We seek alchemy in all aspects of our lives. We may not discover a universal cure for disease, or a way to indefinitely prolong life, or even a way to turn base metals to gold. But if we apply a more modest definition to the 14th century term, we can see where herbalists and formulators have been seeking alchemy for centuries.

As a naturopathic physician and researcher, I always try to study a problem thoroughly and then go about solving it in a comprehensive fashion. That’s why after developing FYI™ (For Your Inflammation), a formula that I believed would attack the seven major causes of inflammation, I took what amounted to a great risk when I decided to put it through extensive clinical trials.

This formula can play a key role in alleviating inflammation – a condition now recognized as being at the root of many diseases, including arthritis, heart and circulatory problems, autoimmune conditions, and even some types of cancer.

1. Cartilage/Collagen Degeneration

Today many of us are missing out on the gelatinous substances in soup stocks. “A lamentable outcome of our modern meat processing techniques and our fast paced, throwaway lifestyle has been a decline in the use of meat, chicken and fish stocks,” say Sally Fallon and Mary G. Enig, PhD, in their book Nourishing Traditions: The Cookbook that Challenges Politically Correct Nutrition and the Diet Dictocrats (1999).1 “In days gone by, when the butcher sold meat on the bone rather than as individual filets and whole chickens rather than boneless breasts, our thrifty ancestors made use of every part of the animal by preparing stock, broth or bouillon from the bony portions.” Stock, the authors add “is also of great value because it supplies hydrophilic colloids to the diet. Certain food compounds such as those contained in soup stocks are colloidal and tend to be hydrophilic, meaning that they attract liquids.”

When cartilage deteriorates, we are left with bone against bone. Soup stocks made from whole chickens, beef, lamb or fish aid in rebuilding and maintaining cartilage by supplying high-quality gelatin and collagen, which are rich sources of glycosaminoglycans like chondroitin sulfate.

Collagen draws water to joints, which in turn, helps cushion them. The uniqueness of the Type II chicken collagen found in FYI, is that it comes from the chicken’s entire body, not just the sternum, as with many other types of collagen. I went to France to source our collagen specifically because I wanted to work with farmers who raise their chickens naturally, unlike the way we typically do in America. (The chicken flocks that supply our collagen receive no antibiotics or mammalian remnants in their feed.) The collagen in FYI contains high amounts of naturally occurring chondroitin sulfates and other sulfated compounds. Because this is a whole food concentrate, it will not cause adverse immune reactions, and is ideally structured for maximum absorption.

Some sea vegetables provide collagen-building substances as well. For instance laminaria and ulva are rich in collagen-building amino acids such as proline, and provide the body with infection-fighting poly-saccharides. They also possess a variety of components that have the ability to bind with toxins and escort them out of the body.

2. Over-Acidity

Many experts consider over-acidity to be one of the major causes of inflammation. The body can only tolerate a small imbalance in blood pH. If you are over-acidic, it will rob alkaline components from skin, tissue and joints, in an effort to maintain a proper pH balance. Therefore, alkaalinizing the body can be extremely important for alleviating arthritis (especially gout). There was an interesting article in the October 2001 issue of the European Journal of Nutrition.2 It suggested that sodium chloride (NaCl) has been copiously incorporated into the contemporary diet, increasing the net systemic acid load. Researchers noted that their group showed that contemporary net acid-producing diets do indeed characteristically produce a low-grade systemic metabolic acidosis in otherwise healthy adults, and that the degree of acidosis increases with age. In a Russian language journal, researchers studied changes in the joint fluid acid-
Inflammation

base balance in 65 rheumatoid arthritis patients. They found increasing acidity to have a direct correlation with the severity of joint damage and inflammation. It was also determined that whole body potassium is significantly lower in older arthritics. In some cases, the levels in the body can sink to almost half of what is considered normal. This again signifies an overly acidic state.

FYI is designed to aid in the correction of acidosis and ameliorate the conditions that cause it. I would argue that any level of acidosis may be unacceptable, and that a low-grade metabolic alkalosis may be the optimal acid-base state for humans. For this reason, I have added fermented alfalfa grass juice to the formula. Green grasses have the ability to super-oxygenate the body and provide ample alkaline reserves. Alfalfa grass juice is abundant in alkaline-forming minerals that help reduce acidity while oxygenating the system. Otto Warburg, a 1930s Nobel prize winner, demonstrated that cancer cannot develop in an oxygen-rich environment, which is often associated with healthy alkalinity.

Rhododendron caucasicum, another key constituent in FYI, helps to reduce acidic deposits, and is used as an effective treatment for gout throughout the former Soviet Union.

3. Chronic Low-grade Infections
The arthritis/infection link has been well established. Infections are clearly associated with the body's inflammatory levels, and can surface as more serious conditions such as arthritis and even heart disease. Inflammation can be measured with a high-sensitivity C-reactive protein test. But not all infections manifest themselves as definitive disease conditions such as the flu or common cold; instead they can simply cause minor symptoms like skin eruptions or fatigue.

