Improve School Meal Quality While Cutting Costs
Freshly Prepared, Healthy, and Cost-Effective School Lunches Made with USDA Foods

Background

California Food Policy Advocates partnered with the Atkins Center for Weight and Health at the University of California, Berkeley and the Sarah Samuels Center to understand the differences between meals made in school districts with minimally-processed USDA Foods compared to meals made by diverting USDA Foods to manufacturers.¹ The primary goal of the study was to determine whether nutritional quality and costs of National School Lunch entrees differed when USDA Foods were diverted to processors versus when USDA Foods were direct-delivered and used to freshly prepare meals within the school district.

Principal Study Findings

Scratch cooking and on-site food preparation with USDA Foods is a cost-effective way to expand the variety of healthy school lunches, which exposes children to a wider array of healthy choices.

- Entrées that involved more scratch cooking included a wide range of dishes such as entrée salads, soups, stews, roasted meats, and Asian-style rice or noodle dishes. In contrast, nearly 50 percent of convenience-prep entrees (those diverted for processing) were chicken/meat nuggets or pizza.
- Entrées prepared with higher levels of scratch cooking tended to have less trans and saturated fat.
- Contrary to assumptions that students will prefer “fast-food” type entrees, the scratch-cooked entrees were chosen in similar numbers and accepted by students in this study.

Entrées made from scratch with USDA Foods cost less. They had significantly lower food costs and slightly higher labor costs when compared with convenience-prepped entrees. Districts may realize larger savings if their labor costs are fixed and sufficient to support scratch cooking.

- The food costs for scratch-cooked entrees were $0.043 less per 100 calories than that of convenience-prepped entrees, while labor costs were $0.017 higher per 100 calories.
- Overall (food and labor costs), scratch-cooked entrees cost less on average than the convenience-prepped entrees, but this difference was not statistically significant.
- Pizzas were the least expensive entrée, and were even less expensive when made from scratch. Pasta and rice dishes were more expensive overall, but also cost less when made from scratch.

Entrées made from scratch with USDA Foods were more likely to include a vegetable and/or fruit within the entrée, and were much more likely to incorporate a variety of vegetables or legumes.

- 42 percent of entrées made from scratch contained a legume or a vegetable other than potatoes.
- Only 2 percent of convenience-prepped entrees contained a legume or a non-potato vegetable.
- Including vegetables in scratch-cooked entrees did not significantly increase the food, labor, or total costs, making this a cost-effective way of serving vegetables with a meal.
- Incorporating vegetables into the entrée has the potential to reduce waste by increasing the likelihood that these vegetables are consumed by students.

¹ For more than 20 years, California Food Policy Advocates (CFPA) has been the state’s trusted food policy advocacy organization dedicated to increasing low-income Californians’ access to healthy food at home, at school, and throughout entire communities. CFPA’s advocacy agenda draws on the anti-hunger, nutrition, and health movements. Working as both a policy leader and supportive policy ally, CFPA continues to build on its long history of success.
Examples of the Benefits of Preparing USDA Foods In-House

Salida Union School District (USD) in the Central Valley has 2,700 students, 60% of whom qualify for a free or reduced price meal. Salida USD’s Nutrition Services Department takes full advantage of the value and flexibility that USDA Foods offer. Salida USD uses USDA “brown box” (i.e., unprocessed) pork and slow-cooks it in the district kitchen with a simple site-prepared barbeque sauce to produce BBQ Pulled Pork that is a fraction of the price of an equivalent commercially prepared product. The commercially purchased product made with diverted USDA Foods pork costs $0.40 per serving, while the district-made product using unprocessed USDA Foods pork costs only pennies per serving (the cost of shipping and handling). This recipe is quick, easy to prepare, and does not increase scheduled labor hours. With these cost savings, Salida USD purchases increased quantities of higher quality produce.

School District Recommendations

Nutrition Service Directors:

1. Make a shift towards scratch cooking with USDA Foods: pilot, taste-test and market some cost-effective items, such as homemade pizzas, roasted pork, or entrée salads. For links to many recipes using USDA Foods, visit [http://www.healthyschoolenvironment.org/school-food-recipes](http://www.healthyschoolenvironment.org/school-food-recipes).

2. Assess your districts’ food service operations to identify shifts in practices that can reduce the amount of USDA Foods diverted to processors, and increase the use of direct-delivered USDA Foods. Consider eliminating other costly practices, such as pre-portioning items into individual containers, and shift additional savings towards the purchase of more fresh fruits and vegetables.

3. Partner with peer mentors, nutrition educators, or community organizations that support efforts to increase scratch-cooked meals and provide students with exposure to new, fresh foods.

4. Seek out or create training opportunities that give staff the basic cooking skills and food safety knowledge needed to increase the amount of scratch cooking and freshly prepared foods.

5. Develop a prioritized list of equipment, training and facilities that would enable your district to cook more fresh foods. Highlight the short-term and long-term benefits of improving student nutrition. Seek out funding opportunities and advocate for these school nutrition upgrades to district officials.

School Boards and District Administrators:

6. Elevate the needs of nutrition services when developing facility improvement plans. Develop a stand-alone nutrition services facilities master plan that better supports the health of students.

7. Include nutrition services when developing local bond measures. Polls of California parents show overwhelming support for improvements to school nutrition quality. An overwhelming 84% of Oakland voters supported Measure J in 2012, which included $43 million for kitchen facilities.

This study was funded by Healthy Eating Research, a program of the Robert Wood Johnson Foundation. Printing funded by the Centers for Disease Control and Prevention through the Los Angeles County Department of Public Health.