



Wellness Minute

Health Information You Can Use On Your Path To Wellness



Is YOUR Brain Shrinking?

“The more your brain atrophies, the lower your ability to think, to remember, and problem solve.”

Are you aware your brain may be shrinking? Because in the elderly, the brain shows progressive atrophy. The atrophy occurs even in healthy cognitive adults. The greater the levels of cognitive decline however, the greater the atrophy as seen on MRIs. In a study, researchers found an interesting variable, plasma level of homocysteine. Raised homocysteine is associated with both regional and whole brain atrophy, not only in Alzheimer's disease, but also in healthy adults.

168 participants 70 years and older were placed in 2 groups. The treatment group had 85 participants supplemented with the homocysteine lowering B vitamins: folic acid, B12, and B6. The 83 remaining participants in

the control group received a placebo. Both groups were given MRIs before and after the two-year study. The mean rate of brain atrophy after 2 years was 1.08 % for the placebo group and .76% for the treatment group. Ouch, I don't like the thought of my brain atrophying even .76% in a 2-year period.

The treatment response was related to baseline homocysteine levels. In the treatment group, if levels were greater than 13, the results were more dramatic. The rate of atrophy was 53% lower. The more atrophy seen on MRIs, the lower the final cognitive test score. In other words, the more your brain atrophies, the lower your ability to think, to remember and problem solve.

Elevated levels of homocysteine in the blood have been associated with atherosclerosis, an increased risk of heart attacks, strokes, blood clot formation, and Alzheimer's disease. Elevated levels of homocysteine have also been linked to increased fractures in elderly persons.

It appears that reducing homocysteine levels does not affect bone density. However, in a trial, subjects with prior stroke and elevated homocysteine levels were given folate and B12. There was an 80% reduction in fractures, mainly hip, after 2 years. Interestingly, bone density and the number of falls was identical in the vitamin and the placebo groups. But the lower homocysteine people had less bone breakage.

Think of homocysteine as a marker. No clear data indicates that reducing homocysteine will reverse these conditions. But the results of this study show, by using low dose B vitamins, you can slow down brain atrophy, especially in the cases where elevated homocysteine is present.

Let's consider several key points of the study. First, the study took place over 2 years. Nutrients are needed on an ongoing basis to reduce the factors that cause the brain to be inflamed. Next, when plasma levels of homocysteine were greater than 13, treatment results were more dramatic. Since homocysteine reflects inflammation, most clinicians I know like to see homocysteine less than 10. Some suggest less than 7.0.

Elevated homocysteine is also a marker for a malfunctioning metabolism that is depleted of folic acid, B12, and B6. Remember, we need B12 and folic acid for our genes to work properly. I think of homocysteine as the canary that dies in the coal mine, warning the miners that gases are present. Why should we wait till it hits 13 before we start supplementing? Testing should be done on a regular basis.

In the study, we learned how supplementing with the homocysteine lowering B vitamins... B12, folic acid, and B6 produced significant changes. B12-2000 Lozenges from Biotics Research contains all the ingredients used in the study, and people love it because of the cherry taste. B12-2000 contains 2000 mcg of B12 as hydroxocobalamin, 800 mcg of folic acid, and 2.0 mg of B6 as P-5-P.

But let's not rely on one supplement. The goal is to reduce inflammation on as many fronts as possible, keeping it to a minimum. So, increasing fish oil, especially DHA, reducing both sugar and trans fats, increasing antioxidants, supplementing essential minerals to keep heavy metals from accumulating, plant-based diets to keep the bowel healthy with the good bacteria. Yep, we are talking about a Wellness lifestyle.

These kinds of changes take time and can be difficult to do by yourself. That's why your wellness clinician can be so beneficial. I know it's corny, but the old phrase, "A mind is a terrible thing to waste," is true. No matter who you are or how old you get. Give your clinic a call and ask for help.