Restful Insomnia • Medical Intuition • Remedies for Muscle Cramps

WELL BEING JOURNAL™

VOL. 19, NO. 2 *March/April 2010* (U.K. £3.50) U.S./Canada $5.95

HERALDING THE INTEGRATION OF MEDICINE WITH PHYSICAL, MENTAL, EMOTIONAL, SPIRITUAL & SOCIAL ASPECTS OF HEALTH

Nutritional Healing for Cancer

Boosting Metabolism

Mammograms Misunderstood

Self-Reliant Homemakers

The Fat That Can Make You Thin

Is Your Vitamin Toxic?

03>
7 25274 94728 7

Cultured Soy and Cancer

By Vijaya Nair, M.D.

"The chemical diversity, structural complexity, affordability, lack of substantial toxic effects and inherent biological activity of natural products makes them ideal candidates for new therapeutics."[1]

AFTER ALMOST A DECADE of reviewing studies conducted by scientists and academicians at distinguished universities and institutions on three continents, as well as performing my own independent research, I can now say that natural remedies present exciting methods for treating and preventing a range of debilitating diseases.

Much has been written about possible adverse side effects resulting from the excessive ingestion of soy-based products. Some of this information is accurate *if* the author is writing only about uncultured soy. Thus, it is absolutely critical that one understands the difference between scientifically cultured soy and the uncultured soy that is found in most products that contain soy. To compare the two is like comparing apples and oranges. All references in this article are to "cultured" or properly fermented soy that has been scientifically formulated in a way that is evidence based and therapeutic to the human body.

Americans are eating more soybean products than ever before. Soy is showing up everywhere—in fortified juices; imitation meats; dairy-free cheeses, yogurts, and frozen desserts; nutrition bars; cereals; and more. It makes sense. Soy contains 42 percent protein, more than any other plant.[2] It's high in fiber. It's a natural source of good-for-you omega-3 fatty acids. It's a powerhouse of protective antioxidants and phytonutrients (beneficial compounds found in plants). It provides a wealth of vitamins, including vitamins A (as beta-carotene), B1, B2, B12, C, D, E, and K—and several essential minerals, such as selenium and zinc. And mounting evidence shows it may prevent cancer. But there's a catch. In order to reap the nutritional and anti-cancer benefits of soy, it must be cultured. Culturing simply means adding beneficial microbial cultures to a food and letting them transform it into something more nutritious and digestible. Yogurt, sour cream, kefir, and pickles are all examples of cultured foods.

THE IMPORTANCE OF CULTURING

If you take a trip to China, Japan, Indonesia, or Singapore, you'll find that the traditional Asian diet does not include large quantities of super-processed, genetically modified soy products like we have in Western countries today (such as isolated soy protein, a common ingredient found in nutrition bars). It incorporates small amounts of natural, cultured whole soy foods, such as natto (cultured soybeans), miso (a condiment made from cultured soybean paste), shoyu (soy sauce or tamari), and tempeh (a compact cultured soybean cake). In fact, soy wasn't even considered edible until fermentation techniques were developed during the Chou Dynasty.[3]

What the producers of modern, uncultured soy foods won't tell you is that in addition to all the nutrients it contains, soy also contains anti-nutrients. These anti-nutrients prevent

your body from absorbing essential minerals and trace elements. Unfortunately, cooking will not destroy these anti-nutrients. Only the culturing process will. Another benefit of culturing is that it makes it easier for your body to digest and absorb the goodness of soy. When you culture a food, you're basically using beneficial microbial cultures to pre-digest it. Those cultures transform large, hard-to-digest molecules into small, easy-to-digest ones. Not only that, culturing soy also reduces its allergenic qualities. (Soy is one of the most common food allergens.) According to two newly published research papers, tests on samples of human blood showed that when soy is cultured, its potential to produce an allergic reaction is reduced by as much as 99 percent.[4]

The most important benefit of culturing, though, is that the process is thought to convert certain phytonutrients, called genistin and daidzin, into their active anti-cancer forms, genistein and daidzein. Both genistein and daidzein are powerful antioxidant and anti-inflammatory agents that have been shown in voluminous laboratory studies to work in multiple ways against cancer.

