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Dietary patterns and cognitive function in early post-menopausal women

O. Furlong, E.M. McSorley, E.A.A. Simpson, J.M. McCormack, S. Hodge, M.M. Slevin, H. Parr and P.J. Magee

Nutrition Innovation Centre for Food and Health, School of Biomedical Sciences, Ulster University, BT52 1SA.

Cognitive function may be impaired during the menopausal transition, with attention and working memory being particularly affected⁽¹⁾ Healthy cognitive ageing studies suggest that dietary intake of B-vitamins, omega 3 fatty acids, antioxidants as well as adherence to a Mediterranean dietary pattern may protect against cognitive decline in older adults⁽²⁾. Further research however is required to substantiate these findings and few studies have focused on dietary patterns and cognitive function in post-menopausal women. This study aimed to investigate the association between dietary patterns and cognitive function in early postmenopausal women.

This study was conducted using baseline data from an ongoing intervention study to assess the effects of soya isoflavones on cognitive function. Dietary intake of postmenopausal women, within 7 years of their last menses (n = 104), was assessed using the validated EPIC food frequency questionnaire⁽³⁾ from which dietary patterns were identified using principal component analysis. Cognitive function was assessed using the validated Cambridge neuropsychological automated test battery (CANTAB), using tests to assess working memory, recognition memory and measures of attention. Demographic information including age, time since last menstrual period, education and smoking and alcohol use was collected via a health and lifestyle questionnaire.

Factor analysis identified four dietary patterns; 'dairy, fruit and veg', 'fats, potatoes and sugars', 'nuts and cereals' and 'potatoes, fish and alcohol', none of which were significantly associated with any of the cognitive function measures assessed (P > 0.05). Age was a significant predictor of pattern recognition memory [$\beta = 0.30$ (95% CI: 0.002, 0.013), P < 0.01].

Further research on the effects of diet on cognitive function in menopausal women is needed with the aim of identifying a natural approach for the alleviation of cognitive problems associated with the menopause.

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