ETHNIC DIFFERENCES IN THE NUTRIENT INTAKE ADEQUACY OF PREMENOPAUSAL AMERICAN WOMEN: RESULTS FROM THE NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III

by

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ABSTRACT

The objective of this work was to examine the adequacy of dietary intake of calcium, folate, vitamins C, D, E, B6 and B12 in pre-menopausal American women of differing ethnicity. Daily dietary intakes were collected on 3,585 randomly selected women aged 20-50 years who were not pregnant or lactating via single and duplicate 24-hour recalls during the National Health and Nutrition Examination Survey III (NHANES III). Usual nutrient intake distributions were estimated using the Iowa State University method for adjustment of the distribution. The Estimated Average Requirement (EAR) cut-point method was used to determine the proportion of women with inadequate intake for each nutrient in each ethnic group. Most women irrespective of ethnic group had usual intakes of calcium lower than the new Adequate Intake (AI). More than half of the women had inadequate intakes of folate and vitamin E from food sources alone, and a large proportion of smokers had inadequate intakes of vitamin C. The proportions of women of all races with intakes of vitamins B6 and B12 above the EAR were high. This paper provides evidence that a high proportion of pre-menopausal American women are under consuming a variety of nutrients. Dietary intakes alone are not currently adequate to meet the new recommended intakes. Nutritional supplement use is widespread and impacts but does not eliminate the concerns for at-risk populations.