## Meat Products Could Raise Diabetes Risk: Study

POSTED: TUESDAY, NOVEMBER 12, 2013, 9:00 AM



To avoid developing type 2 diabetes, you may have been told to watch your calories and kick up your activity level. Now researchers say there's something else you might consider: your so-called dietary acid load.

And that might mean cutting down on meat, since the French researchers say a diet heavy in animal products and other acidic foods can cause an acid load in the body, resulting in health complications. This includes reduced insulin sensitivity, which can lead to type 2 diabetes, according to the new study.

"We have demonstrated for the first time in a large prospective study that dietary acid load was positively associated with type 2 diabetes risk, independently of other known risk factors for diabetes," the researchers said. "Our results need to be validated in other populations, and may lead to promotion of diets with a low acid load for the prevention of diabetes."

The term animal products refers to meat, eggs and dairy. On the other hand, greater consumption of fruits and vegetables is believed to lead to a lower acid load, the researchers said.

One diabetes expert in the U.S. called the finding "interesting," but he said he believes there are worse dietary culprits than meat and dairy when it comes to diabetes.

"There is a much stronger causal connection between the consumption of high glycemic foods -- for example, sugar and refined carbohydrates -- and the development of type 2 diabetes," said Christopher Ochner, director of research, development and administration at the Mount Sinai Adolescent Health Center in New York City.

"Further, the health and potential weight-controlling benefits of foods like fish, legumes and whole grains likely far outweigh any potential increase in risk associated with these food due to acid production when they are digested," Ochner said. The main dietary advice to people with diabetes or at risk of the disease remains the same, he said: "Avoid high glycemic foods, particularly sugar and refined carbohydrates -- cookies, cakes, candy, white bread, pasta, rice."

The new French study included more than 66,000 women in Europe who were followed for more than 14 years. During that time, nearly 1,400 of the women were diagnosed with type 2 diabetes.

Those with diets highest in acidic foods were 56 percent more likely to develop diabetes than those with diets lowest in acidic foods, according to the study, which was published recently in the journal *Diabetologia*.

This link between a highly acidic diet and increased risk of diabetes remained even after the researchers adjusted for dietary patterns, meat consumption and intake of fruit, vegetables, coffee and sweetened beverages. The study did not, however, prove that a highly acidic diet actually causes diabetes.

"A diet rich in animal protein may favor net acid intake, while most fruits and vegetables form alkaline precursors that neutralize the acidity," wrote Dr. Guy Fagherazzi and Dr. Francoise Clavel-Chapelon, of the Center for Research in Epidemiology and Population Health at INSERM, in Paris. "Contrary to what is generally believed, most fruits -- such as peaches, apples, pears, bananas and even lemons and oranges -- actually reduce dietary acid load once the body has processed them."

INSERM is the French equivalent of the U.S. National Institutes of Health.