

For Quality of Life After Breast Cancer, Combine Diet and Exercise

For breast cancer survivors who were overweight or obese, diet alone led to weight loss but a diet/exercise combo means more vitality, too.

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Exercising combined with eating a healthy diet may help breast cancer survivors having overweight and obesity improve their ability to carry groceries and perform other daily physical activities, according to a new study. In this study, researchers compared the effect of different lifestyle interventions on survivors' quality of life. The strong study design adds an important understanding of how lifestyle affects pain, fatigue and other mental and physical challenges that plague many breast cancer survivors after treatment.

The [study](#), published in the journal *Cancer*, includes authors supported by AICR.

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Living longer, added challenges

With advances in diagnosis and treatment, the number of women surviving breast cancer has continued to steadily increase over the years. Today, there are over 3.8 million breast cancer survivors in the U.S. But treatment and other challenges often lead to many survivors experiencing pain, fatigue, physical issues and other harmful effects after treatment is over. Difficulties with everyday activities include getting up from a chair, picking up a child and greater anxiety and fatigue.

Having overweight and obesity increases the risk of older women developing breast cancer. [Overweight and obesity](#) also may play a role in experiencing negative quality of life issues for survivors, along with the risk of worse outcomes.

There is [plenty](#) of previous research suggesting that being active and engaging in other healthy lifestyle habits improve breast cancer survivors' quality of life. A handful of earlier trials have also focused on the effect of weight loss and exercise separately. In this study, researchers wanted to pinpoint how diet and exercise play a role in the qualities of life among survivors who have overweight.

Combining diet and exercise

The study assigned 351 breast cancer survivors having overweight or obesity to one of four groups. All the women had completed treatment at least six months before they entered the study. One group of women focused on exercise, a second on diet and a third on diet combined with exercise. The fourth group served as the control, receiving no specific guidance for diet and exercise and advised to ask their physician about them.

For the next 52 weeks each group had specific goals and plans to follow.

The women assigned to the exercise group were prescribed both resistance and aerobic activities. The activities were in-person and home-based. The women who were in the diet group attended regular dietitian-led sessions and were given healthy diet for the first few months before shifting to behavioral modification techniques. The goal was to lose 10 percent of their body weight, while eating plenty of fruits and vegetables. The group assigned to both started with exercise alone then quickly added the diet component.

By the end of the study, when compared to the control group, the women in the diet group lost an average of 6 percent of their body weight and the women in the diet and exercise group lost slightly more than 7 percent.

After comparing the same quality of life survey taken at the start and end of the study period, it was the diet plus exercise group that emerged as improving women's physical health when compared to the women who did no lifestyle changes. Diet alone and diet plus physical activity improved the women's reported vitality or energy.

"We found consistent evidence that weight loss through diet or the combination of diet and exercise would be most beneficial to improving quality of life," said Justin Brown, PhD, Director of the Cancer Metabolism Program at Pennington Biomedical Research Center and the paper's first author. "This might be intuitive, but with reducing overweight it's probably easier to walk upstairs and get in and out of the bathtub, said Brown, who is also an [AICR grantee](#).

Unique health benefits

[AICR recommends](#) that cancer survivors follow the same healthy eating and physical activity recommendations as the general population, when and if they are able. Being [physically active](#), eating a healthy diet and maintaining a healthy weight are evidence-based steps to lower the risk of the most common cancers.

"There is quite convincing and consistent evidence that exercise offers numerous benefits to cancer survivors, including reducing cancer-related fatigue," said Brown. "There is also good evidence that exercise helps to preserve physical functioning."

We've written about some of that research [here](#) and [here](#).

The Cancer study has several caveats, such as the women could not be assigned to their specific treatment group without their knowledge. That, in turn, may have biased their responses. Women with poorer mental health scores were more likely to not complete the trial, although missing data here was similar throughout all groups.

In this study, diet and exercise did not appear to improve the survivors' mental health. One potential reason could be that the participants reported generally positive mental health scores when they entered the study and so the ability to improve them was limited.

Participants also did not necessarily have a poor quality of life at the start of the study, which may mask the effects of diet and exercise. Ongoing and future research is needed to better understand the benefits of weight, diet and exercise. That is coming, such as in the [Breast Cancer Weight Loss \(BWEL\) study](#), which is looking at connections between exercise, diet, weight management and wellness outcomes among women diagnosed with breast cancer.

"I think at the end of the day exercise and diet provide unique health benefits—the best is to do both," said Brown.

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