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For immediate release

Berries May Inhibit Cancer, OSU Researcher Finds

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COLUMBUS, Ohio – “An apple a day keeps the doctor away.” Well, how about a cupful of raspberries?

The fruit, which contains compounds that may prevent, stop or reverse the development of certain cancers, has produced such promising results in studies of lab rats that one Ohio State University researcher intends to begin human clinical trials upon approved funding.

Gary Stoner, head of the Laboratory of Cancer Chemoprevention and Etiology at OSU’s James Cancer Hospital and Solove Research Institute, found that by feeding cancer-induced rats 5-10 percent of freeze-dried raspberries in their diet over a 36-week study reduced the development of tumors in the colon by 50 percent and reduced esophageal cancer by nearly 70 percent. “The results provide the basis to consider using berries as an inhibitor of these cancers in humans,” said Stoner.

The findings are the latest in a series of studies in recent years that consistently point to fruits such as strawberries, cranberries, blackberries, blueberries and varieties of raspberries as being inhibitors of colon and esophageal cancer in animals. Stoner hopes that the human trials will produce the same results. “We are taking a food-based approach to cancer prevention,” said Stoner. “If the berries provide protection in animals, then ultimately they would provide protection in humans.”

If the human trials are approved, the research will focus on two conditions: Barrett’s Esophagus, a disorder in which the lining of the esophagus goes through cellular changes caused by acid reflux, and Familial Adenomatous Polyposis (FAP), a rare genetic disease that can lead to colon cancer.

Stoner said that there is an increasing number of Americans who have Barrett’s Esophagus and at least 10 percent of those with Barrett’s develop a type of cancer called esophageal adenocarcinoma. “The rate of increase in the development of the disease exceeds that of any other cancer at the moment,” said Stoner, adding that the survival rate is very poor. “The survival rate is about 3 percent.”

FAP is a hereditary disease that becomes prevalent during the teenage years and is characterized by the development of precancerous polyps on the colon. If left untreated, the condition almost always develops into colorectal cancer.

Stoner is hoping that the raspberries will slow the rate of cell growth in patients with Barrett's Esophagus and inhibit polyp growth on the colons of FAP patients. "We don't know how the rat study will translate to humans," said Stoner. "Whatever is in the berries that protects the esophagus and colon in rats, we are hoping we will find it in humans. If we do, we will be very happy. The findings will be hot."

Ellagic acid, found in high concentrations in raspberries and other berries, has long been considered to be an anti-carcinogenic and anti-mutagenic compound that contributes to cancer inhibition. But Stoner contends that it is a combination of compounds in the fruits that aid in cancer prevention, not just the one, and that combination has yet to be discovered.

Funds for preliminary human trials are currently on hold, but Stoner is hoping to acquire half of a two-year \$500,000 OSU Ohio Agricultural Research and Development Center grant to begin the studies within the next few months.