

Low grip strength linked to impaired cognition, memory loss in older Americans

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Lower handgrip strength associated with cognitive impairment



Credit: University of Michigan

For older Americans, poor handgrip may be a sign of impaired cognition and memory, a new study suggests.

Researchers from the University of Michigan and North Dakota State University followed nearly 14,000 participants from the 2006 Health and Retirement Study, age 50 and older, for eight years.

They found that every 5-kg reduction in handgrip strength was associated with 10% greater odds for any [cognitive impairment](#) and 18% greater odds for [severe cognitive impairment](#).

They assessed handgrip with a hand-held dynamometer, and cognitive function with a modified Mini-Mental State Examination, a widely used test among the elderly that includes tests of orientation, attention, memory, language and visual-spatial skills.

Study co-author Sheria Robinson-Lane, assistant professor at the U-M School of Nursing, said the findings are important for providers and individuals seeking ways to retain physical and mental function.

The findings, published in the *Journal of Alzheimer's Disease*, contribute to mounting evidence that providers should include grip strength—not currently used—in routine health assessments for older adults, said first author Ryan McGrath, assistant professor at North Dakota State University.

More importantly, the researchers interpreted the findings to mean that a reduction in grip strength is associated with neural degeneration, which underscores the importance of muscle-building exercise.

"These findings suggest that this is another instance where you're seeing that staying physically active affects your overall health and your cognitive health," Robinson-Lane said.

More information: Ryan McGrath et al. Handgrip Strength Is Associated with Poorer Cognitive Functioning in Aging Americans,

Journal of Alzheimer's Disease (2019). [DOI: 10.3233/JAD-190042](https://doi.org/10.3233/JAD-190042)

Provided by University of Michigan

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