

### **Bovine Colostrum & Chronic Pain:** The Natural Way to Achieve Lasting Relief

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If you are among the millions of Americans who treat your chronic pain with over-the-counter pain relievers or prescription pain medications, you are doing more harm than good to your body. These drugs bring temporary relief but do nothing to halt the progression of tissue damage. In other words, you may feel better initially, but continued use of these drugs will worsen your condition, whether it be arthritis, fibromyalgia, pain due to a musculoskeletal injury, or another autoimmune condition.

### The Dangers of Tradition Pain Management Drugs

Non-steroidal anti-inflammatory drugs (NSAIDs), such as aspirin, ibuprofen, as well as prescription pain relievers such as opioids, reduce or eliminate pain by halting inflammation and swelling. This inflammation and swelling otherwise puts pressure on nearby nerves which in turn, creates the sensation of pain. One hundred million Americans suffer from chronic pain, which equates to approximately half of the adult population. These are frightening

statistics, but what's even more frightening is that the majority of these same people are suffering from other chronic and autoimmune conditions.

Research shows that these over-the-counter (OTC) pain medications cause gut permeability<sup>1,2,3</sup> also called leaky gut syndrome (LGS), which is the leading cause of chronic conditions such as arthritis, cancer, diabetes, heart disease, asthma, and allergies. Thus, the very medicine that you are taking to control your pain may be increasing your

at the expense of increasing the progression of arthritis, fibromyalgia, back pain, and other more serious conditions? We know that prescription pain medications, not just the OTC variety, cause bleeding and holes in the stomach and in the intestinal lining. We know that the risk of death in people taking

pain - as well as creating another condition - for

the rest of your life! This begs the question, Are

you willing to relieve pain and stiffness temporarily

NSAIDs for more than two months is 1 in 1,200.4 We also know that abdominal pain is the most common GI symptom that prompts a visit to the doctor, and in an effort to relieve that pain, physicians prescribe steroids which further exacerbate the destruction of GI tissue.<sup>5</sup> If 100 million people are taking pain medications for extended periods, whether they obtain them through legal or illegal means, that's nearly half of all adults in the United States. By extension, there are at least 100 million people who also have LGS.

> Pain medication is the most utilized drug category in the

United States and also the most abused, followed closely by GI drugs. It's not surprising at all, since the two are interconnected in a vicious cycle of leaky gut syndrome. The first creates the problem, and the second masks and exacerbates the problem. There's no consumer warning label on OTC pain relievers that says "Extended use causes leaky gut syndrome." Medical schools aren't teaching physicians about the GI dangers of longterm use of pain medications, so when doctors write a prescription for pain meds, they're unaware that they're writing a prescription for leaky gut syndrome. Sadly, it's a case of a little knowledge being a lot dangerous.

So, what really needs to be done is to stop this epidemic is for physicians and medical practitioners to offset the effects of the flawed rational and flawed treatment of the past. But that being said, it's absolutely critical for consumers to educate themselves about leaky gut syndrome and to take healing action. First, avoiding long-term use of OTC and prescription pain medication is a 'given'. Second, understanding how bovine colostrum heals LGS, halts inflammation, and relieves pain provides the rationale for a lifetime commitment to supplementation.

## Bovine Colostrum Prevents NSAID-Induced Gut Damage

Research shows that you can prevent the GI damage that NSAIDs cause by taking colostrum supplements at the same time. Many studies show that taking NSAIDs, even for a short period of time, can increase gut permeability considerably.<sup>1,2,3</sup> In a study conducted at the University Division of Gastroenterology, Leicester General Hospital in England, doctors reported that NSAIDs are effective against the symptoms of arthritis but cause concurrent gastrointestinal injury. However, when colostrum is taken along with the NSAIDs, there is not any increase in gut permeability.6 In London, Raymond J. Playford and his team of researchers at the Imperial College of Medicine conducted studies showing that colostrum keeps the GI tract from becoming more permeable, even while taking NSAIDs.7 Researchers attributed this anti-inflammatory response to the numerous growth factors that occur naturally in colostrum.

In a literature review, Gregory Kelly suggests that supplementing with bovine colostrum can have a beneficial effect in improving NSAID-induced gastrointestinal disturbances.<sup>8</sup> Colostrum has a nutrient profile and immunological composition that is rich in immunoglobulins, growth factors, cytokines, nucleosides, oligosaccharides, antimicrobials, and other immune-regulating factors. Colostrum also has activity against a variety of bacteria and viruses which are known to cause a variety of health conditions, including some forms of arthritis.

# The Landmark Ohio Survey Provides Insight into Arthritis Pain

In a study spanning three decades of 8,000 participants, researchers found that daily colostrum brought relief to eight out of ten arthritis sufferers.9 Eighty percent reported significant joint pain relief and seventy percent reported less morning stiffness. Mobility increased as did activity levels. Subsequent studies found similar results.<sup>10</sup> A study comparing colostrum to glucosamine found that after two weeks of supplementation, participants taking colostrum reported less pain, more mobility, and greater ability to participate in daily activities than those taking glucosamine. Robert J. Rowen, MD, who has reported on colostrum's benefits extensively, attributes this to colostrum's ability to function like human growth hormone. The natural hormones and growth factors in colostrum stimulate cell growth, repair and rejuvenation throughout the body.<sup>11</sup>

## STOP the Painful Symptoms - STOP the Progression

Bovine colostrum is nature's ultimate remedy against inflammation and pain. Colostrum's effectiveness lies in the synergistic combination of its powerful anti-inflammatory components, growth factors, immune factors, PRPs and sulfur micronutrients.

