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Public and Private Efforts for the National School Lunch Program

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he National School Lunch Program (NSLP) is one of the best-known Federal Government programs. During fiscal 1995, about 26 million children in just over 94,000 schools and residential childcare institutions participated in the program, at a Federal cost of about \$5.1 billion—up about 3 percent since fiscal 1994.

The NSLP provides lunches to children in public and nonprofit private schools and residential childcare institutions. The U.S. Department of Agriculture (USDA) provides schools with cash and commodities to partially offset the cost of the program's food and foodservice. Additional cash is provided to subsidize lunches for low-income children. To participate in the program, schools must serve lunches that meet Federal nutritional requirements and offer free and reduced-price lunches to children determined eligible for such benefits.

A recent study sponsored by USDA showed that, averaged over 1 week, school lunches in the NSLP provided nutritious food to the Nation's school children at reasonable prices. However, on average, lunches are high in fat, saturated fat, and sodium, and some fall short of

the Recommended Dietary Allowance (RDA) for key nutrients for some age groups.

The regulations surrounding the NSLP were amended in 1995 in response to evolving knowledge about nutrition and the dietary needs of Americans. NSLP lunch menus are required to meet critical nutritional needs by the 1996-97 school year. Waivers may be granted by individual State agencies for up to 2 years to allow schools time to train foodservice employees and to accommodate other special circumstances.

Through the "School Meals Initiative for Healthy Children," USDA is working with school foodservice personnel to provide nutritious and palatable meals with less fat and sodium and more fiber. Through the

program, efforts are also underway to educate school foodservice workers and children about nutrition. Schools are also experimenting with allowing private firms to enter the school lunch market. Such public-private partnerships have led to the development of more nutritious fast food products for use in school lunch menus.

Goals Evolved Along With Nutrition Knowledge

The dietary goals of the NSLP have been based on food guidance information made available by USDA. This nutrition information has evolved over time to incorporate the latest information about the relationship of diet to health.

Profile of USDA's National School Lunch Program, 1995

- Schools and residential childcare institutions participating: 94,154
- Lunches served daily: 26 million
- Free lunch—12.4 million served daily—Requirement: Family income below 130 percent of the Federal poverty level (\$19,695 for a family of four).
- Reduced-price lunch—1.9 million served daily—Requirement: Family income from 130 percent to 185 percent of the Federal poverty level (\$28,028 for a family of four).
- USDA-purchased commodities—1.05 billion pounds
- Expenditures for the NSLP, fiscal 1995—\$5.1 billion

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The National School Lunch Act of 1946 established the NSLP to "safeguard the health and well-being of our Nation's children." Nutritional concerns at that time centered around reducing nutrient deficiencies due to underconsumption of food. In particular, at the time, military recruits were failing physical fitness requirements thought to be caused, in part, by nutrient deficiencies. The Act sought to address underconsumption by requiring NSLP meals to provide balanced nutrition and minimum amounts of specific food groups—meat/meat alternate, bread/bread alternate, vegetables/ fruits, and milk—amounts sufficient to provide one-third of the RDA's for key nutrients.

As nutrient deficiencies due to underconsumption lessened for many children, other nutritional concerns arose. By the 1970's, concerns focused on excessive consumption of fat in many diets. In 1980, the first edition of the Dietary Guidelines for Americans was published, providing Federal dietary recommendations for healthy Americans ages 2 years and over. These guidelines provided directional changes, focusing attention on the importance of modifying diets to reduce consumption of fat and other components. The Dietary Guidelines are reviewed by a panel of experts every 5 years to determine whether the existing recommendations need to be updated based on current scientific findings in the fields of nutrition and health.

In the most recent *Dietary Guide-lines for Americans* (1995), people are urged to eat a variety of foods; maintain or improve their weight; choose a diet with plenty of grain products, vegetables, and fruits; and choose a diet moderate in sugars, salt, and sodium. The guidelines also recommend that people choose a diet that provides no more than 30 percent of total calories from fat and reducing saturated fat to less than 10 percent of calories.

