
**KIDS' SAFE &
HEALTHFUL
FOODS PROJECT**

SNF
SCHOOL
NUTRITION
FOUNDATION
Education, Research and Scholarship

Serving Safe and Healthy Meals at Schools Takes Equipment and Training

THE KIDS' SAFE AND HEALTHFUL FOODS PROJECT

The Pew Charitable Trusts and the Robert Wood Johnson Foundation are working together on the Kids' Safe and Healthful Foods Project to provide nonpartisan analysis and evidence-based recommendations to help ensure that:

- USDA adopts science-based nutrition standards for all foods and beverages served and sold in schools;
- Schools have the resources they need to train cafeteria employees and replace outdated and broken kitchen equipment; and
- USDA develops and implements rigorous school food safety policies.

Kids deserve safe, healthy meals to help them grow, learn and succeed. Together we can help school foods make the grade.

THE SCHOOL NUTRITION FOUNDATION

The School Nutrition Foundation is a 501(c)(3) organization dedicated to financial aid, education, professional development, and research in school food service—resources that equip School Nutrition Association (SNA) members to efficiently serve nutritious meals to millions of school children each year.

EXECUTIVE SUMMARY

In January 2011, the U.S. Department of Agriculture (USDA) proposed regulations to update nutrition standards for the National School Lunch and School Breakfast Programs for the first time in 15 years. The updated regulations would dramatically raise the bar for schools. The Kids' Safe and Healthful Foods Project—a joint initiative of The Pew Charitable Trusts and the Robert Wood Johnson Foundation—partnered with the School Nutrition Foundation to explore the type of equipment and training necessary for schools to successfully meet the proposed regulations. The project conducted a pilot survey among food service directors in three states (Georgia, Kentucky and Wisconsin) to gain insight on perceived equipment and training needs and to explore the viability of a representative national study to further examine the issue and inform decision makers. The results of this initial study are not intended to be generalized as they represent a small sample of schools. However, the findings can help inform the conversation and clarify the need for greater study. Approximately 83 food service directors responded to the pilot survey. Highlights for each state are discussed in the report, but cross-cutting conclusions include:

- The vast majority of respondents indicated they lack adequate funds to repair and/or purchase the kitchen equipment needed to prepare and serve healthier meals that meet USDA's proposed nutrition standards.
- The expected costs of updating kitchen equipment as needed to meet new USDA standards varied widely, with a median estimate of \$52,500 per school district.
- There are substantial baseline differences between school districts in equipment use and preparation methods. Whereas seven percent of responding Wisconsin districts use deep-fat fryers, 88 percent of Georgia and 69 percent of Kentucky schools surveyed use fryers. In contrast, 77 percent of responding districts in Wisconsin use salad bars, while 38 percent in Georgia and Kentucky use this equipment.
- Nearly all respondents indicated that their district's food service staff would benefit from additional training, particularly in the areas of meal quality, food preparation skills to meet USDA nutrition standards, food safety and productivity.

GEORGIA



Food service directors from nine school districts in southern Georgia completed surveys, representing 48,675 students in 68 schools (45 elementary schools, 13 middle schools and 10 high schools).*

As not all directors answered every question, “n” indicates the number of people who responded. Fifty-nine percent of the students in these districts were eligible for free or reduced-price meals in the 2010-2011 school year (n=8). The average school lunch and breakfast participation rates in the 2009-2010 school year were 81 percent and 40 percent, respectively (n=8).

