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High Doses of Vitamins Fight Alzheimer's Disease
Why Don't Doctors Recommend Them Now?

by Andrew W. Saul

(OMNS, December 9, 2008) The news media recently reported that "huge doses of an ordinary vitamin appeared to eliminate memory problems in mice with the rodent equivalent of Alzheimer's disease." They then quickly added that "scientists aren't ready to recommend that people try the vitamin on their own outside of normal doses." (1)

In other words, extra-large amounts of a vitamin are helpful, so don't you take them!

That does not even pass the straight-faced test. So what's the story?

Researchers at the University of California at Irvine gave the human dose equivalent of 2,000 to 3,000 mg of vitamin B3 to mice with Alzheimer's. (2) It worked. Kim Green, one of the researchers, is quoted as saying, "Cognitively, they were cured. They performed as if they'd never developed the disease."

Specifically, the study employed large amounts of nicotinamide, the vitamin B3 widely found in foods such as meat, poultry, fish, nuts and seeds. Nicotinamide is also the form of niacin found, in far greater quantity, in dietary supplements. It is more commonly known as niacinamide. It is inexpensive and its safety is long established. The most common side effect of niacinamide in very high doses is nausea. This can be eliminated by taking less, by using regular niacin instead, which may cause a warm flush, or choosing inositol hexaniacinate, which does not. They are all vitamin B3.

HealthDay Reporter mentioned how cheap the vitamin is; the study authors "bought a year's supply for $30" and noted that it "appears to be safe." Even so, one author said that "I wouldn't advocate people rush out and eat grams of this stuff each day." (1)

The BBC quoted Rebecca Wood, Chief Executive of the UK Alzheimer's Research Trust, who said, "Until the human research was completed, people should not start taking the supplement. . . . people should be wary about changing their diet or taking supplements. In high doses vitamin B3 can be toxic." (3)

The Irish Times reiterated it: "People have been cautioned about rushing out to buy high dose vitamin B3 supplements in an attempt to prevent memory loss . . . The warnings came today one day on from the announcement . . .Vitamins in high doses can be toxic." (4)

Their choice of words is quaint but hardly accurate. There is no wild "rush;" half of the population already takes food supplements. And as for "toxic," niacin isn't. Canadian psychiatrist Abram Hoffer, M.D., asserts that it is actually remarkably safe. "There have been no deaths from niacin supplements," Dr. Hoffer says. "The LD 50 (the dosage that would kill half of those taking it) for dogs is 5,000-6,000 milligrams per kilogram body weight. That is equivalent to almost a pound of niacin per day for a human. No human takes 375,000 milligrams of niacin a day. They would be nauseous long before reaching a harmful dose." Dr. Hoffer conducted the first double-blind, placebo-controlled clinical trials of niacin. He adds, "Niacin is not liver toxic. Niacin therapy increases liver function tests. But this elevation means that the liver is active. It does not indicate an underlying liver pathology."

The medical literature repeatedly confirms niacin's safety. Indeed, for over 50 years, nutritional (orthomolecular) physicians have used vitamin B3 in doses as high as tens of thousands of milligrams per day. Cardiologists frequently give patients thousands of milligrams of niacin daily to lower cholesterol. Niacin is preferred because its safety margin is so very large. The American Association of Poison Control Centers' Toxic Exposure Surveillance System annual reports indicates there is not even one death per year due to niacin in any of its forms. (5)

One the other hand, there are 140,000 deaths annually attributable to properly prescribed prescription drugs. (6) And this figure is just for one year, and just for the USA. Furthermore, when overdoses, incorrect prescription, and adverse drug interactions are figured in, total drug fatalities number over a quarter of a million dead. Each year.