Focus on Improving the Nutritional Quality of Meals

Children's diets need improvement to meet the recommendations of the Dietary Guidelines. Recent studies show children's overall diets meet the RDA's for most vitamins and minerals, but their intake of total fat, saturated fat, and sodium exceed Dietary Guideline recommendations. Research has shown that foods prepared away from home are typically higher in fat and saturated fat than are foods prepared at home (see "The Quality of Children's Diets At and Away From Home," elsewhere in this issue). School lunches have been no exception.

A 1993 USDA dietary assessment of school meals showed that, on average, school lunches provided foods sufficient to meet approximately one-third or more of the RDA for key nutrients, including vitamins A, C, and B6, and calcium, iron, and zinc. However, school lunches exceeded the recommended levels for fat and saturated fat (average program lunches contained 38 percent of calories from total fat and 15 percent of calories from saturated fat).

In USDA's revision of the nutritional requirements of NSLP meals in 1995, lunches, averaged over a 1-week period, are required to provide one-third of the RDA for protein, vitamins A and C, iron, calcium, and calories. Averaged over a week, lunches must contain no more than 30 percent of calories from fat and less than 10 percent of calories from saturated fat. Schools must conform to these criteria by the 1996-97 school year, unless they received a waiver.

USDA Provides Flexibility To Meet Nutritional Standards

The new regulations provide school foodservice directors with several menu planning options to help them meet the revised nutrition requirements. Under one option, called Nutrient Standard Menu Planning or NuMenus, schools conduct a nutrient analysis on foods offered in the program over a school week. This analysis is done using computer software. Appropriate adjustments are then made to ensure that the meals averaged over the week meet the nutrition standards for key nutrients. When using Nu-Menus, the traditional five-itemminimum menu requirement (one meat/meat alternate, one bread/ bread alternate, two vegetables/ fruits, and one milk) would no longer be used. Instead, lunches would have to include a minimum of three menu items—an entree or main course, fluid milk, and one other food item—and meet required nutrition standards.

A second option, called Assisted NuMenus, allows schools to arrange for menu development and nutrition analysis by outside entities, such as State agencies, consortiums of school food authorities, or private consultants.

Schools may opt to continue using the food-based meal pattern for school lunches or they may elect to use another option, which is an enhanced food-based system of menu planning and preparation with increased quantities of vegetables, fruits, and bread/grain products (table 1), that meet required nutritional standards over a school week.

There may be other reasonable approaches to meal planning that would achieve compliance with the new NSLP nutrition standards. Therefore, USDA is developing guidelines and a proposed rule that would set criteria for State agencies

to use when they consider and approve such approaches.

Improving the Nutritional Quality of Food Products

In addition to focusing on bettering the meals, USDA is also improving the nutritional quality of the commodities it provides to schools. About 17 percent (1 billion pounds) of the food served in school meals is

provided by USDA. The rest is purchased by the schools or by private organizations under contract with the schools. Foods provided by USDA will be:

• Lower in fat. For example, the maximum fat content of frozen ground beef and frozen ground pork will be reduced by at least 1 percentage point a year, from 17-19 percent in 1995-96 to 15-17 percent by 1997-98; "light" mozza-

rella cheese products with maximum fat content of 10.8 percent will be substituted as an alternative to part-skimmed mozzarella, which is up to 21 percent fat; the maximum fat content of reduced-fat peanut butter products will be cut to 12 grams of fat per 2-table-spoon serving.

 Lower in sodium. For example, refried beans and canned carrots will have lower salt levels; and

