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Starch in green bananas can slash risk of some cancers by over 60%, study finds

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If you like your bananas slightly green, you may be getting some unexpected health benefits.



A 20-year study has found that a starch in unripe bananas can reduce the risk of some cancers by more than 60 per cent.

Along with bananas, this type of starch is also found in oats, cereals, pasta, rice, peas and beans.

The study, led by experts at the Universities of Newcastle and Leeds and published in the journal Cancer Prevention Research, could have important implications in reducing cancers in the upper part of the gut, which doctors say can be hard to spot and diagnose.

Over the course of the study, participants took a dose of this starch - called resistant starch - equivalent to that you would get from eating a banana that isn't overly ripe, and is still a bit green.

Some 1,000 patients with Lynch syndrome - an inherited disorder which increases the risk of cancer, particularly in the large intestine and rectum - took the dose for an average of two years.

The study revealed that while the starch didn't affect cancers in the bowel, it did reduce the incidence of cancers in other parts of the body by more than half.

It had a particular effect on cancers of the upper gastrointestinal (GI) tract, including oesophageal, gastric, biliary tract, pancreatic and duodenal cancers.

This breakthrough drug trial saw cancer vanish in every patient

The effect of taking the supple-ment was apparent for 10 years after patients stopped taking it.

"We found that resistant starch reduces a range of cancers by over 60 per cent. The effect was most obvious in the upper part of the gut," John Mathers, a professor of human nutrition at Newcastle University, said in a statement.

"The dose used in the trial is equivalent to eating a daily banana: before they become too ripe and soft, the starch in bananas resists breakdown and reaches the bowel where it can change the type of bacteria that live there".

Resistant starch can be taken as a powder supplement and is found naturally in peas, beans, oats and other starchy foods, he added.

Do artificial sweeteners cause cancer? A new decade-long study suggests they might Alcohol is one of the biggest risks for breast cancer, warns World Health Organization

Resistant starch feeds good gut bacteria

Resistant starch is a type of carbohydrate that, unlike most carbohydrates, doesn't get digested in the small intestine.

Instead, it ferments in the large intestine, feeding healthy gut bacteria.

Professor Mathers said he and his colleagues think that resistant starch may reduce cancer development by reducing the amount of bile acids in the gut that are known to damage DNA and eventually cause cancer. He cautioned however that further studies would be needed to verify this.

Professor Tim Bishop, Leeds' School of Medicine, said: "The results are exciting but the magnitude of the protective effect in the upper GI tract was unexpected so further research is required to replicate these findings."

Previous research published as part of the same trial revealed that aspirin reduced the risk of cancer of the large bowel by 50 per cent.

Deborah James dies: How 'Bow-elbabe' could inspire more to check for symptoms of colorectal cancer

Long term study shows 'benefits are clear'

Between 1999 and 2005, nearly 1,000 participants in the study started taking either resistant starch in a powder form, or a placebo, every day for two years.

At the end of the treatment stage, there was no overall difference in cancer incidence between those who had taken resistant starch and those who had not. However, the research team anticipated any protective effect would take longer to develop and had designed the study for further follow-up.

TikTok users are unwittingly marketing brands' unhealthy food and drink products for them

In the follow-up period, there were just five new cases of upper GI cancers among the 463 participants who had taken the resistant starch, compared with 21 among the 455 who were on the placebo.

"When we started the studies over 20 years ago, we thought that people with a genetic predisposition to colon cancer could help us to test whether we could reduce the risk of cancer with either aspirin or resistant starch," said Professor Sir John Burn, from Newcastle University and Newcastle Hospitals NHS Foundation Trust, who co-ran the trial.

"Patients with Lynch Syndrome are high risk as they are more likely to develop cancers so finding that aspirin can reduce the risk of large bowel cancers and resistant starch other cancers by half is vitally important".

He noted that based on this tri-al, the UK's National Institute for Health and Care Excellence (NICE) now recommends aspirin for people at high genetic risk of cancer.

"The benefits are clear – aspirin and resistant starch work," he said.