Local Teacher Participates in National Workshop on Food Science

From Farm to Table, Teachers Explore the Science Behind Nation’s Food Supply

WASHINGTON, DC. August, 2011 – Karen Henderson, a teacher at Stephens Middle School in Toccoa, GA was one of 40 teachers nationwide chosen to participate in a food science workshop developed and implemented in a partnership between the Food and Drug Administration (FDA), the National Science Teachers Association (NSTA), and the Graduate School USA. The one-week workshop for middle and high school science teachers, as well as family and consumer science teachers, took place in Washington this summer.

The workshop is part of the FDA/NSTA Professional Development Program in Food Science, a sustained effort that also features curriculum implementation, a follow-up conference, and participant-led workshops. The goal of the program is to educate teachers and students about critical food safety issues such as foodborne illnesses by exploring the science behind them. The program arms teachers with a unique new topic and curriculum with which to teach science. In addition, participants learn about nutrition, food allergies, cosmetics safety, and color additives from FDA experts and receive nutrition material to help teach their students how to use the Nutrition Facts Label to make better food choices.
“Many teenage students have jobs in the food service industry or have food preparation responsibilities at home,” said Louise Dickerson, FDA’s Project Manager for the Professional Development Program in Food Science. “This program will better educate them about the importance of handling food safely and why precautions must be taken. From FDA’s perspective, our professional development program for teachers is an effective way to support our goal of reducing the incidence of foodborne illness in this country.” An estimated 1 in 6 Americans get sick from food poisoning each year.

At the workshop, teacher participants learned firsthand about the development and spread of foodborne illnesses; the vulnerability of at-risk populations; and the science behind safe food handling, storage, and preparation. These teachers also learned how to better use the Nutrition Facts Label to assess the nutritional value of foods. In addition, the teachers talked with scientists from FDA and conducted laboratory experiments at the University of Maryland to further increase their understanding of food science.

For example, the teachers investigated how a single bacteria cell can multiply to millions in just a few hours, and they observed how different temperatures (heating, room temperature, chilling, and freezing) affect the growth of bacteria. The teachers explored these concepts by putting their culinary skills to the test. After cooking hamburgers to various temperatures, the teachers tested them for bacteria and other organisms that cause disease.

“Though the teachers have completed the workshop, the professional development experience has not ended,” said Al Byers, Assistant Executive Director of NSTA’s e-Learning and Government Partnerships. “They will implement the curriculum in their schools, participate in a follow-up enhancement conference at the NSTA Area Convention in Seattle, Washington in
December, conduct workshops for their teacher colleagues, and receive continuing online support from NSTA. This program is a model of a sustained professional development experience for teachers that we hope to duplicate in other programs."

The food science program is centered on a standards-based curriculum developed by FDA in partnership with NSTA. The Science and Our Food Supply curriculum is available at no charge to all middle level and high school teachers; it explores the science behind the production, transportation, storage, and preparation of our nation’s food supply, and contains a video, hands-on experiments and activities, and evaluation tools. Other parts of the curriculum explore little-known facts about food science that affect millions of people every day, such as how the passage of time affects the nutritional value of produce, the likelihood of certain foods to cause foodborne illness more than others, and reasons why salt serves as a good preservative.

For information on this exciting curriculum and information on how to apply to participate in the FDA Food Science Professional Development Program in Summer 2012, please email isabelle.howes@graduateschool.edu.

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