Table 1
The Enhanced Food-Based Meal Pattern

Meal	Minimum quantities required per day				Option for
component	Ages 1-2	Preschool	Grades K-6	Grades 7-12	Option for K-grade 3
Milk as a beverage	6 ounces	6 ounces	8 ounces	8 ounces	8 ounces
Meat or meat alternate: Lean meat, poultry, or fish Cheese Large egg Cooked dry beans or peas Peanut butter or other nut or seed butters	1 oz. 1 oz. ½ ¼ cup 2 Tbsp.	1½ oz. 11.2 oz. ¾ % cup 2 Tbsp.	2 oz. 2 oz. 1 ½ cup 4 Tbsp.	2 oz. 2 oz.* 1 ½ cup* 4 Tbsp.	1½ oz. 1½ oz. ¾ % cup 3 Tbsp.
The following may be used to meet no more than half of the requirement and must be used in combination with any of the above: Peanuts, soynuts, tree nuts, or seeds, as listed in program guidance, or an equivalent quantity of any combination of the above meat/meat alternate (1 ounce of nuts/seeds = 1 ounce of cooked lean meat, poultry, or fish.)	½ oz. = 50%	3/4 OZ. = 50%	1 oz. = 50%	1 oz. = 50%	³ / ₄ OZ. = 50%
Vegetables/fruits (2 or more servings of vegetables or fruits or both)	½ cup	½ cup	¾ cup** plus extra ½ cup over a week ¹	1 cup**	¾ cup
Grains/breadsMust be enriched or whole grain product. A serving is a slice of bread or an equivalent serving of biscuits, rolls, etc., or ½ cup of cooked rice, macaroni, noodles, or other pasta products or cereal grains.	5 servings per week- minimum of ½ serving per day ¹	8 servings per week- minimum of 1 serving per day ¹	12 servings** per week- minimum of 1 serving per day ^{1,2}	15 servings** per week- minimum of 1 serving per day ^{1,2}	10 servings** per week- minimum of 1 serving per day ^{1,2}

Notes: * = Decreased serving size. ** = Increased serving amount. ¹For the purposes of this chart, a week equals 5 days. ²Up to one grains/breads serving per day may be a dessert.

the maximum amount of salt in canned tuna and salmon will be reduced from 1.5 percent to about 1 percent.

 Lower in sugar. For example, sweet potatoes will be packed in fruit juice instead of syrup; and red tart cherries will also contain reduced sugar levels.

These and other product modifications should contribute significantly toward improving the nutritional content of school lunches.

Improving Food Choices

The meals and food products are not the only targets of USDA's reinvention efforts for the program. School meals also need to be palatable to children participating in the program, so there is minimal food waste. Team Nutrition was created to be the implementation tool for USDA's "School Meals Initiative for Healthy Children." Team Nutrition's two components are technical assistance/training and nutrition education. Its mission is to improve the health and nutrition of children by creating innovative public and private partnerships that promote food choices for a healthy diet (see box). Some existing partnerships include organizations such as The Walt Disney Company, Scholastic Inc., and the National PTA.

Under the technical assistance/ training component of Team Nutrition, USDA will provide the education, motivation, and training to school foodservice personnel to provide healthy meals that appeal to children and that meet the Dietary Guidelines.

Foodservice Companies Also in on the Act

Faced with dwindling budgets and increased per child lunch costs due to decreased participation in the NSLP, more school foodservice directors are using alternative programs. Approximately 1,000 of the

15,000 school districts in the United States have contracted with foodservice companies to manage their school foodservice programs. Contract foodservice companies have been involved in the school food programs for nearly 50 years. These companies provide complete food management services—offering menu ideas, recipes, employee training, purchasing assistance, inventory control, and other management services.

In 1995, all 330 public schools in Rhode Island contracted with private foodservice companies to manage their school foodservice programs. Since then, local officials report that participation increased and students threw away less food. For example, these schools served 2,652 lunches a day during the 1991-92 school year. In 1995, in schools where private firms provided the cafeteria food, the number of lunches served grew 31 percent. Inspections at several of those elementary schools found that most of the hot-food trays were "completely cleared of food" by the end of the lunch period. The privately managed lunch program for 1 Rhode Island School District, composed of 41 schools, generated a \$350,000-savings in the 1994-95 school year through increased revenues and lower costs.

The Salem-Keizer School District in Salem, Oregon, has used private contractors for the lunch programs at its 52 schools for about 15 years. According to local officials, the program spent about \$100,000 more than originally budgeted during the last year of the district-run lunch program. Since privatization, the program has saved between \$150,000 and \$350,000 a year for the district.

Other school districts also report successfully working with private contractors to reduce operating costs of lunch programs, while increasing participation and the nutritional quality of lunches. For example, the five schools in the South Pasadena Unified School District in California reduced costs by about \$50,000 a year in food and product costs over the 1993-94 and 1994-95 school years when their lunch program was managed by Marriott, a private foodservice company (the year before Marriott got involved, the lunch program was \$30,000 over budget). In addition, fat and sodium levels have been lowered to improve the healthfulness of meals. Lunch participation has increased and plate waste has been decreased by setting up buffet tables where students serve themselves.