School Kitchen Equipment

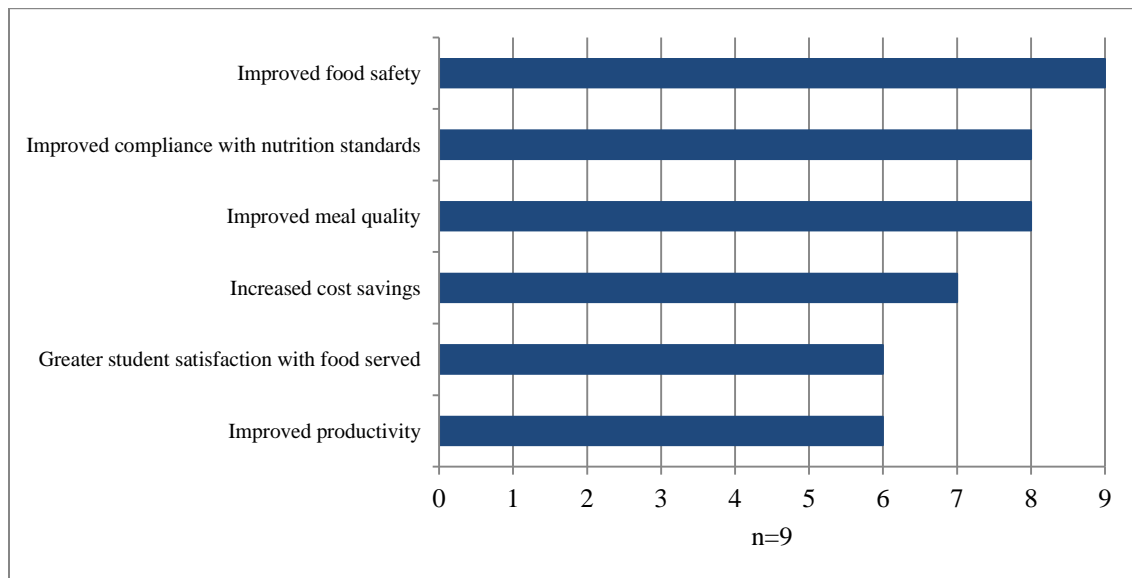
- While all districts surveyed use ovens, seven out of eight districts reported using deep-fat fryers and only three use salad bars.
- Seven of the eight responding districts indicated that their food service operations lack adequate funds to repair and/or purchase the school kitchen equipment needed to prepare and serve healthier meals that meet USDA’s new proposed nutrition standards.
- Five out of eight respondents reported that their district had recently received federal funds to purchase food service equipment. This equipment included ovens that allowed food service workers to bake more and fry less; freezer/cooler combinations that improved storage quality; and additional serving lines that kept food warmer and improved the presentation of fruits and vegetables.
- Respondents listed several examples of equipment most needed to prepare meals that meet new standards, including ovens, vegetable sinks, blast chillers, warmers, serving line renovations and cold tables.
- The median estimated cost of updating a district’s kitchen equipment to meet proposed USDA nutrition standards was \$393,250 (n=6).
- According to food service directors, installing new equipment and changing food preparation methods increased costs and the need to train food service workers but resulted in greater efficiency in meal preparation and improved meal quality.

*Surveys were sent to food service directors from school districts in southern Georgia, as highlighted above on the map of Georgia.

Training for Food Service Workers

- Seven out of nine respondents believed that their district's food service staff would benefit from additional training. Expected benefits include healthier food preparation, increased compliance with nutrition standards and improved meal quality.
- Respondents listed several examples of training most needed to prepare meals that are accepted by students and meet new standards. Among the training categories mentioned were food safety, food preparation, recipe development, food storage, cooking and productivity.
- Food service directors also identified numerous positive outcomes connected to the training their food service staff had already received, including improved food safety, compliance with nutrition standards and meal quality (see Figure 1).

Figure 1. Benefits of the Training Already Received by School Food Service Staff in Your District





KENTUCKY

Food service directors from 15 school districts in southeastern Kentucky completed surveys, representing 44,556 students in 103 schools (70 elementary schools, 12 middle schools and 21 high schools).*

As not all directors answered every question, “n” indicates the number of people who responded. Seventy percent of the students in these districts were eligible for free or reduced-price meals in the 2010-2011 school year (n=14). The average school lunch and breakfast participation rates in the 2009-2010 school year were 80 percent and 45 percent, respectively (n=13).

