



Marco Niconich

Lab gives new taste to MSU food research

By Bob Ratliff

Sensory evaluation is not on the minds of most people as they do the weekly grocery shopping. It is, however, what determines which new food products reach the store shelves and the focus of a new laboratory at Mississippi State University.

The James E. Garrison Sensory Evaluation Laboratory was dedicated April 4 by MSU's Department of Food Science and Technology. The almost 3,000 square-foot facility contains offices, fully equipped kitchens and areas to conduct a variety of sensory evaluations on food products.

"Sensory evaluation is the process of forming an opinion about a food or any other product using one or more of the five senses: taste, touch, smell, sight and hearing," said Patti Coggins, manager of the lab and an assistant professor of food science and technology. "Sensory evaluation of a food product in a designated lab strengthens the research that's gone into its development."

Several methods can be used to do food product evaluations, including supermarket taste tests and mail questionnaires, but Coggins said the most reliable and scientific approach is using a selected panel in a laboratory setting.

The Mississippi State lab uses panelists selected from volunteers within the university and from women's clubs and other groups. Evaluations are usually set up in booths with trays containing samples of the food products to be tested, a glass of water for rinsing between samples, crackers for neutralizing the mouth after each sample and an evaluation form.

The most unique feature of the new lab is the testing booths equipped with "breadbox" doors for passing food samples to panelists. The doors can be raised, a sample placed inside and then closed. The panelist can then remove the sample without ever seeing the room or people on the other side.

"This is a European design and the only one of its type in use in the South," Coggins said. "We chose it because it allows for the fewest possible outside factors influencing an evaluation."

Even the color of the light in the testing booths can be changed to help prevent panelists from being influenced by the color of the sample they are evaluating.

In addition, the lab contains two kitchens equipped with appliances provided by Viking Range Corp. of Greenwood and rooms with several different seating arrangements for panel discussions of products under evaluation.



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Testing booths are equipped with "breadbox" doors.

Dairy Products Pioneer



James E. Garrison retired in 1987 as president of Ryan Milk Co., based in Murray, Ky. During more than three decades with the company, he became a leader in the field through his development of new practices for handling sterile milk prod-

ucts and for manufacturing special dairy products, including whipping cream and individual coffee creamers.

“The significance of Mr. Garrison’s work is that he was a pioneer in the aseptic/sterile dairy products industry,” said Charles H. White, food science and technology department head. “In fact, in 1968 he installed the first Gable-top aseptic filling machine in the United States. Jim Garrison is one of the main reasons why long-life coffee creamers, half-and-half and whipping creams are available in the U.S.”

Garrison began his career in Chicago as a sales representative for Johnson & Johnson, the medical dressing and pharmaceutical manufacturer. He returned to his hometown in 1953 to manage Pontotoc Dairies, a milk condensing plant. Three years later, Garrison moved to Kentucky as Ryan Milk’s general manager.

Under his leadership, Ryan received the U.S. Senate’s 1985 Productivity Award for Kentucky in recognition of the firm’s sustained growth, consistent plant moderation and successful marketing.

His support of Mississippi State includes contributions to a scholarship fund for graduate and undergraduate majors in dairy science who plan careers in the dairy foods industry.

Additionally, he chaired a committee of national business executives who established the Edward W. Custer Endowed Chair in Dairy Foods to honor the late professor emeritus who helped boost the university’s dairy manufacturing plant. Garrison then made the initial donation to the Custer fund.

He and his wife, Edith, have also established the James Garrison Library Endowment Fund to enhance the Mitchell Memorial Library’s collections, as well as to purchase state-of-the-art electronic information resources and provide other funds to maintain library operations.

Photo by Marco Nicovich

The facility is used in food product research by MSU faculty and students. It also is available for contract use by private companies for independent, professional evaluations of their new food products.

“The Garrison Sensory Evaluation Lab expands the scope of the work we’ve been doing in this area for more than a decade,” said Charles White, food science and technology department head. “It offers exciting new possibilities for research by our faculty and graduate students, as well as support for the food industry in Mississippi and the surrounding region.”

The new lab is named in honor of 1949 Mississippi State dairy manufacturing graduate James E. Garrison. The Pontotoc County native is the retired president of Kentucky-based Ryan Milk Co., and MSU’s 1997 National Alumnus of the Year.



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Ribbon-cutting duties for the sensory evaluation lab were performed by, L-R, food science and technology Head Charles White, MAFES Director Vance Watson, James Garrison, MSU President Charles Lee and Lab Manager Patti Coggins.

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