The General Accounting Office completed a study in July 1996 of national plate waste in the NSLP. The amount of food thrown away varied by type of food, according to school cafeteria managers. For example, the average amount of waste for cooked vegetables was 42 percent, compared with 11 percent for milk. Almost 80 percent of cafeteria managers believed that allowing students to select only what they want to eat would reduce plate waste.

The major companies providing foodservice to U.S. public schools are Marriott Management Services; Aramark, Inc.; and Daka, Inc.

Marriott, the largest foodservice contractor in the United States, has been in the school foodservice business for 25 years. It operates in 3,500 schools and 350 school districts. Grand Marketplace, one of their secondary-school programs, replicates a food court at school, by offering a choice of eight entrees. This program is designed to facilitate faster service and maximize the use of the facilities. At least once a week a food bar is offered—potato, pizza, bagel, taco, soup, salad, hot dog/hamburger, pasta, chili, and sandwich where students can build their own meals.

Aramark, the second-largest U.S. foodservice contractor, has catered to schools for 45 years. They have seen a marked increase in their school accounts in the last 5 to 7 years. Aramark is currently in 330 school districts (2,300 schools) across the country.

Massachusetts-based Daka, Inc., has been in school foodservice since 1976. Daka is currently in 60 school districts (100 schools) nationwide. Daka, Inc., is the 10th ranked contract foodservice chain in the United States.

These and other contract foodservice companies are working with USDA and local schools to implement the new regulations for healthful school meals. For example, Marriott is testing a new menu called Healthy School Meals in 12 school districts. It includes 30 recipes modified to be lower in fat.

These companies also offer a wide variety of educational materials focusing on nutrition education tailored for students in kindergarten through grade 12. These range from interactive classroom lesson plans

and videos on exercise and nutrition; to songs, games, quizzes, and cards filled with fun facts, to computer nutrition education programs that stress the importance of eating a variety of foods by acquainting students with the Food Guide Pyramid.

Fast Food Chains Adding to the Menu

Fast food chains are recent entrants into school foodservice. They are a small but growing component of those providing meals for the pro-

USDA Acts To Improve School Meals and Children's Nutrition

To show support for USDA's efforts to improve school meals, Congress passed The Healthy Meals for Healthy Americans Act of 1994 (Public Law 103-448), which required meals served under the National School Lunch Program and School Breakfast Program to meet the Dietary Guidelines for Americans by July 1, 1996. USDA launched the School Meals Initiative for Healthy Children, a comprehensive approach to turning Congress's mandate into a successful program. The initiative includes actions to support State and local foodservice organizations in improving school meals and a broad-based nutrition promotion program to increase the popularity of school meals and encourage children to improve their overall diets.

School lunches are now required to provide one-third of the RDA for protein, vitamins A and C, iron, calcium, and calories, while school breakfasts must provide one-fourth of the day's allowance for those nutrients and calories. Both lunches and breakfasts averaged over a 1-week period must contain no more than 30 percent of calories from fat and less than 10 percent of calories from saturated fat.

Providing healthy meals is the first important step in improving

children's diets. But no meal, however healthy, will have an effect on health unless it is eaten. Team Nutrition is USDA's nationwide program, developed to help schools implement the School Meals Initiative for Healthy Children. The nutrition promotion arm of Team Nutrition is a multifaceted, national effort to provide nutrition education through schools, families, the community, and the media. In addition, Team Nutrition provides training and technical assistance to support foodservice personnel in implementing the *Dietary Guidelines for Americans* in school meals. Team Nutrition will also monitor the implementation and evaluate the success of the program.

Team Nutrition created a network of public-private partnerships to help spread its research-based messages. The Walt Disney Company created two 30-second Team Nutrition Public Service Announcements (PSA's) featuring characters from *The Lion King* movie. The PSA's are being broadcast regularly on the Disney cable television channel and are available at no cost to all broadcast television stations and cable television services. Supporting posters featuring the Disney characters were also produced for use in schools and communities.

