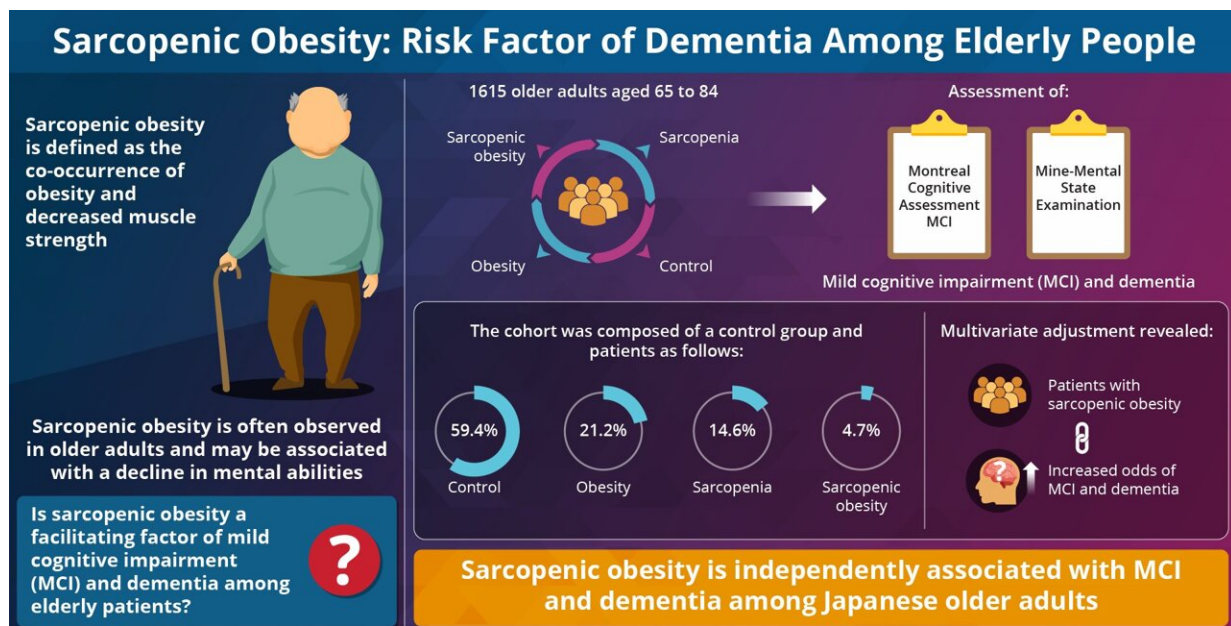



# Sarcopenic obesity linked to dementia in elderly patients

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Sarcopenic obesity is associated with cognitive impairment in community-dwelling older adults: The Bunkyo Health Study  
Someya et al. (2022) | *Clinical Nutrition* | DOI: 10.1016/j.clnu.2022.03.017

 Juntendo University

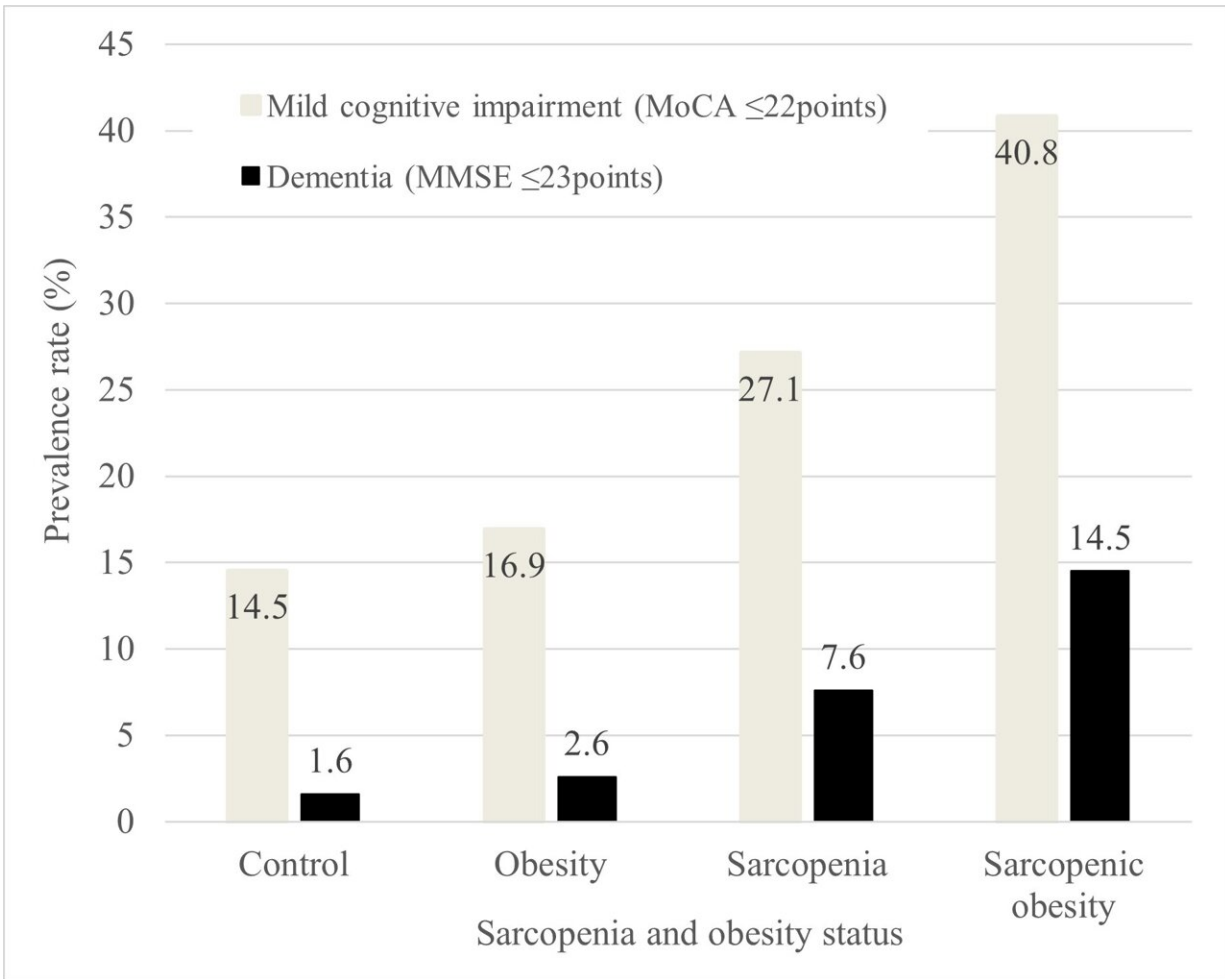
Sarcopenic obesity is independently associated with MCI and dementia among Japanese older adults. Credit: Juntendo University

