

Multivitamins and minerals may boost mood in elderly

By Stephen Daniells, 03-Aug-2007

A daily multivitamin and mineral supplement may improve depressive symptoms amongst the elderly, suggests a new trial from the University of Sheffield.

Writing in the journal *Clinical Nutrition*, Salah Gariballa and Sarah Forster report that regular supplementation of hospitalised older people with **multivitamins** and minerals improved mental health, compared to placebo.



"This trial has demonstrated that nutritional supplementation of hospitalised older people does lead to a clinically important benefit," wrote the researchers.

"Widespread implementation of this strategy taking into account patients preference, life-style and socioeconomic circumstances could have a substantial economic impact and improve mental health for older people," they added.

The new prospective, double-blind, placebo-controlled study, recruited 225 hospitalised acutely ill older people (average age 75.6, average BMI 25.2 kg per sq. m) and randomly assigned them to receive either normal hospital diet plus multivitamin and mineral (MVM) supplements (providing 100 per cent of the Reference Nutrient Intakes for a healthy old person for vitamins and minerals) or normal hospital diet plus placebo for six weeks.

Depressive symptoms and cognitive function were assessed using the 15-item geriatric **depression** questionnaire (GDS) and abbreviated mental test questionnaire (AMT), respectively.



Gariballa and Forster report that at the end of the study levels of folate and vitamin **B12** in red blood cells and the plasma, respectively, increased significantly in the MVM group but decreased in the placebo group.

Significant differences were also reported for symptoms of depression scores between the groups, with beneficial effects observed for patients in the supplementation group regardless of the initial level of depression of the individual, ranging from no depression to severe depression. No differences in cognitive function scores.

"Improvement of micronutrient status would be the most plausible explanation for the results presented here," stated the researchers. "Many epidemiological and case-control studies have shown associations between folate and vitamin B12 deficiency and depression.

"Both folate and vitamin B12 are important for the nervous system at all ages, but in older people where deficiencies are known to be common even in relatively healthy persons, low folate and vitamin B12 status affects mood, cognitive and social functions," they added.

Further study is needed to investigate these results in other populations and age groups, with the authors acknowledging that there exists "a lack of well-designed clinical trials on the effects of nutritional support on older patient's mental health."

Consumer interest in mental health and the products that benefit this are on the increase. To some extent, the 'baby boom' generation (people born between 1946 and 1964) explain the increased interest in supplements for mental health and cognitive function, especially given fears over the rising incidence of Alzheimer's and other age-related diseases.



Data drawn from Mintel's Global New Products Database indicates that the category has caught marketers' attention most markedly from the early 2000s onwards.

Overall, the database shows up more product launches in the category in the US over the past 10 years than in Europe: 255 product lines (product variants not included) to 139.

As one would expect given the amount of science and media attention in the last few years, omega-3 (DHA and EPA, and, to a lesser extent, ALA), figure large in Mintel's results.



But certain other ingredients also crop up time and again. These include ginkgo biloba and ginseng (linked to improved memory); soy lecithin; CoQ10 (reported to help slow the progression of Parkinson's disease); and St John's wort (recognised as combating depression).

*Data source: Mintel's **Global New Products Database***

*Source: **Clinical Nutrition** (Elsevier)*

Published on-line ahead of print, doi:10.1016/j.clnu.2007.06.007

"Effects of dietary supplements on depressive symptoms in older patients: A randomised double-blind placebo-controlled trial"

Authors: S. Gariballa and S. Forster