The in-school component of the program has been developed in cooperation with Scholastic, Inc. Together, Team Nutrition and Scholastic have created a nutrition education program that can be integrated into the basic school curriculum. Through this partnership, Team Nutrition expects to reach over 23 million young people and 1.4 million teachers in 90 percent of America's schools.

In cooperation with USDA's Center for Nutrition Policy and Promotion and USDA's Cooperative State Research, Education, and Extension Service, Team Nutrition has developed the Team Nutrition Community Action Kit, which it has distributed through State and local cooperative extension service agencies and to 4-H clubs and the Internet.

Taken together, all these promotion and training activities provide a comprehensive, reinforcing strategy for improving school meals and children's diets.

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gram. In schools, fast food chains offer limited food fare. Fast food items offered as part of a NSLP meal must meet USDA nutrition requirements, requiring some items to be modified. (Fast food fare is also offered in some schools "a la carte," with each food item offered and priced separately from NSLP meals. These a la carte items are priced higher than the same product is priced when included in the NSLP meal. Students receiving a NSLP school meal can buy extra food a la carte, but they pay full price for the food.)

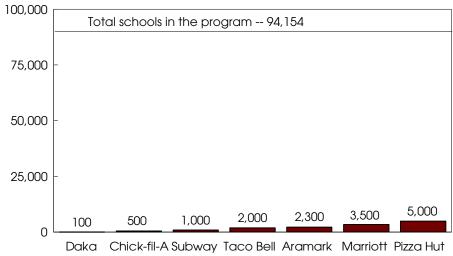
The number of schools serving fast food is low but growing. Currently, approximately nine fast food chains sell to schools across the country: Pizza Hut, Little Caesar's, Domino's, Taco Bell, Subway, Chickfil-A, McDonald's, Blimpie's, and Arby's (fig. 1). (Little Caesar's, Domino's, and McDonald's are not aggressively pursuing the school lunch market and are not monitoring the number of schools they serve. Arby's and Blimpie's are in fewer than 50 schools.)

PepsiCo's Pizza Hut has the highest school presence, in approximately 5,000 of the just over 94,000 schools across the country in 1994-95, up from 4,000 in 1992-93. Pizza Hut offers several one-topping pizzas to schools—pepperoni pizza and cheese pizza are the most popular among the students. Two other pizza chains offer similar products in the school lunch market nationwide—Domino's and Little Caesar's. Under the nutrient-based option, the pizza does not have to be modified. But under the food-based option, the pizza would have to be modified to meet the 2-ounce protein requirement set up by the NSLP.

Schools are increasingly offering "brand days," in which the school rotates the fast food chains' products with regular cafeteria offerings. Several school districts report that lunch

Figure 1
Fast Food Chains and Contract Foodservice Companies a
Small Segment of the National School Lunch Program

Number of schools and residential childcare institutions, 1994-95



Note: Excludes McDonald's, Little Caesar's, and Domino's, which do not reveal the number of schools that serve their products. Also excludes Blimpie's and Arby's, which are in fewer than 50 schools.

participation increases on the days that brand name, fast food products are sold. For example, Capital Hill Schools in Dover, Delaware, added Pizza Hut products at high schools in 1994 when seniors were allowed to go off-campus for lunch. NSLP meal participation in those high schools rose 18 percent on the days Pizza Hut products were sold. Brand day rotations also lessen onsite labor requirements because the food arrives at the school fully prepared.

McDonald's was the first chain to offer products in school lunch programs—approximately 20 years ago. McDonald's currently offers two products to schools—hamburgers and cheeseburgers. In some schools, students cannot buy the burger a la carte. They must buy the complete school lunch as part of the NSLP, which also includes school-prepared french fries, salad, and milk.

Taco Bell, another subsidiary of PepsiCo, Inc., is the largest U.S. chain serving Mexican food. Taco Bell entered school foodservice in 1992 and served around 2,000 schools nationwide in 1994-95. Their catering programs provide schools with a fresh prepared product delivered directly to the school cafeteria. Taco Bell's catered products include a bean burrito, beef burrito, combination bean and beef burrito, and a chili cheese burrito. In order to meet USDA's nutrient requirement for protein, additional beans, meat, or cheese are added to their regular retail products for service at schools.