School Kitchen Equipment

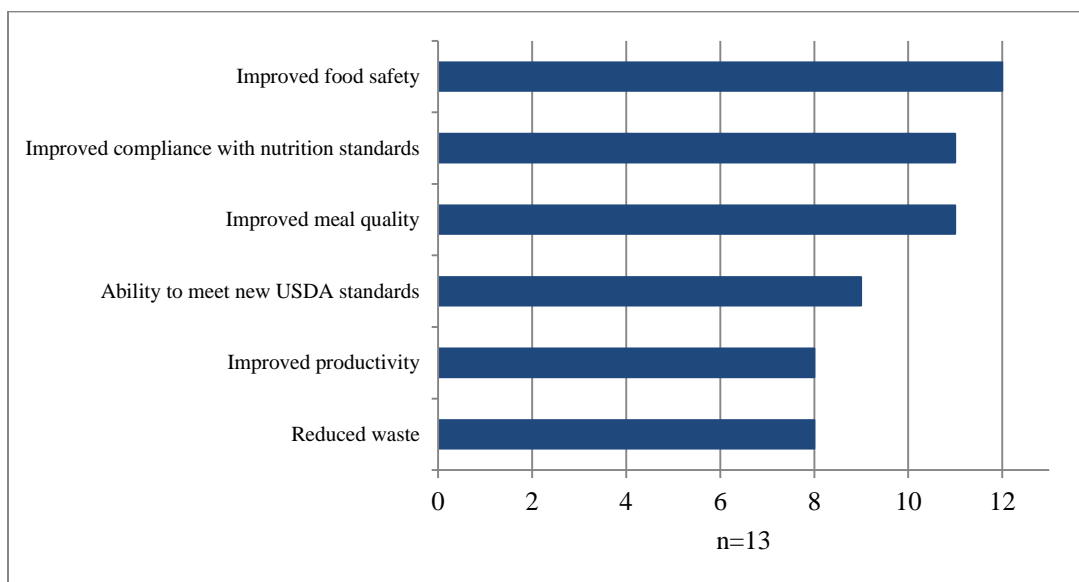
- While almost all districts reportedly use ovens, nine out of 13 also use deep-fat fryers and five use salad bars.
- An overwhelming majority of the responding districts—14 out of 15—indicated that their school food service operations lack adequate funds to repair and/or purchase the school kitchen equipment needed to prepare and serve meals that meet USDA’s new proposed nutrition standards.
- Five out of 13 respondents indicated that their district had recently received federal funds to purchase food service equipment. This equipment included a convection oven that allowed staff to bake more and deep fry less, milk coolers, walk-in freezers, warming cabinets, dishwashers and combi-ovens.
- Respondents listed examples of equipment most needed to prepare meals that meet new standards, including ovens, freezers, steamers, coolers, additional salad bars, warmers and slicers.
- The median estimated cost of updating a district’s kitchen equipment to meet proposed USDA nutrition standards was \$75,000 (n=5).
- According to food service directors, installing new equipment and changing food preparation methods increased costs, but resulted in increased student satisfaction and morale among food service workers, improved meal quality and greater efficiency in meal preparation.

* Surveys were sent to food service directors from school districts in southeastern Kentucky, as highlighted above on the map of Kentucky.

Training for Food Service Workers

- The majority of respondents—11 out of 13—believe that their district’s food service staff would benefit from additional training. Expected benefits include healthier food preparation, reduced waste, greater student satisfaction and improved worker productivity, food safety and meal quality.
- Respondents listed several examples of training most needed to prepare meals that are accepted by students and meet new standards. Among the training categories mentioned were food safety, healthier food preparation, cooking and time management.
- Food service directors also identified numerous positive outcomes connected to the training their food service staff had already received, including improvements in food safety, compliance with nutrition standards and meal quality (see Figure 2).

Figure 2. Benefits of the Training Already Received by School Food Service Staff in Your District





WISCONSIN

Food service directors from 59 school districts in western and southwestern Wisconsin completed surveys, representing 70,863 students in 178 schools (93 elementary schools, 34 middle schools and 51 high schools). As not all directors answered every question, “n” indicates the number of people who responded. Forty-two percent of the students in these districts were eligible for free or reduced-price meals in the 2010-2011 school year (n=44). The average school lunch (n=42) and breakfast (n=40) participation rates in the 2009-2010 school year were 73 percent and 27 percent, respectively.

