

## Farm-to-School Program Provides Healthy Foods in SC Schools

Select South Carolina schools are making needed changes in their school lunch menus. Currently, children are not eating enough fruits and vegetables, as the average child in the US eats less than ½ cup of fruit, and less than a bite of vegetables per day.<sup>1</sup>

Children are more likely to eat more vegetables from school meals than at home; however, only 30% of them consume any vegetables from school at all.<sup>2</sup> If poor eating habits are carried from childhood into adulthood a child's chances of developing chronic illnesses such as heart disease, diabetes, hypertension, and some cancers can increase.<sup>3</sup>

To address the nutrition challenges in schools, the Farm-to-School program was developed to incorporate fresh, quality produce from communities into school meals. According to the program website, Farm-to-School aims to serve healthy meals in school cafeterias by creating a positive environment for children to try and eat more fruits and vegetables, and educating students in the areas of agriculture, health, and nutrition through activities, such as school gardens.

The criteria for schools to participate in the program are: 1) be a source of at least two South Carolina (SC) grown fruits and vegetables per month to be served as a part of the school meal; 2) promote SC grown produce in the school cafeteria; 3) include nutrition and agriculture education into classroom activities; and 4) create a school vegetable garden.<sup>4</sup>

Sonya Jones, Assistant Professor and Deputy Director of the Center for Research in Nutrition and Health Disparities at the Arnold School of Public Health was awarded a grant to evaluate the effects of the Farm-to-School Program on children's diets within 19 South Carolina schools.

With a grant from the USDA RIDGE program, Sonya Jones (principal investigator), Amy Teixeira (study coordinator), and Casey Childers (graduate assistant) went out to observe how Farm-to-School programs might be changing children's lunch time choices. Using a research method called Photographic Plate Waste, they were able to capture images of children's trays before and after they ate, and estimated how much of the fruits and vegetables had disappeared from the tray.

"We thought it was important for us get a clear picture of what children are being offered on a daily basis and what they are eating, so we can understand the impact of Farm-to-School. The pictures gave us an accurate perspective of this," Childers said.

Students ate significantly more vegetables, while fruit consumption decreased. This was possibly due to vegetable promotions such as "Veggie of the Month", seasonal climate, and the simplicity of growing vegetables in comparison to fruits.

Parents reported that they were noticing some healthy changes in their children's eating.

"One parent told us she wrote a thank you note to the school principal for introducing her child to kale, a vegetable the child would not try before. Now, the child's asking for kale chips as a treat," said Childers.

Childers added, "The parents expressed positive things about the Farm-to-School program, especially the school gardening aspect of the program. They were really excited about their children learning how food is grown and where it comes from. Some parents even began to develop garden plots at home."

### Key Points

- Currently, children are not eating enough fruits and vegetables.
- The Farm-to-School program was developed to incorporate fresh, quality produce from communities into school meals.
- Nineteen SC schools participated in the Farm-to-School program.
- Students in the program ate significantly more vegetables, while fruit consumption decreased.
- The SC Department of Agriculture received a grant to expand the Farm-to-School program to additional school districts.

“They also felt Farm-to-School created a positive environment through peers, teachers, and administration to try new fruits and vegetables. We found there are opportunities to get parents involved with the Farm-to-School program and the school in general, through volunteering in the school gardens.” said Childers.

The U.S. Department of Agriculture Food and Nutrition Service recently awarded a grant to the SC Department of Agriculture to expand the Farm-to-School program to additional SC school districts. For more information click [here](#).

1. Liu JH, Jones SJ, Han S, Probst JC, Merchant AT, Cavicchia P. “Diet, Physical Activity, and Sedentary Behaviors as Risk Factors for Childhood Obesity: An Urban Rural Comparison”. Submitted to *Obesity Journal*.
2. Centers for Disease Control. *State Indicator Report on Fruits and Vegetables*. Found at: <http://www.fruitsandveggiesmatter.gov/downloads/StateIndicatorReport2009.pdf>
3. Freedman DS, Zugno M, Srinivasan SR, Berenson GS, Dietz WH. Cardiovascular risk factors and excess adiposity among overweight children and adolescents: the Bogalusa Heart Study. *J Ped*. 2007;150(1):12–17.
4. South Carolina Farm-to-School website: <http://agriculture.sc.gov/farm2school/aboutus>