Fruits and Veggies May Help Prevent Colon and Rectal Cancer

Researchers are zeroing in on flavonoids, found in produce such as blueberries and broccoli, as a cancer preventive.

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People who eat plenty of fruits and vegetables are less likely to develop colon and rectal cancers, observational studies show. Colorectal cancer is the third most common cause of cancer death in the United States.

But what's in produce that's protective? A new study identifies one potential anticancer compound that our bodies produce when we eat colorful fruits and vegetables, MedicalNewsToday reports.

A research team led by Jayarama Gunaje, PhD, an associate professor at South Dakota State University, was initially assessing aspirin therapy as a cancer preventive when its focus was directed toward the flavonoid metabolites produced by the digestion of various forms of produce.

Flavonoids are colorful antioxidant and anti-inflammatory pigments found in blackberries, blueberries, red grapes, apples, red onions, broccoli, pomegranates, apricots, red cabbage and the peels of purple eggplant as well as chocolate, tea and red wine.

Publishing their findings in the journal Cancers, the researchers identified that 2,4,6-trihydroxybenzoic acid (2,4,6-THBA), a compound that arises when bacteria in the gut break down flavonoids, inhibits enzymes that drive cell division. That's important because malignant tumors result from excessive cell division.

The scientists theorized that 2,4,6-THBA, which is also a derivative of the salicylic acid in aspirin, may be the factor that makes flavonoids protective against cancer. So they studied 2,4,6-THBA in various human cancer cell lines in the laboratory and found that it did indeed inhibit the growth of cancer.

Further research, first in animal models, is needed to determine how flavonoid deconstruction in the gut and the production of 2,4,6-THBA might affect cancer growth. The researchers hope their investigations will give rise to a cancer prevention drug. Specifically, they are looking for particular types of bacteria that can generate 2,4,6-THBA and thus could be used as a probiotic combination therapy along with flavonoid supplements.

What to do in the meantime? Eating brightly colored produce isn't a bad place to start. The study authors stress the importance of routinely eating flavonoid-containing fruits and vegetables.

To learn more, check out "How to Increase Fruits and Vegetables" and "Flavonoids May Reduce the Risk of Cancer."

To read the MedicalNewsToday article, click here.

To read the study, click here.

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