Obesity, an increasingly prevalent lifestyle disease, often occurs along with poor muscle mass. This condition, called sarcopenic obesity, is evaluated based on the patients' body mass index (BMI) and handgrip strength. Interestingly, sarcopenic obesity is known to increase the risk of cognitive impairment. Dementia, a cognitive condition where

memory, thinking and social abilities progressively decline, is known to significantly affect the quality of life in elderly people. Is this condition associated with sarcopenic obesity?

In a new study published in *Clinical Nutrition*, a group of researchers led by Dr. Yoshifumi Tamura of Juntendo University, Japan, explored this very question. "If the association between sarcopenic obesity and dementia is established, appropriate preventive measures can be taken to reduce the occurrence of this condition and the [risk of dementia in elderly patients](#)," says Dr. Tamura, stressing on the importance of their study.

In the study, the researchers recruited 1,615 older Japanese adults aged 65 to 84 years participating in the Bunkyo Health Study. The researchers divided the subjects into four groups based on their sarcopenia and obesity status: those with obesity, those with sarcopenia, those with sarcopenic obesity, and those without obesity or sarcopenia (control). They studied the link between various mental processes, sarcopenia, and obesity status. Sarcopenia or poor muscle strength was determined based on a handgrip strength of less than 28 kg in men and 18 kg in women, while [obesity status](#) was given to patients with a BMI greater than 25 kg/m<sup>2</sup>. Two assessment methods were performed to establish the presence of mild cognitive impairment (MCI) and dementia. A score of less than 22 points on the Montreal cognitive assessment and less than 23 points on the Mine-Mental State Examination were used to confirm MCI and dementia respectively.



In a brand-new study, researchers from Japan have shown how co-morbidity with sarcopenia and obesity is linked with cognitive impairment in elderly Japanese people. Credit: Juntendo University

They found that 59.4% of the population had neither obesity nor sarcopenia, 21.2% had obesity, 14.6% had sarcopenia, and 4.7% of the population had sarcopenic obesity. The participants with sarcopenic obesity had the greatest rate of MCI and dementia, followed by those with sarcopenia, obesity, and finally the [control group](#). When the team ran multivariate analyses to check for statistically relevant associations, they found that sarcopenic obesity was independently associated with an

increased prevalence of MCI and dementia compared with the absence of sarcopenia and obesity. The study also showed that sarcopenia is significantly associated with dementia in women, but not in men.

"This study clearly demonstrates that sarcopenic obesity, defined by the combination of BMI and hand grip strength is associated with MCI and dementia among Japan's [elderly people](#)," says Dr. Tamura.

But what are the long-term implications of this study? Dr. Tamura says that "since we now know that there is a strong correlation between sarcopenic [obesity](#) and dementia, we may develop new treatment methods to manage the condition, thereby even reducing the prevalence of [dementia](#)."

**More information:** Yuki Someya et al, Sarcopenic obesity is associated with cognitive impairment in community-dwelling older adults: The Bunkyo Health Study, *Clinical Nutrition* (2022). [DOI: 10.1016/j.clnu.2022.03.017](#)

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