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Treating the Troops

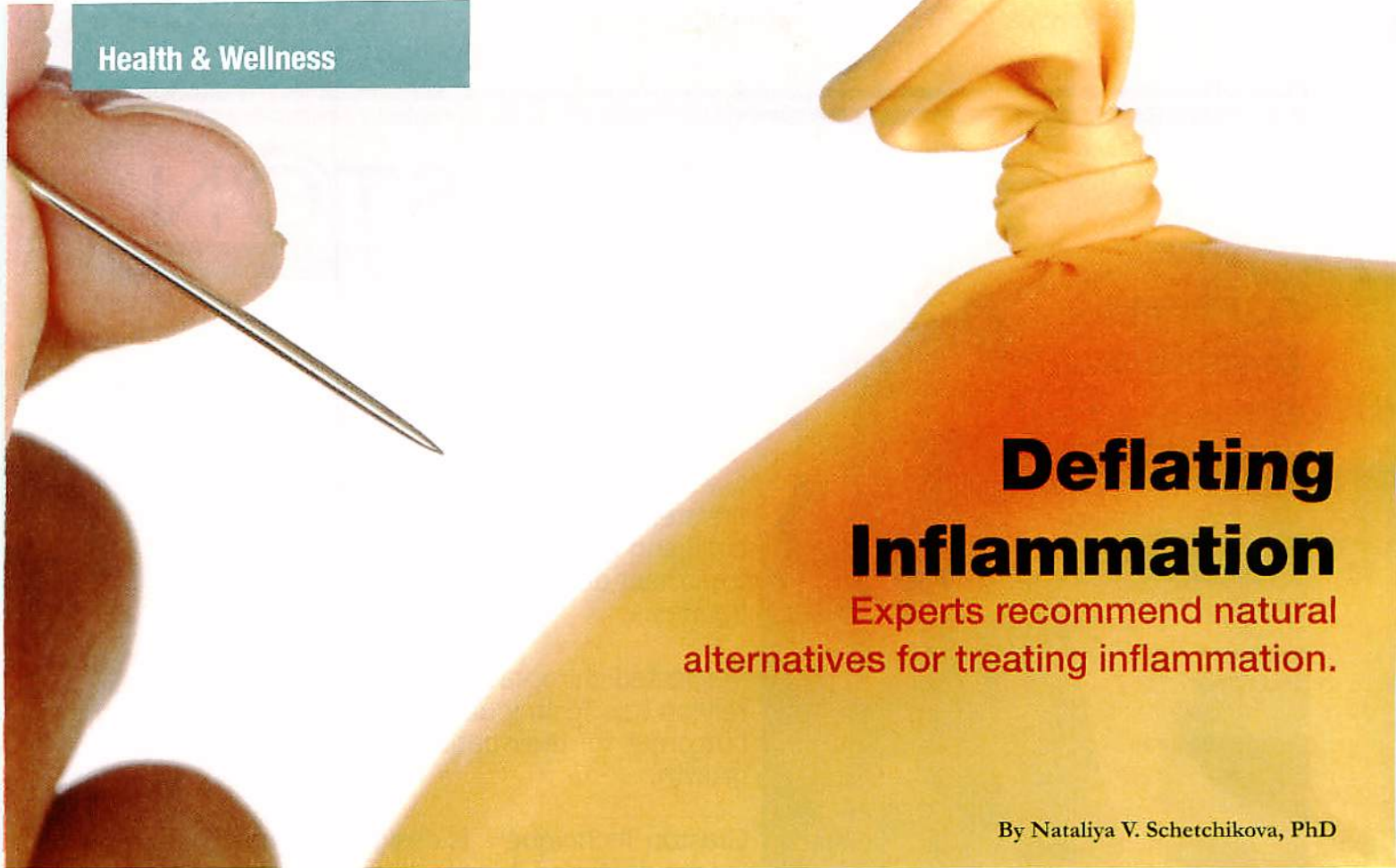
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Deflating Inflammation

Experts recommend natural alternatives for treating inflammation.

By Nataliya V. Schetchikova, PhD

When patients with chronic pain and other conditions report to chiropractic offices, David Seaman, DC, MS, DABCN, of Port Orange, Fla., believes that, as part of lifestyle counseling, it's beneficial to explain that they eat "chronic pain meals for breakfast, lunch and dinner for years on end."

"We eat linoleic acid that is concentrated in various oils, grains and packaged foods, and then linoleic acid is converted within our bodies to arachidonic acid—a precursor of prostaglandin E2 (PGE2), the primary eicosanoid associated with pain. We also ingest arachidonic acid directly in domestic animal products, particularly in fatty meat, chicken skin and farm-raised fish such as tilapia and catfish. Sooner or later, the outcome will be a chronic inflammatory disease," he explains.

Research has connected inflammation with a myriad of health problems, including cardiovascular diseases, diabetes, osteoarthritis, cancer and Alzheimer's, but converting these research findings into practice remains a problem¹, says Dr. Seaman, an associate professor at Palmer College of Chiropractic Florida, where he teaches clinical nutrition, and author of a Web site dedicated to reducing inflammation, www.deflame.com.

