

## Dietary Pattern and Risk of Breast Cancer Among Women:a Case Control Study

**Authors :** Huma Naqeeb

**Abstract :** Epidemiological studies have shown the robust link between breast cancer and dietary pattern. There has been no previous study conducted in Pakistan, which specifically focuses on dietary patterns among breast cancer women. This study aims to examine the association of breast cancer with dietary patterns among Pakistani women. This case-control research was carried in multiple tertiary care facilities. Newly diagnosed primary breast cancer patients were recruited as cases (n = 408); age matched controls (n = 408) were randomly selected from the general population. Data on required parameters were systematically collected using subjective and objective tools. Factor and Principal Component Analysis (PCA) techniques were used to extract women's dietary patterns. Four dietary patterns were identified based on eigenvalue >1; (i) veg-ovo-fish, (ii) meat-fat-sweet, (iii) mix (milk and its products, and gourds vegetables) and (iv) lentils - spices. Results of the multiple regressions were displayed as adjusted odds ratio (Adj. OR) and their respective confidence intervals (95% CI). After adjusted for potential confounders, veg-ovo-fish dietary pattern was found to be robustly associated with a lower risk of breast cancer among women (Adj. OR: 0.68, 95%CI: (0.46-0.99, p<0.01). The study findings concluded that attachment to the diets majorly composed of fresh vegetables, and high quality protein sources may contribute in lowering the risk of breast cancer among women.

**Keywords :** breast cancer, dietary pattern, women, principal component analysis

**Conference Title :** ICNEH 2022 : International Conference on Nutritional Epidemiology and Health

**Conference Location :** Dubai, United Arab Emirates

**Conference Dates :** November 10-11, 2022