



Depressed young people have lower vitamin B12 and vitamin D levels than their peers

By Dr. Jessica Edwards

Researchers in Turkey have studied serum folate, vitamin B12, homocysteine and 25-OH vitamin D levels in young people with and without depression. Erman Esnafoglu and Deniz Deniz Ozturan recruited 89 children with depression and 43 children without any DSM-5 disorder. They found no difference between the groups in terms of folate levels. However, vitamin B12 and vitamin D levels were significantly lower in those with depression compared to controls, while homocysteine levels were significantly higher.

Based on these results, the researchers considered that vitamin B12 and vitamin D insufficiencies, and raised homocysteine levels, might be involved in the pathogenesis of depression in children and adolescents. Although this possibility is interesting and would have important implications, a cause and effect relationship cannot be confidently concluded from these cross-sectional results alone. Going forward, further research is needed, including longitudinal studies and randomized controlled trials, to better understand these relationships, and to inform whether routine testing or vitamin replacement may be beneficial for young people with depression.

Referring to:

Esnafoglu, E. & Ozturan, D.D. (2020), The relationship of severity of depression with homocysteine, folate, vitamin B12, and vitamin D levels in children and adolescents. Child Adolesc. Ment. Health. doi: 10.1111/camh.12387.