Plasma folate concentrations are associated with depressive symptoms in elderly Latina women despite folic acid fortification.

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BACKGROUND: A relation between low folate status and depression has been recognized since the 1960s. Since 1998, flour in the United States has been fortified with folic acid, and the prevalence of folate deficiency has decreased dramatically.

OBJECTIVE: We investigated whether, in this era of folic acid fortification, low folate status is a determinant of depressive symptoms in a cohort of elderly Latinos (aged >/=60 y) participating in the Sacramento Area Latino Study on Aging (SALSA).

DESIGN: In a cross-sectional logistic regression analysis of data from SALSA (n = 627 M, 883 F), odds ratios (ORs) were ascertained for elevated depressive symptoms [Center for Epidemiologic Studies Depression Scale (CES-D) score >/=16] among tertiles of plasma folate. Depressive symptoms were assessed by using the CES-D. Plasma folate concentrations were determined by radioassay.

RESULTS: The prevalence of folate deficiency (plasma folate </= 6.8 nmol/L) in the SALSA population was <1%. For men, no significant association between folate tertile and high CES-D score was observed. The adjusted OR for high CES-D score in women in the lowest tertile of folate was 2.04 (95% CI: 1.38, 3.02), which was significantly different from that in women in the highest tertile of folate (P < 0.001).

CONCLUSION: These data indicate that, despite folic acid fortification, low folate status is associated with depressive symptoms in elderly Latina women (but not elderly Latino men).

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