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Arthritis, Multiple Sclerosis, Poliomyelitis: The Sunshine Deficiency Diseases

(Sunshine and Health)

by Stephan Cooter, Ph.D.

Maybe we don't need it. There are even those who have proposed we could use the sun as a garbage dump for our nuclear waste, and chances are, we'd find out pretty damn quick how long we could survive without sunshine.

Of course, life would cease to exist. Plants require sunlight for photosynthesis to transform carbon dioxide into oxygen, to transform water and inorganic minerals into organic minerals, vitamins, proteins, carbohydrates, and fats for our use, in short to concentrate all the energy of the sun for sustaining life on Earth.

Joanna Budwig, a German MD, has used one small part of the sun in flaxseed oil, one tablespoon per meal with the same amount of cottage cheese or other protein to totally change the blood chemistry of a cancer patient back to normal (*Well Mind Association*®). Dr. Budwig's theory is that normal growth and repair of cells is impaired in cancer because one unsaturated fat is missing necessary for normal growth. Based on discoveries made between 1842 and 1888, three German scientists had been able to demonstrate that fat free diets killed laboratory animals. In 1937, Szent-Gyorgyi won a

Nobel prize for demonstrating that linoleic acid in combination with sulfur containing proteins produced healthy and necessary oxygenation processes in the body. Also Budwig feels that the skin's exposure to sunlight in addition to sunlight in vegetable oil is responsible for more of our energy as human beings than even the Krebs energy cycle, responsible for at least 30% of everything that we are, everything that is health and healthy. (See "Flax Oil As A True Aid Against Arthritis, Heart Infarction, Cancer and Other Diseases," <http://www.arthritis-trust.org>.)

Sunlight and vitamin D do affect the pineal and pituitary, which in turn affect the thyroid, which regulates all the body's processes, its use of fatty acids, proteins, and carbohydrates. Without sunshine, growth, building, and repair would be impossible.

Bears hibernate only when available sunlight diminishes in the winter. They come out of hibernation when injected with real vitamin D, the sunshine vitamin. For animals, vitamin D is produced by transformation of cholesterol on the skin and fur into vitamin D which is then taken in with grooming. For humans, vitamin D is absorbed from cholesterol in and on the skin provided sunbathing is not followed by washing it off for at least a half hour.

Even vitamin D₂, the synthetic version of vitamin D, comes from sunlight, or rather irradiation with ultraviolet light of vegetable oils (*Townsend Letter for Doctors*®). SAD or Seasonal Adjustment Depression is geared to available light; twenty minutes' exposure to intense incandescent light in the morning has changed depression into normal behavior in a short period of time for people subject to the syndrome.

Dr. Paul Goldberg, Cambridge researcher, found that neurological disease doesn't exist at the equator (*International Journal of Environmental Studies*²). There sunshine produces 2 to 4 thousand IUs of vitamin D per day in contrast to the 400 IUs of the official Recommended Dietary Allowance. Nor is the risk of MS high at high altitudes. High altitude above 1000 feet intensifies ultra violet exposure and reduces MS risk. Multiple Sclerosis begins to develop as human populations move away from the most intense sunlight. Although the data has never been collected by *Monthly Morbidity and Mortality Report*³³ bulletins, the International Polio Network News does collect support-group addresses for polio groups, a neurological disease tied to MS according to *The Merck Manual*¹. Fascinating differences appear when you compare geographical locations of support groups. In Israel, only one polio support group exists. In the Northwest, there are dozens, totaling over 1,700 people. In Arizona, only one support group exists; in Canada, there are dozens. Does nerve disease thrive on overcast, dark, damp weather, and reverse itself with sunlight? (Also see "Calcium & Vitamin D Deficiency," and "Thyroid Hormone Therapy: Cutting the Gordian Knot," <http://www.arthritis-trust.org>.)

Fascinatingly, Scotland has islands where an answer lay waiting to this question, an answer overlooked by orthodox medicine, and unknown to most people subject to MS. On Shetland and Orkney islands, multiple sclerosis rates are among the highest in the world, much higher than the 1 in 1000 people who are subject to the disease in northern latitudes or smog polluted cities elsewhere. On the Faeroe Islands with exactly the same sunlight, dampness, overcast, and gloom, less than normal incidence of MS exists. What accounts for the difference? On Faeroe Islands, seafood is abundant; on the other, it is virtually non-existent in the diet. In Norwegian fishing communities where even margarine has a high fish oil content, MS rates are also low, but in Norwegian agricultural communities MS is high. The highest rates of all are in communities with high oat consumption or high phytate consumption in addition to northern latitudes. Phytates bind with calcium and are antagonistic to vitamin D. In Northern Scotland where the MS rates are the highest in the world, both oats, low seafood diets, and lack of sunshine combine to produce the perfect environment for MS.

