



Movement Is Medicine for People With Cancer

Physical activity doesn't replace medical therapies, but it could help them work better.

June 5, 2025 By [Liz Highleyman](#)

A structured exercise program after surgery for colon cancer was associated with a reduced risk of disease recurrence and improved survival, according to [results from a randomized trial](#) presented at the [2025 American Society of Clinical Oncology \(ASCO\) Annual Meeting](#) and published in [The New England Journal of Medicine](#). Patients assigned to the exercise group had a 28% lower risk of cancer recurrence and a 37% reduction in deaths.

"This is the first randomized Phase III trial in patients with Stage III and high-risk Stage II colon cancer to demonstrate that post-treatment exercise is both achievable and effective in improving disease-free survival," ASCO gastrointestinal cancers expert Pamela Kunz, MD, of Yale School of Medicine said in a [news release](#). "Exercise as an intervention is a no-brainer and should be implemented broadly."

Senior study author Christopher Booth, MD, of Queen's University in Canada, noted that the magnitude of the benefits of the exercise program was comparable to—or even exceeded—that of many standard medical therapies. "The CHALLENGE trial sets a new standard of care for colon cancer," he said.

A standing ovation for [#CHALLENGE](#) trial at [#ASCO25](#) -
first in world to definitively show exercise reduces
recurrence and improves survival:

"For every 16 people, exercise prevents 1 person from
recurrent/new cancer"

“For every 14 people, exercise prevents 1 person from dying” pic.twitter.com/Beq0gHstDR
— Nicolas Hart (@DrNicolasHart) [June 1, 2025](#)

Research over the years has linked greater physical activity to lower risk of developing cancer and better outcomes among patients and survivors. But many of these were small observational studies that did not include a randomized control group, making it difficult to quantify the benefits.

In the CHALLENGE trial ([NCT00819208](#)), Booth and colleagues evaluated a structured exercise program for colon cancer patients who had undergone surgery and completed adjuvant (post-surgery) chemotherapy within the past two to six months. About a third of people with Stage II or III colon cancer experience recurrence after such treatment.

Between 2009 and 2023, the researchers enrolled 889 people at 55 medical centers in six countries who said they did not get the recommended 150 minutes of moderate physical activity per week. The median age was 61 years, and men and women were equally represented. Most (90%) had Stage III colon cancer (locally advanced but not yet spread to other parts of the body), while the rest had high-risk Stage II cancer.

The participants were randomly assigned to either participate in the structured exercise program or receive health education materials promoting physical activity and healthy nutrition over a three-year period. Those in the exercise group received a tailored “exercise prescription” and coaching from a physical activity consultant and took part in supervised exercise sessions. The sessions were twice weekly at first, then monthly after six months, with extra support if needed. Both groups also received standard surveillance and follow-up care.

At six months, people in both groups saw a sustained improvement in physical function—including amount of recreational physical activity, predicted VO2 max (maximal oxygen consumption) and distance they could walk in six minutes—but this was significantly greater in the exercise group.

After a median follow-up period of about eight years, 93 patients in the exercise program experienced cancer recurrence or new malignancies, compared with 131 in the health education group. At five years, the disease-free survival rates were 80% versus 74%, respectively, showing that people assigned to the exercise program had a significant 28% lower risk of recurrence, new malignancies or death.

During follow-up, 41 people in the exercise group and 66 in the health education group died. After eight years, overall survival rates were 90% and 83%, respectively, reflecting a 37% lower risk of

death.

Participants in the exercise program reported more muscle and bone adverse events, such as strains or fractures, than those in the control group (19% versus 12%), 10% of which were related to their participation in the program.

“A three-year structured exercise program initiated soon after adjuvant chemotherapy for colon cancer resulted in significantly longer disease-free survival and findings consistent with longer overall survival,” the study authors concluded.

“As oncologists, one of the most common questions we get asked by patients is ‘What else can I do to improve my outcome?’ These results now provide us with a clear answer: an exercise program that includes a personal trainer will reduce the risk of recurrent or new cancer, make you feel better and help you live longer,” Booth said.

Booth emphasized that patients can only benefit from structured exercise interventions if health systems invest in such programs and insurers are willing to cover them. “This intervention is empowering and achievable for patients, with much lower costs than many of our therapies and is sustainable for health systems,” he said.

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