and vitality. Let's take a look at a few of these other growth agents:

- **Transforming growth factors A & B** induce the transformation of cells from an immature form to a mature, functional status.
- **Epithelial growth factor** is involved in the generation and maintenance of cells in the epithelial (outer) layers of the skin.
- **Fibroblast growth factor** is associated with the regeneration of various types of tissue, including skin and other organs.
- **Platelet-derived growth factor** is responsible for the generation of cells and functions associated with blood clotting.

All of these growth factors work together to help prevent premature bodily aging. But you won't find them just anywhere.

Where you will find them is in colostrum—especially a quality colostrum formula like TBR Labs Colostrum. That's why power athletes, exercise enthusiasts and anyone interested in slowing the aging process are all turning to nature's first food. I don't know of any other natural food or medical drug that can provide such a complete array of growth factors.

TBR Labs Colostrum is produced within the first twelve hours of birth of all mammals and provides these important growth factors and other essential components to aid the newborn. These same ingredients can also aid the prematurely aging body.

### Clinical Studies

I recently reviewed a study published in the July 2001 issue of the *Journal of the American Geriatric Society*. The researchers, associated with the Division of Endocrinology, Department of Medicine, Brown University School of Medicine, Rhode Island, note that reduced muscle mass and strength are characteristic findings of growth hormone deficiency (GHD) and aging. In their study, they evaluated measures of muscle strength in response to treatment with recombinant human growth hormone (rhGH) with or without a resistance exercise program in frail older persons. The administration of rhGH resulted in a “significant increase” in circulating IGF-I levels in the individuals receiving rhGH treatment, the researchers note. Muscle strength “increased significantly” in both groups. “Our results are encouraging in that they suggest an effect of growth hormone on a specific aging-correlated deficit,” say the researchers.

In a study published in *The New England Journal of Medicine*, researchers studied the effects of six months of growth hormone replacement in 24 adults with growth hormone deficiency. Most of the patients had acquired growth hormone deficiency during adulthood as a consequence of treatment for pituitary

tumors, and all were receiving appropriate thyroid, adrenal, and gonadal hormone replacement. *Treatment had no effect on body weight, but mean lean body mass increased by an average of more than 10 pounds. The men became much more muscular. Their fat mass decreased by more than 11 pounds.* The basal metabolic rate, measured at base line and after one and six months of rhGH administration, increased significantly. Fasting plasma cholesterol levels were lower. “We conclude that growth hormone has a role in the regulation of body composition in adults, probably through its anabolic and lipolytic actions.”

### Colostrum vs. Synthetic hGH

While these studies were done on synthetic hGH, for most of us, TBR Labs Colostrum would be a much better choice. Introducing high levels of synthetic hGH as is done with growth hormone therapy may well permanently inhibit the body’s release of any of its natural growth hormone stores. This won’t happen feeding only trace amounts of bioactive substances with colostrum. Colostrum is a very safe way to receive the benefits of human growth hormone, IGF-I, and other important

growth factors. We also know that colostrum’s natural growth hormone and other growth factors, including IGF-I, are well absorbed, and that they boost the body’s overall levels.

One study shows that hGH, IGF-I and other growth factors contained in colostrum are not destroyed by digestive enzymes in the human gut, particularly as it they are protected by casein, a normal protein in milk.

They are able to pass through the gastrointestinal membrane and exert systemic effects by increasing overall levels. In a veterinary study, calves were fed either colostrum or a non-colostrum formula in the same amounts as colostrum. “Insulin and growth hormone concentrations were higher” among the calves receiving colostrum, while levels of the stress hormone, cortisol, were lower.

In another veterinary study conducted at the Children’s Nutrition Research Center, Department of Pediatrics, Baylor College of Medicine, Houston, Texas, researchers utilizing a control group found among the colostrum-fed piglets “plasma IGF-I was higher than that in control pigs.” ♦

Reverences available via e-mail at [info@freedompressionline.com](mailto:info@freedompressionline.com)

### Physical Changes Linked to Declining hGH Levels

While conventional wisdom has it that as we age, it is inevitable that as we get weaker, fatter, and more fatigued. But with the discovery of hGH, IGF-I and other growth factors contained in colostrum, we may be able to turn conventional wisdom on its head. Replenishing the body’s supplies of hGH, IGF-I and other growth factors can help to overcome the following age-related declines in health.

- Thinning skin and wrinkling
- Muscle wasting
- Abdominal fat
- Poor sleep
- Cognitive changes
- Mood changes
- Decreasing energy
- Lessened sexual performance
- Weak bones
- Impaired heart health
- Impaired immune function
- Impaired kidney function

### The Doctors’ Prescription

Use of TBR Labs Colostrum is a safe way to receive the benefits of human growth hormone and other important growth factors. Think of colostrum as natural hormone replacement therapy.

The most important and drastic problems of aging are related to organs and or systems dependent or influenced by reproductive and other hormones. Aging men and women experience a slow and continuous decline of hormones. This decline in endocrine function involves a decrease of testosterone, dehydroepiandrosterone (DHEA), estrogens, thyroid stimulating hormone (TSH), growth hormone (GH), insulin-like growth factor-1 (IGF-1), and melatonin, as well as other growth factors.

Interventions such as use of TBR Labs Colostrum, supplemental DHEA and melatonin may prevent, delay or alleviate the debilitating conditions, which result from hormone deficiencies. If you’re ready to do everything possible to maintain or recapture your youthful vitality, certainly being sure to supplement additional hGH, IGF-I and other growth factors contained in TBR Labs Colostrum is important.

If you want to know more about TBR Labs Colostrum or find out where you can purchase TBR Labs Colostrum (the formula I professionally recommend), give TBR Labs a call toll-free at (800) 916-3681.

