United States Department of Agriculture

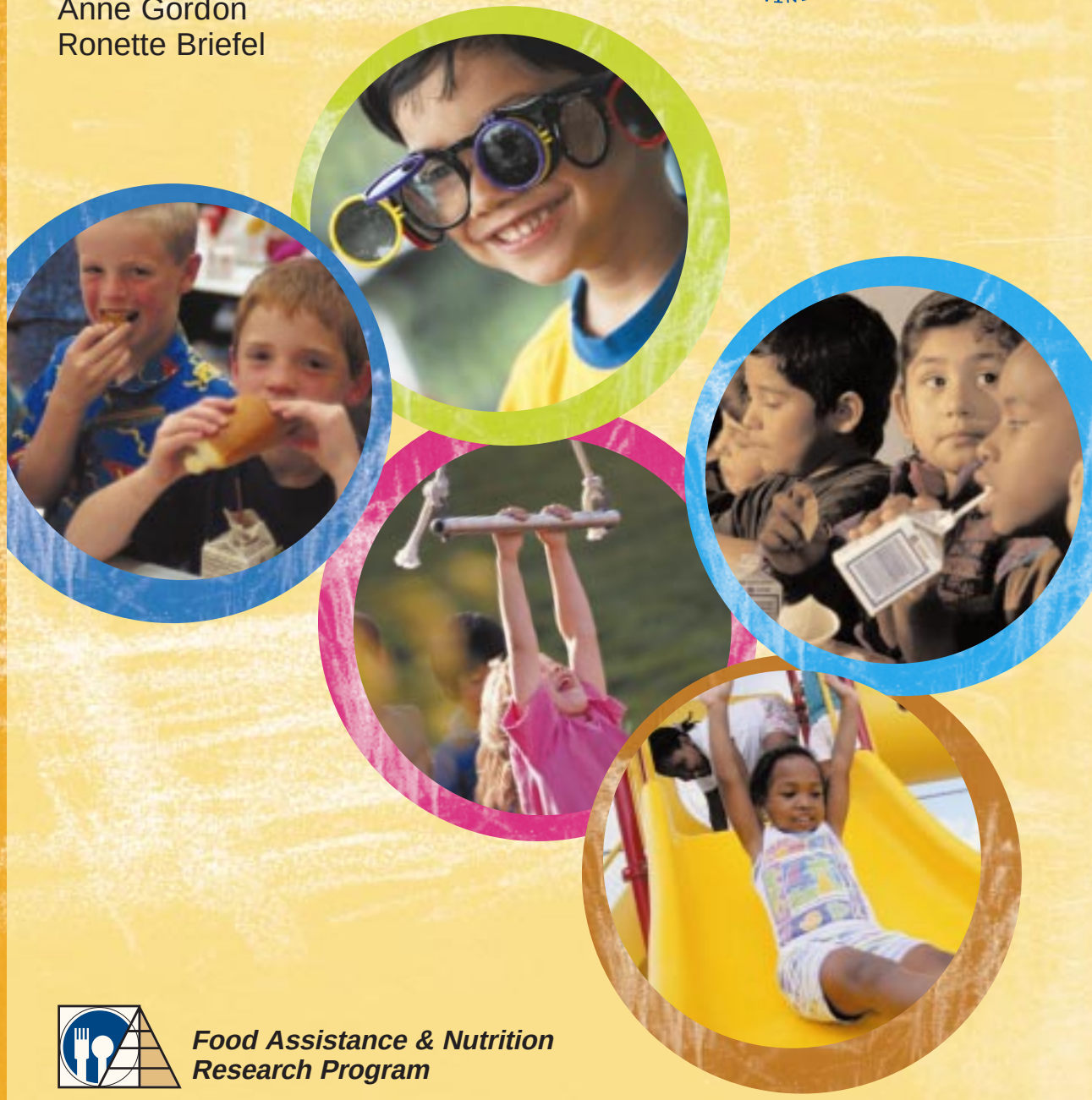
Economic Research Service

Food Assistance and Nutrition Research Report Number 30

Feeding Low-Income Children When School Is Out—The Summer Food Service Program

Executive Summary

Anne Gordon
Ronette Briefel



Food Assistance & Nutrition Research Program

Feeding Low-Income Children When School Is Out—The Summer Food Service Program: Executive Summary. By Anne Gordon and Ronette Briefel, Mathematica Policy Research, Inc., for the Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture. Food Assistance and Nutrition Research Report No. 30.

