Developing a Youth Curriculum to Teach Home Food Processing

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ABSTRACT

Food processing and preservation provides a platform for hands-on instruction in food science that fulfills established curricula and STEM initiatives in schools as well as community youth programs. An original PUT/UP Food Preservation for Youth (PUT/UP) curriculum was developed to address gaps in the science and methods in acid and low-acid food canning, pickling, freezing, making jam and drying processes, and foods that preserve and improve food and cost. Food Safety Standards™ and Common Core State Standards™ in math, it is presented in a format familiar to Cooperative Extension and other community youth organization leaders.

METHODS

A Three-Year Plan

Focus group input provided constructive forms for drafting the curriculum consisting of a leader’s guide and 6 lesson units. By 2007, piloting the curriculum in extension and educational venues, data were collected from 108 youth and 20 leaders. Pilot program volunteers were recruited from Clemson University and University of Georgia Cooperative Extension to teach the drafted lessons to youth.

PUT/UP Food Preservation for Youth was piloted by 13 Cooperative Extension educators in a total of 12 programs in Georgia and 12 in South Carolina. Pilot program evaluation forms contained 16-page, with follow-up activity pages for hands-on activities (e.g., canners, dehydrators, produced), and assessments for food forks and hygiene. Each pilot lesson was evaluated by at least one Extension educator. In some cases, the 1-page leader’s guide was completed by three helpers completed evaluations for a total of 26 leader evaluations.

A total of 174 youth participated in pilot programming and were asked to complete a pre-test, post-test, and evaluation. Actual numbers of forms completed varied: 172 knowledge pre-tests, and 164 evaluations. These responses were used to determine the preferred format of distribution. Pilot programming included youth from 4-H Clubs, and Boys and Girls Clubs, Girl Scouts, home-schools, and the Children, Youth, and Families At Risk Extension Program (CURE). Participants ranged in age from 6 to 18 years old and varied in socio-economic status, ethnicity, and gender. The activities are designed for middle school ages; however, they find that they are appropriate for 4th–12th graders depending on prior experience with food preparation and science.

RESULTS

A comparison of youth pre-tests and post-tests shows increases in knowledge in all subject areas except one — there was a slight decrease in the knowledge area of “How should long food become safe?” The majority of participants were female. Evaluation contained questions regarding the influence of the program on attitude and behavior. Though it was limited in not having the right number of participants, it still provided an idea of the project’s impact on knowledge and behavioral change. A total of 174 youth participated in the pilot program in order to assess knowledge, attitude, and behavior change. Leaders are also given a "Leader Feedback" form at the end of the Leader’s Guide. A three-page form is complete and return this form, or fill it out online, so that the curriculum can continue to be improved.

The curriculum is available to download from http://nchfp.uga.edu.

REFERENCES


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