



What Condition Is Found In All Diseases? Combatting Inflammation with Curcumin, Fatty Acids & A Healthy Diet

Are you in pain? Have you been diagnosed with a chronic condition or disease? Would you prefer to avoid the potential side effects of prescription and over-the-counter (OTC) anti-inflammatory drugs? Learning about inflammation and how to address it naturally can be one of the best ways for you to become proactive in your healing process.

What Is Inflammation?

Inflammation is an acute or chronic response to damage caused to the body. Many factors contribute to the complex course of inflammatory reactions and the pain associated with it results from the overworking of the body's normal defense system. The release of the hormone-like prostaglandin PGE2 triggers inflammatory response. Certain cytokines, proteins secreted by immune cells that increase with aging, contribute to it, and the enzymes cyclooxygenase (COX-2) and lipooxygenase (5-LOX) sustain it. Especially high levels of the inflammatory indicators C-reactive protein (CRP), IL-6, and other cytokines indicate significantly greater risks of contracting or dying from specific diseases. In fact, chronic inflammation is the key element common in all diseases, including cancer, heart disease (heart attack, congestive heart failure, stroke), diabetes, osteo/rheumatoid arthritis, asthma, Alzheimer's, Lupus, Multiple Sclerosis, dermatitis (psoriasis, eczema, skin cancer), bowel disorders, and obesity.

The Conventional Approach

While a wide variety of prescription and OTC drugs address the symptoms caused by inflammation, none actually prevent it and they all have potential side effects, including: (1) Corticosteroids (Cortisone, Prednisone): can cause

long-term pain (The Lancet, 10/22/10), glaucoma, cataracts, hypertension, weight gain, increased risk of infections, and high blood sugar; and (2) NSAIDs (ibuprofen, naproxen, aspirin, Celebrex): kidney and liver failure, stomach ulcers, edema, prolonged bleeding, and serious cardiovascular risk (Celebrex).

Anti-inflammatory drugs may be indicated in certain cases. Ultimately, when deciding whether to use one, each patient should review his condition with his medical practitioner and weigh the risks against the benefits.

Key Alternative Approaches:

If you prefer to avoid anti-inflammatory medications, curcumin, essential fatty acids, and an anti-inflammatory diet can help ease your pain and even protect you from age-related and other diseases. Keep in mind, however, that not all nutritional supplements are equal. Quality and dosages impact results.

Curcumin

Curcumin is a polyphenol in the spice turmeric, a member of the ginger family, which has been used in traditional Indian medicine for more than 3000 years. Studies have shown that this potent antioxidant combats inflammation, bacteria (including *H. pylori*), fungus/yeast, and viruses. It targets a wide range of diseases, including arthritis, diabetes, cardiovascular disease, Alzheimer's disease, inflammatory bowel disease, and cancer, including tumors, and breast and cervical cancers. With respect to curcumin and cancer data she reviewed, Razelle Kurzrock, M.D., professor at the well-respected University of Texas MD Anderson Cancer Center's Department of Investigational Cancer Therapeutics, stated, "It was clear that this agent was just as potent at killing tumor cells in the

lab as any experimental drug I'd seen from pharmaceutical companies."

Studies indicate that curcumin safely combats inflammation principally by inhibiting the cytokine NF-kappaB, which acts like a switch to turn on the genes that produce the body's inflammatory responses. Gene expression of NF-kappaB increases in aging adults, thus causing numerous degenerative diseases and those related to compromised immunity. Curcumin also reduces inflammation by inhibiting other cytokines and COX-2 and 5-LOX activity.

Human clinical studies have shown that a patent-pending curcumin formulation (BCM-95) greatly enhances the bioavailability of this spice, which is generally difficult to absorb. This form not only delivers up to 7 times better absorption than ordinary 95% standardized curcumin, but also remains in the bloodstream for 8-12 hours, almost twice as long as conventional supplements. Those with sensitive digestive systems should note that high doses of curcumin can cause diarrhea and mild nausea.

Fish Oil (EPA/DHA)

Fish oil (ideally enteric coated, molecularly distilled or pharmaceutical grade, and cholesterol-free) is a critical part of every child's and adult's nutritional supplement regimen. The Journal of the American College of Nutrition (2002) has reported that EPA and DHA, two of the key omega-3 essential fatty acids (EFAs) in the oil of fatty fish (e.g., anchovies, sardines, salmon, herring, white albacore tuna, haddock, and mackerel), are "essential for normal growth and development and may play an important role in the prevention and treatment of coronary artery disease, hypertension, arthritis, other inflammatory and autoimmune disorders, and cancer."

(Vegetarian flax oil is an inferior source of EFAs since it contains only ALA, which must convert to EPA in the body.) More specifically, reliable and consistent scientific data supports the use of fish oil to address Crohn's disease, rheumatoid arthritis, elevated triglycerides, and excessive blood clotting. Some studies also support its use to treat Raynaud's disease, psoriasis, eczema, and diabetes.

The imbalance of omega-3 and omega-6 fatty acids causes inflammation, which is exacerbated by psychological stress. The correct doses of EPA and DHA help balance the omega-6 fatty acids that are found mainly in vegetable oils and are the predominant polyunsaturated fats in Western diets. Omega-3 fatty acids produce anti-inflammatory, immune-supporting, hormone-like prostaglandins (PGE1 and PGE3). In this writer's clinical practice, 1,000 mg/day of EPA has proven to be the effective baseline therapeutic dose. Most researchers have administered at least 3,000 mg/day of the total of EPA plus DHA in studying the impact of fish oil on humans with various health conditions.

Studies show that DHA is essential for infants' proper brain function (especially if premature) and visual and nervous system development. The effects of DHA on the nervous system are also thought to extend beyond infancy. In one double-blind trial, young adults given 1.5–1.8 grams/day of DHA displayed less aggression in response to mental stress compared to the control group.

Evening Primrose oil/Borage oil. Black Currant Seed Oil (GLA)

GLA is an omega-6 fatty acid that converts to the prostaglandin PGE1. For this reason, some authorities maintain that this EFA, found in evening primrose, borage, and black currant seed oils, is a potent anti-inflammatory. Those with diabetes, eczema, PMS, scleroderma, and Sjogren's syndrome have benefited from its use in preliminary research. There also is evidence that GLA may facilitate alcohol withdrawal in alcoholics.

The optimal intake of GLA is unknown, but researchers often use 270-540 mg/day in studying its efficacy as a treatment for numerous chronic inflammatory conditions.

Anti-Inflammatory Diet

While anti-inflammatory nutritional supplements are useful in the treatment of disease, a diet consisting of pro-inflammatory foods hinders their full impact. It is thus critical to wellness to maintain a healthy diet.

A "healthy diet" in this context: (1) excludes saturated, hydrogenated, or trans fats (beef, pork, lamb, or duck); (2) minimizes simple carbohydrates (foods with a high glycemic index that quickly convert to sugar in the body: sweets; pasta; bread; potatoes; rice); and (3) includes fish and as many raw foods as possible, such as low-sugar fruits (berries and apples), nuts and seeds (especially almonds, walnuts and pumpkin seeds), legumes (especially black and navy beans), and a large variety of dark green and cruciferous vegetables (broccoli, brussel sprouts, cabbage, cauliflower).

Conclusion

While anti-inflammatory supplements can be used safely in a preventive regimen, it is best to seek the advice of an expert in alternative medicine when attempting to change the course of disease. Since nutritional supplements can interact with prescription drugs, advise your doctor of your desire to incorporate alternative medicine into your health program and do your own research before mixing natural remedies with any medications prescribed.

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