School Kitchen Equipment

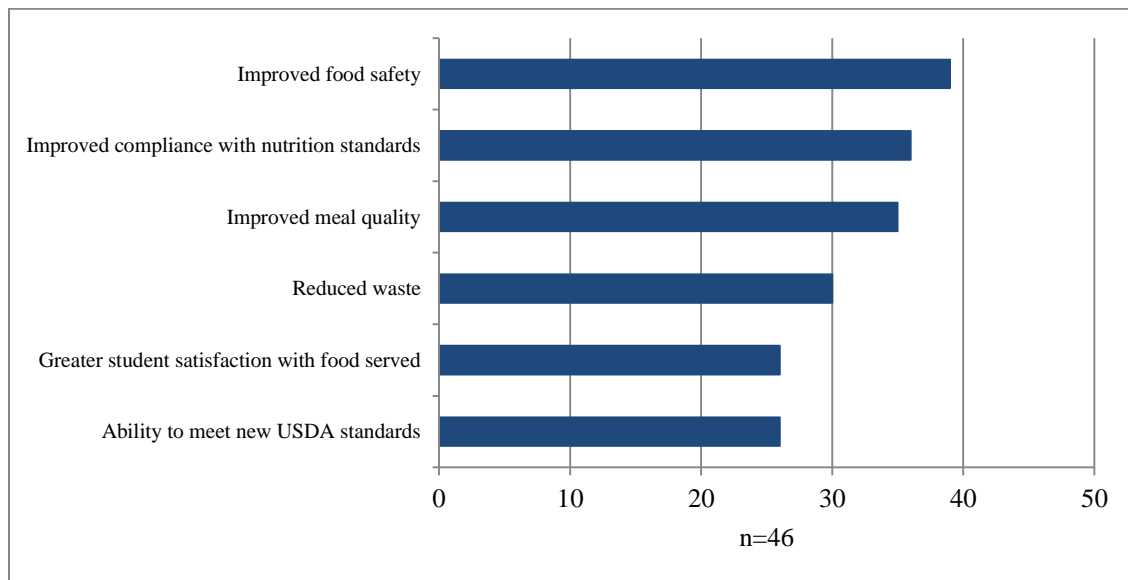
- Almost all districts reported using ovens, while seven percent report using deep-fat fryers and 77 percent use salad bars (n=44).
- Sixty-five percent of responding directors indicated that their school food service operations lack adequate funds to repair and/or purchase the school kitchen equipment needed to prepare and serve meals that meet USDA’s new proposed nutrition standards (n=55).
- Twelve out of 45 respondents reported that their districts had recently received federal funds to purchase food service equipment. This equipment included dishwashers, convection ovens, milk coolers, warming tables that allowed for multiple serving lines, and walk-in coolers for storing fresh produce.
- Respondents listed several examples of equipment most needed to prepare meals that meet new standards, including freezers, sinks for washing fruits and vegetables, chill tables, vegetable steamers, additional salad bars, preparation tools and fruit and vegetable slicers.
- The median estimated cost of updating a district’s kitchen equipment to meet proposed USDA nutrition standards was \$25,000 (n=19).
- According to food service directors, installing new equipment and changing food preparation methods increased costs, but resulted in increased student satisfaction, improved meal quality and greater efficiency in meal preparation.

*Surveys were sent to food service directors from school districts in western and southwestern Wisconsin, as highlighted above on the map of Wisconsin.

Training for Food Service Workers

- Ninety-six percent of respondents (n=47) believe that their district’s food service staff would benefit from additional training. Expected benefits include healthier food preparation, increased food safety and compliance with nutrition standards, and improved worker productivity and meal quality.
- Respondents listed several examples of training most needed to prepare meals that are accepted by students and meet new standards. Among the training categories mentioned were food safety, healthier food preparation, cooking and meeting USDA requirements.
- Food service directors also identified numerous positive outcomes connected to the training their food service staff had already received, including improvements in food safety, compliance with nutrition standards and meal quality (see Figure 3).

Figure 3. Benefits of the Training Already Received by School Food Service Staff in Your District



Appendix 1. Data Collection Summary

Survey Development

Three previously developed questionnaires were used to create the survey questions: the Nutrition Learning Environments, Actions and Policies (LEAP) Survey, the Healthy Eating Active Communities Survey and the School Nutrition Dietary Assessment Survey.

Location	Congressional district	Total responses—includes SNA and non-SNA members (Total # invited)
Georgia	First	9 (21)
Kentucky	Fifth	15 (40)
Wisconsin	Third	59 (86)
Total		83 (147)

Note: Some questions were not answered by all respondents. Sample sizes (n) are thus provided in parentheses throughout the document to represent the number of directors who provided an answer.

The analysis included in this report does not necessarily reflect the views of outside reviewers. This report is intended for educational and informative purposes.

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The Kids' Safe and Healthful Foods Project is an initiative launched by The Pew Charitable Trusts and the Robert Wood Johnson Foundation that provides nonpartisan analysis and evidence-based recommendations on policies that impact the safety and healthfulness of school foods.

For more information, see: www.HealthySchoolFoodsNow.org.



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