

## **Providing Healthy Food in Schools: A Primer for Food and Nutrition Services Departments**

By Scott Richardson and Kelley Kreitz

### **The Challenge**

The United States has entered a new era of food insecurity in which a growing number of low-income children, our nation's most vulnerable population, are finding it increasingly difficult to acquire adequate amounts of healthy food. Proper nutrition, which is critical to fueling the healthy development of children, is not merely an issue of obtaining an appropriate quantity of food, but more importantly, a matter of accessing nutrient-rich food options. Due to a combination of lack of access, lack of parental awareness of nutrition fundamentals, and their prohibitively higher cost, healthier fresh produce and whole grains are often out of reach to low-income children, leaving them dependent on low-cost, widely available, high-energy-density foods to fulfill their daily calorie requirements. These low-quality foods contain significantly higher levels of fat and simple carbohydrates, both of which have been proven to contribute to increased risk for negative health outcomes, including obesity.<sup>1</sup> Because the vast majority of these children participate in the USDA's free and reduced meal program and consume an estimated 60% of their daily calories at school, the nutrients offered by school meals presents a powerful lever for ensuring the health and academic success of our nation's youth. Sadly, this opportunity continues to go unexploited, as the nutrient quality of school breakfast and lunch menus have not kept pace with evolving nutrition science and best practices.

Because overweight children are more likely to remain overweight into adulthood<sup>2</sup>, addressing the root causes of this issue in financially sustainable ways promises significant long-term social and economic impacts. A 2005 study published in the *New England Journal of Medicine* contends that rising obesity rates will cut average U.S. life expectancy two to five years in the coming decades—a magnitude of decline last seen in the United States during the Great Depression.<sup>3</sup> During their lives, obese Americans lead medically complicated lives—costing the country about \$147 billion in weight-related medical bills, and an additional \$1.8 trillion a year in costs associated with chronic diseases linked to obesity including diabetes, heart disease and cancer.<sup>4</sup>

Health impacts aside, obesity has also been linked to decreased workplace productivity<sup>5</sup> and carries national security implications as well, significantly limiting the number of young adults eligible to serve in the U.S. military.<sup>6</sup> In direct contrast, a study suggests that students who eat an adequate

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<sup>1</sup> On the link between energy-dense foods and obesity, see, for example, <http://www.ajcn.org/cgi/content/full/82/1/265S>

<sup>2</sup> <http://health.usnews.com/usnews/health/healthday/071205/overweight-kids-often-become-obese-unhealthy-adults.htm>

<sup>3</sup> S. Jay Olshansky et al. "A Potential Decline in Life Expectancy in the United States in the 21st Century," *The New England Journal of Medicine* 352, no. 11 (2005): 1138-45

<sup>4</sup> Hellmich, Nanci; "Rising obesity will cost U.S. health care \$344 billion a year" "Rising obesity will cost U.S. health care \$344 billion a year, USA Today, 11/17/09

<sup>5</sup> <http://www.medicalnewstoday.com/articles/93402.php>

<sup>6</sup> According to a recent report, "at least nine million 17- to 24-year-olds in the United States are too fat to serve in the military." "Too Fat to Fight: Retired Military Leaders Want Junk Food Out of America's Schools." Mission: Readiness, 2010.

amount of fruit, vegetables, protein, fiber and other components of a healthy diet perform significantly better academically<sup>7</sup>—an indicator of the important role school food can play in sustaining US global competitiveness.

### **The Opportunity: FNS Departments as a Lever for Change**

Few programs exist today that are as powerful a lever to improve the lives of our nation’s children as those provided by Food Nutrition Service (FNS) Departments—operating on their own or in partnership with external food service providers—which serve over 41,100,000<sup>8</sup> school meals daily across the United States. Established under acts of Congress, the National School Breakfast and Lunch Programs are federally assisted meal programs administered by the US Department of Agriculture (USDA) that provide cash reimbursements and donated commodity food assistance to participating school districts for each meal they serve. Nationwide, almost 99 percent of all public schools and approximately 92 percent of all students have access to meals through these federal programs.<sup>9</sup> It is estimated that low-income students receive more than 60 percent of their daily calories from school meals.<sup>10</sup>

Yet, although schools clearly serve as ideal intervention points for providing more nutritious food to the vast majority of children in the United States, many school districts have found it difficult to act on this opportunity. Food service providers in schools, after all, must ultimately measure success by their bottom lines rather than student health outcomes. And too often, operational inefficiencies and fiscal challenges prevent the creation of healthy menus, the sourcing of high quality ingredients, and the consistent preparation of palatable meals that students want to eat.

