

No evidence for vitamin and mineral supplementation for maintenance of cognitive function in adults

Clinical Question	How effective are vitamin and mineral supplementation in maintenance of cognitive function in cognitively healthy people aged 40 years or more?
Bottom Line	There was no good evidence to suggest that middle-aged or older people could preserve cognitive function or prevent dementia by taking vitamin or mineral supplements. Vitamins were considered broadly in the categories of B vitamins (B6, B!2 and folic acid), antioxidant vitamins (beta-carotene/ vitamin A, vitamins C and E), and combinations of both. Chromium was the only mineral considered. There were a few positive results associated with long-term use of antioxidant vitamins, particularly beta-carotene and vitamin C, although the effects were small.
Caveat	There were very few data on supplementation starting in midlife (< 60 years). Only 10 studies had an average length of follow-up longer than five years. Only one trial assessed progression to dementia due to Alzheimer's disease and none assessed progression to all-cause dementia.
Context	Vitamins and minerals play multiple functions within the central nervous system which may help to maintain brain health and optimal cognitive functioning. Supplementation of the diet with various vitamins and minerals has been suggested as a means of maintaining cognitive function, or even of preventing dementia, in later life
Cochrane Systematic Review	Rutjes AWS et al. Vitamin and mineral supplementation for maintaining cognitive function in cognitively healthy people in mid-to-late life. Cochrane Reviews, 2018, Issue 12. Art. No.: CD011906.DOI:10.1002/14651858.CD011906.pub2. This review contains 28 studies involving over 83,000 participants.

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Systematic review link:

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD011906.pub2 /full