

## Diet and physical activity in relation to weight change among breast cancer patients

### Abstract

**Background:** This study aimed to provide an overview of lifestyle changes after breast cancer diagnosis and to examine the relationship between dietary and physical activity changes with weight changes in breast cancer patients. Women with breast carcinomas (n=368) were recruited from eight hospitals and four breast cancer support groups in peninsular Malaysia. Dietary and physical activity changes were measured from a year preceding breast cancer diagnosis to study entry. Mean duration since diagnosis was  $4.86 \pm 3.46$  years. Dietary changes showed that majority of the respondents had decreased their intake of high fat foods (18.8-65.5%), added fat foods (28.3-48.9%), low fat foods (46.8-80.7%), red meat (39.7%), pork and poultry (20.1-39.7%) and high sugar foods (42.1-60.9%) but increased their intake of fish (42.7%), fruits and vegetables (62.8%) and whole grains (28.5%). Intake of other food groups remained unchanged. Only a small percentage of the women (22.6%) had increased their physical activity since diagnosis where most of them (16.0%) had increased recreational activities. Age at diagnosis ( $\beta = -0.20$ ,  $p = 0.001$ ), and change in whole grain ( $\beta = -0.15$ ,  $p = 0.003$ ) and fish intakes ( $\beta = 0.13$ ,  $p = 0.013$ ) were associated with weight changes after breast cancer diagnosis. In summary, the majority of the women with breast cancer had changed their diets to a healthier one. However, many did not increase their physical activity levels which could improve their health and lower risk of breast cancer recurrence.

**Keyword:** Changes in dietary intake and physical activity; Breast cancer; Weight change; Malaysian females