To deal with inflammation and pain, more than 14 million patients turn to non-steroidal anti-inflammatory drugs (NSAIDs), which suppress the symptoms of headaches, musculoskeletal pains, arthritis, sports injuries, menstrual cramps and allergies—and are responsible for more than 100,000 hospitalizations and 16,500 deaths a year in the United States alone. While NSAIDs can provide acute pain relief and reduce swelling at the injury site, long-term use has been shown to cause serious health problems.

"Traditional NSAIDs inhibit enzymes called cyclooxygenase-1 (COX1) and cyclooxygenase-2 (COX2). The enzymes serve numerous beneficial homeostatic functions, such as converting dietary fatty acids into eicosanoids. Acute inhibition of the enzymes [by NSAIDs] poses no danger; however, long-term use of NSAIDs does, and gastrointestinal ulceration is the most well-known example," says Dr. Seaman. "Long-term use of COX2 inhibitors

[prescribed to prevent heart disease and stroke] can lead to serious side-effects, including heart attack and stroke in susceptible individuals," he adds.

Since NSAIDs do not provide a viable solution to the problem of inflammation—and, instead of protecting from chronic diseases, may actually promote them, "the only real alternative is adopting a lifestyle change that does not create the biochemical need for NSAIDs," says Dr. Seaman.

Essential Fatty Acids

One such change may be restoring the proper balance of essential fatty acids in the diet. "Many Americans tend to have chronically inflamed bodies and brains because they are eating too many omega-6 and too few omega-3 fatty acids," says Nancy Emerson Lombardo, PhD, president of HealthCare Insights, LLC (www.healthcareinsights.net), and adjunct research assistant professor of neurology

at Boston University School of Medicine, who has been involved in several research projects on the effect of nutrition on Alzheimer's disease. "Experts believe that for optimum health we need a 1:1 to 4:1 range of ratio of omega-6 to omega-3 fatty acids, but we are eating a ratio of 20:1 to 30:1." In excess, omega-6 fatty acids are pro-inflammatory, she explains.

Consumption of anti-inflammatory omega-3 fatty acids may decrease chronic pain and inflammation and reduce the need for prescription NSAIDs, agrees Joseph Maroon, MD, a board-certified neurosurgeon at the University of Pittsburgh Medical Center and a professor of neurosurgery at the University of Pittsburgh School of Medicine, whose research has focused on prevention and treatment of injuries and diseases of the brain and spine. One of his studies² showed that 2 g of EPA/DHA daily reduced joint pain and the need for NSAIDs in 59 percent of patients with neck and low-back pain. "The omega-3 fatty acids counter to some extent the poisons we put into the body in the form of trans fatty acids, nitrates, and various chemicals and pesticides from non-organic foods," he says.

While omega-3 acids are contained in green leafy vegetables, flax seed, flax seed oil and canola oil, many patients, "especially older adults, need direct marine sources of EPA and DHA, namely fish, seafood, seaweed and fish oils," says Dr. Emerson Lombardo. "DHA seems

communicate with their physicians before introducing or increasing consumption of fish oils, as well as green tea, garlic, ginkgo biloba or vitamin E.

Fighting Chronic Disease

In addition to increasing intake of anti-inflammatory compounds, returning to a healthy diet and nutritional support can help reduce inflammation and the risk of chronic diseases. "From a dietary perspective, we need to eat more low-calorie, nutrient-dense foods, such as lean meat, fish, skinless chicken, vegetables and fruit. A modest amount of nut intake is also appropriate. From the perspective of supplementation, the available evidence favors a multivitamin, magnesium, fish oil, vitamin D and probiotics," says Dr. Seaman.

Some hypothesize that proper nutritional support, which includes anti-inflammatory components, may be effective in treating Alzheimer's disease. In Dr. Emerson Lombardo's double-blind randomized controlled clinical trial, funded by the Alzheimer's Association and scheduled to start in the spring through Boston University School of Medicine, a combination of anti-inflammatory supplement Zyflamend®, a fruit and vegetable powder BerryGreen®, and two fish oil products will be administered to persons with early-stage Alzheimer's disease to determine if they can slow progression of the disease when com-



A Word About NSAIDs

Non-steroidal anti-inflammatory drugs include the following:

- Products containing ibuprofen, naproxen, and ketoprofen, also known as Advil®, Motrin®, Aleve® and Orudis®
 - Aspirin—Bayer® and Excedrin®
 - Common cold and flu medications, such as Advil Cold and Sinus®, Dimetapp Sinus®, Motrin IB Sinus® and Aleve Cold and Sinus®
 - Selective COX-2 inhibitors, such as celecoxib (Celebrex®), valdecoxib (Bextra®) and rofecoxib (Vioxx®)
- Acetaminophen (Tylenol®) is not an NSAID.

Data shows that in about 80 percent of cases, a serious stomach problem or gastrointestinal bleeding caused by NSAIDs comes with no warning symptoms. A November 2005 study in the *Journal of Rheumatology* also shows that the majority of patients taking NSAIDs are not aware of the side effects.