Wild oregano concentrate with its antimicrobial oils carvacrol and thymol, and bayberry bark extracts containing large amounts of myricetin, both aid the body in warding off fungal, bacterial and viral pathogens.

4. Immune System Imbalance
Many inflammatory conditions can be caused or exacerbated by immune system dysfunction. Whether the immune system is overactive, underactive, or even a combination of both, each can contribute to a wide range of inflammatory problems. To combat immune system imbalance, FYI employs a specially processed raw fermented Cat's Claw (Uncaria tomentosa). Cat's claw when harvested for its proper chemotype, has an almost intuitive ability to harmonize the body's immune system, helping to quell an overactive immune response and to stimulate an under-active system. With its high concentration of quiovic acid glycosides, cat's claw can also block several inflammatory pathways. Some researchers believe that when properly processed, cat's claw can reduce the overproduction of Tumor Necrosis Factor alpha (TNF-α), which can be elevated to dangerous levels in certain autoimmune conditions.

Many types of autoimmune arthritis or related inflammatory conditions result from immune system dysfunction such as lupus, rheumatoid arthritis and ankylosing spondylitis. Studies have shown that the combination of phytosterols and sterolins in FYI, aid the body in its effort to balance immune system functions by reducing the overproduction of pro-inflammatory chemicals such as interleukin-6 (IL-6) and cortisol.

5. Overproduction of COX-2 Enzyme and Prostaglandins
We've all heard of celecoxib (Celebrex®), refecocoxib (Vioxx®) and other so-called COX-2-inhibiting drugs - the latest prescription drugs for treating arthritis. COX-2 medications were promoted as safer alternatives to the typical non-steroidal anti-inflammatory drugs (NSAIDs), which are harsh on the stomach. However, as investigative reports have since revealed, the initial enthusiasm for these drugs by medical doctors may have been unwarranted. Synthetic COX-2 inhibitors are not without their side effects.

Natural COX-2 inhibitors are now proven to be safe and effective. Oregano contains rosmarinic acid, which along with its infection-fighting properties, has been reported in laboratory studies to have significant COX-2 inhibiting properties comparable to conventional medicines such as ibuprofen, naproxen, and aspirin.

Ginger and turmeric are also potent, natural COX-2 inhibitors. "In experimental studies, ginger was shown to inhibit both the cyclooxygenase and lipoxygenase pathways as well as the production of prostaglandins, thromboxane, and leukotrienes, just as the NSAIDs do," says James B. LaValle, RPh, NMD, CCN, author of The COX-2 Connection (Healing Arts Press, 2001). "Yet its clear advantage is that no significant side effects have been reported, unlike NSAIDs, which can have quite serious side effects associated with their use."

Turmeric, closely related to ginger, is traditionally used to treat systemic inflammation. Researchers at New York Presbyterian Hospital and the Weill Medical College at Cornell University have shown that one of the major phytochemicals in turmeric (curcumin), has potent COX-2-inhibitory factors, notes LaValle. Additional research at Vanderbilt University and the University of Leicester in England has further confirmed the powerful COX-2-inhibiting capabilities of this ancient herb. All of these natural COX-2 inhibitors have been included in FYI.
6. Enzyme Deficiencies

Systemic enzymes can help minimize circulating antibodies and have been shown to reduce all types of inflammatory conditions. That’s why FYI includes a wide array of inflammation-fighting enzymes, including proteases for protein digestion, lipase for fat digestion, amylase for carbohydrate digestion and cellulase for the digestion of plant fiber. Appreciable amounts of the enzymes bromelain and papain are present as well. Bromelain, an enzyme found in the stalk of pineapples, is effective in reducing inflammation in living tissue. Papain, the enzyme found in un-ripened papaya, aids in the reduction of inflammation sites where dead or diseased tissue has been lodged.

7. Oxidative Stress

Someday the use of antioxidants will be recognized as one of the most significant contributions to modern health practices. Antioxidants play an important role in fighting off the damaging effects of inflammation by quenching the devastating micro-cellular effects of free radicals that exert cumulative oxidative damage on joint tissues.

To fight free radical damage, FYI contains a potent extract of the well known Russian botanical Rhododendron caucasicum. High in polyphenolic antioxidants (40% polyphenols), Rhododendron caucasicum exerts a profound antioxidant effect on the body, which many experts believe is several times more bio-available than pine bark or grape seed extract.

Published Studies on FYI

The following scientific studies on FYI have been published in a special edition of the peer-reviewed Progress in Nutrition. Following are summaries of those studies:

- A study conducted at Bio-Inova Life Sciences Laboratories evaluated the effectiveness of FYI on the immune system. In this study, researchers looked at natural killer cells and macrophage function. FYI was found to boost the immune system by enhancing the function of natural killer cells and macrophages. FYI was not shown to cause an abnormal lymphocyte reaction which indicates the FYI may be safely used in conditions of overactive immunity.
- In another study at Bio-Inova Life Sciences Laboratories, FYI was shown to inhibit proliferation of abnormal cells in breast, liver and lung cancer.
- In the in vivo studies done by Michael Whitehouse, PhD, at the University of Queensland, Australia, FYI was found to reduce inflammation with consistent use. These effects were comparable to common NSAIDs, but without any gastrointestinal damage.

