Apple juice can be a useful supplement for calming the declining moods that are part of the normal progression of moderate-to-severe Alzheimer's Disease (AD), according to a study in *American Journal of Alzheimer's Disease and Other Dementias* (AJADD), published by SAGE.

In the AJADD study, after institutionalized AD patients consumed two 4-oz glasses of apple juice a day for a month, their caregivers reported no change in the patients' Dementia Rating Scale or their day-to-day abilities. What did change, however, was the behavioral and psychotic symptoms associated with their dementia (as quantified by the Neuropsychiatric Inventory), with approximately 27% improvement, mostly in the areas related to anxiety, agitation, and delusion.

Alzheimer's disease is characterized by a progressive loss of memory, decline in cognitive function, behavioral changes, and the loss in ability to do daily activities, all of which causes a significant caregiver burden and increased health care costs. While pharmacological treatments can provide temporary reduction in AD symptoms, they're costly and cannot prevent the ultimate decline in cognitive and behavioral function. That's why the authors considered it important to discover any possible nutritional interventions.

"The modest, but statistically significant, impact of apple juice on the behavioral and psychological symptoms of dementia in this study adds to the body of evidence supporting the usefulness of nutritional approaches, including fruit and vegetable juices, in delaying the onset and progression of Alzheimer's Disease, even in the face of known genetic risk factors," write the authors, Ruth Remington, RN, PhD, Amy Chan, PhD, Alicia Lepore, MS, Elizabeth Kotiya, MS, and Thomas B. Shea, PhD, "As in prior studies with vitamin supplements, it indicates that nutritional supplementation can be effective even during the late stages of AD."