WHOLE SOY VS. ISOLATED SOY PHYTONUTRIENTS

If genistein and daidzein are so great, why not just take those specific phytonutrients in pill form? The answer lies in the old adage "The whole is greater than the sum of its parts." Individually, genistein and daidzein are soy's most powerful anti-carcinogenic constituents. However, soybeans contain numerous cancer-fighting compounds that work synergistically. One of the most important principles of traditional herbal medicine is that it is the whole herb (or whole soybean in this case) that's important—not isolated fractions.

> Soybeans contain numerous cancer-fighting compounds that work synergistically

In fact, research has shown that soy, with the anti-carcinogenic isoflavones genistein and daidzein removed, was more effective at shrinking tumors than those phytonutrients by themselves.[5] In other words, genistein and daidzein are only part of the complete picture of whole soy.

MY INTEREST IN CULTURED SOY

I have a special interest in the healing power of cultured soy. I was raised in Singapore, an island nation in Southeast Asia. About 75 percent of the population of Singapore is ethnically Chinese. Therefore, growing up, I had friends whose parents ran traditional Chinese medicine shops that sold cultured soy foods.

Because of my childhood familiarity with these foods, as an adult I was particularly intrigued when I heard about some of the fantastic results people with terminal cancer were experiencing from drinking 8 ounces a day of a liquid cultured soy beverage. However, because of my Western scientific training, I had to see factual evidence to be convinced that this treatment could be of value.

While at Columbia University, I came upon some promising research on cultured soy that showed it was extremely effective as a nutritional supplement for malnutrition, especially in people with terminal cancers and chronic infections. Knowing that this information could revolutionize modern cancer therapy, I decided cultured soy was worthy of investigation.

For six years, I worked with various centers across the globe studying cultured soy, as well as documenting the incredible response of individual cancer patients to the treatment through biopsies, blood tests, and patients' own evaluations of how cultured soy improved their symptoms. The case reports I

Vegetables That Help Your Eyes Last a Lifetime

VITAMIN A allows the rods and cones in the retina to adjust to light changes, produce visual excitation and send images to the visual centers of the brain. This mechanism was elucidated in 1950, and the work won a Nobel Prize. An early sign of vitamin A deficiency is night blindness. Carrots are indeed an excellent source of vitamin A via the beta-carotene precursors, but so are all darkly colored vegetables. Dark green vegetables have lots of beta-carotene, but the green of the chlorophyll overwhelms the yellow and orange tones. The highest food sources of vitamin A, in descending order, are liver, carrots, sweet potato, spinach, apricots, winter squash, cantaloupe, broccoli, crab, and peaches. The RDAs for retinol equivalents are about 5000 IUs (international units). However, I consider a therapeutic dose, for those with compromised vision, to be closer to 50,000 IUs. Women who could become pregnant should not take higher than 150,000 IUs, and if in doubt, use the water-soluble beta-carotene rather than fat-soluble vitamin A, which stays in the tissues longer. Extremely high doses of vitamin A are known to cause fetal damage. This was discovered through the marketing and use of the popular acne drug Retin-A, which is a synthetic version of vitamin A delivered in very high doses.

—Excerpted from "Eye Strain: Helping Your Eyes Last a Lifetime," by Emily Kane, N.D.; full article upcoming in *Well Being Journal*, May/June 2010

Filter Your Tap Water Unless You Know It's Pure

According to a *New York Times* article (December 16, 2009), a 35-year-old U.S. federal law regulating tap water is so out of date that the tap water in the U.S. often can pose health risks, even if it meets all legal standards. The Safe Drinking Water Act regulates 91 contaminants, but today more than 60,000 potentially harmful chemicals are used within the United States. In recent decades, scientists have identified hundreds of chemicals associated with a risk of cancer and other diseases from small concentrations in drinking water. Also recent studies have found that even some of the chemicals that are regulated by the old law pose risks at much smaller concentrations than previously known. However, many of the act's standards for those chemicals have not been updated since the 1980s, and some remain essentially unchanged since the law was passed in 1974.

compiled won recognition from the Office of Cancer Complementary and Alternative Medicine (OCCAM) at the National Cancer Institute. Based on that initial groundwork, there is now a human clinical study being conducted at The University of Texas M.D. Anderson Cancer Center using cultured soy to treat the complications of cancer. As of this printing (2008), that study is not yet completed, but I can share with you the research that first got my attention back in 2001. And I can also share what I observed working one on one with terminal cancer patients who were lucky enough to be introduced to cultured soy.

