

Healthier Diet Means Better Mobility, Less Fatigue for Colorectal Cancer Survivors

Study reports that eating high amounts of fruits and vegetables linked to better mobility and less fatigue for colorectal cancer survivors.

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Colorectal cancer survivors who eat high amounts of vegetables and fruit, as set out in the diet-related components of the [AICR Cancer Prevention Recommendations](#), have better mobility and lower levels of fatigue compared to survivors who least follow the diet-related recommendations, suggests a recent [study](#) published in the British Journal of Nutrition.

The study is one of the few to focus on how dietary habits connect to colorectal cancer survivors' health-related quality of life. Its findings show only an association between diet-related AICR recommendations and better outcomes; it does not show that diet causes improved outcomes. Yet it adds to a growing body of research on how a healthy lifestyle — and AICR recommendations — links to cancer survivors' overall health.

“Research on the influence of dietary habits after a cancer diagnosis, including colorectal cancer, remains relatively scarce to date, and research is especially lacking on the effects of diet on patient-reported outcomes in cancer survivors, such as quality of life, functioning and persisting complaints of fatigue,” said Martijn Bours, PhD, an Assistant Professor at Maastricht University in the Netherlands and senior author of the paper.

“Although further longitudinal research is needed, our findings provide evidence that colorectal cancer survivors, two to ten years after diagnosis, may benefit from a diet high in fruits and vegetables and low in energy density as recommended in the WCRF/AICR lifestyle guidelines for cancer prevention,” he said.

How do Diet-Related Recommendations Connect with Common Health Challenges of Survivors?

This study included 150 colorectal cancer survivors in the Netherlands who were part of the Energy for life after ColoRectal cancer (EnCoRe) study. The researchers set out to investigate how diet-related AICR Cancer Prevention Recommendations connected with common health challenges

that survivors face, including physical functioning, fatigue and a type of nerve damage called neuropathy. Chemotherapy can lead to neuropathy, which can cause pain and tingling that often affect survivors' hands and feet.

Participants had all completed treatment two to ten years before they filled out questionnaires about their health, sense of fatigue, physical functioning, lifestyle and dietary habits. For one week, the survivors completed detailed reports of what they ate and drank.

Researchers then categorized and calculated a score for how much individuals met each diet-related AICR recommendation, which included groups for fruit, vegetables, alcohol, fast foods, red meat, processed meat and sugar-sweetened drinks. For example, one of the AICR recommendations is to limit sugary drinks. Participants who reported having no sugary drinks were assigned a score of one; those drinking about a cup every day were given half a point and drinking over that amount scored a zero.

AICR has [ten Cancer Prevention Recommendations](#), which stem from an analysis of the latest global evidence on lifestyle and cancer risk. Taken together, the recommendations are a set of evidence-based action steps developed to help adults lower their risk of cancer.

Did the Increased Intake of More Veggies and Fruit Lead to Less Fatigue?

After analysis, the paper found that increasing fruit & vegetable intake by 100 grams per day – about a medium apple or a cup of broccoli – was associated with an increase in physical functioning by about five points. Other research has suggested that a 5–10 point change in score represents a small but real difference, says Marlou-Floor Kenkhuis, PhD, lead study author and student at Maastricht University.

“The association we observed is a small difference, but may become larger when increasing intake,” said Kenkhuis. “The individual dietary recommendations from WCRF/AICR form a package that can have the most impact when taken together. Even small dietary changes could already be beneficial, as all little things add up.”

When adjusting for treatment, tumor stage, physical activity and other factors, higher vegetable intake remained linked to better physical functioning, such as carrying shopping bags, walking and moving about. Higher vegetable intake also linked to improved overall quality of life and lower levels of fatigue. Higher intake of energy-dense food linked to worse physical functioning. No associations were found connecting AICR dietary recommendations with neuropathy.

What is the Link Between Survivors' Health and Diet?

The association between the colorectal cancer survivors' health and diet only shows an association. Kenkhuis emphasizes that “diet may affect the quality of life, or quality of life may lead to altered dietary habits.”

“The major take-home message [of this paper] is that diet and quality of life are related, although

we cannot draw any firm conclusions regarding the direction of the observed associations based on our study findings. The relationship between diet and quality of life is complex and likely bi-directional,” she said.

Another limitation of the study is that people with worse health outcomes were not part of the study population, which may have affected the findings. More research is needed to show how AICR recommendations and diet overall affect cancer survivors’ health.

Kenkhuis and her colleagues are now looking at lifestyle data of colorectal cancer survivors from diagnosis until five years after the end of treatment. The researchers are focusing on AICR’s separate and total recommendations, investigating how changes in dietary habits over time are related to the survivors’ quality of life.

“Other research has shown the benefits of adherence to the AICR Cancer Prevention Recommendations as a package of behaviors rather than focusing on individual components,” notes Nigel Brockton, PhD, AICR’s Vice President of Research. “We look forward to future studies addressing the combined effect of the AICR recommendations and their role in colorectal cancer survivors.”

After a cancer diagnosis, [AICR recommends that survivors follow all AICR Cancer Prevention Recommendations](#), if and when they are able. Eating a healthy diet, engaging in physical activity and following AICR’s other recommendations can protect against cancer reoccurrence and other chronic health conditions.

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