



## Enzymes and the Pain of Arthritis

Health is mobility. If your joints are like "rusty door hinges," creaking, sticking and not moving, your camping trip will likely not happen because you have arthritis. Other people liken the pain of arthritis to a fire in the joints - burning and constantly inflaming their tissues. Others use words like "gritty," "grinding" and "popping" to describe the condition of their inflamed joints.

Finally, however, thanks to discovery of systemic oral enzymes and other supporting nutrients we may finally be able to do something dramatic so that these limitations will not be so common. Most importantly, you can and will be helped if you understand their importance and how to use them.

### THE FIVE MOST COMMON FORMS OF ARTHRITIS

1. **Osteoarthritis:** This is most common form of arthritis. Osteoarthritis, also known as OA affects 15 to 20 million Americans - usually over age 45.
2. **Rheumatoid arthritis:** Also known as RA, rheumatoid arthritis is an intense auto-immune inflammatory disease of the small joints, most the hands. RA affects about 2.1 million people - usually women.
3. **Gout:** This type of arthritis has been linked to lifestyle and diet - especially to the high quantity alcohol consumer. Gout affects nearly one million people - usually men, and the most common joint affected is the great toe.
4. **Ankylosing spondylitis (spinal arthritis):** This inflammatory arthritis disorder causes extreme immobility of the back, sometimes involving the shoulders and neck. Ankylosing spondylitis affects more than 300,000 people - usually men.
5. **Systemic Lupus Erythematosus:** This disease, also known as lupus is not technically an arthritis. It is an auto-immune mediated form of joint pain often affecting which leads to systemic joint pain - all joints. Lupus affects about 131,000 individuals - usually women.

### FIVE ARTHRITIS MYTHS

1. **You'll get osteoarthritis if you live long enough.**  
This is false in that osteoarthritis is not inevitable. You can alter your diet, exercise, and use nutritional supplements that will dramatically reduce your risk of ever suffering a debilitating joint disease.
2. **There's nothing you can do about arthritis once you have it.**  
This is also false, in that systemic oral enzymes, when used in combination with other bone building nutrients control inflammation and provide a safe, natural and proven method for relieving pain and controlling the pain of arthritis, while at the same time helping to rebuild your joints.
3. **Pain killers relieve pain without side effects.**  
Doctors who treat pain, known as "algologists" will often use strong pain drugs but

generally will be cautious and will carefully observe for various side effects such as nausea, sedations and shortness of breath. With narcotics, the strongest of the pain drugs, there can be problems with dependence and in some cases addiction.

4. **Only people who've had traumatic injuries or who work in professions like professional football get osteoarthritis.**

You and I can get arthritis. I was never a professional athlete, but yet, on cold damp mornings, I can feel a hint of arthritis especially in my knees from those days of youth basketball. Concert pianists, who spend days hunched over the keyboard, may suffer the pain of arthritis, and ballet dancers are also known to have high incidences. The overwhelming key point here is that anyone can get arthritis - including you.

5. **If I have osteoarthritis I will have to give up an active life.**

The reality is that most people with osteoarthritis are fairly active. It's unlikely that they play rugby or ski off black diamond slopes, but overall, a happy joyful life is compatible with arthritis.

### **Salubrity with Systemic Oral Enzymes**

In *The Healing Response and Healing Sports Injuries Naturally*, the miracle of German Enzymes is discussed. The gold medal achieved, the sought after prize was to obtain "salubrity" - the state of enviable health. This was the competitive edge that kept them winning.

The clinical studies behind systemic oral enzymes are indisputable; enzymes work and they work fast. Enzymes are able to quickly quell redness, swelling and heat, and return movement to normal quickly in damaged joints, especially from sports injuries in otherwise healthy individuals.

