

Could something as simple as taking a multivitamin every day help our mind?

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Dr. Stephen Chaney is a frequent spokesman for health and nutrition issues. As a professor of biochemistry, biophysics and nutrition at the University of North Carolina, Chapel Hill, he teaches nutrition to medical students and has conducted a cancer research project for nearly 30 years. His name is on over 80 published studies in peer-reviewed journals.

After all, we don't live in a third world country. None of us have serious nutritional deficiencies. Maybe we don't eat as well as we might, but **could a multivitamin actually improve our mental acuity and our ability to multitask?**

Two recent studies by Dr. David Kennedy of Northumbria University in England suggest that we should give the simple multivitamin a second look if we want our mind to function like a well oiled machine.

The first study looked at 81 healthy children between the ages of 8 and 14 who were given either a chewable multivitamin or a placebo for a 12-week period (Haskell et al, British Journal of Nutrition, 100: 1086-1096, 2008).

The children were given sophisticated online mental function tests just prior to the 12 week period and again at 4, 8 and 12 weeks. For example, one of the tests (the Arrow test) required them to press the left or right arrow key in response to a 1-3 second picture of an arrow on the computer screen.

A second test (The Arrow Flankers test) required them to press the left or right arrow key in response to a 1-3 second picture of an arrow flanked by distracters, which could include arrows pointing in the opposite direction.

In both cases the response time and accuracy of the responses were measured. Not surprisingly, **the multivitamin group showed a significant improvement in both reaction time and accuracy during the 12 week period compared to the group just taking the placebo.**

The second study was with 216 females in the 25 to 50 year old age range. Again, the participants were given either a multivitamin or a placebo - in this case for a 9 week period.

This study looked at on the effect of multivitamin supplementation on the also looked at whether multivitamin **supplementation could reduce the fatigue and anxiety associated with extended periods of multitasking. ability of the women to multitask. It**

The multitasking test was actually quite interesting.

The computer screen would display four windows - each with a different task the continuously required responses - and the women had to complete all four tasks simultaneously. Once again the researchers measured **the speed and accuracy with which the women completed the tasks.**

(You can see why this study was done with women. We guys would have had a hard time with two tasks - and four tasks would be out of the question!)

After 20 minutes of this multitasking test the women were asked to fill out questionnaires that assessed things like tiredness, alertness, calmness and anxiety.

And the results were similar to those seen with children. The women taking the multivitamin performed significantly better on the multitasking test and experienced less fatigue and anxiety after completing the test than the women taking the placebo.

So what do these studies mean for you and me?

The effects seen were small. These studies do not mean that taking a multivitamin will make you a genius or prevent Alzheimer's.

However, the kinds of mental functioning seen in the children's study fall in the category of what are known as pre-cognitive learning skills - which mean that they can, in the proper learning environment, improve the ability of those children to acquire new knowledge.

And, in today's workplaces multitasking is almost a requirement - not an option.

It is studies like these that suggest that, if nothing else, we should consider taking a daily multivitamin to fill in the gaps in our diet.

To Your Health!
Dr. Stephen G Chaney