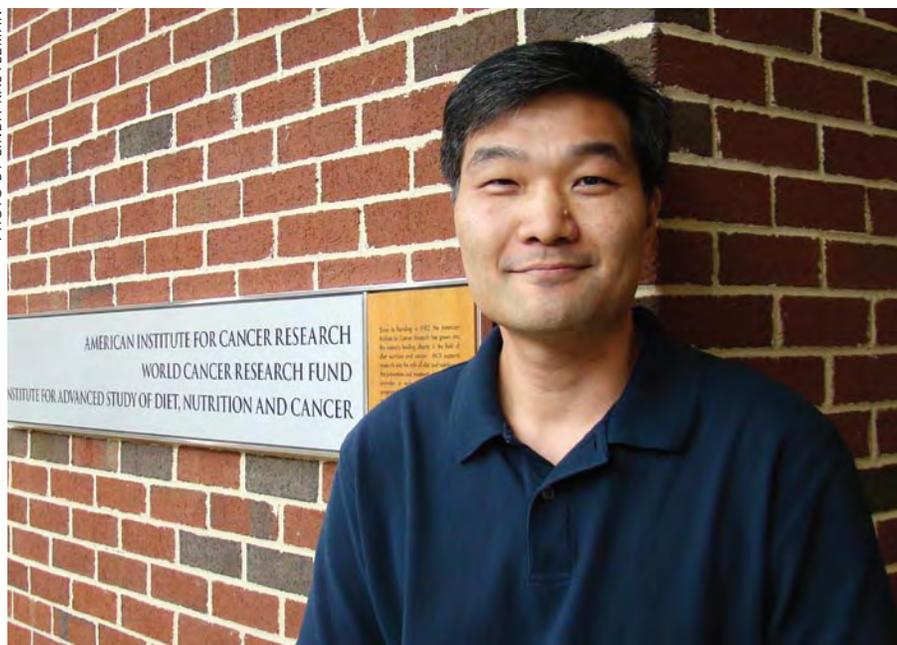


Studying *the* link between sialic acid *and* colon cancer

PHOTO BY LINDA KASTLEMAN



Dr. Eric Park

What is it about red meat and dairy products that increases people's risk of developing colon cancer?

Eric Park, PhD, research assistant professor of nutrition at the UNC Gillings School of Global Public Health, is determined to solve that puzzle.

Park's research focuses on the relationship between diet and cancer. He is looking at a family of carbohydrates called sialic acids and their role in colon cancer. Even more specifically, his research focuses on one type of carbohydrate that is found in cancer cell surfaces but comes mainly from red meat and dairy products, not from humans.

"I want to know if these carbs, these non-human sugars, could account for the increased risk of [getting cancer from] eating mammal products," Park says. "There is something unique about cancer cells that they accumulate these non-human sugars."

While many researchers have looked at some of the risks posed by high consumption of red meat, such as its high fat or caloric content, no one has examined the sialic acids from red meat in the way that Park is doing now.

He hopes to discover whether this specific type of sialic acid increases inflamma-

tion associated with colon cancer, thereby increasing a person's risk of developing the cancer. This particular form of sialic acid also has been detected in breast cancer and liver cancer.

"If you know what the functions of sialic acids are and you know what the normal state of sialic acids should be, it is a lot easier to find out what happens during the disease," Park says.

His research also could help people who suffer from inflammatory bowel disease (IBS) because they have a higher risk of colon cancer. Red meat is strongly associated with colon cancer.

The American Institute for Cancer Research recommends consuming no more than 18 ounces (cooked) of red meat (beef, pork or lamb) per week and avoiding processed meat. (For details, visit www.aicr.org.)

Park says such recommendations are based on strong evidence. "It is not because of this particular sugar, but this sugar may explain why red meat increases your risk for cancer." ■

— *By Natalie Gott*

For a different angle on the red meat debate, read the Archives of Internal Medicine (<http://archinte.ama-assn.org>) editorial by Barry Popkin, PhD, Carla Smith Chamblee Distinguished Professor of Global Nutrition and director of UNC's Interdisciplinary Obesity Center. He discusses both the potential cancer and other health risks of eating red meat and the impact on energy consumption and climate change from producing meat.