

## **Weight changes and lifestyle behaviors in women after breast cancer diagnosis : a cross-sectional study.**

### **Abstract**

Background: Weight gain rather than weight loss often occurs after breast cancer diagnosis despite breast cancer survivors frequently reported making healthful lifestyle changes. This study describes the prevalence and magnitude of changes in weight before and after breast cancer diagnosis and examines lifestyle behaviors of breast cancer survivors with stable weight, weight gain or weight loss. Methods. Respondents were 368 women with breast cancer characterized by stages I, II and III. All were recruited from hospitals or breast cancer support groups and had completed conventional treatment. Current weight and height were measured while weight at cancer diagnosis and 1 year before diagnosis were self-reported. Weight change was calculated as the difference between current weight and weight a year preceding breast cancer diagnosis. A 24-hour diet recall and Global Physical Activity Questionnaire assessed dietary intake and physical activity, respectively. Differences in lifestyle behaviors among weight change groups were examined using Analysis of Covariance (ANCOVA). Results: Mean weight change from a year preceding diagnosis to study entry was 2.73 kg (95% CI: 1.90-3.55). Most women (63.3%) experienced weight gain rather than weight loss (36.7%) with a higher percentage (47.8%) having at least 5% weight gain (47.8%) rather than weight loss (22%), respectively. Compared to other weight change groups, women in >10% weight gain group had the lowest fruit and vegetable servings (1.58 servings/day; 95% CI: 1.36-1.82) and highest servings of dairy products (0.41 servings/day; 95% CI: 0.30-0.52). Conclusions: Weight gain was evident in this sample of women after breast cancer diagnosis. Information on magnitude of weight change after breast cancer diagnosis and lifestyle behaviors of breast cancer survivors with varying degrees of weight change could facilitate the development and targeting of effective intervention strategies to achieve healthy weight and optimal health for better survival.

**Keyword:** Weight changes; Lifestyle behaviors; Breast cancer; Women; Diagnosis.