For arthritis, enzymes work by targeting various tissues and organs in the body and help to restore a healthy balance between anti-inflammatory and pro-inflammatory cytokines - "kinetic messenger cells". When your body is trying very hard to get better, cells must work smart, do the right things, and do them in the right sequence. They must also have sufficient stamina to complete the job. A type of systemic oral enzymes called "proteolytic" have a communicating line with the master cytokine, also known as TGF-beta (transforming growth factor). It is for this reason that systemic oral enzymes, in the European medical community, are known as "biological response modifiers"; they aid healing. They have positive effects on inflammation and they help in pain control, but their overriding and most notable effect is that they enhance the healing response. They do so by their interactions with a number of cell systems.

### **Enzymes Accelerate Elimination of Circulatory Immune Complexes**

Rheumatoid arthritis is an auto-immune inflammatory disease. While progress has been made by the introduction of several new disease modifying - anti-rheumatic - agents, also known as DMARDs, complete remissions or cures are few and far between. Their mechanisms of action are best described as combat drugs; they do not bolster healing, they only quell the revolution for a while. They don't treat the underlying problem that is immune dysfunction that is often caused by multiple underlying factors. These factors may include antigens, bacteria, toxins, or general dysbiosis in the gastrointestinal tract. Systemic oral enzymes address these issues; they stimulate rather than suppress cellular healing responses. In naturopathic and homeopathic philosophy, when you pound down an illness,

as is frequently seen in various forms of arthritis, especially rheumatoid, you drive the illness inward and begin to experience a new set of problems. Many of these problems are subtle at first, but with time result in opportunistic problems which occur when total body balance is lost. The immune system needs to be supported and enzymes, through their interactions with cytokines, do this and do it effectively. Cytokines quench inflammation and revs up immunity, producing a cleansing effect, by cleaving and breaking up circulating immune complexes. These nasty clumps are at the center of the damage that occurs with rheumatoid arthritis because when they are not cleared, they end up lumping themselves into the joint tissues. The sufferer will see them and feel them in their joints.

### **Enzymes and Rheumatoid Arthritis**

Because systemic oral enzyme therapy is relatively new in the United States, we must rely on studies done in Europe, mostly in Germany. Mind you, these are excellent studies, as perfected as the engine in your Mercedes or Volkswagen, should you be inclined to be buying these masterfully built vehicles.

One such study, a small but well controlled one was published in 1985 using a combination formula enzyme formula for the treatment of rheumatoid arthritis. Sixty two percent of the patients improved dramatically.<sup>1</sup>

In 1988, another study addressing the issue of circulating immune complexes was completed. The levels of these immune complexes were followed and their decreasing levels correlated with the levels of pain and function in patients with rheumatoid arthritis. The expected happened. The pain levels went down, the function improved as the circulating immune complexes went down.<sup>2</sup>

The benefits of oral enzymes were assessed in another investigation where the effects of systemic oral enzymes was compared to that of gold therapy. The results were dramatic. Improved patient function was confirmed without the toxicity known to be associated with gold therapy.<sup>3</sup>

The Russians have been involved in enzyme research over the past twenty years, intensively at the Ukrainian Research Center in Kiev. One of their studies evaluated seventy-eight patients with severe, crippling rheumatoid arthritis who were already on standard therapy but were not improving. Half of these patients had chronic fevers and twenty three percent had rheumatic nodules. The majority of this group had notably low hemoglobin levels. When systemic oral enzyme therapy was introduced, every patient showed a decrease in their circulating immune complexes. On average this drop was between twenty-eight and forty-two percent. Rheumatoid factors also decreased in these patients and so did their concurrent drug use with twenty percent reducing their NSAID doses by fifty to seventy-five percent. One patient was able to stop taking methotrexate and experienced a clinical remission of the disease.<sup>4</sup>

In a smaller study, ten children with juvenile rheumatoid arthritis were given five enzyme tablets three times a day, while continuing the non-steroidal agent of their choice. The number of actively inflamed joints was reduced from forty-four to fifteen by the second month. One of these patients had psoriatic lesions in addition to juvenile rheumatoid arthritis, and experienced a significant reduction in the number of dermal lesions.<sup>5</sup>

