

Daily Folic Acid May Protect Cognitive Function & Heart Health

I've always been a big fan of the *American Journal of Clinical Nutrition*. I find their articles are frequently cutting edge. As it turns out, there were so many articles in the September 2007 edition that I thought I'd devote this entire newsletter to articles from that medical journal.

There were some exciting articles published on folic acid. The first study looked at over 1,000 participants between ages 60 and 90 who had no cognitive impairment¹. It was found that after adjusting for other factors, individuals with higher plasma folic acid levels had overall better global cognitive function and better performance on tests of psychomotor speed. Researchers felt that these associations may be mediated by vascular mechanisms.

There was a second study regarding meta-analysis of 14 double-blinded, randomized, placebo-controlled trials regarding folic acid². The study concluded that high doses of folic acid appeared to improve endothelial function and as a result potentially promote good cardiovascular function.

There was another meta-analysis reported on out of Sweden regarding the link between obesity and the risk of colon and rectal cancer³. Thirty perspective studies were included in the meta-analysis of body mass index (BMI). Increases in BMI were positively associated with increased risk of rectal cancer in men but not women. Colon cancer, however, seemed to correlate with increasing waist circumference in both men and women.

There was an interesting small study out of Rome, Italy regarding coffee⁴. Ten healthy volunteers, after an overnight fast, drank about seven ounces of filtered coffee. Blood was then drawn 30 minutes and 60 minutes after drinking coffee. It was found that resistance to LDL oxidation significantly increased after coffee drinking, although LDL concentration did not increase. It's the oxidation of LDL cholesterol that causes damage. Researchers concluded that resistance to LDL oxidation was probably the result of phenolic compounds in coffee which have antioxidant activity. Another great option is green tea as it provides a large amount of antioxidant nutrients. Look for green tea with high levels of EGCG, one of the key antioxidants.

I'd like to mention two additional studies published in the *American Journal of Clinical Nutrition* on vitamin D. The first study out of Canada evaluated 12 patients with a neurologic disorder who were given varying doses of vitamin D anywhere from 28,000 to 280,000 IU per week for 28 weeks⁵. It was found that serum concentrations of 25 hydroxy vitamin D increased on average from 78 to 386; although liver enzymes and other blood parameters did not appear to change. Likewise, there was no increase in calcium levels either in the blood or urine. Authors concluded that vitamin D levels at twice the physiologic range appear to be safe by a large margin.

Finally, there was a study published on the effects of vitamin D with acute respiratory tract infection in Finnish men⁶. A total of 800 men serving on a military base in Finland

participated in this study. Blood levels of 25 hydroxy vitamin D were measured and then these 800 men were followed for six months. It was found that those men who had lower levels of vitamin D had significantly more days of absence from duty due to respiratory tract infections compared to those with the higher blood levels of vitamin D. Researchers concluded that clinical trials of vitamin D supplementation would be needed to investigate whether it enhances immunity to microbial infections. As you know from my past newsletters, vitamin D has the potential to reduce risk of colon and breast cancer by 50% at levels of 2,000 to 3,500 IU per-day range based on published medical journal studies.

A nice selection of articles...all from one journal in one month. The importance of the nutrients noted above cannot be overemphasized. Vitamin D in recent years has become increasingly a darling of the medical and scientific communities. It's quite clear that most people get inadequate amounts of vitamin D in their diet and with a typical multi-vitamin, even those who are exposed to adequate sunlight may not have adequate blood levels.

Folic acid is another nutrient that plays so many important roles in our bodies. Just like vitamin D, the RDA/DV levels are too low. Nutaceutical Sciences Institute® (NSI®) makes the best scientifically formulated B-complex on the market, with 800 mcgs of folic acid in it and optimal levels and forms of the other essential B vitamins. I recommend you choose a multi-vitamin with at least 700 to 2,000 IU of vitamin D3 and at least 800 mcgs per day of folic acid. Also look for a multi-vitamin with at least 500 mcgs per day of the active form of vitamin B12 called methylcobalamin.

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