

Letters

Calcium and Silicon Enrichment vs Fluoridation

In *Health, Disease and the Environment* (Foster, 1992) I suggested that because inadequate calcium intake appears to increase the bioavailability of aluminum, calcium deficiency may play a significant role in the etiologies of both Alzheimer's disease and osteoporosis. I have argued elsewhere (Foster, 1993) that because fluoride is an antagonist of aluminum it reduces its absorption, so perhaps giving some protection against both of these disorders. In a recent publication, Edwardson and colleagues (1993) have shown experimentally that silicon is also an aluminum antagonist, greatly reducing its gastrointestinal absorption, and significantly lowering plasma aluminum levels.

If aluminum is, indeed, a risk factor in Alzheimer's disease and osteoporosis, its ingestion should be restricted. Clearly, the use of aluminum sulphate as a primary sediment flocculent by water treatment plants also should be discontinued. Much still remains to be learned about the roles of calcium, fluorine, silicon and aluminum in human disease and nutrition. However, given the continuing controversy over fluoridation, it might be prudent to promote the use of natural calcium and silicon enriched drinking water to reduce aluminum absorption, rather than encourage more widespread adoption of fluoridation.

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References

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Save Your Life with Vitamin E

A sudden sense of unreality sweeps over me. Can this be true: a positive article on megavitamin therapy in the *New England Journal of Medicine*? It says: "among middle-aged women the use of vitamin E supplements is associated with a reduced risk of coronary heart disease". That is the conclusion of Dr. Meir Stampfer and his colleagues¹ at Harvard Medical School in their report of a questionnaire study involving 87,000 nurses and follow-up over an 8 year period. A 45 percent reduction in coronary heart disease was observed amongst nurses taking vitamin E supplements over 100 units per day compared to those who relied on dietary sources alone. This departs from the steadfast anti-vitamin and megavitamin stance of the American health establishment for the past 50 years. It has been dogma at FDA (Food and Drug Administration) that "The average American Diet is adequate in vitamins and minerals." I addressed this sentence as the "*nutrition death sentence*" in my 1980 book, *MegaNutrition*.

In a second and parallel study in this same issue of the Journal, Dr. Eric Rimm and his colleagues,² including Dr. Stampfer, report their observations on 40,000 men, all health professionals, observed over a 4 year period. The conclusion is similar: "evidence of an association between a high intake of vitamin E and a lower risk of coronary heart disease". A dose of 100 to 250 units per day was associated with 46 percent reduced risk of heart attack. There was no further benefit at doses over 250 units and the results held regardless of fat intake, iron intake or alcohol intake! Even such factors as age and family history of heart attack did not weaken the vitamin E effect. On the other hand there were no additional benefits from taking magnesium, carotene or vitamin C — except that in men still smoking, those with the highest carotene intake had a 70 percent reduced risk of heart attack compared to the low carotene smokers.

Taken together, these two studies include over 127,000 men and women and the overall impact of vitamin E turns out to be a 45 percent reduction in risk of heart attack for

those taking vitamin E supplements at doses above 100 units a day for more than two years. The benefits were unaffected by intake of fat, whether saturated, monounsaturated or polyunsaturated. The benefits held up regardless of high cholesterol or diabetes. The benefits even held up in smokers!

Dr. Daniel Steinberg wrote the editorial comments on these two research papers³ and offered three reasons *not* to take vitamin E. First is that convincing proof requires further research, especially intervention trials, to pin down the magnitude of benefits. Second is the question of safety of large doses of vitamin E for long time periods. Third, "we should ask how many patients will slack off on their adherence to better-established but somewhat more onerous, preventive measures, such as cholesterol-lowering diet, regular exercise, and smoking cessation."

These are the words of the medical establishment, channelled through the mind of a brilliant researcher, but one who lives off research grants, not by the good-will of patients. His creed is the rule of absolute proof: "we must play by the rules and insist on large, long term, double blind clinical trials. Until they are done, please, let's hold the vitamin E." To the mind of a nutrition physician a different rule must prevail, that of *possible* benefit: the rule of Hope. In the real world of the doctor and patient, when there is health, happiness and life itself at stake, common sense dictates the rules and a non-toxic, non-invasive treatment deserves a trial if it might help.

There you have it, the latest controversy in medical thinking. As for me, I shall continue taking 1000 units of vitamin E more or less daily as I have since 1968. Among my colleagues in the International Society for Orthomolecular Medicine and the American College for Advancement in Medicine, all together numbering over 1000 physicians, I have heard of not a single case of harm from vitamin E in 25 years. One of my patients once took a teaspoonful of vitamin E oil, amounting to about 4000 units in a single dose. She had diarrhea for half a day. I also can recall two women who stopped vitamin E because it increased their sexual feelings at a time when there was no available partner.

These two research reports, coming as they do

from the *New England Journal*, the most prestigious of our general medicine journals, are a turning point in medical history, one of the first times that vitamin supplementation has won public respect from the medical establishment for other than gross deficiency disease. By respect, I refer to the inclusion of data comparing vitamin treatment with surgery, head to head. In those patients who took vitamin E over 100 units daily, risk of heart attack was 0.63 compared to those who had no treatment. By comparison, those who had coronary by-pass surgery or angioplasty had a risk of 0.68, almost 10 percent higher. Though the statistical difference is not significant, the practical difference is in favor of vitamin E because of the huge reduction in cost.

The question of cost is important because once an influential medical journal endorses such a study, by publishing it, the expectation is that doctors will heed the message and prescribe vitamin E. Patients surely will ask about it and demand it. Will health insurance companies pay for it? Not yet they won't. Would the country go broke if vitamin E supplementation were covered by national health insurance? I say the country will go broke without it.

The actual wholesale cost of 100 units of vitamin E is as low as \$6.00 a year per person. If 100 million Americans took vitamin E at that dose under government sponsorship, the total cost would probably be more like \$3.00 a year per person or about 500 million dollars. The expected reduction in coronary heart disease however, would cut our medical and hospital bills. It wouldn't be a 45 percent drop but it might make a difference of 10 percent or more. That would add up to almost \$50 billion in savings per year, a 100 to 1 pay-off! And that is based upon the benefits of just this one vitamin. How about the other 50 nutrients? There are many other benefits that remain unknown to our medical orthodoxy, a health establishment that still puts nutrition last. Putting nutrition first might save our nation from iatrogenic (medically caused) bankruptcy.

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