

Clinical Update

Vitamin D Boosts Mood in Older Adults

Low levels of the vitamin and higher blood levels of the parathyroid hormone (PTH) were associated with higher rates of depression among 1,282 community residents aged between 65 and 95.

(Archives of General Psychiatry, May 2008)

If the study can be repeated in further study, it may see brain health added to the long list of health benefits reported for the vitamin, ranging from bone and cardiovascular health, to protection against certain cancers, and improved muscle strength.

Recently, a review by Bruce Ames and Joyce McCann from the Children's Hospital and Research Center Oakland highlighted the role of the vitamin in maintaining brain health, noting the wide distribution of vitamin D receptors throughout the brain.

According to the review (FASEB Journal, Vol.22, pp. 982-1001), the vitamin has been reported to affect proteins in the brain known to be directly involved in learning and memory, motor control, and possibly even maternal and social behaviour.

Hoogendijk and co-workers measured vitamin D (25-hydroxyvitamin D - 25(OH)D) and PTH blood levels in the volunteers taking part in the Longitudinal Aging Study Amsterdam. In the whole cohort, 26 had major depressive disorder, 169 had minor depression, and 1,087 were not depressed. The researchers note that the average blood 25(OH)D level was 21 nanograms per milliliter (ng/ml) and the average PTH level was 3.6 picograms per millilitre (pg/ml).

Amongst the people with major and minor depression, blood 25(OH)D levels were 14% lower, while PTH levels were, on average, five and 33% higher in people with minor and major depression, respectively, compared to non-depressed individuals.

Calls to increase the current recommendations of 200 IU per day for children and adults up to 50 years of age for vitamin D up to 800 - 1000 IU vitamin D3, have become more frequent in both scientific and public circles.

Vitamin D refers to two biologically inactive precursors - D3, also known as cholecalciferol, and D2, also known as ergocalciferol. The vitamin can be manufactured in the body on exposure to sunlight and also consumed in relatively low quantities from the diet. However because of the low dietary amounts, and lack of sunshine in northern climates, with some estimates claiming that as much as 60 per cent of northern populations may be vitamin D deficient.

In adults, vitamin D deficiency may precipitate or exacerbate osteopenia, osteoporosis, muscle weakness, fractures, common cancers, autoimmune diseases, infectious diseases and cardiovascular diseases.

Source: www.nutraingredients.com