WHAT CULTURED SOY RESEARCH SAYS

Research shows that cultured soy can be used both as a cancer preventative and as a treatment. On the prevention side, a mountain of evidence shows that populations who eat soy regularly (primarily in the form of cultured soy) have lower rates of breast cancer, lung cancer, prostate cancer, and leukemia.[6] A 2002 study of Asian-American women, for example, found that those who ate four servings of soy a week (including cultured soy foods such as miso and natto) during adolescence and adulthood slashed their risk of developing breast cancer in half.[7] And a 2007 study of Japanese men showed that those with the highest intake of genistein and daidzein through consuming soy (again, including cultured soy foods such as miso and natto) were 58 percent less likely to develop prostate cancer than those with the lowest intake.[8] If you want to prevent cancer, it just makes sense to include a little cultured soy in your diet every day.

What excites me most, however, is cultured soy's effect on people who have already developed cancer. The most impressive study to date was a human clinical trial conducted at six different hospitals and one medical school in China. A total of 318 patients with 23 different kinds of cancer participated in the study, all of whom were receiving either chemotherapy or radiation. About two-thirds of the patients were given a cultured soy beverage daily, while the other third, which acted as the "control" or comparison group, received a standard medical preparation. After six months, over 90 percent of the people in the cultured soy group experienced improvements in their quality of life, such as a noticeable increase in the amount of energy they felt. Their immune function improved. And they experienced fewer side effects from the chemotherapy and radiation treatments, such as decreased appetite, nausea, and vomiting.[9]

These results are very similar to what I have observed first-hand working with cancer patients. Time and time again, I saw that patients undergoing chemotherapy and radiation treatments (which are some-

Surgeon Refuses Chemotherapy

WITH COLON CANCER at age sixty, Kenneth Forror, M.D., was told by his oncologist he would probably only live one more year, provided he started with chemotherapy or radiation immediately. Forror, a surgeon, routinely recommended chemotherapy to other patients. He refused the treatment. At the time of this writing,[1] he is retired and age 83. Forror chose to change his diet to natural, whole foods. He started drinking large amounts of vegetable juices, and began following the Virginia Livingston program of natural healing. He later became the center's medical director. His wife asked him in 1975, when he was diagnosed with cancer and refused chemotherapy, why he did so. "Because," he replied, "I am the patient now, and I don't have to follow that routine. It never did that much good. I had to keep prescribing it to keep my hospital privileges." (Virginia Livingston, M.D., founded The Virginia Livingston Medical Center in San Diego in 1971. She stated there was an 82% success rate with cancer patients.[2])

NOTES

1. *Choices*, Spring 1999
2. See http://www.whale.to/cancer/livingston.html.

what effective against certain cancers but can have devastating side effects) experienced tremendous improvement in the way they felt once they started taking cultured soy. People who were terminally ill, who had been given just a few months to live, were picking up their lives and actually going back to work! In addition to improving people's quality of life, I also observed, cultured soy helped reduce the amount of cancer in terminally ill patients. How? By making sure their bodies didn't become resistant to the conventional therapies.

One of the drawbacks of chemotherapy and radiation is that they increase the activity of the pro-inflammatory protein NF-kB, and make cancer cells less sensitive to cell-killing agents. When that happens, the patient may become "chemo-resistant" or "radiation-resistant," meaning he or she stops responding to the therapy.

What's so amazing about cultured soy is that it turns down the pro-inflammatory protein that causes treatment resistance. After taking cultured soy for six months, my case study patients, who were once resistant to chemotherapy or radiation, started responding again. This is very exciting for scientists because once a patient develops resistance to chemotherapy or radiation, it's pretty much the end of the road—there's nothing much you can do. If there is a natural product that can reverse that state, it may bring hope to those who are suffering.

What's so amazing about cultured soy is that it turns down the pro-inflammatory protein that causes treatment resistance

But cultured soy doesn't just make chemo and radiation work better; it also has antitumor properties of its own. Being a firm believer in complementary medicine, which advocates a combination of Western and Eastern healing therapies, I would never suggest that a cancer patient solely choose cultured soy to the exclusion of conventional treatment; rather, I'd advise them to use it as an adjunct therapy. Some of the individuals I studied did make the choice to use each in conjunction with the other, and the results were nothing short of extraordinary!

