

the sum of all— EQUALS SAFER FOOD

By Eva Ann Dorris

It may look good enough to eat, but is it?

That's the question answered daily in dozens of ongoing research efforts into meat production and safety, food processing and human nutrition. This research helps fulfill the Mississippi State University Division of Agriculture, Forestry and Veterinary Medicine's mission to provide a safe and plentiful food supply. The area of food science, including food safety, is one of the division's five core areas of interest and a major component of MAFES research.

As the nation reeled from the terrorist attacks of Sept. 11, and people worried about threats of more to come, MAFES and the division assessed its own areas of expertise, advice and strategic planning that would continue to help keep food supplies safe and plentiful.

MSU's Food Science Institute was revitalized with the appointment of 31 researchers, nutritionists, dietitians, professors, animal scientists, economists, agronomists and MSU Extension Service educators from throughout the university system. Twenty-eight of these appointees have partial or full-time MAFES assignments.

"Food safety and food security are second only to national security in the defense of this nation. Some of us have forgotten where our food comes from, and we don't realize how little there really is if we had to depend on existing supplies on a long-term basis," said Vance Watson, interim vice president of the division and MAFES director. "We have always committed a major part of our resources and programs to food safety because we care about our clients and about future generations."

The restaffing of the Food Science Institute has created a pool of expertise that potential new food industries in the state can go to for help in determining economic potential, assessing availability of raw or processed products and recruiting graduates trained for their needs. These industries could in turn bring millions of dollars to the state's economy.

The institute also serves as a liaison between producers of raw vegetables, fruits, dairy products and meats, and the food industries that further process and deliver these goods safely and economically to grocery stores.

"What we've done is brought our people and our resources together to form a united front," said Bob

Rogers, recently appointed director of the Food Science Institute. "We know it's almost impossible for a single scientist to work alone and achieve timely results. This institute will provide a team approach to problem solving and will provide a stronger front as we pursue funding."

Rogers, a professor of food science and technology with MSU's animal and dairy sciences department, brings more than 40 years of professional experience in meat and food processing to the institute. Among his personal achievements is the development of the method to rapidly and efficiently skin commercial catfish for processing. He also led research into the development of the fat-free hot dog, which now accounts for millions of pounds of processed meat sold worldwide.

One example of ongoing research, which will now be carried out under the auspices of the institute, is to perfect a nonradioactive, post-package pasteurization system. The system will lower the risk of food-borne pathogen contamination in food products consumers don't always cook or fully cook, such as hot dogs and other sandwich meats.

The Food Science Institute has been designated the flagship for food processing in Mississippi.

Rogers said the Food Science Institute plans to secure \$5 million of outside or leveraged funds for research, education and extension activities related to foods and food safety.

Researchers and other members of the institute hope their work will provide a safer food supply, more industries for the state, more education on nutrition, enhanced research into new products, marketing of those products and degree programs that produce graduates trained to carry on the tradition of providing a healthy food supply.



Bob Rogers

- MAFES animal and dairy scientist and Food Science Institute director
- Bachelor's, master's and doctorate degrees in animal science from the University of Kentucky
- Current manager of MSU's meats laboratory, an on-site teaching and research facility.
- Professor of food law, food packaging and food plant management