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The impact of fruit flavonoids from cherries on memory and cognition in older adults with mild to moderate dementia

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The impact of fruit flavonoids from cherries on memory and cognition in older adults with mild to moderate dementia

Abstract

Abstract of a presentation that was present at the NSA 2014 Annual Scientific Meeting, 26-28 November, Hobart, Australia.

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CONCURRENT SESSION 5: PLANT FOODS

THE IMPACT OF FRUIT FLAVONOIDS FROM CHERRIES ON MEMORY AND COGNITION IN OLDER ADULTS WITH MILD TO MODERATE DEMENTIA

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Background/Aims: A high consumption of dietary flavonoids, including anthocyanins, show promising results for improving cognitive outcomes, and may be beneficial for the prevention and treatment of dementia. We aimed to assess whether further cognitive decline could be delayed or prevented in dementia patients through daily intake of anthocyanin-rich cherry juice. Secondary outcomes included blood pressure and anti-inflammatory effects.

Methods: A 12-week randomised controlled trial assessed multiple cognitive outcomes in older adults ($n = 49$) with mild to moderate Alzheimer's type dementia (70+ years) after consumption of 200 mL/day of either cherry juice or a control juice with negligible anthocyanin content. Repeated measures ANCOVA were performed. Blood pressure and inflammatory markers [C-reactive protein (CRP), IL-6] were measured at 6 and 12 weeks.

Results: Cognitive improvements were seen in tasks relating to verbal fluency ($p = 0.014$), short term memory ($p = 0.014$) and long term memory ($p < 0.001$) in the cherry juice group. There was a trend for systolic ($p = 0.038$) and diastolic ($p = 0.160$) blood pressure reduction in the intervention group. Markers of inflammation (CRP and IL-6) were not altered in either group.

Conclusions: For older adults with dementia, the inclusion of an anthocyanin-rich beverage may be a practical way to improve their total flavonoid consumption, with potential to improve specific cognitive outcomes.

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