

# Abstract

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## Depression and folate status in the US Population.

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**BACKGROUND:** Folate deficiency and low folate status have been linked in clinic studies to depression, persistent depressive symptoms, and poor antidepressant response. These relationships have not been demonstrated in general populations. This study examined associations between depression and folate status indicators in an ethnically diverse general US population sample aged 15-39 years.

**METHODS:** Healthy subjects whose red blood cell (RBC) folate concentrations had been measured were determined to have no depression (n = 2,526), major depression (n = 301), or dysthymia (n = 121) using a diagnostic interview schedule. Serum concentrations of folate and total homocysteine (tHcy) were also measured.

**RESULTS:** After adjustment for sociodemographic factors, serum vitamin B(12) concentration, alcohol consumption over the past year and current status as to overweight and use of vitamin/mineral supplements, cigarettes and illegal drugs, subjects who met criteria for a lifetime diagnosis of major depression had folate concentrations in serum and RBCs that were lower than those of subjects who had never been depressed. Subjects who met criteria for dysthymia alone had lower RBC folate concentrations than never-depressed subjects, but the serum folate concentrations of the two groups were comparable. Serum tHcy concentration was not related to lifetime depression diagnoses. Low folate status was found to be most characteristic of recently recovered subjects, and a large proportion of such subjects were folate deficient.

**CONCLUSIONS:** Low folate status was detectable in depressed members of the general US population. Folate supplementation may be indicated during the year following a depressive episode.

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