One of the case reports I submitted to OCCAM tracked a 67-year-old woman who was diagnosed with breast cancer in August1997. She had a tumor that was 15 x 15 x 20 mm in size. It was recommended that she have a total mastectomy or lumpectomy with removal of the auxiliary lymph nodes, followed by aggressive radiation and hormonal treatment. However, she refused all standard therapy. The doctors gave her six months to live. The woman began taking a cultured soy beverage in November 1997 and received regular mammograms. Gradually the tumor decreased in size, until by January 2001, it was just 7 x 5 x 6 mm. In February 2004—six years after she was supposed to have died—her mammogram and ultrasound readings did not show any evidence of malignant lesions. She is still alive and well today.

Mark N. Mead, M.Sc., integrative nutrition and wellness coach, Carolina Center for Integrative Medicine, associate editor of *Integrative Cancer Therapies*, and co-author of *The Rapid Recovery Handbook,* comments: "In my work as a nutritional oncology specialist, I have been consistently impressed with cultured soy and curcumin in terms of their ability to enhance the quality of life

---

"*LOOK AT EVERYTHING as though you were seeing it either for the first or last time. Then your time on earth will be filled with glory.*"

—Betty Smith, *Joy in the Morning*, Harper and Row, 1963

---

for people undergoing cancer treatment and those in recovery. I have known a number of individuals with advanced cancers who have gone on to surprise their oncologists by substantially exceeding all statistically based expectations for survival."

CURCUMIN AND ARTHRITIS

While I was busy studying cultured soy, a noted researcher, Bharat B. Aggarwal, Ph.D., was doing groundbreaking work with curcumin. Even if you've never heard of curcumin, you've probably eaten it before. Curcumin is the major constituent of turmeric. It's what gives the spice its characteristic yellow-orange color. But turmeric does more than just add flavor and color to curries. It's been used in Traditional Chinese Medicine and the ancient Indian medical system called Ayurveda for thousands of years to treat a variety of inflammatory diseases. The work of Aggarwal and other scientists over the past decade has confirmed curcumin's ability to fight inflammation, which is one reason why it has become a popular natural remedy for arthritis.

Research has shown curcumin is a powerful antioxidant that is ten times more active than vitamin E

Research has shown curcumin is a powerful antioxidant that is ten times more active than vitamin E.[10] It's also a potent anti-inflammatory with efficacy rivaling that of both cortisone and phenylbutazone.[11] How does it work? It works in many ways, but one of the primary modes is by shutting down the same pro-inflammatory protein that cultured soy shuts down.[12] In other words, curcumin tells the body to put away the fire hoses and turn the inflammation off. A number of animal studies support curcumin's ability to relieve the pain and swelling of both osteo- and rheumatoid arthritis. One study found that when curcumin was given to arthritic rats, it lowered levels of an inflammatory protein by a stunning 73 percent.[13] Another study, also in rats, showed that turmeric extract profoundly curbed joint inflammation and joint destruction.[14] A study in dogs with osteoarthritis found that turmeric extract reduced lameness and joint pain.[15] Curcumin seems to work in humans too. In a study consisting of eighteen patients with rheumatoid arthritis, after just two weeks, curcumin caused significant improvements in morning stiffness, joint swelling, and walking ability.[16] Human cell studies have additionally shown that curcumin suppresses the inflammatory chemicals that contribute to the development of osteoarthritis,[17] and decreases some of the abnormal changes in joint tissue that characterize rheumatoid arthritis.[18]

I've seen tremendous improvement in patients with arthritis who take large doses of curcumin. But I also think it's a great tool for preventing this disease in the first place. Remember, joints don't just "wear out" with age. They wear out because of inflammation. If you can keep your inflammation levels under control with a daily dose of curcumin, you may reduce your risk of ever getting arthritis. Δ

Vijaya Nair, M.D., has a background in psychiatry and is an epidemiologist conducting research in complementary and alternative medicine, with special interests in soy and cancer, HIV and traditional medicine. She can be contacted by email at: vijayanair@worldnet.att.net.

REFERENCES

1. Amir Deorukhkar, Sunil Krishnan, Gautam Sethi, and Bharat B. Aggarwal, researchers at The University of Texas M.D. Anderson Cancer Center (2007).
2. Colebank, Susan. Deconstructing soy. *Health Supplement Retailer*. April 2, 2002. http://www.naturalproductsmarketplace.com/articles/241feat1.html (Accessed Aug. 15, 2008).

Deficient in Magnesium?