By addressing inefficiencies and rallying districts around a mission of serving healthy food to our nation’s youth, schools can play a leading role in addressing the childhood obesity crisis in the United States. Doing so has a number of additional socio-economic benefits as well, as school meal programs (and their suppliers) provide opportunities for local job creation and can help to reduce the environmental footprint of processing and transporting pre-packaged foods over long distances.

### **The Solution: A Framework for School Nutrition Departments**

Throughout the country, school districts are piloting new initiatives for improving the quality of the food they serve. According to a recent Root Cause survey of 16 school districts across the country,<sup>11</sup> many districts are strengthening the nutritional profiles of their meals, beyond current 1995 USDA requirements, by limiting saturated and trans fats, sugar, and calories, and by increasing fiber, fruits, vegetables, and whole grains. Several districts are also utilizing technology to better track inventory,

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<sup>7</sup> Reuters news service; “Kids who eat better perform better in school, a new study of Nova Scotia fifth-graders confirms.”; Mon Apr 14, 2008;

<http://www.reuters.com/article/idUSTON47353620080414?feedType=RSS&feedName=healthNews>

<sup>8</sup> <http://www.fns.usda.gov/cnd/lunch/AboutLunch/NSLPFactSheet.pdf>;

<http://www.fns.usda.gov/cnd/breakfast/AboutBFast/SBPFactSheet.pdf>

<sup>9</sup> Massachusetts Department of Elementary and Secondary Education;

<http://www.doe.mass.edu/cnp/nprograms/nslp.html>

<sup>10</sup> Project Bread

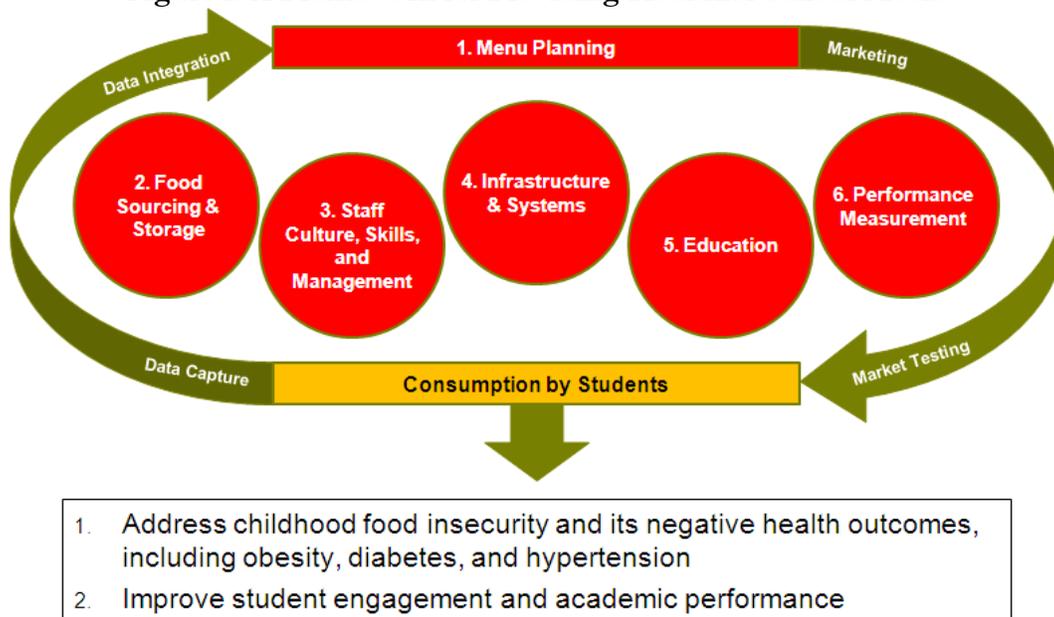
<sup>11</sup> The school districts benchmarked as part of the Root Cause study were Atlanta, GA; Baltimore, MD; Boston, MA; Berkeley, CA; Chicago, IL; Corpus Christi, TX; Denver, CO; Fairfax, VA; Framingham, MA; Indianapolis, IN; Milton, MA; New York, NY; Philadelphia, PA; Portland, OR; Somerville, MA; and St. Paul, MN.

minimize waste, gather student and parent feedback and measure student consumption. Others have implemented comprehensive staff training to empower employees to prepare, market, and serve nutritious and tasty meals.

