

Fatty diet can cause intestinal tumors, study says

Published: Sept. 28, 2016 at 11:30 AM

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PHILADELPHIA, Sept. 28 (UPI) --

PHILADELPHIA, Sept. 28 (UPI) -- From a health perspective, not all fats are created equal -- which is why olive oil is good but corn oil is not -- with new research now showing some may increase risk for intestinal cancer.

Regardless of obesity, certain types of dietary fat motivate immune inflammatory responses in mice, causing cancer to develop, according to researchers.

Finding that diet can influence intestinal cancer risk regardless of obesity is significant, researchers say, and could allow people to lower their risk by paying better attention to their diets.

"We found that specific types of high-fat diets -- based on corn or coconut oils like those found in certain salad dressings and ice cream -- are associated with increased tumor formation in a mouse model of intestinal cancer," Dr. John Lambris, a professor of research medicine at the University of Pennsylvania, said in a [press release](#). "This model is particularly interesting because it resembles human familial adenomatous polyposis, a condition that carries an 80 percent risk of developing colorectal cancer in individuals with mutations in a tumor suppressor gene called Apc."

For the study, [published in the journal Molecular Cancer Research](#), fed mice high-fat diets that included corn oil, coconut oil and olive oil.

Within days of starting the diets, mice fed corn and coconut oil diets developed intestinal inflammation and tumors.

When mice were later given a drug to reduce activity in the complement system, a part of the innate immune system, it prevented the development of tumors. The researchers say this result may also suggest a new adjuvant treatment for cancer patients.

More significantly, however, researchers say the finding appears clear about making better selections of dietary fats.

"Our results clearly show that eating a high-fat diet is sufficient to increase cancer risk, regardless of obesity," said Joseph Nadeau, co-senior author of the study and a researcher at the Pacific Northwest Research Institute.