## **Osteoarthritis**

Systemic Oral Enzymes Therapy has been used for more than 20 years now. In one study, eighty patients on enzymes were pitted against the non steroidal anti-inflammatory agent diclofenac.<sup>6</sup> This was a carefully controlled study designed in such a way to assure that the patients did not know what they were taking. An evaluation of all principle criteria for pain and function were carefully assessed. The result was that the effectiveness of the two groups could not be distinguished. Both therapies rendered equal results - i.e., enzymes v diclofenac were both equally effect. But, the side effects in the NSAID group were much higher, most notably stomach upset, and liver dysfunction.

## **Systemic Oral Enzymes Benefit Persons with Systemic Lupus**

Systemic Lupus Erythematosus also called "lupus" most often strikes young women between the ages of 20 to 40. Lupus is not technically an arthritis in that no "fire in the joints" can be demonstrated, but it is an "arthralgia" which means that the joints hurts; they hurt a lot. Like rheumatoid arthritis, circulating immune complexes are generated. More often than not, there is morning stiffness and severe associated fatigue. The deposition of the immune complexes is more likely in the kidney and liver than in the joints, but the overriding symptoms of the disease is truly systemic - everything hurts.

In one study of eighteen lupus patients presented at the 1996 Russian Symposium, clinical and laboratory immuno-inflammatory activity was found to decrease quickly when oral enzymes were initiated. It was also noted that the use of adjuvant pain medication and non-steroidal anti-inflammatory agents were reduced. Five of these patients were able to reduce their dose of diclofenac or prednisolone.

Because in lupus, immune complexes are frequently deposited in the kidneys and the liver, the early use of agents that are capable of preventing needs to be encouraged in the preliminary evidence supports this action. according to August Heidland, M.D., and co-investigators reporting in a 1997 issue of *Kidney International*.<sup>7</sup>

The Bottom Line is that systemic oral enzymes help sufferers of osteoarthritis, rheumatoid arthritis, gout, ankylosing spondylitis and systemic lupus erythematosus. Enzymes help by slowing the disease process, and reinforcing important immune functions. By their important role as "biological response modifiers", they enhance the healing response by supporting intelligence cell-to-cell communication. The result will be insurance protection for preserving and improving the quality of life.

1) Steffen C., et al Enzymtherapie im vergleich mit immunkomplexbestimmungen bei chronischer polyarthritis. *Zeitschr f. Rheumatologie*, 1985, 44:51

2) Streichhan P., et al Resorption partikularer und makromolekularer Darminhaltsstoffe, *Nature-und Ganzheitsmedizin*, 1988; 1, 90

3) Miehlike, K. Enzymtherapie bei rheumatoider arthritis. *Nature-und Ganzheitsmedizin* 1988; 1:108

- 4) Singer, F., Aktiverte arthrosen knorpelschonend behandeln In; Medizinische Enzym-Forschungsgesellschaft e.V. (ed) Systemische Enzymtherapie, 10th Symposium, Frankfurt, 1990
- 5) Shaiikov, A.V., et al Enzyme combination therapy for juvenile chronic arthritis. Oral Enzyme Therapy, Compendium of Results from Clinical Studies with Oral enzyme Therapy, Second Russian Symposium, St. Petersburg, Russia, 1996, page 28-32,
- 6) Mazurov, V.I et al Systemic enzyme therapy in combination therapy for rheumatic disease. Oral enzyme Therapy. Compendium of Results from Clinical Studies with Oral Enzyme Therapy, Second Russian Symposium, St. Petersburg, Russia , 1996 p15-24
- 7) Heidland A., et al, Renal Fibrosis: Role of Impaired Proteolysis and Potential Therapeutic Strategies. Kidney International, 1997; 52 (suppl 62)