

- Colorectal cancer

## Daily glass of milk may cut bowel cancer risk by fifth, research finds

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Having a large glass of milk every day may cut the risk of bowel cancer by nearly a fifth, according to the largest study conducted into diet and the disease.



An extra daily 300mg of calcium, about the amount found in half a pint of milk, was associated with a 17% lower risk of bowel cancer, researchers said, with non-dairy sources of calcium such as fortified soy milk having a similar protective effect.

“This comprehensive study provides robust evidence that dairy products may help prevent colorectal cancer, largely due to the calcium they contain,” said Dr Keren Papier, the first author of the study and a senior nutritional epidemiologist at the University of Oxford.

“Calcium was found to have a similar effect in both dairy and non-dairy sources, suggesting that it was the main factor responsible for cutting risk,” she added.

Bowel cancer is the third most common cancer in the world causing nearly 2 million cases and one million deaths annually. New diagnoses are expected to reach 3.2 million by 2040, with deaths rising to 1.6 million largely because of rises in wealthy countries. For reasons that remain unclear, bowel cancer is rising sharply in younger people around the world. Between the early 1990s and 2018, the number of UK adults aged 25 to 49 diagnosed with bowel cancer rose 22%.

While the trends are concerning, more than half of bowel cancers are preventable through changes to diet and lifestyle. Maintaining a healthy weight, eating more fibre, drinking less alcohol, being physically active and not smoking all help to reduce the risk. Diet is particularly important, with one in five cases linked to eating too much red or processed meat.

Previous studies have suggested that dairy products can help prevent bowel cancer, but the evidence was not clear-cut. For the latest study, Papier and her colleagues used dietary data from more than 540,000 women over nearly 17 years to investigate how 97 foods, drinks and nutrients affect bowel cancer risk.

The study found convincing evidence that calcium can protect against bowel cancer and confirmed that alcohol and red or processed meats raise the risk. Drinking an extra 20g of alcohol a day, about the amount found in a large glass of wine, was linked to a 15% higher risk of bowel cancer, while eating 30g more red and processed meat was linked to an 8% increase in the disease.

The study focused on postmenopausal women, but Papier said the protective effects of calcium are expected to apply to men and younger people. “We think that calcium may protect against colorectal cancer by attaching to bile acids and free fatty acids in the colon, which helps reduce their cancer-causing potential,” she said. Details are published in Nature Communications.

Sophia Lowes at Cancer Research UK, which funded the study, said: “Bowel cancer is one of the most common cancers affecting people in the UK, which is why it’s so vital that we know how to prevent it.

“Maintaining a healthy, balanced diet, alongside keeping a healthy weight and stopping smoking, is one of the best ways to lower your risk of bowel cancer. This includes cutting down on alcohol and red and processed meat, and eating lots of fruit, vegetables, and wholegrains. Dairy products like milk can also be part of a diet which reduces bowel cancer risk.

“We look forward to further research, including into the effects of specific ingredients like calcium, to ensure fewer people are impacted by this devastating disease.”