

# Dr. Shari Lieberman

Dedicated to the Scientific Pursuit of Better Health

## June, 2004 Newsletter

### *Dr. Shari Lieberman's Nutritional & Integrative Therapy Review Newsletter*

Welcome to my newsletter. Each month I review the cutting-edge research in the field of nutritional and integrative medicine and give you my commentary. At the end of each newsletter, I give a specific nutritional protocol for a specific disorder. The newsletters and nutritional protocols can also be found on my website. You may also visit my website to view my numerous Powerpoint presentations given at medical conferences and visit my Q & A, library and more. As an ongoing commitment to excellence in product development, you can also view products I have developed and co-developed with leading experts all over the world.

#### 1. Reduced Risk of Alzheimer's Disease in Users of Antioxidant Vitamin Supplements: The Cache County Study

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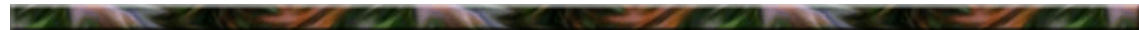
## **1. Reduced Risk of Alzheimer's Disease in Users of Antioxidant Vitamin Supplements: The Cache County Study**

*Zandi PP, Anthony JC, Khachaturian AS, Stone SV, Gustafson D, Tschanz JT, Norton MC, Welsh-Bohmer KA, Breitner JC; Cache County Study Group. Arch Neurol, January 2004;61(1):82-88.*

**Abstract:** In a cross-sectional and prospective study of dementia in elderly subjects who were greater than 65 years of age, there were 4,740 respondents. Among 3,227 survivors at risk, there were 104 cases of Alzheimer's disease at follow-up. Use of vitamin E and C supplements in combination was associated with a reduced Alzheimer's disease prevalence, with an adjusted odds ratio of 0.22, and incidence, with an adjusted hazard ratio of 0.36. There was a trend toward lower Alzheimer's disease risk seen in users of vitamin E and multivitamins containing vitamin C, but there was no evidence of a protective effect with the use of vitamin E or vitamin C supplements alone, multivitamins alone, or with vitamin B-complex supplements.

**Commentary:** These users were not taking very large doses of any vitamin, yet the combination of vitamins E and C was associated with a reduced Alzheimer's disease prevalence. The synergy of antioxidants is often overlooked in studies. Researchers still try to find the "magic bullet" antioxidant that will give the greatest results. Perhaps they should take a biochemistry course? Vitamin C regenerates vitamin E. Also, any single antioxidant can be a pro-oxidant if not consumed with other antioxidants. There are excellent studies demonstrating that very high doses of vitamin E, alpha-lipoic acid, Gingko biloba and other nutrients are therapeutic for Alzheimer's disease and may prove to also be preventive.

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## 2. Dietary Prevention of Post-Angioplasty Restenosis. From Illusion and Disillusion to Pragmatism

*de Lorgeril M, Salen P, Nutr Metab Cardiovasc Dis, 2003;13:345-348.*

**Abstract:** B-vitamin therapy lowers and omega-3 fatty acids may have benefit in sudden cardiac death and vascular inflammation since specific B-vitamins lower homocysteine and fish oil has been shown to reduce sudden cardiac death, vascular inflammation and restenosis. This nutritional therapy may have partial benefit in preventing restenosis after coronary angioplasty. Using a combination of both is probably the best approach and is a low-cost, low-risk preventive approach to restenosis and can be justified ethically.

**Commentary:** Studies have demonstrated that high homocysteine levels are a risk factor for restenosis (re-closing the very arteries that you just opened with angioplasty). Yet I have personally seen patients who had this procedure who didn't even have their homocysteine levels or C-Reactive Protein measured! Isn't that a little careless? Many studies have shown that fish oil supplementation also prevents restenosis after angioplasty. How many of you have seen patients who were told to take fish oil or homocysteine lowering B-vitamins after angioplasty by their cardiologist? I just don't get it. This cheap effective therapy has been shown to be the best protection against restenosis. So if you know any cardiologists - please pass this info on to them.

