



**RESEARCH:** Henry Thompson, professor of horticulture and landscape design at Colorado State University, also is director of the CSU Cancer Prevention Laboratory, where, he is researching foods that can be used in cancer prevention.

V. Richard Haro  
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## Research looks at preventing cancer through our diets

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A new research program at Colorado State University will examine the role foods — specifically fruits, vegetables and grains — play in preventing cancer.

The program, led by horticulture and landscape architecture professor Henry Thompson, will focus on answering two key questions: How much plant food is helpful or enough, and what types of plants are best for lowering the risk of developing cancer?

"Our mission is to try to find ways to prevent the development of cancer," Thompson said. "It's a repeating process of asking questions, learning from what we investigate and forming a new set of questions that will con-

tinue to address our understanding of the optimal diet for cancer prevention."

The research will involve at least 150 women who are at risk to develop breast cancer, either because they have a family history of the disease or because they have survived it.

Researchers are designing a number of diets with varied amounts and types of fruits, vegetables and grains and preparing cook books for the study subjects. The subjects will follow a menu plan for two to eight weeks while their urine and blood is evaluated for changes in biomarkers for cancer risk.

Biomarkers are specific physical traits used to measure or indicate the effects or progress of a disease or condition. Thompson's research currently is

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## Diets

**Continued from Page B1** focusing on oxidated damage to the body as a biomarker for cancer risk and how the antioxidant quality of plant food affects that risk.

"It is thought that the oxidation of cellular components like DNA may be involved in the cause of cancer, therefore it is reasoned that the antioxidants in plant food should be a protection against the development of cancer," Thompson said.

Thompson and the five people on his research team have been investigating plant foods' role in preventing cancer since 1998. Plants from 17 botanical families offer some protection against cancer, but researchers are trying to determine the types, amount and combination that is most effective.

"If you look at the amount of fruits and vegetables that a typical Ameri-

can consumes, it's about 31/2 servings per day," Thompson said, adding that people typically get in a shopping rut and buy only a few kinds of plant foods.

"The typical consumer is not taking advantage of the diversity of plant foods that are available to choose from," he said. "Our work is to identify what are the best foods to select and then help people figure out how to incorporate that into their daily living."

Eventually, Thompson's research could help farmers, especially in Colorado, determine what types and varieties of plants to grow. That's how it ties in with CSU's Department of Horticulture and Landscape Architecture.

"While it may be unusual, it's very appropriate for a future-sighted College of Agricultural Sciences," department chairman Stephen Wallner said. "It adds a whole other level, layer of re-search credibility, and expertise in a new direction."