Mediterranean diet alone may lower diabetes risk

January 6 2014, by Kathleen Doheny, Healthday Reporter

Key ingredient of study: use of extra-virgin olive oil, not calorie counting or exercise.

(HealthDay)—Adults at risk for heart disease who eat a Mediterranean diet rich in olive oil can lower their chances of developing diabetes, even without restricting calories or boosting exercise, new research suggests.

In the study, Spanish researchers followed more than 3,500 older adults at high risk of heart disease. The researchers assigned them to one of three groups: a Mediterranean diet with extra-virgin olive oil, a Mediterranean diet supplemented with mixed nuts, or a low-fat diet, which served as the comparison. They did not get special instructions on losing weight or increasing their physical activity.

A Mediterranean diet focuses on fruits, vegetables, whole grains and
fish, besides the olive oil.

Those in the nut group were allowed about an ounce a day of walnuts, almonds and hazelnuts. Those in the olive oil group were allowed a little more than three tablespoons daily.

The researchers followed the men and women, aged 55 to 80, for about four years, between 2003 and 2010. During the follow-up, 80 in the olive oil group developed type 2 diabetes, while 92 in the nuts group and 101 in the comparison diet group did.

After adjusting for other factors affecting diabetes risk, the researchers found those in the olive oil group reduced diabetes risk by about 40 percent compared to the comparison diet group. Those in the nuts group reduced risk by 18 percent, which was not statistically significant.

The new research, published online Jan. 7 in the *Annals of Internal Medicine*, is good news, said Dr. Christine Laine, editor-in-chief of the journal and an associate professor of medicine at Jefferson Medical College in Philadelphia.

The study "suggests it is possible to reduce the risk of diabetes by changing the composition of your diet. It is another piece of evidence that the Mediterranean diet has health benefits," said Laine, who was not involved in the research.

She hopes the findings don't discourage people from diet and exercise. Excess weight is a risk factor for type 2 diabetes, she said, and diet and exercise can help control weight. Adding diet and exercise to the Mediterranean diet could theoretically reduce the diabetes risk even more, she noted.

Those at risk for type 2 diabetes, Laine said, "should work hard to
maintain a healthy body weight." However, even if they are not able to do that successfully, she said the new study suggests—but does not prove—that adding olive oil to their diet may provide some benefit.

The oil's anti-inflammatory and antioxidant properties, among other factors, may explain the link, the researchers said. However, while the finding shows an association between long-term olive oil consumption and reduced risk of diabetes, it doesn't establish a cause-and-effect relationship.

People with diabetes, which has more than doubled in incidence worldwide in the past 30 years, have trouble controlling their blood sugar because they don't produce the hormone insulin or don't use it properly. The disease can lead to blindness, kidney failure and amputation.

The new study "demonstrates the power of plant foods and an overall healthful diet," said Connie Diekman, director of university nutrition at Washington University in St. Louis.

"The important message from this study is the value of a Mediterranean diet plan to satiety and overall health," Diekman said. "Inclusion of plant foods, including nuts, along with the use of olive oil in place of solid fats provides a wider variety of phytonutrients, which promote health, aid metabolism and provide feelings of fullness, all important aspects of weight control."

The research was funded by the Spanish government's Institute of Health Carlos III. Industry sources provided the olive oil and nuts.

More information: To learn more about the Mediterranean diet, visit the American Academy of Nutrition and Dietetics.