Low compliance with recommendations on folic acid use in relation to pregnancy: is there a need for fortification?

Objective: As a means to prevent neural tube defects (NTDs), women planning pregnancy in Denmark are recommended to take a dietary supplement of 400 mug folic acid daily during the periconceptional period. We examined compliance with this recommendation in a national survey. Design: Cohort study on pregnant women in Denmark. Setting: The Danish National Birth Cohort (DNBC). Subjects: From November 2000 to February 2002, 22 000 pregnant women were recruited for DNBC. Use of dietary supplements was recorded at enrolment. Compliance with the recommendation was related to an information campaign that took place during the second half of 2001, and to lifestyle factors provided in a telephone interview by the end of the first trimester of pregnancy. Results: An increase was seen in the proportion of women complying with the recommendation in the study period and this coincided with the information campaign events. However, even at the end of the period, only 22.3% of the women who had planned their pregnancy fully complied with the recommendation. No increase at all was seen in periconceptional folic acid use among women with unplanned pregnancies. Young age, low education and smoking were identified as factors that determined non-compliance. Conclusions: Alternative and more effective strategies are needed if the Danish population is to benefit fully from the knowledge that folic acid prevents NTDs. Future strategies should not only target vulnerable groups, such as the less educated and the young, but also women who get pregnant without planning this. The only possible way to reach the last group may be through fortification of foods with folic acid.