

Healthy heart equals healthy brain

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A healthy heart may have major benefits for preventing the decline in brain function that sometimes accompanies aging, according to new research in *Journal of the American Heart Association*.

Researchers studied a racially diverse group of older adults and found that having more ideal [cardiovascular health](#) factors was associated with better [brain](#) processing speed at the study's start and less cognitive decline approximately six years later.

The researchers from the University of Miami and Columbia University used the American Heart Association's "Life's Simple Seven" definition of cardiovascular health, which includes tobacco avoidance, ideal levels of weight, physical activity, healthy diet, blood pressure, cholesterol and glucose.

"Achieving the health metrics of Life's Simple 7 is associated with a reduced risk of strokes and heart attacks, even among the elderly. And the finding that they may also impact cognitive, or [brain function](#) underscores the importance of measuring, monitoring and controlling these seven factors by patients and physicians," said Hannah Gardener, Sc.D., the study's lead author and assistant scientist in neurology at the Miller School of Medicine, University of Miami, in Florida.

At the beginning of the study, 1,033 participants in the Northern Manhattan Study (average age 72; 65 percent Hispanic, 19 percent black and 16 percent white), were tested for memory, thinking and brain processing speed. Brain processing speed measures how quickly a person

is able to perform tasks that require focused attention. Approximately six years later, 722 participants repeated the cognitive testing, which allowed researchers to measure performance over time.

The researchers found:

- Having more ideal cardiovascular [health factors](#) was associated with better [brain processing speed](#) at the initial assessment.
- The association was strongest for being a non-smoker, having ideal fasting glucose and ideal weight.
- Having more cardiovascular health factors was associated with less decline over time in processing speed, memory and executive functioning. Executive
- function in the brain is associated with focusing, time management and other cognitive skills.

While this study suggests achieving ideal cardiovascular health measures is beneficial to brain function, future studies are needed to determine the value of routinely assessing and treating risk factors, such as high [blood pressure](#), in order to reduce brain function decline.

Gardener said similar studies in race and ethnically diverse populations, with different profiles of educational attainment, literacy and employment status, are needed to generalize the findings to other populations.

"In addition, further study is needed to identify the age ranges, or periods over the life course, during which cardiovascular health factors and behaviors may be most influential in determining late-life cognitive impairment, and how behavioral and health modifications may influence cognitive performance and mitigate decline over time."

Provided by American Heart Association

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