

## Walkers' brains better connected

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U.S. researchers suggest walking enhances brain circuit connectivity and brain function.

Moderate walking for 40 minutes three times per week for a year -- rather than just stretching and toning - helped increase brain function in older adults.

University of Illinois at Champaign study leader Art Kramer and colleagues looked at brain regions functioning together -- especially the "default mode network" that dominates brain activity while passively observing or simply daydreaming.

The study, published in *Frontiers in Aging Neuroscience*, finds in healthy young brains, activity in the default mode network quickly diminishes when a person engages in an activity requiring focus on the external environment. The researchers also say default mode network connectivity significantly improved in the brains of the older walkers.

"The higher the connectivity, the better the performance on some of these cognitive tasks, especially the ones we call executive control tasks -- things like planning, scheduling, dealing with ambiguity, working memory and multitasking," Kramer says in a statement.

Kramer and colleagues used functional magnetic resonance imaging to measure brain activity in 32 adults, ages 18-35, as well as in 65 previously sedentary people age 59 to over 80 -- before, as well as six and 12 months, after joining either a walking group or a stretching and toning group.

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