



When They Say There's No Hope: Nutritional Approaches to Autoimmune Diseases

Autoimmune diseases tend to be viewed as separate entities. A broader perspective, however, may reveal that shared mechanisms are the cause of disease, rather than just its byproduct. If this perspective were applied, patients would benefit from improved therapies and early intervention, before the development of irreversible tissue damage. ~ "Autoimmune Diseases," Life Extension®, www.lef.org

Rheumatoid arthritis (RA), celiac, IBD/Crohn's, psoriasis, chronic fatigue syndrome (CFS), type 1 diabetes, multiple sclerosis (MS), Hashimoto's thyroiditis, lupus, scleroderma, Sjögren's syndrome . . . what do these conditions have in common? They are all autoimmune diseases (ADs). Conservatives maintain that there is no known means of preventing or reversing such disorders. According to alternative medicine experts, however, a solid, long-term nutritional foundation, coupled with lifestyle modification, can alleviate or even reverse autoimmune dysfunction and help combat fully developed autoimmune diseases.

Definition, Symptoms & Risk Factors of ADs

A healthy immune system can differentiate between "self" and "non-self" tissues. The immune system thus normally produces antibodies to protect the body from potentially harmful foreign substances (antigens) like environmental toxins, blood or tissue from other organisms, and microorganisms. In a process called phagocytosis, specialized white blood cells called lymphocytes recognize, engulf, and destroy specific antigens. Although the body has some defective lymphocytes that are sensitized against "self" tissue cells, other lymphocytes suppress them.

In the presence of an AD, the body cannot destroy the defective lymphocytes, which causes the destruction/decreased function or enlargement of one or more organs, tissues, or entire systems. The location and extent of the resulting inflammation dictates the type and severity of the AD. While the more than 80 autoimmune disorders all have unique symptoms, nonspecific symptoms often include fatigue, dizziness, general feeling of discomfort, and fever. Although diagnosing a specific AD can be difficult or sometimes impossible, certain reliable lab tests can turn up helpful abnormalities. These include: tests for the inflammation biomarker C-reactive protein (CRP) (optimal ranges: men < 0.55 mg/L, women < 1.5 mg/L), which are often followed with disease-specific diagnostic tests; the fluorescent antinuclear antibody test (FANA); and the erythrocyte sedimentation rate (ESR) test (non-diagnostic; detects/monitors tissue death and ADs that present vague/minimal physical symptoms).

There are several risk factors for ADs, only some of which can be controlled. Certain individuals have a genetic predisposition to ADs, which are usually associated with more than one gene. Often due to hormonal imbalances (including those attendant to pregnancy), women generally are more likely to develop ADs than men (an estimated 75% of all AD patients).

Aging is recognized as a key factor that often presents long-term exposure to various environmental toxins (e.g., heavy metals, auto exhaust, pesticides, cigarette smoke) that cause cell and protein damage. Viral or bacterial invaders trigger or worsen many ADs. Leaky gut syndrome, chronic stress, and lifestyle choices also play a significant role.

Limited Conventional Treatments

Traditional physicians most frequently treat ADs with immunosuppressive drugs and/or anti-inflammatories, which can provide some relief but do not address underlying causes. They prescribe immunosuppressants (cyclosporine, azathioprine) and corticosteroids to reduce the immune response against normal body tissue but seek to leave intact the immune response against abnormal tissues and foreign microorganisms. Non-steroidal anti-inflammatories (NSAIDs-Motrin, Advil) relieve pain and reduce inflammation.

According to Joel Fuhrman, M.D., author of "Eat to Live", drugs prescribed for ADs are extremely toxic and have many risky side effects. Dr. Fuhrman further maintains that drugs actually often contribute to the AD patient's "disability and misery" and increase cancer risk. Studies show that the long-term outcome is poor after 20 years of drug reliance. For example, one study in the British Journal of Rheumatology showed the major drugs prescribed for RA, such as azathioprine, cyclophosphamide, chlorambucil, and methotrexate, increase the likelihood that the person will die of cancer. Such evidence clearly supports Dr. Fuhrman's view that the dietary approach to ADs should be tried first.

A 5-Pronged Natural Approach

The 5-pronged natural approach to ADs requires: (1) reducing inflammation and pain; (2) slowing damage to healthy proteins; (3) reducing free-radical/oxidative cell damage; (4) modulating the immune system; and (5) improving the liver. Supporting the GI tract and reducing stress are also important considerations.