Anti-inflammatory Components: Among others, colostrum contains cytokines and infopeptides. Cytokines have been shown to mediate numerous vital biological processes, including inflammation.<sup>12</sup> Infopeptides are a protein derivative that reduce inflammation as well as allow the immune system to reorient and correct its response mechanism

against autoimmune disease processes. Clinical observations of the effects of infopeptides in humans show reductions in inflammation, edema, pain and fever apparently regardless of cause.<sup>13</sup>

Growth factors: Colostrum is the only natural source of IgF-1 (insulin-like growth factor), the growth factor known for its regenerative effects. The numerous growth factors in colostrum, particularly epithelial growth factor, help prevent and repair damage to the gastrointestinal tract and connective tissue. By healing the intestinal barrier with colostrum's growth factors, pathogens that cause disease, including various forms of arthritis, will not be allowed to enter the body. Since up to 80% of all disease-causing microbes enter the body through enlarged openings in the GI tract, it is important to heal the damage that pain relievers, soft drinks, antibiotics, steroids and many other drugs or foods have caused. By healing the connective tissue, you may slow or stop the progression of the disease.

Immune factors: There is some evidence that many diseases may be caused by pathogens entering the body through the intestinal tract. Researchers have shown that intestinal bacteria are involved in the etiology of various forms of arthritis, including rheumatoid arthritis. Various studies show colostrum protects against common diseasepromoting bacteria, such as E. coli, salmonella, shigella and yersinia.<sup>14,15</sup> By providing antibodies to bacteria, viruses, toxins and yeasts, the various immune factors in colostrum prevent these pathogens from attaching to the intestinal mucosa and gaining access to the body.<sup>16</sup> This is important because if pathogens are allowed to enter through the intestines, they can easily be transported and deposited within various joints and other tissues, thereby creating pain and inflammation.

**PRPs (proline-rich polypeptides):** A compound, also known as colostrinin and transfer factor, shown recently to regulate and balance immune response.

PRPs relieve pain and swelling by stopping the prowess of an overly aggressive immune response, such as over-production of T-cells and lymphocytes.<sup>12,17</sup> It stops the overactive immune response that characterizes auto-immune conditions, like rheumatoid arthritis and fibromyalgia. And it has a wonderful side effect: clinical studies show that PRPs reduce symptoms of Alzheimer's disease by up to 50%.<sup>17</sup>

Sulfur micronutrients: Colostrum contains bioavailable sulfur micronutrients such as MSM that have been shown to have a beneficial effect on the inflammation of arthritis. This essential micronutrient performs many vital roles in the body. Sulfur helps the body neutralize toxins and aids in the development of its structural systems, which consist of bones, tendons, cartilage, hair, nails and skin. Sulfur is important in the biochemical makeup of collagen, the primary constituent of cartilage and connective tissue. One of the functions of human connective tissue is to maintain elasticity and flexibility of joints. A deficiency of sulfur may impede growth and stability of healthy connective tissue. MSM in colostrum supplies the body with sulfur in a form that it can use to create new cells and repair damaged tissue.

In addition to the important combination of components that colostrum offers the body, it also stimulates the body to produce glutathione, the most important anti-oxidant for humans. Low intracellular glutathione has been implicated in or associated with hundreds of conditions relating to oxidative stress. Although supplement companies have made glutathione available in pill or powder form, researchers have determined that orally ingested glutathione has no effect on increasing glutathione levels in the body. Colostrum, however, can stimulate the body to produce it naturally.

#### Natural Liposomal Delivery System

Critical to the effectiveness of colostrum is its natural delivery system (a protective phospholipid, or fat, membrane). In mammals, this delivery system is provided by the mother's mammary gland to ensure that colostrum reaches the portion of the gastrointestinal system where it can do the most good. When colostrum is dried and defatted to be made into powdered supplements, the protective lipid membrane is lost. Unless this membrane is restored, the beneficial components in colostrum are simply digested in the stomach.

Liposomal Delivery (LD) technology, a bioidentical delivery system in which the phospholipids are reapplied to protect the colostrum, enhances delivery for all nutrients and makes them up to 1,500% more bioavailable. This enhanced delivery helps to ensure that colostrum's unique bio-active components are absorbed and assimilated by the body to not only relieve pain, but also to slow or stop the progression of tissue damage.

#### Conclusion

What sets bovine colostrum apart from over-thecounter and pharmaceutical drugs used to treat chronic pain conditions is that it does not cause gastrointestinal injury. In fact, colostrum can actually heal the damage that you have previously done to your GI tract from taking long-term pain remedies. Colostrum is the only natural substance that contains a synergistic combination of powerful anti-inflammatory components, growth factors, immune factors, PRPs, and sulfur micronutrients. When taken consistently, and by avoiding the other causes of leaky gut syndrome, colostrum can effectively relieve the painful symptoms of arthritis, fibromyalgia, or musculoskeletal injury. Thus, if you use colostrum as your foundation supplement for overall good health, perhaps you will either avoid arthritis altogether or get your current pain under control - without sacrificing your future health.

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These statements have not been evaluated by the Food and Drug Administration (FDA). These products are not intended to diagnose, treat, cure or prevent any disease.