While all of these experiments are yielding promising results, it is clear that none of them alone will make it possible to achieve financial sustainability while serving healthy food that students want to eat. What is needed is a holistic approach that enables school districts to integrate fiscal responsibility and a commitment to delivering high-quality food to students into all aspects of their work. According to Ann Cooper, the self-proclaimed “renegade lunch lady” and a leader in the field of child nutrition who orchestrated an overhaul in the FNS programs in both Berkeley, CA and Boulder, CO: “The five key elements that make up a FNS program are food, finance, facilities, human resources, and marketing. To create systemic change, all of these elements need to be addressed and revised to follow the mission of the program.”<sup>12</sup>

Figure 1 below provides an overview of the six components necessary to apply a holistic approach to providing and increasing student consumption of healthier food in schools.

**Figure 1: A Framework for Providing Healthier School Meals**



<sup>12</sup> Interview with the authors, June 18, 2010.

1. **Menu planning** forms the operational base of the Food Nutrition Services department and is critical for informing planning/purchasing decisions and ensuring conformity to nutrition and food standards. Schools can ensure that they are planning the best meals for their students by setting nutrition targets that exceed current regulations, choosing recipes that reach these goals, and planning all menus 12-18 months in advance, in order to maximize commodity food utilization, lower costly supplemental open-market purchases, and provide district-wide meal consistency on a daily basis. “The cost-effective solution is centralization and standardization of management,” says Ann Cooper. “I took away all site-based decision making and centralized everything; all schools have standardized food orders, recipes and menus.”<sup>13</sup> The City of Los Angeles, for example, has created a Child Health and Nutrition Task Force to help ensure the quality of its meals.
2. **Food sourcing and storage** refers to processes and relationships that govern the purchasing of ingredients, supply chain logistics, and storage of inventory. Choices made here have large nutritional and financial implications for overall department operations. For example, districts with ample local storage space are able to lower the overhead costs associated with rented storage space and transportation, better prepare for supply chain disruptions, and when the market presents them, take advantage of low-cost stockpiling opportunities. Portland, OR keeps one month’s work of supplies on hand to maximize bulk-buy savings and prepare for emergencies.
3. **Staff culture, skills, and management** refer to the policies and procedures that define the organizational structure and culture of the department and ensure that staff can fulfill its mission. Appropriate skills sets, including food service operations and finance, and culinary expertise must be present in key top- and mid-level departmental leaders for departments to function efficiently and effectively. Simultaneously, systematic and comprehensive staff training is critical to running cost-efficient and customer-oriented operations that provide healthy options to students. These trainings can range from simple knife skills and safe food handling to more elaborate techniques often thought reserved for culinary schools and four star restaurants. New York City has one of the most robust training programs in the country, with a full curriculum for its employees. Jean Ronnei, the FNS director of Saint Paul Public Schools, stresses the importance of accessible trainings: “We provide staff a variety of training opportunities, including video demonstrations online.” She also values leadership and argues “FNS directors need to have a passion for food in order to succeed at their job. Directors need to act as leaders to their staff and be able to articulate their vision of an ideal cafeteria.”<sup>14</sup>
4. **Infrastructure and systems** refers to the processes, systems, and equipment necessary for the department to function efficiently day-to-day. Well-designed processes and on-going, strategic long-term capital investments are required in this area to ensure the consistent delivery of healthy and palatable meals to students. Corpus Christi and Denver school districts, for example, are piloting POS vending machines to speed checkout and lower POS staffing needs.

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<sup>13</sup> Interview with the authors, June 16, 2010.

<sup>14</sup> Interview with the authors, June 29, 2010.

