



FOOD SYSTEMS 101

UNDERSTANDING THE CONTEXT AND COMPLEXITY OF FOOD SYSTEMS AND SOCIETY *By Brian Meyer*

Above: **Ruth MacDonald** (left) and **Cheryl Reitmeier** lead a new course in which students think about food, understand context and evaluate the impact of food choices on their health, the environment and society.

STORIES Recipes

Wild Rice Soup

From the kitchen of: **Ruth MacDonald**

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A new class challenges students to grasp the complexity of food systems and to better understand food production issues.

The Societal Impact on Food Systems course was offered for the first time last spring. It was taught by Ruth MacDonald, professor and chair of the Department of Food Science and Human Nutrition, and Cheryl Reitmeier, professor and associate chair of food science and human nutrition.

“Everyone makes food choice decisions throughout their lives,” says MacDonald. “The goal was to make students think about food, understand context and evaluate the impact of food choices on their health, the environment and society. The course

focused on the broad spectrum of food systems and to try to see it in its entirety to put a framework around discussions.”

Last spring’s class of 13 undergraduates was a casserole of majors, from animal science, food science, French and English, and diverse personal perspectives, from farm-raised to urban, from meat lovers to vegetarians.

They learned about issues in food safety and links to environment and health; types of food systems; history, trends and components in processing, packaging, transportation and marketing; defining the current U.S. food system; influences of economics, public policy

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and politics and food systems; and role of consumers, government, farmers, retailers and other stakeholders.

From day one, students were encouraged to engage in discussion and debate, share experiences and think through their ideas in writing. One exercise was to write a letter to Congress about a current agricultural policy or food safety issue. They surveyed other students on what they knew about agriculture and the food system. They met with a molecular biologist who was on campus to speak about a book on genetically modified foods.

Discussions were stimulating and, at times, passionate about topics such as migrant workers in agriculture and what kinds of food and soft drinks should be allowed in high schools. “There were a lot of eye-opening moments for everyone in the discussions. One of our class expectations was to be respectful and nonjudgmental, allowing everyone to voice ideas and allowing acceptance of opposing viewpoints,” says MacDonald.

The final project was a team presentation on a chosen topic. “The teams had members who had studied the pros and those who had studied the cons, and then

they had to come together and have a consensus. It wasn’t easy,” she says.

But that’s the real world, MacDonald says. “Students learned that as adamant as they can be in making their case, in the end, you need to make a decision. Being dogmatic and saying we must do this or that ignores other perspectives or situations. There are many factors involved in making decisions on our food choices. They include our resources and time, ethical beliefs and also what our friends and neighbors are saying. In some cases, your decision may be ‘It depends.’”

The course will be offered again in the spring of 2012. In the future, the instructors will look into making it available more broadly online.

“I feel everyone would benefit from a course like this,” MacDonald says. “We wanted to put issues in front of students to think through and build on what they’re learning in their other classes. If they begin to have a holistic view on food systems, it may be helpful in navigating the bewildering array of information they’re bombarded with each day and help them put it into context.” ■

What’s in a Name?

Whether consumer or producer driven, terms or labels are a major part of navigating today’s food systems. Part of the Societal Impact on Food Systems course is understanding terminology used to describe food. The following examples were used in the class last spring:

Genetic modification. Changing the genes of an organism by insertion or deletion, usually for some sort of possible benefit to the survival of the organism.

Natural. Products labeled “natural” cannot contain any artificial flavor or flavoring, coloring ingredient, chemical preservative or any other artificial or synthetic ingredient; and the product and its ingredients are not more than minimally processed (ground, for example). All fresh meat qualifies as “natural.” All products claiming to be natural should be accompanied by a brief statement which explains what is meant by the term “natural.” USDA does not regulate use of the term “natural.” (Source: USDA)

Organic. Organic production is a system that is managed in accordance with the Organic Foods Production Act and regulations in the Code of Federal Regulations to respond to site-specific conditions by integrating cultural, biological and mechanical practices that foster cycling of resources, promote ecological balance and conserve biodiversity. The National Organic Program develops, implements and administers national production, handling and labeling standards. (Source: USDA)

Local. Obtaining food from within some set distance of one’s location. Some define as anything that can be transported to the location in one day or less.

Nutraceutical. Created from the words “nutrition” and “pharmaceutical” meaning a food (or a supplement) that may provide medical or health benefits, including the prevention and/or treatment of a disease (Source: American Association of Pharmaceutical Scientists)

Whole food. Loosely defined as a food which has undergone as little processing as possible, or that is in as close to a natural state as possible.