

Tech News in Alzheimer's Research

TRAINING CORNER ... by *Phyllis Hanvey, R.N.*

... and Then, What Can We Do To Help Ourselves?

A subtle change in a memory-making brain region may predict who will develop Alzheimer's disease up to 9 years before symptoms appear, according to researchers from the New York University School of Medicine.

The researchers developed a brain scan computer program that measures metabolic activity in a key region of the brain affected in the early stages of the disease.

Applying the program, called "HipMask," the study demonstrated reductions in brain metabolism in healthy individuals that were associated with later development of Alzheimer's.

"We found the earliest predictor", said the lead researcher, Lisa Mosconi, PhD. "The hippocampus seems to be the very first region to be affected. Although our findings need to be replicated in other studies, our technique offers the possibility that we will be able to screen for Alzheimer's in individuals who aren't cognitively impaired." The program uses an image analysis technique to allow researchers to standardize and computer-automate the sampling of PET brain scans. The details were published in the June, 2005 issue of *Neurology*.

In another recent issue of the journal *Neuropsychology* researchers reported that higher education might protect older people from faltering mental powers by building up alternative neural networks absent in the uneducated. They tested their hypothesis by conducting memory tests using functional magnetic resonance imaging scanning which records changes in blood flow associated with mental activity. Elderly volunteers who had many years of higher education not only performed better on a series of memory tests than their less educated peers, they used different parts of their brain according to the study.



So, what shall we do?

Continue physical exercise, at least 150 minutes per week.

Restrict calories (the overfed of our country are at risk of developing diseases associated with inflammation, heart disease, diabetes, strokes, cancers, dementias).

Talk to your physician, as I have. My physician recommends Omega-3 fatty acid supplements in the form of fish oil (if you're not eating the cold water fish of salmon, mackerel, tuna), along with a diet which discourages the inflammatory process: restrict red meats, uses olive oil, nuts, avocados, whole grains, whole vegetables, and whole fruits; and restricts sugary, starchy items, eliminate partially hydrogenated fats (read the labels on foods that are packaged in cellophane and cardboard). These guidelines come from James Merryman, DO, Austin Regional Clinic, and other authorities on the relationship of inflammation to the chronic diseases.

Stimulate your brain: read, play strategy games with friends, word puzzles, mix up your activities, brush your teeth with the opposite hand, make time for fun and relaxation, stay around positive people. (The House of Friends is a great place to do this)!

And engage in Sabbath moments during each day, trusting God through prayer and meditation, as Jesus did, first, and last: "Let not your heart be troubled nor let it be fearful" (John 14:27).

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