Growth hormone is produced by the pituitary gland. During the first hours of sleep and after exercise, growth hormone is secreted in small amounts. This “master hormone” is essential for growth but it is also vital for the maintenance, repair, and regeneration of the adult body. Human growth hormone levels fall steadily in everyone as we get older. It is still an important adult hormone, albeit a scarce one.

Growth hormone is unstable, so it remains in circulation only a few minutes after it is secreted. Because growth hormone breaks down quickly, it is difficult to measure a blood level. The liver converts growth hormone to insulin-like growth factor-1 (IGF-1), also called Somatomedin-C. IGF-1 is a stable protein hormone that can be measured in the blood. Levels of IGF-1 reliably predict how much growth hormone is being produced, so we can measure IGF-1 levels to monitor our growth hormone activity.

If an adult IGF-1 level falls too low, body changes and symptoms of low growth hormone will likely occur. Muscle strength and energy levels decrease, brain and memory function diminish, immune dysfunctions occur, and healing capacities, cell regrowth, and tissue repair are affected. Many of these problems I have just described are also seen in fibromyalgia, so it should be no surprise to you that many with fibromyalgia will also have low IGF-1 levels.

Dr. Robert Bennett found that low levels of IGF-1 occur in about one-third of patients with fibromyalgia. Furthermore, women with fibromyalgia and low IGF-1 levels who were given daily growth hormone injections for nine months experienced an improvement in their fibromyalgia pain, energy, and stamina levels and had reduced numbers of painful tender points.

Another study published in 1999 confirmed that patients with fibromyalgia exhibited a marked decrease in spontaneous growth hormone secretion, but had a normal pituitary response to injections of growth hormone releasing hormone (GHRH). This suggests that people with fibromyalgia have normal pituitary glands and are capable of producing normal amounts of growth hormone, but lack the necessary control and feedback signals (called the hypothalamic/pituitary/IGF-1 neuroendocrine axis). This disrupted function diminishes the supply of growth hormone/IGF-1.

Growth hormone levels can be increased by several treatment methods. Daily human growth hormone injections are expensive and usually are not covered by insurance. Sublingual forms of growth hormone are available. Colostrum oral supplements are a practical way to increase serum IGF-1 levels and try to help fibromyalgia symptoms.

Bovine colostrum is regarded as nature’s best oral growth hormone supplement because it is naturally more concentrated in growth hormone.
Colostrum for Fibromyalgia continued

In humans, much of the maternal antibody protection is passed through the placenta during gestation rather than through colostrum. Thus, human colostrum is important but not a vital part of the neonate’s first hours. Newborns who are not breast-fed do not show any significant immune or growth problems when compared with their breast-fed peers.

Cows, on the other hand (or hoof?), are unable to receive immunoglobulins across the placenta before birth. Thus, newborn calves need a massive dose of colostrum to prime their immune system and bovine colostrum contains much more immunoglobulins and other factors than humancolostrum.

The molecular makeup of bovine colostrum is not species-specific. This means it can be effective in other mammals, including humans. The body absorbs bovine colostrum into the bloodstream and it goes to work. It is widely used in veterinarian practices to treat diarrhea, infection, allergies, and rashes. A paste can be made and applied to a pet’s skin lesion to promote healing. Colostrum can thicken coats and reduce arthritis symptoms in pets.

In fibromyalgia, colostrum has a useful treatment role. I have used this product myself for fibromyalgia and have recommended it to most of my fibromyalgia patients over the years. I routinely check serum IGF-1 levels in patients and if the levels are low or low-normal (less than 200 nanograms), I will often recommend a trial of bovine colostrum supplement.

Colostrum can help many symptoms in fibromyalgia and since it is well tolerated, many with fibromyalgia can try it even if they have normal IGF-1 levels. I have found that approximately 75-80% of my patients who take colostrum will report some benefit in their fibromyalgia symptoms.

The most common symptoms of fibromyalgia that may respond to colostrum include:

- Fatigue
- Poor endurance and stamina
- Fibro-Fog
- Frequent and persistent allergies and infections (especially viral)

Colostrum probably works by increasing the growth hormone levels in our circulation (increased IGF-1 levels) and improving the feedback signals and actions of the neuroendocrine axis involving our hypothalamus and pituitary. Thus, colostrum is a true “supplement” which replaces deficient levels when in fibromyalgia and leads to better hormonal function.

Bovine colostrum is powdered and tastes like powdered milk with a hint of malt. The powder can be mixed with foods or beverages or can be made into a pill form by filling a gel capsule. To Your Health offers Colostrum, a natural bovine antibiotic-free powder in capsule form. I recommend 2000 mg/day to start (i.e. two tablets twice a day on an empty stomach). It is well tolerated, even in those with irritable bowel syndrome.

Side effects can include diarrhea, constipation, or flu-like symptoms. I have a few patients who have complained of skin rash and itching which resolved after discontinuing the colostrum. If gastrointestinal side effects or flu-like symptoms occur, they usually resolve within a few days. If side effects persist, the dose can be lowered and gradually built back up, or taken with food. Rarely does colostrum have to be discontinued due to intolerance.

It may take a month to notice any changes, so you need to give it ample time to work. Some of the favorable responses reported by my patients on colostrum include:

- “My energy level is better.”
- “I think much more clearly.”
- “My yeast symptoms have improved.”
- “I don’t crave sugars as much.”
- “I tolerate exercise better.”
- “I don’t get frequent colds anymore.”

Many patients will have non-fibromyalgia family members and even pets try colostrum and often report they have more energy, less allergy and cold symptoms, less asthma symptoms, and thicker and shinier coats. (I think the last one had to do with the pets!)

Colostrum can be helpful but is not a cure. No one treatment is ever magical for fibromyalgia but colostrum may be something to try to see if helps you. You won’t grow taller or wider, but some of your fibromyalgia symptoms may shrink! Talk with your doctor or fibromyalgia professional.

References:

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