Unfortunately, no dietary studies were tried using cod liver oil and avoidance of phytates for those subject to MS to test Dr. Goldberg's theory that dietary changes might help new creation of

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myelin by the addition of calcium-magnesium, and fish or fish oil sources of vitamin D, with their omega 3's or linoleic acids, to see to what extent damaged myelin might be rebuilt and repaired. William Lands, PhD, in 1972 pointed out at a Vienna conference that John Vane's explanation of aspirin's curative effects, which block excessive prostaglandins that lead to excessive inflammation and pain, were also possible with fish oil. Of course, aspirin accomplishes this feat by stealing calcium from tissues and bone to place more in circulation. Fish oil, on the other hand, helps calcium from the diet actually do its job building myelin, nerve tissue, bone density, and assisting white blood cells to do their job digesting damaged tissue, digesting undigested food in circulation, and digesting damaged imported microbes.

No pharmaceutical industry seemed to be interested that fish oil was nature's aspirin, or that cancer, asthma, rheumatoid arthritis, lupus, psoriasis, allergies, autoimmune disorders, high blood pressure, and MS were all associated with runaway production of prostaglandins, not to mention malfunctioning calcium metabolism. American orthodox medicine has remained uninterested in dietary prevention or the possibility of reversal, remission, or curing of these diseases with fish because there is no monetary incentive [except] for the merchandising of new or expensive "drugs."

However, in 1967, good British doctors tried to find out if one component of myelin rebuilding, linoleic acid, also an omega three acid found not only in fish, but safflower, corn, sunflower, cotton, and soybean oils, would help patients in reducing symptoms from the middle phase of MS. About half of 75 patients were given sunflower seed oil, which is rich in linoleic acid, and from which, other fatty acids can be synthesized in the body. The other half of the patients were given olive oil as the control group. Two tablespoons of olive oil contain only .2 grams of linoleic acid compared with 8.6 grams of linoleic acid in sunflower oil, or 43 times as much. During the two year study, the olive oil group suffered twice as many MS problems as the sunflower group. The sunflower oil group experienced a 50% reduction in severity of leg weakness and loss of vision compared to their controls, and their MS relapses were shorter in duration, according to Drs. Joseph Bernsohn and Leo Stephanides in *Nature*, January 22, 1967⁴.

Dr. Frederick R. Klenner reported promising clinical success in *The Journal of Applied Nutrition*²⁸, in 1973 with mineral, trace minerals, amino acids and vitamin B₁, the beriberi deficiency vitamin. Dr. Klenner felt that what he had developed as a supplement treatment simply provided more usable energy for the whole body helping to rebuild and repair damaged tissue.

The likely cause for this success was discovered by Drs. Hugo Henzi and R. U. Schwyzer of Switzerland, *Medical Hypothesis*²⁵, when they found high methanol and formaldehyde levels in both the blood and myelin sheaths of their MS patients. They then used what had traditionally been used only as a placebo, B₁₂ and folic acid, to help metabolize the breakdown of methanol into nontoxic forms, which they found "promising" for their patients when they stuck to a low sugar, low fruit-sugar diet, and took supplementary folic acid and B₁₂ shots. Their feeling was that folic acid and B₁₂ in some unknown way created an alternate metabolic pathway for the breakdown of sugar into methanol and prevented the formation of formaldehyde.

Apparently escaping the attention of these doctors who found vitamin B₁ helpful, other B vitamins, and Dr. Hans Nieper, in Hanover, Germany, his success with calcium-magnesium-potassium-phosphates, was a fascinating common link with the metabolism of toxins in the Krebs energy cycle. Sunflower seed oil had produced a whopping 50% improvement in MS symptoms. The doctors were interested in sunflower oil only for its linoleic acid component even though sunflower oil is also rich in minerals, especially molybdenum. As I discussed in "Molybdenum: Recycling Fatigue into Energy," *Townsend Letter for Doctors*¹² [and Walter H. Schmitt, Jr., D.C., *Digest of Chiropractic Economics*¹²], molybdenum is one key player in metabolizing sugar from alcohol thru their

aldehyde phase and into their acetic acid phase and further into acetyl coenzyme A, a basic player in the Krebs energy cycle. Also playing roles in helping convert potentially dangerous aldehydes into non-toxic forms are: selenium, manganese, magnesium, iron, and the B vitamins. [Also see "Molybdenum for *Candida albicans* Patients and Other Problems," <http://www.arthritis-trust.org>.]

B₁ is a known vitamin deficiency that occurs from excessive alcohol or sugar consumption and was first noticed as a rice polish deficiency in prisoners of war, where white rice (and white flour) can lead to the MS-like symptoms of weakness, tremors, stumbling, slurred speech, and paralysis. Beriberi symptoms are characterized by nerve and hypothalamus damage, weakness, lack of coordination, poor memory, and sleep disturbances, caused by any refined carbohydrate, like sugar or white rice, or excessive alcohol intake, where B₁ is necessary to metabolize both.

Each researcher had found or supplied only one ingredient helpful in rebuilding myelin or had used one ingredient in the Krebs energy cycle. Why not use them all and see what happens.

In other words, the addition of a little fish oil chemical sunshine, omega 3 fatty acids plus vitamin A, sunflower seed oil, a full set of minerals that help rebuild myelin, a full set of minerals and B vitamins that remove toxic byproducts like aldehydes, might make for better than a 50% improvement in MS suffering and other nerve conditions.

