

# MooDFOOD

PREVENTING DEPRESSION THROUGH FOOD

## **Depression and serum 25-hydroxyvitamin D in older adults living at northern latitudes – AGES-Reykjavik Study**

The role of vitamin D status when it comes to bone health is quite well established, while the role of vitamin D status in other areas, such as mental health, is growing but less established. A recent publication in *Journal of Nutritional Sciences*, produced as part of the MooDFOOD project, suggests that in the older population living at a northern latitude, deficient serum 25(OH)D concentrations (<30 nmol/L) may be a risk factor for depression, particularly among older men. The aim of the study was to investigate associations between vitamin D status measured by serum 25-hydroxyvitamin D (25(OH)D) concentrations and depression in older adults. The results are based on analysis of data from the Age, Gene/Environment Susceptibility–Reykjavik (AGES-Reykjavik) Study.

More depressive symptoms were observed in both men and women with the lowest vitamin D concentrations. Older men with deficient serum vitamin D levels (<30 nmol/L) were twice as likely to be depressed compared to comparably aged men with adequate vitamin D levels ( $\geq 50$  nmol/L) even after accounting for other factors such as diabetes and hypertension which might confer a health-related reason for depression. Although moderate inverse association was found between vitamin D status and depressive symptoms the association with current major depressive disorders was not seen among women.

Our findings contribute to the growing evidence linking vitamin D status to mental health. It is important to note that the association between depression and vitamin D in men was observed at a relatively low level of serum 25(OH)D (<30 nmol/L). Maintaining Vitamin D levels above 30 nmol/L may protect older adults against other adverse health conditions and may also reduce the risk of depression. Future research on the effects of vitamin D should examine sex-specific differences when assessing the risk of depression among older adults.