Abstract

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Dietary Intake of Vitamin B(6) and Risk of Breast Cancer in Taiwanese Women.

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BACKGROUND: B vitamins, including vitamin B(6), are coenzymes that are important for DNA integrity and stability. Deficiencies in B vitamins may promote tumor carcinogenesis.

METHODS: We examined the association of dietary vitamin B(6) intake with overall breast cancer risk and breast cancers stratified by hormone receptor status. This case-control study included 391 breast cancer cases and 782 control subjects enrolled at the Tri-Service General Hospital in Taipei, Taiwan. Energy-adjusted intake of vitamin B(6) was derived from a food frequency questionnaire. Odds ratios (ORs) and 95% confidence intervals (CIs) were estimated using logistic regression.

RESULTS: As compared with women in the lowest tertile, the multivariate-adjusted ORs for breast cancer among women in the second and highest tertiles of vitamin B(6) intake were 0.78 (95% CI, 0.64-2.52) and 0.64 (0.26-0.92), respectively. In addition, higher vitamin B(6) intake was associated with a significantly lower risk of developing ER-negative breast tumors.

CONCLUSIONS: Our findings suggest that higher intake of vitamin B(6) is associated with a reduction in breast cancer risk, particularly ER-negative tumors.

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