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### 3. Plasma Lycopene, Other Carotenoids, and Retinol and the Risk of Cardiovascular Disease in Women

*Sesso HD, Buring JE, Norkus EP, Gaziano JM. Am J Clin Nutr, 2004;79:47-53*

**Abstract:** This study examined the impact of lycopene in reducing the risk of cardiovascular disease (CVD) in a case-control study of 39,876 women who were initially free of cardiovascular disease and cancer in the Women's Health Study. Blood samples were taken from 28,345 of these women, and during a mean follow-up of 4.8 years, there were 483 cardiovascular disease cases compared with 483 matched controls. After adjusting for variables, the relative risk of cardiovascular disease in increasing quartiles of plasma lycopene were 1.00, 0.78, 0.56 and 0.62. Those in the upper compared with the lower half of plasma lycopene had a relative risk of 0.66. For cardiovascular disease risk, which excluded angina, women in the upper 3 quartiles had a significant 50% risk reduction compared with those in the lowest quartile. Higher levels of lycopene are associated with a reduced risk of cardiovascular disease in women.

**Commentary:** There is a wealth of research on lycopene's ability to reduce the risk of CVD as well as breast and prostate cancer. Lycopene is an important carotenoid with its very own health benefits beyond alpha, beta or other carotenoids. It is imperative that if you choose to take a beta-carotene supplement it must be natural and with other mixed carotenoids. Synthetic beta-carotene supplements provide little to no beta-carotene (according to Dr. Kedar Prasad), may act as a pro-oxidant and block the absorption of other important carotenoids. The richest food source of lycopene is tomato paste (rather than fresh tomatoes or fruits). So if you like pomodoro sauce - eat up!!

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### 4. Dietary Magnesium Intake in Relation to Plasma Insulin Levels and Risk of Type 2 Diabetes in Women

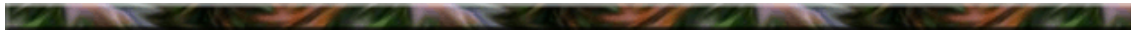
*Song Y, Manson JE, et al, Diabetes Care, January 2004;27(1):59-65.*

**Abstract:** This study evaluated 39,345 U.S. women from the Women's Health Study who were  $\geq$ 45 years of age and free of cardiovascular disease, cancer or type 2 diabetes at baseline. Subjects were followed up for an average of 6

years. Results showed there were 918 confirmed cases of type 2 diabetes. There was a significant inverse association between magnesium intake and risk of type 2 diabetes that was independent of age and body mass index. Among women with a body mass index  $\geq 25$  kg/m<sup>2</sup>, the inverse was of even greater significance. Mean insulin levels for overweight women in the lowest quartile of magnesium intake were 53.5 compared with 41.5 pmol/l among those with the highest magnesium intake. These findings support a protective role of higher intake of magnesium in reducing the risk of developing type 2 diabetes, especially in overweight women.

**Commentary:** Our government estimates that 60% of Americans are deficient in magnesium. That means that they are not even getting the RDI. Magnesium is an essential mineral for glucose tolerance and is also critical for bone mass among other functions. The recommendation that women should take tons of calcium with some vitamin D to prevent/treat osteoporosis is quite frankly ignorant. Yet this is constantly perpetuated through the media. High calcium intake can further exacerbate a magnesium deficiency. It would have been interesting if the researchers also looked at the relationship between high calcium intake and magnesium status. In any event, we already know that magnesium (as well as chromium and vanadium) are essential minerals in glucose tolerance. More attention should be given to magnesium in the media since it is a rather easy thing to measure through red blood cells to assess status and so many people are deficient in it.

