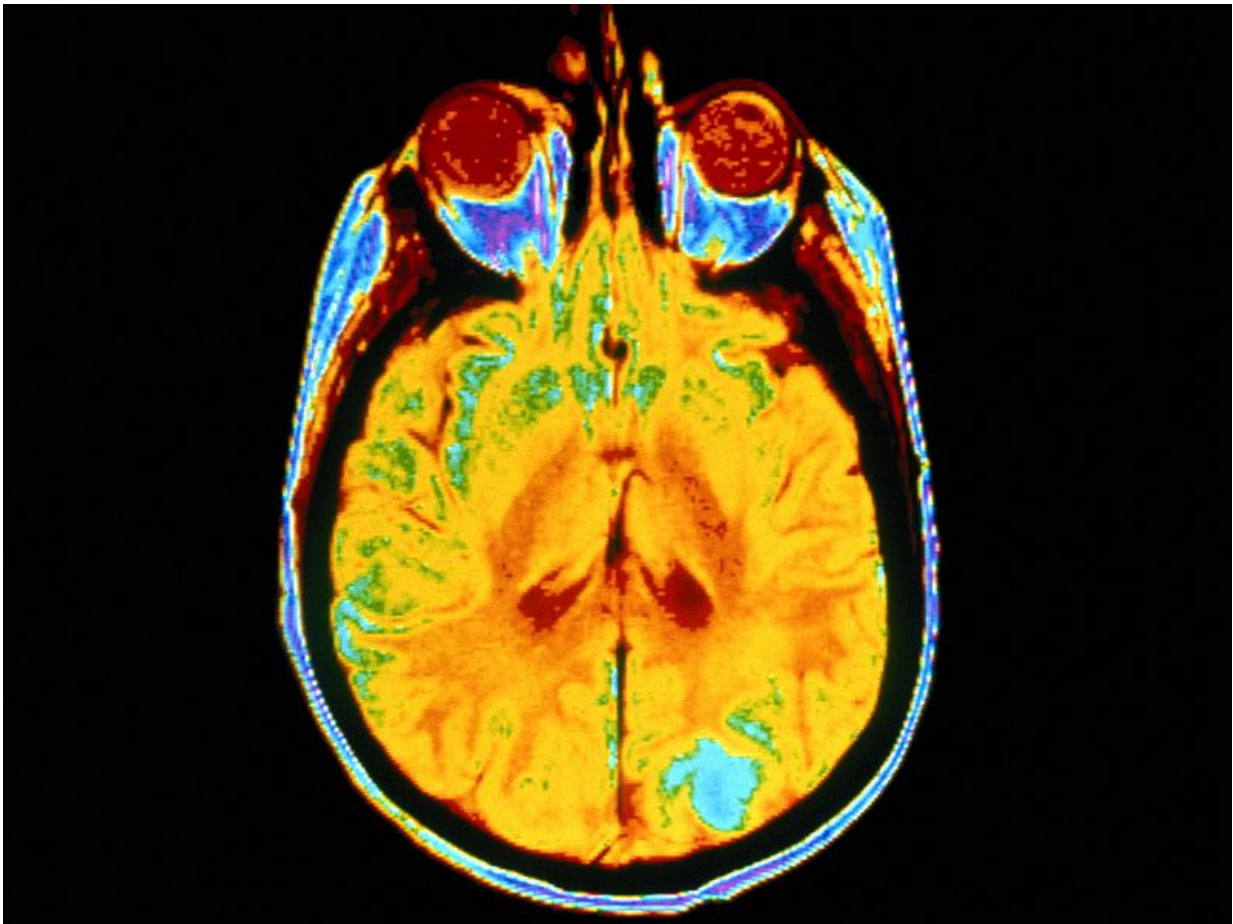


# Dysglycemia affects brain structure, cognition in seniors

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(HealthDay)—In older adults, dysglycemia is associated with brain

structure and cognition, according to a study published online Dec. 5 in the *Journal of the American Geriatrics Society*.

Christiane Reitz, M.D., Ph.D., from Columbia University in New York City, and colleagues conducted a cross-sectional and longitudinal cohort study involving Medicare recipients aged 65 years and older from Northern Manhattan. The authors examined the relation of dysglycemia clinical categories, based on hemoglobin A1c or history of type 2 diabetes, with cognitive performance.

The researchers found that dysglycemia correlated with a higher number of brain infarcts, [white matter hyperintensities](#) volume, and decreased total white matter, gray matter, and hippocampus volumes cross-sectionally; there was also a correlation with a significantly decline in gray matter volume longitudinally. There was a correlation for dysglycemia with lower performance in language, speed, and visuospatial function; after adjustment for education, APOE-ε4, ethnic group, and vascular risk factors, these correlations were attenuated.

"Our results suggest that dysglycemia affects [brain structure](#) and cognition even in elderly survivors, evidenced by higher cerebrovascular disease, lower white and [gray matter volume](#), and worse language and visuospatial function and cognitive speed," the authors write.

One author disclosed receiving royalties for the book *Diabetes and the Brain*, published by Springer.

**More information:** [Full Text \(subscription or payment may be required\)](#)

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