Abstract

The U.S. Department of Agriculture, through the Summer Food Service Program (SFSP), funds meals for children in low-income areas when school is not in session. The first comprehensive study of the SFSP since 1986 found that, in fiscal year 2001, more than 4,000 local sponsors provided about 130 million meals at more than 35,000 feeding sites. The number of children served in July 2001 (2.1 million per day) was about 14 percent of the number who received free or reduced-price school meals each day during the previous school year. On average, SFSP meals provided the levels of key nutrients recommended for school meals. However, breakfasts were slightly lower in food energy than recommended, and lunches were higher in fat. Half the SFSP sponsors were school districts, which operated about half the sites and served about half the meals. Other sponsors included government agencies, private nonprofit organizations, and residential camps. The nationally representative study, which was sponsored by USDA's Economic Research Service, surveyed State administrators, sponsor staff, and site staff on program operations and on factors that affect participation. This report summarizes the study results. For more details and study methodology, see *Feeding Low-Income Children When School Is Out—The Summer Food Service Program: Final Report,* E-FAN-03-001 (electronic only), available at: http://www.ers.usda.gov/publications/efan03001.

Keywords: Summer Food Service Program, SFSP, child nutrition programs, nutrient content, plate waste.

Acknowledgments

The authors gratefully acknowledge our coauthors on the full study report: Karen Needels, Nancy Wemmerus, Teresa Zavitsky, Randy Rosso, Tania Tasse, Laura Kalb, Anne Peterson, and Darryl Creel. We also received valuable input from Jane Allshouse, Betsy Frazao, David Smallwood, and others at the Economic Research Service, and from Linda Jupin, Anita Singh, and others at the Food and Nutrition Service.

This report was prepared by Mathematica Policy Research, Inc., under a research contract with the Economic Research Service.

Washington, DC 20036-5831 April 2003

Contents

Introduction 1

Data Sources 2

Program Characteristics 2
- State Agencies 3
- Sponsors 3
- Sites 4
- Participant Characteristics 5
- Changes Since 1986 6

Program Administration 6
- State Agencies' Administration of Sponsors 6
- Sponsors' Administration of Their Sites 8

Outreach and Participation 8
- Staffs' Views on Barriers and Outreach 9
- Sponsor Entry and Exit 9

Meal Service 10
- Meal Service Arrangements 10
- SFSP Meal Pattern Requirements 10
- Nutritional Standards Used To Assess Meals 11
- Nutrient Content of Meals 12
- Plate Waste 13

Conclusions 14
- Simplifying Program Administration 14
- Expanding Participation 15
- Improving Meals and Reducing Waste 15

References 16

Feeding Low-Income Children When School Is Out

The Summer Food Service Program

Executive Summary

Anne Gordon
Ronette Briefel

Introduction

The Summer Food Service Program (SFSP) provides meals to children when school is not in session. To be eligible to offer the program, feeding sites generally must be located in low-income areas or must serve primarily low-income children. Because SFSP meals usually are provided in conjunction with activities for children, the program also helps to sustain summer programs that promote physical activity, and that foster children's social and educational development.

The SFSP is funded through the U.S. Department of Agriculture (USDA) and is supervised by State administrative agencies and USDA's Food and Nutrition Service (FNS). The program had expenditures of $272 million in fiscal year 2001. More than 4,000 local agencies (sponsors) provided meals at more than 35,000 feeding sites. In July 2001, about 2.1 million children per day received SFSP meals.

This report summarizes the results of the SFSP Implementation Study, a descriptive study of the operations of the SFSP at the State and local levels.

Mathematica Policy Research, Inc., under contract to USDA's Economic Research Service (ERS), collected nationally representative data during summer 2001 to describe how the program works, and how SFSP staff think it could be improved. The study's major research questions are as follows:

- ***How does the SFSP operate at the State, sponsor, and site levels?***
- ***What factors affect participation by sponsors and children?*** What barriers to participation do program staff believe are the most important? What efforts are program staff making to expand participation? What factors are associated with sponsors' entry and exit?
- ***What is the nutritional quality of meals served, and what is the extent of plate waste?*** How are SFSP meals prepared and served, and what types of foods do they contain? How well do the meals meet USDA requirements and other nutrition standards? What factors are associated with more nutritious meals and less waste?

