

ASSOCIATION OF THE CONSUMPTION OF MILK AND DAIRY PRODUCTS WITH MORTALITY FROM BREAST CANCER IN SERBIA: AN ECOLOGICAL STUDY

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Background: The association between consumption of food and mortality rates from breast cancer has been found to vary in significance and magnitude across countries. The aim was to assess the relationship between per capita consumption of milk and dairy products and mortality rates for breast cancer.

Methods and Objectives: This nationwide, ecological study analyzed relationship between per capita consumption of dairy and mortality for breast cancer in Serbia. Mortality data and per capita food consumption were obtained from official databases. The linear regression analysis was used to assess the strength and direction of the relationship between consumption of dairy and variation in the mortality by determining the β coefficient (with 95% CIs, Confidence Intervals). Statistical significance was considered when $p < 0.050$.

Results: Per capita milk consumption was significantly positively associated with breast cancer mortality ($\beta = +0.057$, 95% CI = 0.021 to 0.093, $p = 0.005$). A significant negative association was observed between the consumption of yogurt and mortality from breast cancer ($\beta = -0.112$, 95% CI = -0.222 to -0.002, $p = 0.047$). In contrast, per capita consumption of cheese was not significantly correlated with mortality from breast cancer ($\beta = -0.322$, 95% CI = -0.335 to 0.999, $p = 0.299$).

Conclusions: Consumption of dairy is of potential importance for mortality from breast cancer in Serbia. Further epidemiological analytical studies are needed to investigate a possible causative association.

Keywords: breast cancer; dairy; per capita consumption; ecological study