

Dairy intake and cognitive function in Canadian older adults

Background: Dietary intake is one of the modifiable factors that may affect older adults' cognitive function in their later years. Few research has considered the potential role of dairy foods on cognitive function. **Methods:** Across-sectional study was undertaken in 2014. Cognitive function was assessed using The Montreal Cognitive Assessment (MoCA), Rey Complex Figure Test and Recognition Trial (RCFT), Trail-Making Test (TMT), Victoria Stroop Test (VST) and the Digit Span Test (DST). Dietary intake was assessed via estimated 5-day food intake records and analyzed for saturated fat, vitamin D and calcium. **Results:** A total of 32 participants (8 males and 24 females) (average age= 70.59± 7.07 years; BMI=27.59±4.45 kg/m²) completed the study. No differences were found between the group who consumed <3 and the group who consumed the recommended amount of 3 servings of dairy foods per day in cognitive task performances. However, a number of associations were found between the nutrients (vitamin D, saturated fat, calcium) found in dairy foods and cognitive performance. A positive correlation was found between the level of vitamin D and the RCFT [r=0.367], the DST [r=0.390], and the MoCA [r=0.362]. Also, a negative correlation was found between the level of saturated fat and performance on the RCFT [r=-0.361]. However, no association was found between calcium level in dairy foods and performance on any of the cognitive tasks. **Conclusion:** Consumption of dairy foods is associated with better performance on cognitive tasks but underlying mechanisms are still to be determined.

Keywords: Dairy foods, milk, cognition, mental health, cognitive function, older adults