Factors that increase the risk of gastrointestinal problems due to NSAIDs include:

- a history of ulcers
- regular alcohol consumption
- taking several different medications that contain NSAIDs
- using a higher-than-recommended dosage
- concurrent use of steroid medications (such as prednisone) or blood thinners (such as warfarin or Coumadin®)
- use by people over the age of 60.

For more information: www.acg.gi.org/patients/women/asprin.asp.

"Research has connected inflammation with a myriad of health problems, including cardiovascular diseases, diabetes, osteoarthritis, cancer and Alzheimer's, but converting these research findings into practice remains a problem."

David Seaman, DC, MS, DABCN
Associate Professor, Palmer College of Chiropractic Florida

particularly important for cognitive health and the health of the retina of the eye, while EPA may be more important for heart health and for emotional health." She cautions, however, that omega-3 fatty acids, particularly EPA, have blood-thinning properties, so those taking Warfarin or other potent blood thinners need to

pared to placebos. Zyflamend, a supplement based on anti-inflammatory spices and herbal compounds, which is mainly used for painful joints, has been shown effective in preliminary trials at Columbia School of Medicine to slow down prostate cancer, says Dr. Emerson Lombardo. "It should help the brain, as well."



A small study showed that a lifestyle modification protocol may be effective in reducing the pain associated with fibromyalgia,³ says Jacob Teitelbaum, MD, medical director of the Fibromyalgia and Fatigue Centers (www.fibroandfatigue.com) and author of *Pain Free 1-2-3: A Proven Program for Eliminating Chronic Pain Now*. “Our placebo-controlled study showed that 91 percent of fibromyalgia patients improve, with the majority becoming pain-free, using our SHINE Protocol: Sleep, Hormones, Infections, Nutrition and Exercise,” he says. As part of the protocol, Dr. Teitelbaum advocates eight hours of daily sleep for tissue repair; thyroid and adrenal hormonal support; elimination of infections, including yeast overgrowth; nutritional support through proper diet and supplementation; and exercise. For those whose pain may prevent them from exercising, he recommends starting a walking program in a warm-water pool.

Natural Alternatives to NSAIDs

While lifestyle changes can help prevent and manage chronic diseases, NSAIDs have their place for acute pain and inflammation relief, says Dr. Seaman, adding that “on the rare occasion, I take over-the-counter NSAIDs for acute pain

relief because I do not think there is a natural product that compares.”

For managing chronic pain, however, some natural anti-inflammatory products may be helpful, according to some clinicians and researchers. In addition to omega-3 fatty acids, Dr. Maroon advocates the use of boswellia and turmeric and “tapering off drugs after the blood levels of the products are sufficient.”

Hundred of herbs possess anti-inflammatory properties, says Dale Bellisfield, RN, AHG, clinical herbalist in private practice in New Jersey (www.herbaldale.com). For example, “turmeric is protective against Alzheimer’s, liver problems and cancers,” she says, adding that it’s a good idea to regularly include turmeric in the diet as curried spices or to take a standardized curcumin extract (which can be irritating to the stomach in large doses, she notes).

Willow bark has been shown “as effective to twice as effective as Motrin, but without the toxicity,” says Dr. Teitelbaum. “Boswellia hits several different enzyme systems, as opposed to NSAIDs, and is very effective for both arthritis and muscle pain,” he adds.

Just as any other healthcare intervention, however, herbs should be selected for patients individually, based on a thor-

ough history, assessment and lab work, says Bellisfield. Adding anti-inflammatory compounds is warranted in the presence of high levels of c-reactive protein, high sedimentation rate, pain, inflammation, and in patients who have conditions cofactored by inflammation, such as heart disease, diabetes or cancer, she suggests. “A good herbalist creates patient-specific protocols, selecting the fewest herbs to cover the most conditions for that patient,” she says—adding, as an example, that boswellia may help someone with musculoskeletal pain and asthma. Ginger, in addition to reducing inflammation, is good for those with poor circulation or nausea.

Ultimately, reducing inflammation and the risk of chronic diseases boils down to maintaining healthy lifestyles, which include proper nutrition. “Research has demonstrated that many factors can augment the inflammatory state, including insufficient sleep, mental stressors and too much or too little exercise. In other words, the healthy lifestyle pursuits that many chiropractors recommend are known to be anti-inflammatory,” concludes Dr. Seaman. ■

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3. Teitelbaum JE, Bird B, Greenfield RM, Weiss A, Muenz L, Gould L. Effective treatment of chronic fatigue syndrome and fibromyalgia—A randomized, double-blind, placebo-controlled, intent to treat study. *J Chronic Fatigue Syndrome* 2001;8(2):3-28.

Green Tip of the Month

Recycling Made Easy

Do you have something you would like to recycle or reuse, but not sure where to take it?

- Visit www.earth911.com and type in your zip code for recycling services of any product in your area.
- If you have something that can be reused, consider posting it on www.freecycle.org or www.craigslist.org under “free.” Remember: One man’s trash is another man’s treasure!

