

Vegetable Gardening May Improve Health Outcomes for Cancer Survivors

People who maintained home vegetable gardens reported healthier diets and improved physical performance.

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Vegetable gardening led to increased vegetable and fruit consumption and improvements in physical health for people with a history of cancer, according to study findings published in [JAMA Network Open](#).

Cancer patients and survivors can experience a decline in physical function that negatively affects their independence and quality of life. Earlier research has shown that vegetable gardening may lead to healthier diets and increased physical activity.

To add to this body of research, Wendy Demark-Wahnefried, PhD, RD, of the University of Alabama at Birmingham, and colleagues aimed to understand whether vegetable gardening could improve health outcomes among older individuals with a history of cancer. They compared improvements in diet, physical activity and overall functioning in people who participated in a gardening intervention and those who were put on waitlist.

This randomized trial ([NCT02985411](#)) was conducted between May 2016 and May 2022, a period that included the early years of the COVID-19 pandemic. The study included 381 Medicare-eligible cancer survivors ages 50 or older in Alabama. About two thirds were women, and the average age was 70. During an initial screening, they reported eating fewer than five servings of vegetables and fruit per day and getting less than 150 minutes of moderate to vigorous physical activity per week. In addition, they had poor physical function according to the [36-Item Short Form Health Survey](#), with a score of 90 or lower.

The enrollees were randomly assigned to start a gardening intervention immediately or go on a waitlist to do so a year later. For the gardening intervention, participants were given supplies and received mentorship from master gardeners in planting and maintaining home-based gardens through the spring, summer and fall.

The investigators carried out a second assessment after 12 months. The primary outcome was a composite index that considered self-reported vegetable and fruit intake, physical activity and physical. Overall, there was no significant difference in this index between the intervention and

waitlist groups.

But the researchers did see some improvements. People who gardened significantly increased their vegetable and fruit consumption. The gardening group had significant improvements in physical performance compared to those on the waitlist, according to timed step and chair-stand tests. They also scored 8.4 points higher on a 100-point scale that measured perceived health. What's more, they had more diverse microbial species in their gut, a sign of a healthier microbiome. However, the COVID pandemic affected outcomes, with the likelihood of improved self-reported physical functioning being twofold higher before versus during the pandemic.

“In this randomized clinical trial including older cancer survivors, a vegetable gardening intervention did not significantly improve a composite index of diet, physical activity and physical function; however, survivors assigned to the intervention had significantly increased vegetable and fruit consumption and, compared with waitlisted survivors, experienced significant improvements in perceived health and physical performance,” wrote the researchers. “Further study in broader populations and during pandemic-free periods is needed to determine definitive benefits.”

Click here to read the study in [JAMA Network Open](#).