Each of the following conditions is associated with cellular magnesium deficiency: cardiovascular disease, osteoporosis, hypertension, insulin resistance and type 2 diabetes, inflammation, asthma, chronic stress, colorectal cancer, depression, tension and migraine headaches, attention deficit hyperactivity disorder, preeclampsia (a pregnancy disorder), kidney stones, hyperlipidemia, muscle cramps and weakness, and poor memory. Notes James South, M.A., in "Magnesium: A Key to Health and Life," at www.vrp.com, many of these conditions have been successfully treated with magnesium supplementation. He says the mineral has been called nature's physiological calcium channel blocker. He points out that dietary intake of magnesium in the U.S. has declined by almost half since 1900, when it was 475-500 mg per day. The recommended daily allowance is 400 mg. Addressing the controversy about taking 2 times more calcium than magnesium per day, and advocating the 1-1 ratio, South cites Guy Abraham, M.D., who has stated that "humans have evolved in a potassium-and-magnesium-rich but calcium-and-sodium-poor environment." Thus the body has evolved mechanisms to absorb and conserve calcium and sodium, but not magnesium and potassium. South states, "In general, organic forms of magnesium such as magnesium citrate, magnesium succinate, magnesium aspartate, magnesium lactate and magnesium taurinate are well-absorbed forms. Magnesium chloride is a well-absorbed inorganic form." See related ad on inside front cover.

3. Fallon, Sally. The ploy of soy. *Nourished Magazine*. http://editor.nourishedmagazine.com.au/articles/the-ploy-of-soy (Accessed Aug. 15, 2008).
4. University of Illinois at Urbana-Champaign (March 9, 2008). Can allergic reactions to soy be overcome through fermentation? *ScienceDaily*. http://www.sciencedaily.com/releases/2008/03/080306113750.htm (Accessed Aug. 18, 2008).
5. Anderson, Nina, in cooperation with Howard Peiper. *Cancer Disarmed: Healing Benefits of a Fermented and Nitrogenated Soy*. Safe Goods Publishing: Sheffield, MA, 2004, p. 24.
6. Messina MJ, et al. Soy intake and cancer risk: a review of the in vitro and in vivo data. *Nutr. Cancer*. 1994;21(2):113-31.
7. Wu AH, et al. Adolescent and adult soy intake and risk of breast cancer in Asian-Americans. *Carcinogenesis*. Sep; 23(9):1491-96.
8. Nagata Y, et al. Dietary isoflavones may protect against prostate cancer in Japanese men. *J Nutr*. 2007 Aug;13(8):1974-79.
9. A clinical study of Haelen 851 concentrated nutritional oral liquid in supporting healthy energy and lowering toxic effects of radiation and chemotherapy on cancer patients. U.S. Research Reports, Inc. April 1, 1993.
10. Khopde SM, et al. Free radical scavenging ability and antioxidant efficiency of curcumin and its substituted analogue. *Biophys Chem*. 1999;80:85-91.
11. Mukhopadhyay A, et al. Anti-inflammatory and irritant activities of curcumin analogues in rats. *Agents Actions*. 1982;12:508-15.
12. Shishodia S, Sethi G, Aggarwal B. Curcumin: Getting back to the roots. *Ann NY Acad Sci*. 2005 Nov;1056:206-17.
13. Joe B, et al. Presence of an acidic glycoprotein in the serum of arthritic rats: modulation by capsaicin and curcumin. *Mol Cell Biochem*. 1997 Apr;169(1-2):125-34.
14. Funk JL, et al. Efficacy and mechanism of action of turmeric supplements in the treatment of experimental arthritis. *Arthritis Rheum*. 2006 Nov;54(11):3452-64.
15. Innes JF, et al. Randomised, double-blind, placebo-controlled parallel group study of P54FP for the treatment of dogs with osteoarthritis. *Vet Rec*. 2003 Apr 12;152(15):457-60.
16. McCaleb R, Leigh E, and K Morien. *The Encyclopedia of Popular Herbs: Your Complete Guide to the Leading Medicinal Plants*. Roseville, CA: Prima Health, 2000, p. 378.
17. Shakibaei M, et al. Suppression of NF-kappaB activation by curcumin leads to inhibition of expression of cyclo-oxygenase-2 and matrix metallo-proteinase-9 in human articular chondrocytes: Implications for the treatment of osteoarthritis. *Biochem Pharmacol*. 2007 May 1;73(9):1434-45.
18. Park C, et al. Curcumin induces apoptosis and inhibits prostaglandin E(2) production in synovial fibroblasts of patients with rheumatoid arthritis. *Int J Mol Med*. 2007 Sep;20(3):365-72.