

EASEL #4 The Effect of Vitamin D Supplementation on Depressive Symptoms in Adults: A Systematic Review

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Objective: To review the most current evidence on the effect of vitamin D supplementation for decreasing depressive symptoms in adults with one or more medical concerns.

This is a systematic literature review of randomized controlled studies conducted from 2015 through 2018 that tested the effects of a vitamin D supplement on depression scores in adults. Six major databases were used to search for studies on this topic. Studies were to have examined effects on depressive scores as a primary or secondary outcome and were excluded if there was no comparison group or baseline data recorded.

Of the 86 articles initially screened, seven studies were included in the final review. These studies included seven randomized controlled trials. Based on the questions asked in the Quality Criteria checklist, there were five studies with positive ratings and two with neutral ratings. Two studies focused on adults with diagnosed major depression, two focused on overweight/obese adults, one focused on adults with vitamin D deficiency, one focused on adults with multiple sclerosis, and one focused on adults undergoing dialysis treatments. While depression scores were significantly improved compared to baseline data in all studies, only two studies resulted in a significant improvement compared to the control group.

The review of literature showed that vitamin D supplementation alone cannot significantly improve depressive symptoms among adults but has the potential to be a beneficial aid in lowering symptoms. Further studies should be done to evaluate the effect of vitamin D supplementation in addition to one or more interventions.