Aerobics Can Reverse Mental Decline in Older Adults Review of studies shows workouts that leave a person breathless boost brain tissue volume

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THURSDAY, Oct. 16 (HealthDay News) -- Regular exercise can reverse age-related brain decline, according to a U.S. cognitive neuroscientist.

Prof. Art Kramer, of the Beckman Institute at the University of Illinois, says there's substantial evidence showing the benefits of aerobic exercise and physical activity on such executive-control brain functions as task coordination, planning, goal maintenance, working memory and the ability to switch tasks.

As people age, a deterioration of white and gray matter in certain areas of the brain can cause cognitive decline, Kramer explained. He reviewed published research and found that several studies showed that regular moderate exercise that makes a person breathless increases the speed and sharpness of thought, the actual volume of brain tissue, and the way in which the brain functions.

These benefits have been noted in people with Alzheimer's disease as well as in those with no signs of progressive brain disease, Kramer wrote in the *British Journal of Sports Medicine*.

Some studies found that six months of aerobic exercise reversed age-related decline and that older adults' brains retained plasticity -- the capacity to grow and develop. Other studies showed that adults with higher levels of physical fitness had less evidence of deterioration in gray matter (involved in thinking) than less fit peers.

In women going through menopause, a decline in levels of the female hormone estrogen is linked with poorer memory and declining brain power. But Kramer cited a study that found older women who were physically fit had more gray matter and did better on tests of executive control than less-fit women, irrespective of whether they had hormone replacement therapy.

There are still many unanswered questions, but, Kramer concluded, "we can safely argue that an active lifestyle with moderate amounts of aerobic activity will likely improve cognitive and brain function, and reverse the neural decay frequently observed in older adults."

More information

The AGS Foundation for Health in Aging offers cognitive vitality tips for older adults.



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