Inflammation & Pain / EFAs, Curcumin, Colostrum

Omega-3 and omega-6 essential fatty acids (EFAs) are well-established natural anti-inflammatories. The correct doses of EPA and DHA, ideally from fish oil, produce anti-inflammatory, immune-supporting, hormone-like prostaglandins (PGE1 and PGE3). EPA has been shown to inhibit the cytokine TNF- α in resolving RA. GLA from a professionally recommended, high-quality source (including evening primrose oil), in the right ratio to omega-3 fatty acids, is an omega-6 fatty acid that effectively converts to PGE1. All other omega-6 fatty acid sources (including safflower, peanut, sesame, and almond oils) should be excluded from the AD patient's diet.

Curcumin is a polyphenol in turmeric. Studies indicate that this herb (especially in the highly bioavailable form of patent-pending BCM95) safely combats inflammation and pain principally by inhibiting the cytokine NF-kappaB, a protein complex that acts like a switch to turn on the genes that produce the body's inflammatory responses, especially in ADs. Curcumin also reduces inflammation by inhibiting other cytokines and COX-2 and 5-LOX activity. Recent studies have shown that this nutrient specifically ameliorates MS, RA, psoriasis, and inflammatory bowel disease.

Colostrum, a form of mammalian breast milk produced in late pregnancy, is abundant in antibodies and helps form the "good" bacteria (Bifidus flora) in the GI tract. It contains lactoferrin, which inhibits the production of pro-inflammatory cytokines (TNF-a and IL1-b). Its component colostrinin helps tone down the overactive immune response in ADs. Various growth factors in colostrum can help reverse protein breakdown and stimulate skin cell and tissue repair.

Protecting Healthy Proteins / L-Carnosine

As we age, sugar molecules attach to proteins (which compose 50% of the human body) and convert them to "glycated" proteins that the immune system cannot recognize. Since removal of these damaged proteins declines with age, slowing protein glycation can help reduce autoimmune reactions. L-carnosine inhibits glycation and can suppress autoimmune response.

Reducing Cell Damage /Antioxidants

Antioxidants destroy or neutralize free radicals in order to protect cells from oxidative damage. The most effective antioxidants include vitamins C, E (ideally taken together) and A, astaxanthin (500 times stronger than vitamin E), Coenzyme Q10/ubiquinol, and selenium (as selenomethionine).

Modulating the Immune System Vitamin D & Acetyl L-Carnitine

A study published in Genome Research by an Oxford University genetic researcher presented biologic evidence that Vitamin D regulates genes involved in ADs and cancer. Vitamin D curbs the body's incorrect regulation of NF-kappaB, without immunosuppressive side effects.

The dangerous fats of the standard American diet decrease cellular energy and thus impair the immune function. L-carnitine reduces such impairment by enhancing the transport of fatty acids into the cell's mitochondria for the production of energy. Acetyl-L-carnitine is the most effective form of this amino acid.

Improving the Liver - Milk Thistle

Since the liver plays a major role in purifying and eliminating waste products, drugs, and toxins, supporting its function can improve a variety of disease states. Two of milk thistle's active components, silymarin and silibinin, can be instrumental in promoting a healthy liver and stimulating its regenerative ability.

Diet & Lifestyle Changes

Unhealthy lifestyle choices, including poor diet, inadequate sleep, and smoking greatly impact the management of ADs. A "healthy diet" in this context excludes saturated, hydrogenated, and

trans fats (beef, pork, lamb, or duck), gluten, dairy, caffeine, alcohol, MSG, and sugar/simple carbohydrates. (All sugars impair the antigen-destroying ability of lymphocytes, starting within 30 minutes from consumption and continuing for 5 hours; after 2 hours, sugar intake reduces immune function by 50%. A healthy AD diet should include fish, chicken, turkey, and as many raw foods as possible, such as low-sugar fruits (berries and apples), almonds, walnuts, pumpkin seeds, legumes, and a large variety of dark green and cruciferous vegetables (broccoli, cabbage, cauliflower, Brussels sprouts).

Reducing stress through psychological counseling, yoga, meditation, and proper sleep management may provide relief. Proper chiropractic care, acupuncture, deep pressure massage, light therapy, and avoiding cigarette smoke and extreme temperatures, can also be helpful.

Conclusion

With proper guidance from an experienced alternative health-care practitioner, nutritional supplements, diet, and healthy lifestyle changes can together strengthen the immune system and thus greatly improve the symptoms of ADs. It is critical not only to take the right supplements, but also the right doses for an adequate time period, and to make a lifetime commitment to healthy dietary and lifestyle habits.

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