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Have you ever studied so hard for an exam and then felt like you couldn't remember anything when taking the test? Well if this seems to be burdensome for you, below may be some ways to help you ace those tests next time!

## Magnesium Maintains Memory

### Mineral seems to regulate key brain receptor involved in learning

Along with its many other functions in the body, magnesium may also help maintain learning and memory in middle age and beyond, according to a study in the Dec. 2 issue of *Neuron*.

Scientists already knew that magnesium helps build bones, regulate body temperature, produce proteins and release energy stored in muscles.

The new study by Massachusetts Institute of Technology researchers found that magnesium also helps regulate a key brain receptor that plays an important role in learning and memory. The finding indicates that magnesium deficiency may result in reduced ability to learn and memorize, while cognitive function may be improved by an abundance of magnesium.

"Our study shows maintaining proper magnesium in the cerebrospinal fluid is essential for maintaining the plasticity of synapses," the study authors wrote.

Synapses are the connections among brain cells. Plasticity, which refers to the ability to change, is vital to the brain's ability to learn and remember.

"Since it is estimated that the majority of American adults consume less than the estimated average requirement of magnesium, it is possible that such a deficit may have detrimental effects, resulting in potential declines in memory function," the authors wrote.

Magnesium is found in foods such as dark green, leafy vegetables. The adult daily requirement for magnesium is about 400 milligrams a day. It's estimated that about half of all Americans don't get enough magnesium.

Anxiety, heart disease, muscle cramps, asthma, allergies, attention-deficit disorder and other health problems have been linked to lack of sufficient magnesium.

## Zinc Hones Teens' Thinking Skills

### Study found 20 milligrams a day improved memory, attention span in seventh graders

Zinc may give your teenager a mental edge. Researchers found that adding the mineral to the diets of middle schoolers led to improvements in their memories and attention spans.

They reported the results on April 4 at the Experimental Biology 2005 meeting in San Diego.

Seventh graders given 20 milligrams of zinc five days a week for 10 to 12 weeks performed better on memory tasks and had longer attention spans than did those who did not receive zinc supplements, said James G. Penland, a research psychologist at the U.S. Department of Agriculture's Grand Forks Human Nutrition Research Center, in North Dakota.

Zinc has been studied in relation to motor function, thinking and social skills in very young children and in adults, Penland said, but "this is the first study to look at that relationship in adolescence." These older children may be at risk for zinc deficiency, especially while undergoing rapid growth during puberty, he added.

The current daily requirement for zinc is 11 milligrams for boys aged 14 to 18; 9 milligrams for girls aged 14 to 18, and 8 milligrams for kids aged 9 to 13.

Zinc also helps regulate cell growth, helps wounds heal, and boosts the immune system.

Researchers caution parents not to supplement their children with zinc without checking first with the pediatrician or family doctor. "If you take too much zinc for too long, you can also run into problems," he said.

Added Penland: "My advice to parents would be to look at their kids' diet and make sure it provides the recommended amount of zinc and other nutrients."

Good sources of zinc include meat, seafood, eggs and milk, according to the American Dietetic Association.

## Have you seen it?

Researchers at the Adolescent Health and Resource Center would like your help. There has recently been an advertisement for the center at all Iowa City/Coralville movie theaters. They would be interested to know if any of you have seen this ad and welcome your feedback.



## Spicy Cheese Dip

You will need: 1 box Mild Mexican Velveeta Cheese, 1 jar chunky salsa (mild, medium or hot, whatever you like). Cut Velveeta into cubes and melt in microwave stirring frequently. Once cheese is melted, add about  $\frac{3}{4}$  jar of salsa and stir. Put back in microwave to heat for an additional minute. Can add cooked hamburger if desired and a dollop of sour cream. Serve with tortilla chips. Yummy!!