Data Sources

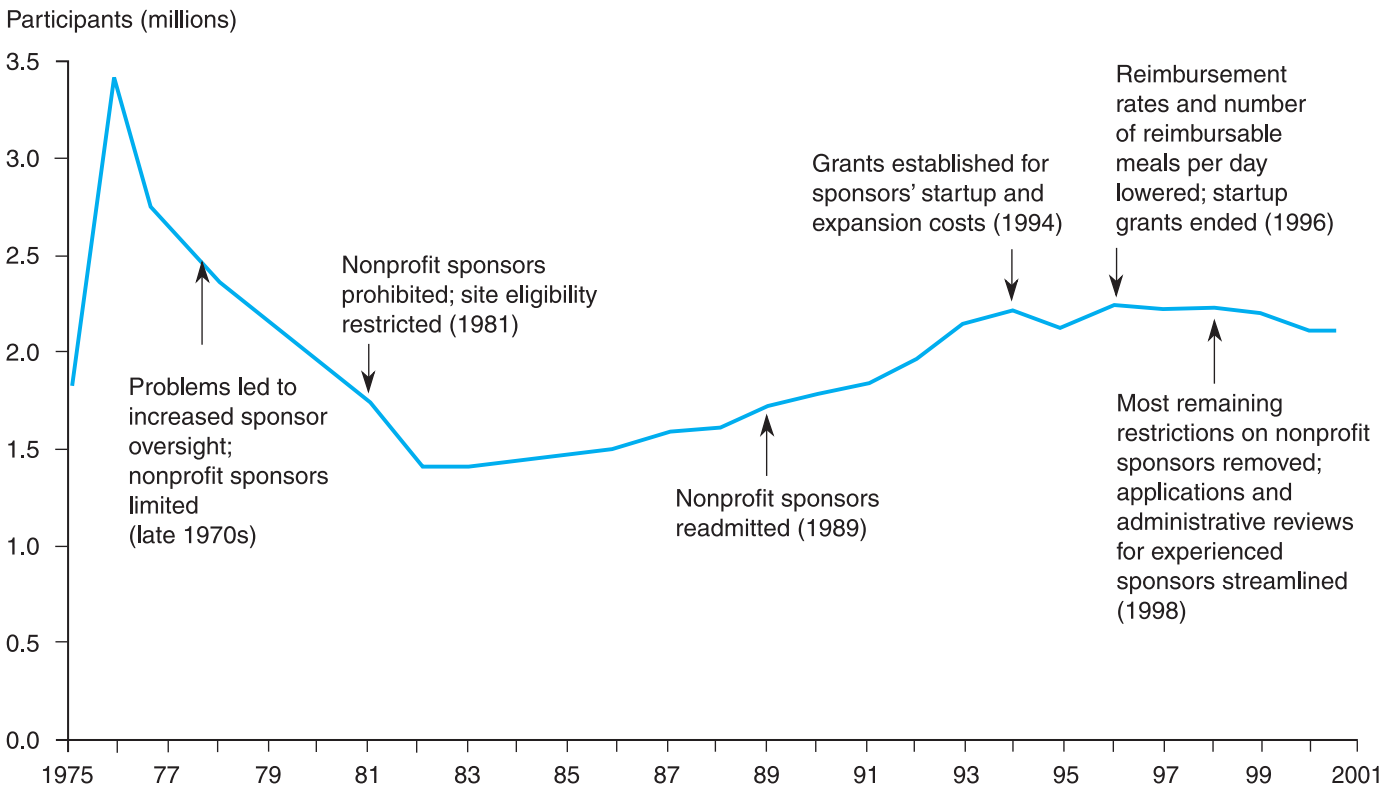
Study interviewers collected nationally representative data at the State, sponsor, and site levels, as well as from former sponsors. All SFSP State administrators were interviewed by telephone. Samples of sponsors and samples of sites were selected from lists of sponsors provided by State agencies and from lists of sites provided by sampled sponsors, respectively. Study staff then conducted a mail survey with telephone followup of 126 SFSP sponsors and a telephone survey of 131 former sponsors (organizations that had participated as sponsors in 2000 but not in 2001). In addition, study interviewers visited 162 sites operated by sampled sponsors. While on site, the interviewers conducted in-person interviews with site supervisors; completed structured observations of site operations (including the site's setting and activities offered, characteristics of participants, and food service facilities); recorded detailed descriptions of the types and amounts of foods served on 5 or 10 randomly selected plates; and recorded detailed descriptions of the types and amounts of food left on 10 randomly selected plates. During the site visits, interviewers always observed lunch and, if multiple meals were served at a site, observed either breakfast or supper in addition to lunch. (They did not observe snacks.) The survey response rates ranged from 89 percent (for the survey of former sponsors) to 100 percent (for the survey of State administrators). In the analysis, data from each survey have been weighted to be nationally representative.

The study also compiled a database of basic characteristics of all 2001 SFSP sponsors and sites, based on lists provided by the State agencies. