

Abstract

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If high folic acid aggravates vitamin B12 deficiency what should be done about it?

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BACKGROUND: The most common cause of vitamin B12 deficiency in older people is malabsorption of food-bound vitamin B12. Thus, it is suggested that the recommended daily allowance of 2.4 microg/d be met primarily with crystalline vitamin B12, which is believed to be well absorbed in individuals who have food-bound malabsorption.

OBJECTIVE: There is concern that high intakes of folic acid from fortified food and dietary supplements might mask the macrocytic anemia of vitamin B12 deficiency, thereby eliminating an important diagnostic sign. One recent study indicates that high serum folate levels during vitamin B12 deficiency exacerbate (rather than mask) anemia and worsen cognitive symptoms. Another study suggests that once vitamin B12 deficiency is established in subjects with food-bound malabsorption, 40 microg/d to 80 microg/d of oral crystalline vitamin B12 for 30 d does not reverse the biochemical signs of deficiency.

CONCLUSION: Together, these studies provide further evidence that public health strategies are needed to improve vitamin B12 status in order to decrease the risk of deficiency and any potentially adverse interactions with folic acid.

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