Molybdenum itself is still about as well known as it is pronounced, actually pronounced "Mo-lib-de-num", and most people who know how to spell it can't pronounce it. It may be for most people the single most important missing ingredient in improving health.

What Dr. Henzi had stumbled on was that B₁₂ provided an alternate pathway for metabolizing aldehydes into harmless forms. B₁₂, selenium, magnesium, manganese, B₃, iron, and MOLYBDENUM, are all necessary for metabolizing irritating aldehydes from food, sugar, NutraSweet®, personal care products, smog, alcohol, *Candida albicans* byproducts, into acetic acid which can be excreted, or acetyl coenzyme A, a necessary part of the Krebs energy cycle, or the ATP molecule and Coenzyme Q₁₀, responsible for the other great source of energy for the human body, the proper functioning of the immune system, the ability to handle virus and other unfriendly microbes, for maintaining youth, vigor and health.

Raw sunflower seeds also contain vitamin D, which is mainly lost in processing, and an ingredient not suspected of affecting the Krebs energy cycle, but a vitamin that acts like a hormone which must affect everything, in the same way that other hormones are said to regulate all bodily functions. Without sunlight, plants die. Without sunlight, we die, our nerves, our energy, everything.

As I was experimenting with sunflower seed oil as a part of salad dressing, I looked down to notice the twitching in my post polio syndrome damaged "good" right leg. The twitchings happen day and night, sometimes attributed to spinal or brain nerve damage, sometimes to auto-cannibalism where tissues eat themselves to find nourishment, and sometimes to calcium-magnesium deficiency if it applies to anyone else besides a person subject to nerve disease. I had been diagnosed as subject to new nerve degeneration, and this was proved to me by EMG tests as well as gross muscular strength tests. Chronic pain had left my leg after taking molybdenum supplements, 100 mcg dissolved on the tongue, three times a day. However, nothing had ever affected the twitchings in my leg, which both keep me entertained as my leg jerked in public and keep me and my wife awake at night with its Mexican jumping bean effects.

I had thought it was calcium or magnesium deficiency that was responsible for the twitching, as the *Merck Manual*¹ (1992) suggested for both facial and other muscular ticks. But I had taken those minerals as supplements for years without their apparently reaching my muscles. I had wanted to try injections of magnesium, but never got around to it so that I could bypass the oral assimilation route and go directly to the muscle groups most affected.

Here I was at the kitchen table pouring oil on my salad. Why not try rubbing oil into my leg where the twitches were, like an injection,

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I did it slowly. Within minutes, I could feel heat generated in that leg, then the twitching subsided, about 30%, after an hour or so. That was a first for me. Perhaps, the sunflower seed oil, cold pressed, also contained calcium and magnesium in sufficient quantities to make a difference. Gus J. Prosch, Jr., M.D., in *Essential Fatty Acids are Essential*¹⁴, provided me with a piece of the puzzle when he reported that linolenic acid “regulates calcium movement.” (See <http://www.arthritis-trust.org>.)

Then, finally, I got a call from a bookstore. I had ordered the *Ebers Papyrus*⁴² months before and it was in.

As I read the oldest medical book in the history of the world, I found one fascinating thing. Most of the medicines of ancient Egypt were oils mixed with herbs and rubbed or massaged into the skin, the muscles, the nerves. Certainly fatty acids are part of the nutrient precursors for nerves. If linoleic acid is missing, Dr. Budwig found, tumors begin. In fact, all disease states are associated with low linoleic acid levels. If it is supplied, normal cellular growth will digest tumors and many other disease states have been transformed into health. Edgar Cayce¹⁹ said oils were communication chemicals. James Carter in *Racketeering in Medicine*⁹ said the same thing. They tell excessive prostaglandin production to shut down when they are fish oil or sunflower oil omega 3s. They are carriers or transport mediums for fat soluble vitamins A, D, K, and E; maybe they also transport water soluble vitamins. How else could oils show any water-soluble vitamin B vitamin content on their labels? The vitamins and minerals are in the oil. I added cod liver oil and got better results.

I also stank like a fish.

Then, I added a liquefied calcium-magnesium medium to the oil, then a full set of minerals in liquefied form from an herbal tincture, each time getting a little better results, less twitching, and more strength from my leg.

I also tried it on my paralyzed left leg to see what would happen. There, I got heat, and better circulation, something useful on a leg with paper thin muscles. So pain and comfort levels were much improved.

I'm convinced that out of Egypt or accident, the notion of using oils as a medium for massaging-in supplements is something we must rediscover. Aloe vera is known to regenerate skin and other tissue. So is N-acetyl glucosamine. In applying both to the skin, next to damaged tissue, would nerves regenerate, muscles, injured organs, joints, brains? Would DMSO help this process?

Rubbing sunflower oil on my nasal passages took away nasal congestion. Rubbing it on my scalp took away a headache. Rubbing and eating the imprisoned energy of the sun into the body might help replace what people at the equator have from the sun itself.

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