

## ZINC ENHANCES TEENS' MEMORY, ATTENTION

Teenagers taking zinc supplements show strong gains in memory and sustained attention, according to a recent study.

James Penland et al. divided 209 seventh-graders into three groups. Each day for 10 to 12 weeks, the students consumed juice containing 0, 10, or 20 mg of zinc gluconate. Students, their teachers, and their parents were not told which groups received zinc and which received the placebo.

Before and after the experiment, Penland et al. measured the students' blood zinc levels and administered tasks measuring hand-eye coordination, attention, memory, and problem-solving. In addition, students, parents, and teachers filled out questionnaires about the children's mental, physical, and social abilities and school performance.

The researchers report that students receiving 20 mg of zinc gluconate per day decreased their reaction time on a visual memory task by 12 percent, vs. 6 percent for the placebo group; increased correct answering on a word recognition task by 9 percent, vs. 3 percent; and increased their scores on a sustained attention task by 6 percent, vs. 1 percent. The gains seen in children on the high dose of zinc were independent of their initial zinc status. No significant differences were seen between students taking the placebo and those on the lower dose of zinc.

Penland notes that zinc deficiency is not uncommon even in developed nations, and that the risk is especially high for teens because they are growing rapidly and often eat poor diets.

The findings follow earlier research revealing that zinc can benefit many children with attention deficit hyperactivity disorder (see related article, [Crime Times, 2004, Vol. 10, No. 2, Page 4](#)). In that study, Mustafa Bilici et al. randomly assigned 400 children with ADHD to take either a placebo or 150 mg per day of zinc sulfate for 12 weeks, and reported that subjects taking zinc "showed significant improvement in hyperactivity, impulsivity and socialization scores," although the treatment had no effect on attention deficits.

-----

"Zinc supplementation improved mental performance of 7th-grade boys and girls," news release, Federation of American Societies for Experimental Biology, April 4, 2005.