

Dietary outcomes following a six-month weight loss intervention for breast cancer survivors:

Living Well after Breast Cancer

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ABSTRACT

Background Breast cancer survivors are at increased risk for cancer recurrence, co-morbid disease development and mortality. Healthy dietary practices may decrease these risks and improve health and well-being of survivors.

Aim To evaluate dietary changes made by breast cancer survivors participating in a weight loss intervention, using quantitative and qualitative methods.

Methods Ninety women recruited from an Australian state-based cancer registry (mean±SD age: 55.3±8.7 years; body mass index: 31.0±4.3 kg/m²) participated in a randomized controlled trial evaluating a weight loss (diet and physical activity) intervention (n=45) versus usual care (n=45). Objectively measured weight and self-reported dietary intake (2x24-hour dietary recall telephone interviews) were assessed at baseline and six-months. Linear regression analyses were used to examine intervention effects in the 74 women who completed the 6-month assessment, adjusted for baseline values and confounders. A sub-sample (n=14) of intervention participants completed a semi-structured interview after intervention-completion.

Results Compared to usual care, the intervention group had significantly greater weight loss (-3.0kg [95% CI: -5.0, -1.0]; p<0.001) and vegetable intake (0.66 serves [95% CI: 0.12, 1.19]; p=0.016) at six-months. Significant improvements within both groups (and no significant intervention effects) were observed for multiple dietary outcomes targeted in the intervention (i.e., energy, energy density, carbohydrate, and total and saturated fat intake). Qualitatively, women identified portion control, dietary self-monitoring and reducing fat intake as most commonly initiated dietary strategies. Program-related accountability and social support (provided by the program delivery agent or family/friends) greatly facilitated initial dietary changes.

Conclusions Despite observing a significant intervention effect on body weight, there was minimal evidence of intervention effects on dietary outcomes, with both groups improving. The role of diet in weight changes within this sample of breast cancer survivors is difficult to

ascertain. Qualitative findings helped to better understand the complexity of the dietary changes made by intervention participants.

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