Folic Acid May Improve Cognitive Performance

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lder adults who took 800 mcg of folic acid daily for 3 years showed significantly less cognitive decline than those who took placebo, according to a randomized, double-blind trial.

Three years of folic acid supplementation gave an individual the performance of someone 4.7 years younger for memory, 2.1 years younger for information pro-

cessing speed, and 1.5 years younger for global cognitive function, said Jane Durga, Ph.D., of Wageningen (the Netherlands) University and her associates (Lancet 2007:369:208-16).

According to the investigators, folic acid supplementation was associated with particularly good results in the most clinically relevant subtest, the one that measured delayed recall. After 3 years of supplementation, patients experienced an improvement in performance similar to

that of an individual 6.9 years younger.

In an accompanying editorial comment, Martha Clare Morris, Sc.D., and Christine C. Tangney, Ph.D., of Rush University Medical Center, Chicago, noted that normal levels of folic acid intake vary greatly across different regions, ethnic groups, ages, and socioeconomic circumstances (Lancet 2007;369:166-7).

In the United States and Canada, for example, grain is fortified with folic acid, and now less than 1% of the U.S. population

has an inadequate serum folate status. There is no such fortification in the Netherlands, where the study was conducted, and where the recommended dietary allowance (RDA) of folic acid is 300 mcg/day, lower than the U.S. RDA of 400 mcg/day.

In general, dietary folic acid intake is about 200 mcg/day in northern Europe but up to 559 mcg/day in Greece, where many eat the so-called Mediterranean diet. Before the fortification of grain began in

High Folate Intake May Lower AD Risk

High intake of folate decreased the risk of Alzheimer's disease in a predominantly Hispanic and African American cohort of elderly people, according to a recently published study.

There was a statistically significant association between AD risk and combined dietary and supplemental folate consumption, but not between AD and either type of folate alone, suggesting that cumulative intake from both sources is important in assessing Alzheimer's risk, wrote Dr. Jose A. Luchsinger of Columbia University, New York, and his associates.

These results are consistent with those of several previous studies of folate and AD risk, but conflict with the results of several others. "Definitive conclusions about the value of higher folate intake in the prevention of AD cannot be made at this time," Dr. Luchsinger and his associates said, adding that "the decision to increase folate intake to prevent AD should await clinical trials."

In what they described as the first published study of the issue in a cohort that was predominantly black and Caribbean Hispanic, the researchers assessed diet and cognitive status in 965 subjects in 1992-1994 and thereafter at 18-month intervals.

The subjects were Medicare recipients aged 65 years and older whose folate intakes were estimated using 61-item food frequency questionnaires. The group had a high prevalence of cardiovascular disease. A total of 192 developed AD over a mean follow-up of 6 years.

The risk of AD decreased with increasing intake of folate but not of vitamins B_6 or B_{12} , the investigators said (Arch. Neurol. 2007;64:86-92).

People with AD had a total folate intake "that was almost statistically significantly lower" than that in subjects without AD.

There was a "modest" correlation between folate intake and plasma homocysteine levels, suggesting that folate's ability to lower homocysteine may account for some of its effect on AD risk, Dr. Luchsinger and his associates said.

And since folate is derived primarily from vegetable sources, folate intake may be a marker of a healthier diet or of other socioeconomic or lifestyle factors, they noted.

-Mary Ann Moon

