Does fat content within muscle predict risk of cognitive decline?

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New research reveals that the level of fat within the body's muscle—or muscle adiposity—may indicate a person's likelihood of experiencing cognitive decline as they age. In the study published in the *Journal of the American Geriatrics Society*, 5-year increase in fat stored in the thigh muscle was a risk factor for cognitive decline. This risk was independent
of total weight, other fat deposits, and muscle characteristics (such as muscle strength or mass) and also independent of traditional dementia risk factors.

Investigators assessed muscle fat in 1,634 adults 69–79 years of age at years 1 and 6 and evaluated their cognitive function at years 1, 3, 5, 8, and 10. Increases in muscle adiposity from year 1 to year 6 were associated with faster and more cognitive decline over time. The findings were similar for Black and white men and women.

"Our data suggest that muscle adiposity plays a unique role in cognitive decline, distinct from that of other types of fat or other muscle characteristics," said corresponding author Caterina Rosano, MD, MPH, of the University of Pittsburgh's School of Public Health.

"If that is the case, then the next step is to understand how muscle fat and the brain 'talk' to each other, and whether reducing muscle adiposity can also reduce dementia risk."


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