

Brisk walking linked to better memory for seniors

By Randolph E. Schmid

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WASHINGTON—A section of the brain involved in memory grew in size in older people who regularly took brisk walks for a year, researchers reported Monday.

The new study reinforces previous findings that aerobic exercise seems to reduce brain atrophy in early-stage Alzheimer's patients, and that walking leads to slight improvement on mental tests among older people with memory problems.

The new analysis, led by researchers at the University of Pittsburgh and University of Illinois at Urbana-Champaign, appears in Tuesday's edition of the *Proceedings of the National Academy of Sciences*.

The study involved 120 sedentary people, ages 55 to 80. They were divided into two groups: Half began a program of walking for 40 minutes a day, three days a week to increase their heart rate; the others only did stretching and toning exercises.

The hippocampus, a region of the brain involved in memory, tends to shrink slightly with age and that's what happened in the group that only did stretching. But among people who took part in the walking program, the hippocampus region of the brain grew in size by roughly 2 percent.

Researchers found that there was some memory improvement in both groups, but "in the aerobic exercise group, increased hippocampal volume was directly related to improvements in memory performance."

"We think of the atrophy of the hippocampus in later life as almost inevitable," Kirk Erickson, professor of psychology at the University of Pittsburgh and the paper's lead author, said in a statement.

Added Art Kramer, director of the Beckman Institute at the University of Illinois and the senior author: "The results of our study are particularly interesting in that they suggest that even modest amounts of exercise by sedentary older adults can lead to substantial improvements in memory and brain health."

Dr. Jeffrey Burns of the neurology department at the University of Kansas School of Medicine, said he was "enthusiastic" about the paper. Burns, who wasn't involved in the new research, said that while previous studies have pointed to the relationship between exercise and memory, this rigorous, yearlong study advances what's known about the brain and exercise.

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