The BBC's curious mention that we should even be "wary about changing our diets" is especially odd. More and more scientists think our much-in-need-of-improvement diets are what contribute more than anything to developing Alzheimer's. "There appears to be a statistically significant link between a low dietary intake of niacin and a high risk of developing Alzheimer's disease. A study of the niacin intake of 6158 Chicago residents 65 years of age or older established that the lower the daily intake of niacin, the greater the risk of becoming an Alzheimer's disease patient." The group with the highest daily intake of niacin had a 70 percent decrease in incidence of this disease compared to the lowest group. "The most compelling evidence to date is that early memory loss can be reversed by the ascorbate (vitamin C) minerals. Greater Alzheimer's disease risk also has been linked to low dietary intake of vitamin E and of fish." (7)

Nutrient deficiency of long standing may create a nutrient dependency. A nutrient dependency is an exaggerated need for the missing nutrient, a need not met by dietary intakes or even by low-dose supplementation. Robert P. Heaney, M.D., uses the term "long latency deficiency diseases" to describe illnesses that fit this description. He writes: "Inadequate intakes of many nutrients are now recognized as contributing to several of the major chronic diseases that affect the populations of the industrialized nations. Often taking many years to manifest themselves, these disease outcomes should be thought of as long-latency deficiency diseases. . . Because the intakes required to prevent many of the long-latency disorders are higher than those required to prevent the respective index diseases, recommendations based solely on preventing the index diseases are no longer biologically defensible." (8) Where pathology already exists, unusually large quantities of vitamins may be needed to repair damaged tissue. Thirty-five years ago, in another paper, Hoffer wrote: "The borderline between vitamin deficiency and vitamin-dependency conditions is merely a quantitative one when one considers prevention and cure." (9)

As there is no recognized cure for Alzheimer's, prevention is vital. In their article, the Irish Times does admit that "Healthy mice fed the vitamins also outperformed mice on a normal diet" and quoted study co-author Frank LaFerla saying that "This suggests that not only is it good for Alzheimer's disease, but if normal people take it, some aspects of their memory might improve." (4) And study author Green added, "If we combine this with other things already out there, we'd probably see a large effect."

The US Alzheimer's Association's Dr. Ralph Nixon has said that previous research has suggested that vitamins such as vitamin E, vitamin C and vitamin B12 may help people lower their risk of developing Alzheimer's disease. At their website (although you have to search for it), the Alzheimer's Association says, "Vitamins may be helpful. There is some indication that vitamins, such as vitamin E, or vitamins E and C together, vitamin B12 and folate may be important in lowering your risk of developing Alzheimer's. . . One large federally funded study (10) showed that vitamin E slightly delayed loss of ability to carry out daily activities and placement in residential care."

But overall, at their website http://www.alz.org/index.asp the Alzheimer's Association has strikingly little to say about vitamins, and they hasten to tell people that "No one should use vitamin E to treat Alzheimer's disease except under the supervision of a physician." (http://www.alz.org/alzheimers_disease_10428.asp) "They write as if these safe vitamins are dangerous drugs, not be used without a doctor's consent," comments Dr. Hoffer. "I have been using them for decades."

Niacin and nerves go together. Orthomolecular physicians have found niacin and other nutrients to be an effective treatment for obsessive compulsive disorder, anxiety, bipolar disorder, depression, psychotic behavior, and schizophrenia. New research confirms that niacinamide (the same form of B3 used in the Alzheimer's research) "profoundly prevents the degeneration of demyelinated axons and improves the behavioral deficits" in animals with an illness very similar to multiple sclerosis. (11)

A measure of journalistic caution is understandable, especially with ever-new promises for pharmaceutical products. Drugs routinely used to treat Alzheimer's Disease have had a disappointing, even dismal success rate. So when nutrition may be the better answer, foot-dragging is inexplicable, even inexcusable. Nutrients are vastly safer than drugs. Unjustified, needlessly negative opinionating is out of place. Over 5 million Americans now have Alzheimer's disease, and the number is estimated to reach 14 million by 2050. Potentially, 9 million people would benefit later from niacin now.

"Man is a food-dependent creature," wrote University of Alabama professor of medicine Emanuel Cheraskin, M.D.. "If you don't feed him, he will die. If you feed him improperly, part of him will die."

When that part is the brain, it is dangerous to delay the use of optimum nutrition.

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For More Information:

A complete copy of Dr. Harold D. Foster's What Really Causes Alzheimer's Disease is available in PDF format, free of charge: http://www.hdfoster.com/Foster_Alzheimers.pdf

To access a free archive of peer-reviewed medical journal papers on the safety and efficacy of vitamin therapy: http://orthomolecular.org/library/jom/

Review of nutritional approaches to Alzheimer's Disease: http://www.doctoryourself.com/alzheimer.html

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