

The Peninsula Center

for Estate and Lifelong Planning Attorneys and Counselors at Law

461 McLAWS CIRCLE, SUITE 2 WILLIAMSBURG, VIRGINIA 23185 Telephone: (757) 969-1900 Facsimile: (757) 969-1903

www.tpcestate.com

Physical Exercise and Dementia

by Catherine E. Sears

We all know that exercise is good for us: it helps us lose weight, keeps our muscles strong, and is good for our hearts. When we associate "exercise" and "dementia," however, we typically focus on mental exercises such as crossword puzzles or cryptograms. These are certainly helpful and effective ways of strengthening your brain, and people should strive to exercise their brains in a variety of ways each day to prevent dementia. However, surprisingly, physical exercise can also be beneficial for improving memory and delaying the effects of dementia.

One type of dementia – vascular dementia – occurs when an individual's blood vessels are damaged, reducing blood flow to the brain. Therefore, efforts such as physical exercise to reduce risks of heart disease and high blood pressure can also lower one's chances of developing vascular dementia. In addition to reducing the likelihood of a vascular dementia diagnosis, however, physical exercise can also benefit cognition more generally. According to a recent *New York Times* article, a study has documented a correlation between regular exercise and increased cognitive skills. Participants took a brisk, one-hour walk three times per week. After six months, researchers found that these participants were able to think more efficiently and process information more rapidly than individuals who had not followed this exercise regimen.

A separate study by Dr. Wendy A. Suzuki, a neuroscientist at New York University, explains this phenomenon. Suzuki has found that physical exercise enhances people's ability to focus and shift their attention from one activity to another. This is due to the hormones that are generated through exercise. These

hormones help new cells grow in the hippocampus, a region of the brain that affects long-term memory. Some hippocampal cells grow in the adult brain automatically, even without physical exercise; however, physical exercise creates more of these cells than would be generated in a sedentary lifestyle. New hippocampal cells are more active than those that have been in the brain since birth, so the brain becomes more engaged overall when a person has more new cells. Suzuki found that college students who exercised for an hour before class had increased attention and better long-term memory than their more sedentary classmates. Students also earned a higher grade point average during the semester when they exercised than they had in prior semesters.

Both studies acknowledge that physical exercise does not actively cure dementia or reverse damage that has already occurred. Additionally, many older adults who have been diagnosed with dementia may not be physically able to exercise, and it may be dangerous for individuals who are already experiencing memory loss to exercise alone. However, younger adults and those not yet diagnosed with dementia can build more young brain cells and safeguard against dementia by committing a few hours per week to a regular exercise regimen. Your heart and your brain will thank you.

For more information, see:

https://www.nytimes.com/2017/05/24/well/move/a-1-hour-walk-3-times-a-week-has-benefits-for-dementia.html?smid=fb-nytimes&smtyp=cur

http://www.amnh.org/explore/amnh.tv/(watch)/scicafe/scicafe-exercise-your-brain/(category)/131052