



Family and Consumer Sciences Extension

—*Reducing the Risk of Foodborne Illness in Children 2004*
Putting Knowledge to Work for Georgia Families

The University of Georgia

Cooperative Extension Service

The Problem

- An estimated 76 million Americans become ill from foodborne illness each year, resulting in 325,000 hospitalizations and 5,000 deaths (source: 1). The Economic Research Service (ERS) estimates the cost of foodborne illness from the five major foodborne illnesses at \$6.9 billion per year, \$2.3 billion of that in children under age 10 (source: 2).
- Young children are more at risk for foodborne illness and serious complications: blood poisoning, kidney disease, seizures, strokes, heart complications, death (source: 2).
- ERS estimated costs for a single case requiring hospitalization is \$13,117 for salmonellosis, \$11,200 for *E. coli* O157:H7 and a staggering \$922,583 for listeriosis (source: 3).
- As of 2002, there were 600,000 children 6 years of age or younger in Georgia (source: 4).
- According to Georgia DHR, there are over 1,675 licensed day care centers and 5,584 registered family day care homes. Additionally, there are at least 3,753 informal caregivers providing child care to Georgia's children (source: 5).
- Approximately 66 million meals were served to children and adults in Georgia in 2003 through the Child and Adult Care Food Program (source: 6).

Research-based Solutions

- Food handler training programs help to acquaint child care providers, 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 child care providers the importance of cleanliness in food handling.
- Teach child care providers 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

- More than 1,400 contact hours of food safety education were provided to 510 child care providers.
- More than 26,940 contact hours of food safety education were provided to 922 school food service employees.
- *The Smart Kids Fight BAC!*® food safety program provided nearly 3,000 contact hours of education to 2,895 elementary school children.

Impact on Georgians

- Comparison of pre and post-test evaluations indicates that the elementary school children who participated in the *Smart Kids Fight BAC!*® program significantly improved their knowledge related to all four basic food safety principles: cleaning, preventing cross contamination, cooking, and chilling.

Most of the children learned recommended food safety practices, for example, 89% of the children learned the correct method to decide whether a hamburger is properly cooked.

- Child care providers who participated in food safety education programs significantly improved their knowledge and developed positive attitudes toward recommended food handling practices. Eighty three percent of the child care providers who participated in Food Safety and Sanitation training programs improved their food handling knowledge.
- Ninety-four percent of the child care providers who participated in the food handler education program said the training was very helpful for them to ensure the food safety in their child care centers. At the end of the training workshop most of the child care providers planned to adopt recommended food safety practices. For example, 97% planned to wash their hands with warm running water and soap for at least 20 seconds before working with foods; use a separate cutting board for meats and produce; and use a thermometer to decide whether meat, poultry or fish is done when cooking it.

Sources

- 1) Mead, P.S., et al. (1999). Food-Related Illness and Death in the United States. *Emerging Infectious Diseases*, Vol. 5 (5): 607-625.
- 2) Buzby, J.C. ERS. (2001). Children and Microbial Foodborne Illness. *FoodReview*. Vol. 24 (2): 32-37.
- 3) Economic Research Service. <http://www.ers.usda.gov/data/foodborneillness/>. Accessed 11/04.
- 4) Georgia Dept. of Human Resources. Child Care Regulation in Georgia Factsheet. Accessed 11/04.
- 5) Georgia Dept. of Human Resources. Child Care Licensing. <http://www2.state.ga.us/Departments/DHR/ORS/orsccl.htm>. Accessed 11/03.
- 6) Office of School Readiness. Georgia Dept. of Early Care and Learning. Nutrition Growth: Child and Adult Care Food Program. Accessed 11/04.

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