

Naturally-occurring apple compounds reduce risk of pancreatic cancer

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Eating flavonol-rich foods like apples may help reduce the risk of pancreatic cancer, says a team of international researchers. Quercetin, which is found naturally in apples and onions, has been identified as one of the most beneficial flavonols in preventing and reducing the risk of pancreatic cancer. Although the overall risk was reduced among the study participants, smokers who consumed foods rich in flavonols had a significantly greater risk reduction.

This study, published in the October 15 issue of the American Journal of Epidemiology, is the first of its kind to evaluate the effect of flavonols – compounds found specifically in plants – on developing pancreatic cancer. According to the research paper, “only a few prospective studies have investigated flavonols as risk factors for cancer, none of which has included pancreatic cancer. “

Researchers from Germany, the Univ. of Hawaii and Univ. of Southern California tracked food intake and health outcomes of 183,518 participants in the Multiethnic Cohort Study for eight years. The study evaluated the participants’ food consumption and calculated the intake of the three flavonols quercetin, kaempferol, and myricetin. The analyses determined that flavonol intake does have an impact on the risk for developing pancreatic cancer.

The most significant finding was among smokers. Smokers with the lowest intake of flavonols presented with the most pancreatic cancer. Smoking is an established risk factor for the often fatal pancreatic

cancer, notes the research.

Among the other findings were that women had the highest intake of total flavonols and seventy percent of the flavonol intake came from quercetin, linked to apple and onion consumption.

It is believed that these compounds may have anticancer effects due to their ability to reduce oxidative stress and alter other cellular functions related to cancer development.

“Unlike many of the dietary components, flavonols are concentrated in specific foods rather than in broader food groups, for example, in apples rather than in all fruit,” notes the research study. Previously, the most consistent inverse association was found between flavonols, especially quercetin in apples and lung cancer, as pointed out in this study. No other epidemiological flavonol studies have included evaluation of pancreatic cancer.

While found in many plants, flavonols are found in high concentrations in apples, onions, tea, berries, kale, and broccoli. Quercetin is most plentiful in apples and onions.

Source: U.S. Apple Association

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