

Coffee Drinkers Rejoice: New Survey Shows Massive Health Benefits

Coffee drinkers in a long-term study were about half as likely to develop type 2 diabetes as those who didn't drink coffee, and researchers think an inflammation-lowering effect of the beverage might be the key.

"Extensive research has revealed that coffee drinking exhibits both beneficial and aggravating health effects," said Demosthenes B. Panagiotakos of the department of Nutrition and Dietetics at Harokopio University in Athens, Greece.

"An inverse relation between coffee intake and diabetes has been reported in many prospective studies whereas some have yielded insignificant results," Panagiotakos, a co-author of the new study, told Reuters Health by email.

Since he and his colleagues merely observed the study participants, and didn't assign them randomly to drink or abstain from coffee, they still can't be sure that drinking coffee helps prevent diabetes, but their findings might help form the basis of a cause-and-effect hypothesis, Panagiotakos said.

In 2001 and 2002, the researchers selected a random sample of more than 1,300 men and women age 18 years and older in Athens. The participants filled out dietary questionnaires including questions about coffee drinking frequency.

Drinking less than 1.5 cups of coffee per day was termed "casual" coffee drinking, and more than 1.5 cups per day was "habitual" drinking. There were 816 casual drinkers, 385 habitual drinkers and 239 non-coffee drinkers.

The participants also had blood tests to evaluate levels of protein markers of inflammation. The tests also measured antioxidant levels, which indicate the body's ability to neutralize cell-damaging "free radicals."

Ten years later, 191 people had developed diabetes, including 13 percent of the men and 12 percent of the women in the original group. And participants who reported higher coffee consumption had lower likelihoods of developing diabetes.

Habitual coffee drinkers were 54 percent less likely to develop diabetes compared to non-coffee drinkers, even after accounting for smoking, high blood pressure, family history of diabetes and intake of other caffeinated beverages, the researchers reported in the *European Journal of Clinical Nutrition*.

Levels of serum amyloid, one of the inflammatory markers in the blood, seemed to explain some of the relationship between coffee and diabetes, the authors write. Higher coffee consumption went along with lower amyloid levels.

"Previous studies pointed in the same direction . . . now we have an additional hint," said Dr. Marc Y. Donath, chief of Endocrinology, Diabetes & Metabolism at University Hospital Basel in Switzerland, who was not part of the new study.

The new findings are supported by a prospective study in 2013 involving 836 people who didn't have diabetes at the start of the study, Panagiotakos said. Over the next seven years, high levels of amyloid and another inflammatory marker called C-reactive protein "were found to precede the onset of diabetes, independently of other risk factors," he said.

It's possible that other influences were also at work, he acknowledged.

"Oxidative stress has been shown to accelerate the dysfunction of pancreatic b-cells and antioxidants intake has been shown

to decrease diabetes risk, so the antioxidant components of coffee may be beneficial, but still more research is needed toward this direction,” Panagiotakos said.

Some studies have found that the association between coffee and diabetes risk is stronger for women and non-smokers, according to Dongfeng Zhang of the department of Epidemiology and Health Statistics at Qingdao University Medical College in China, who also was not part of the new study.

We are not yet sure that coffee helps prevent diabetes, but “what is sure and remains more effective is exercise and body weight control,” Donath told Reuters Health by email.

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