



Family and Consumer Sciences Extension

Reducing the Risk of Foodborne Illness in Children 2006

Learning for Life

The University of Georgia Cooperative Extension

The Problem

- An estimated 76 million Americans become ill from foodborne illness each year, resulting in 325,000 hospitalizations and 5,000 deaths (1). The Economic Research Service (ERS) estimates the cost from the five major foodborne illnesses to be \$6.9 billion per year, \$2.3 billion of that in children under age 10 (2)
- Young children are more at risk for foodborne illness and serious complications: blood poisoning, kidney disease, seizures, strokes, heart complications, death (2).
- ERS estimates that the cost for a single case requiring hospitalization is \$9,284 for salmonellosis and \$6,194 for *E. coli* O157:H7 .
- According to the Georgia County Guide 2005-2006, the estimated total number of children below age nine was 1,201,451 in 2004 (4).
- There are approximately 2,600 licensed childcare centers and over 6,600 registered family childcare homes in addition to the informal caregivers in Georgia (5).
- Over 1.5 million meals are served daily in Georgia as a part of the school nutrition program (6).

Research-based Solutions

- Food handler training programs help to acquaint childcare providers, school foodservice workers, teachers, children and parents with the seriousness and the causes of foodborne illness.
- By controlling the major contributing factors (improper cooling, inadequate cooking, time lapse between preparation and serving, infected persons handling food, contaminated raw foods or ingredient), a high percentage of foodborne illnesses could be prevented.

Extension's Role

- Teach childcare providers and school foodservice workers the importance of cleanliness in food handling.
- Teach childcare providers and school foodservice workers about hazards that can occur at various stages during storing, preparing and serving foods and steps to take to eliminate hazards.
- Provide training that fulfills state requirements for licensure and enables Georgians not only to maintain jobs, but also to provide safer environments for children in their care.
- Teach children and parents four steps to keeping food safe - clean, separate, cook, and chill.

Extension's Contribution to Solving the Problem

- Nearly 485 contact hours of food safety education were provided to 143 childcare providers.
- Almost 5,800 contact hours of food handler training were provided to 1,866 school foodservice employees.
- Food safety programs reached over 1,770 school children. In addition, over 9,000 interactive *Smart Kids Fight Bac!*® CD-ROMs were distributed to children throughout the country.

Impact on Georgians

- All of the childcare providers who completed the *ServSafe*® employee training improved their food safety knowledge. The childcare providers indicated that they planned to follow recommended food handling practices. For example, 100% planned to wash, rinse, and sanitize their cutting board, especially after cutting raw meat, poultry, or fish; 93% planned to thaw foods in the refrigerator, in cold

running water, or in the microwave right before cooking; and 93% planned to cool large quantities of food like soups, stews, or roasts quickly by packaging in smaller amounts or shallow containers.

- Ninety percent (90%) of the childcare providers who participated in the *Smart Care Givers Fight BAC!*® food safety education program significantly improved their knowledge and learned to follow recommended food handling practices.
- Of the approximately 1,200 school foodservice personnel who participated in the Hazard Analysis and Critical Control Point (HACCP) workshops in South Georgia, over 90% indicated that they would improve how they handle food. For example, 91% of the participants planned to slice down large cuts of meat and package them in shallow pans for cooling; 94% planned to reheat leftovers to at least 165°F measured by a thermometer before serving them; 95% planned to check the temperature of foods on hot and cold buffets and serving lines at least every 2 hours; and 94% planned to analyze the flow of food for potential hazards, identify critical control points, and write down standards for critical control points in recipes. Overall, 96% of the participants rated the workshops as helpful or very helpful in teaching them how to safely handle food.
- Ninety-one percent (91%) of the 178 elementary school students who completed the *Smart Kids Fight BAC!*® program improved their knowledge related to four basic food safety principles: cleaning, preventing cross contamination, cooking, and chilling. More than 95% of the children learned recommended food safety practices as a result of this program. For example, 99% learned the best way to save a ham and cheese sandwich that they want to eat later is to cover it and put it in the refrigerator.
- Of the children who evaluated the general food safety educational programs, 95% said it was helpful or very helpful to them in learning about food safety practices. After the program, 86% of the participants said that they would wash their hands with warm running water and soap for at least 20 seconds before working with food; 88% plan to clean kitchen counters with hot soapy water before making food on them; and 88% plan to rinse vegetables well with running cool water before they eat them.

Sources

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- 3) Economic Research Service. <http://www.ers.usda.gov/data/foodborneillness/>. Accessed 11/06.
- 4) Georgia Dept. of Human Resources. Childcare Regulation in Georgia Factsheet. Accessed 11/06.
- 5) National Childcare Information Center, <http://nccic.acf.hhs.gov/statedata/statepro/georgia.html#demographic> Accessed 11/20/06.
- 6) Georgia Dept. of Education, <http://www.doe.k12.ga.us/schools/nutrition/about.asp> Accessed 11/20/06.

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