5. **Education** refers to any collaboration between FNS departments and classrooms or the community. These collaborations are critical to maximizing the impact of the department by “reaching beyond the cafeteria walls” to disseminate dietary best practices to students and their families. This area has the added benefit of serving as a “marketing” tool that can drive students to purchase healthier items provided by FNS, instead of opting for less nutritious competitive foods. In Massachusetts, as part of a city-wide initiative known as Shape-Up Somerville, the Somerville Public Schools implemented a standardized, consistent classroom and after-school curriculum that have reinforced the menus and marketing occurring in the cafeterias.
6. **Performance measurement systems** are the tools and processes that measure all FNS activities and operations. Ongoing, accurate measurements across each of the other six model areas are critical to enabling school districts to identify inefficiencies and to continuously identify opportunities for operational and financial improvements. Denver Public Schools continuously improve the palatability of the food served in their cafeterias by capturing student feedback through computerized kiosks.

### **Trend Setters to Watch**

A variety of stakeholders are leading the effort to bring healthier food to our nation’s youth at school:

- Across the nation, **school districts** are experimenting with various aspects of a financially sustainable and nutritious school meal program. Among the school districts most recognized for their innovative approaches to improving the quality of the food they serve is **Baltimore Public Schools**, where the head of the district’s food service, Toni Geraci, has started a school garden program and serves fresh produce with every meal.
- **Foundations** understand that providing healthy food is a major lever for addressing the obesity crisis. **Robert Wood Johnson Foundation** and the **W.K. Kellogg Foundation** are among the national foundations leading the charge to support school districts in their efforts to serve healthier food to their students. In Berkeley, California, the **Chez Panisse Foundation** funded Chef Anne Cooper, the self-titled “renegade lunch lady,” in her overhaul of the district’s lunch program. Cooper is now bringing her innovative approach to Boulder, CO’s school district.
- **Government leaders at the federal** have also begun to recognize the importance of providing healthier food to America’s youth while they are at school. **Michelle Obama** has made school food a key component of her “Let’s Move” campaign, and **President Obama’s Task Force on Childhood Obesity** included school lunches in its recently published recommendations: “Providing healthy food in schools, through improvements in federally-supported school meals; upgrading the nutritional quality of other foods sold in schools; and improving nutrition education and the overall health of the school environment.” And **Chairman Miller’s** Improving Nutrition for America’s Children Act of 2010 includes a wide range of initiatives which, among other things, would increase access to healthy school breakfasts; enhance funding for nutrition education in schools; promote stronger collaboration and sharing of nutrition information; and connect more children to healthy produce from local farms.

- **Cities** have begun taking steps to improve access to healthy food in schools and beyond. In July 2010, **Boston's Mayor Thomas Menino** named a new food policy director, **Edith Murnane**, a restaurant owner in Jamaica Plain, to lead the city's efforts to increase access to fresh food and expand urban farming. Her influence extends from school lunches, to farmers markets, to city-wide anti-obesity campaigns.
- **Advocacy groups**, like the **Healthy Schools Campaign**, are promoting policies that will improve the nutritional value of the food served in schools. These groups are particularly focused on pending child nutrition legislation in the House and Senate, including Chairman Miller's bill, "Improving Nutrition for America's Children." Realizing the enormous impact of policy on their programs, some school districts, including **Berkeley Unified School District** and **Chicago Public Schools**, have also made advocacy for better nutritional guidelines part of their programs.

### Looking Ahead: The Future of Healthy Food in Schools

Given the enormous potential benefits of improving the nutritional value of food served in schools, the path to success for school districts is clear. They will need to combine fiscal responsibility with a mission to ensure that our nation's youth have access to and eat the foods that will help them to lead healthy and productive lives.

Bringing about this future will require leadership on the part of all sectors. Government leaders, both within and outside of the public school system are already recognizing the importance of this issue and leading the charge to make improvements. Since many schools outsource their food services to corporations, they too will need to be part of the solution. In the nonprofit sector, foundations may help to provide the seed funding for new programs on the way to financial sustainability, and, in some cases, nonprofits rather than for-profit companies may begin to forge new models for mission-based food service in schools.

FNS departments have an opportunity to play a leading role in ensuring a healthier future for our nation's most vulnerable populations.

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