

# Abstract

J Affect Disord. 2006 Nov;96(1-2):133-8.

## **Dietary folate and vitamins B12, B6, and B2 intake and the risk of postpartum depression in Japan: the Osaka Maternal and Child Health Study.**

Miyake Y, Sasaki S, Tanaka K, Yokoyama T, Ohya Y, Fukushima W, Saito K, Ohfuji S, Kiyohara C, Hirota Y; Osaka Maternal and Child Health Study Group.

Department of Public Health, Faculty of Medicine, Fukuoka University, Fukuoka 814-0180, Fukuoka, Japan.

**BACKGROUND:** Previous studies showed an inverse association between folate intake and depression. However, epidemiological evidence for folate intake and postpartum depression is unavailable. This prospective study examined the relationship of dietary consumption of folate and B vitamins during pregnancy with the risk of postpartum depression.

**METHODS:** Study subjects were 865 Japanese women. Dietary data were obtained during pregnancy from a validated self-administered diet history questionnaire. Postpartum depression was defined as present when subjects had an Edinburgh Postnatal Depression Scale score of 9 or higher between 2 and 9 months postpartum. Adjustment was made for age, gestation, parity, cigarette smoking, alcohol intake, family structure, family income, education, changes in diet in the previous 1 month, season when data at baseline were collected, body mass index, time of delivery before the second survey, medical problems in pregnancy, baby's sex, and baby's birth weight.

**RESULTS:** Postpartum depression developed in 121 subjects (14.0%) 2 to 9 months postpartum. There was no measurable association between intake of folate, cobalamin, or pyridoxine and the risk of postpartum depression. Compared with riboflavin intake in the first quartile, only riboflavin consumption in the third quartile was independently related to a decreased risk of postpartum depression (multivariate odds ratio: 0.53, 95% CI: 0.29-0.95, P for trend=0.55).

**LIMITATIONS:** Personal and family psychiatric history, sociocultural factors, and personal and family relations were not controlled for. The possibility of misclassification of dietary information during pregnancy should be considered.

**CONCLUSIONS:** Our results suggest that moderate consumption of riboflavin may be protective against postpartum depression.

PMID: 16815556