Taken as a whole, it should not be surprising that in a recent 90-day, 70-patient, blind, placebo-controlled clinical study conducted by J. G. Huertas, MD, and Peter R. Rothschild, MD, PhD testing the effectiveness of FYI as a treatment for Rheumatoid Arthritis, 30% of the subjects using FYI had achieved clinical remission at the conclusion of the study, 52% had a 60% or greater improvement in their condition, and the remaining 18% showed a greater than 40% improvement as measured by standard mobility evaluation tools and the commonly used RA latex test. All patients experienced significant reductions in their C-reactive protein levels, indicating reduced inflammatory processes.

The placebo effects observed in the control group were negligible. Twenty patients of the original 35 in the control group dropped out of the study because of their disappointment from total lack of benefit. It was also shown that individuals with abnormal immune markers showed a trend towards a modulation of the immune system after consuming FYI, as evidenced by a decrease in white blood cells, an increase in neutrophils, normalization of lymphocytes and a decrease in elevated monocytes, eosinophils and basophils.

<table>
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<th>Marker</th>
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<th>After FYI</th>
<th>Change</th>
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<td>7.8</td>
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<td>2.3</td>
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Patients in the study had the following additional improvements:

- Ten patients (seven females, three males), having suffered from chronic insomnia, reported total remission of this condition by the end of the study.
- Seven patients (four females, three males), having suffered from chronic, recurrent migraine headaches, reported total remission from their headaches by the end of the respective studies.
Inflammation

- Twelve patients (four females, eight males), having suffered from chronic digestive problems, reported significant improvement in their digestive distress by the end of the study.
- Fifteen patients (ten females, five males), having suffered from chronic constipation, reported total remission of their condition by the end of the second month of their treatment.
- Three male patients, suffering from hearing deficit for several years, reported significant improvement in their hearing by the end of the study.
- Four patients (three females, one male), having suffered from various grades of chronic skin rash, reported total remission of these symptoms.

Although we tend to think of inflammation almost solely in terms of arthritis, FYI is excellent for enhancing the body’s healing response in cases of trauma and sports injuries, heart and circulatory disease, and virtually all other inflammatory conditions.

Recommended Usage

Based on early clinical research, the recommended dosage of FYI for acute inflammation is 3 caplets per day. In cases of chronic inflammation, take 12 caplets per day for 30 days followed by 6 caplets per day for 60 days. I’ve used up to 30 caplets daily for patients with severe sports injuries. Some feel relief quickly, within a few hours. Stubborn cases may take 90 days or more before there is a noticeable improvement.

Increase your dosage as needed until you feel relief. FYI may be used safely with other anti-inflammatory formulas.

References

4. James B. LaValle, RPh, NMD, CCN; The COX-2 Connection; Healing Arts Press, 2001
5. Peter R. Rothschild, MD, ThD, NMD, PhD & Huertas, J. G., MD; Ambulatory naturopathic treatment of rheumatoid arthritis with FYI caplets; Progress in Nutrition, 2002

Manuscript Requirements

- All submissions must be typewritten, double-spaced with pages numbered and mailed flat. Word processing file on 3½” computer disk preferred with hard copy of manuscript and original photos, charts and/or graphs. Disks will not be returned unless specified.
- We do not notify in advance of publication – we do, however, send a copy to you upon publication to the correspondence address accompanying your letter, article or review.
- References should be numbered within the text and listed at the end of the article.
- References are written as follows:
  1. All patient reports regarding treatment and diagnosis submitted underwent a truthful peer review process.
  2. A signed letter from another health professional in your field approving the report for publication.
  3. A signed letter on letterhead from an academic researcher, editor or author approving the article for publication. This researcher must be fully independent of the author.
  4. All three requirements must be submitted with the original article for consideration by the Townsend Letter for Doctors and Patients. The TLDP will not review articles without peer review completion.

Peer Review for Patient Reports

1. All patient reports regarding treatment and diagnosis must state that the letter is a “patient report.” It will be listed as such when the report is published.
2. The author must attest that a peer review process has been completed.
3. The patient report must be reviewed by the doctor treating the patient and the doctor must sign a letter approving the report for publication.
4. The patient report must be reviewed by one other unrelated health professional. A letter is required approving the report for publication.
5. The patient report must be accompanied by the above letters of approval. No patient letters will be considered without undergoing this peer review.

Truth in Referencing Requirement

1. Do all references listed directly support the statements and assertions of your article?
2. Is the conclusion or summary statement of any reference in opposition to your premise?
3. If any reference summary does not support the article’s premise, the reference opposing statement must be presented in the text of the paper with full description of the opposing viewpoint. Otherwise the reference may not be cited whatsoever.
4. All author statements must be referenced. Otherwise the statement that this is the author’s opinion must be made.

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