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## 5. Niacin and Carcinogenesis

*Kirkland JB, Nutr Cancer, 2003;46(2):110-118*

**Abstract:** The dietary status of niacin (vitamin B3) has the potential to influence DNA repair, genomic stability, and the immune system, eventually having an impact on cancer risk, as well as the side effects of chemotherapy in the cancer patient. In addition to its well-known redox functions in energy metabolism, niacin, in the form of NAD, participates in a wide variety of ADP-ribosylation reactions. NAD and NADP are required for the synthesis of cyclic ADP-ribose and nicotinic acid adenine dinucleotide (NAADP), two mediators of intracellular calcium signaling pathways. Disruption of any of these processes has the potential to impair genomic stability and deregulate cell division, leading to enhanced cancer risk. There are various sources of evidence that niacin status does have an impact on cancer risk, including animal models of leukemogenesis and skin cancer, as well as epidemiological data from human populations. Niacin may also play a role in the regulation of cell division and apoptosis.

**Commentary:** In an excellent review article published in JAMA several years ago, researchers went through all the data on cholesterol-lowering drugs and found that every single one of them were carcinogenic in animals. And they were carcinogenic in amounts similar to those used in humans (adjusted for body weight and mass). Research on newer statin drugs has shown a

significant increased risk in breast cancer in women. This may be due to the depletion of coenzyme Q10 (which also induces cardiomyopathy) or the drugs may be interfering with TNF (tumor necrosis factor). Statin drugs are not candy and should not be taken lightly. And that doesn't mean that they should never be used. But if you simply want to lower blood lipids, niacin has repeatedly been shown in the scientific literature to be the treatment of choice and cholesterol-lowering drugs work better with niacin. The fact that niacin has the potential to protect against cancer rather than induce it is certainly a plus - don't you think?

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## 6. Obesity-Related Bills Fall to U.S. Taxpayers

*For the entire article, go to [www.obesityresearch.org](http://www.obesityresearch.org) or [www.cdc.gov/nccdphp/dnpa/obesity](http://www.cdc.gov/nccdphp/dnpa/obesity)*

**Abstract:** An independent nonprofit corporation evaluated the cost of obesity. It was discovered that the United States spends approximately \$75 billion each year on obesity-related health problems, with Wyoming spending \$15 million on Medicare, California spending \$1.7 billion on Medicare, Wyoming spending \$23 million on Medicaid, and New York spending \$3.5 billion on Medicaid. Medicare expenditures for obesity-related problems ranged from 3.9% for Arizona to 9.8% for Delaware. Medicaid percentages were significantly higher, from 7.7% in Rhode Island to 15.7% for Indiana. According to the Centers for Disease Control (CDC) 1999-2000 National Health and Nutrition Examination Survey, approximately 64% of adults in the United States are either overweight (33%) or obese (31%). A CDC survey, Behavioral Risk Factor Surveillance System (BRFSS) 1998-2000, showed that 15% of Colorado's population and 25% of West Virginia's population is obese. Other data indicate that 12% of Hawaiian Medicare patients are obese and 30% of Medicare recipients in Washington, DC are obese. The BRFSS found that 21% of Rhode Island Medicaid recipients are obese and 44% of the Indiana population in that state are obese.

**Commentary:** These statistics are obscene. And our government is doing less than nothing to impact this epidemic. The World Health Organization wanted to make a recommendation that everyone cut their sugar consumption to no more than 10% of calories. And the country that objected to this? You guessed right - the USA. When you see the foothold that the fast food industry has in advertising, in our school lunch programs, airplanes, etc. it becomes abundantly clear that there is simply too much money involved. Also, vending machines are loaded with sodas in schools and most workplaces. The worst thing is that the statistics on children are catching up. It is estimated that at least 20% of children in the USA are very overweight or obese and within the next 10 years, one in three children will acquire type 2 diabetes. Clearly the "education" programs have failed for both adults and children. As practitioners we need to start taking the bull by the horns and start educating our patients and make losing weight a priority.