Another approximately 350 schools are licensed to prepare and serve Taco Bell tacos and burritos. The school purchases food supplies from the chain, and the chain trains the school staff to prepare the product. A line of frozen Taco Bell food products is also served in those schools.

Taco Bell is the only chain that has designed a lower fat menu especially for schools, although two of its four specially designed products exceed the limit of 30 percent of calories from fat as outlined in the Dietary Guidelines: chicken bean en-

chiladas have 35 percent of their calories from fat, and fiesta casseroles have 34 percent of calories from fat. Taco Bell's chicken burritos have 30 percent of calories from fat, and 27 percent of calories in Taco Bell's Border pizza are from fat

Subway has served sandwiches in approximately 1,000 schools nation-wide since 1992. These are delivered cold and without mayonnaise. Subway's cold-cut sandwiches are less than 30 percent of calories from fat. Their products do not have to be modified in any way and are sold in most schools under a licensing or catered program. Subway sandwiches can be included in the NSLP meal plan or can be sold a la carte.

Chick-fil-A, Inc., has been in schools since 1992. The chain delivers a fried chicken-fillet sandwich, with 27 percent of calories from fat, to schools for their lunch program. Chick-fil-A currently services about 500 schools and the number is growing.

Arby's is new to the school lunch circuit. The chain started a pilot program with the San Juan Unified School District in California in early 1995. Prewrapped roast beef sandwiches are delivered hot daily in special insulated containers to 10 of the district's 19 secondary schools. Sandwiches are modified to contain 2-ounce portions of beef (with a sauce package) to qualify as part of a NSLP lunch. The school district plans to expand the program to all 19 of their secondary schools by the end of the 1996-97 school year.

In 1995, Blimpie International entered into a partnership with public school foodservices in one district in Colorado and two on Long Island, New York. They set up a quick-service counter in schools to sell the company's standard menu, but the school foodservice staff operates the unit.

Blimpie's cold cut sandwiches are offered under the NSLP and also sold a la carte. Under the NSLP, however, sandwiches are modified to meet the protein requirements.

On Tomorrow's Menu

Parents and school and government officials have expressed concern about the nutritional value of the fast food products in school lunches—with some being over the 30 percent of calories from fat allowance. However, the chains insist that under the new regulations, fast food products can be incorporated into week-long menus that average the fat content to acceptable levels.

The Government and private vendors are working together to bring more tasty, nutritious, healthy meals to our Nation's school children. USDA is working with contract foodservice companies to help them comply with new regulations. Already, Marriott, Aramark, and Daka are testing new, healthier products and menus in some school districts to see which ones the students like.

Manufacturers and processors have developed many new lowfat and low-sodium products—such as light butter, lowfat macaroni and cheese, prune puree (as a fat substitute), meatless spaghetti sauce, and boneless turkey ham—that can be useful in meeting the NSLP requirements.

In addition to changing the foods and meals, USDA has joined with private companies and public groups to provide nutrition information for children and their parents to promote life-long healthy food choices.

References

"Building a Better School Lunch: USDA Orders Less Fat, Salt in Program Foods," *The Washington Post*, Health Section, Oct. 24, 1995, p.16.

Burghardt, John, and Barbara Devaney. *The School Nutrition Dietary Assessment Study: Summary of Findings*. USDA, Food and Nutrition Service. Oct. 1993.

Donovan, Sharon. "The Benefits of Private Contractors: Four Case Studies," *School Business Affairs*, May 1996, pp. 25-31.

Oleck, Joan. "Go Ahead, Make My Lunch" *Restaurant Business*, July 20, 1994, pp. 54-62.

United States General Accounting Office. School Lunch Program: Cafeteria Managers' Views on Food Wasted by Students. Report to the Chairman, Committee on Economic and Educational Opportunities, House of Representatives, GAO/RCED-96-191. July 1996.

U.S. Department of Agriculture, Food and Consumer Service. "Child Nutrition Programs, School Meal Initiatives for Healthy Children: Final Rule," Federal Register, Rules and Regulations, Part II, Vol. 60, No. 113, June 13, 1995, pp. 31188-31222. ■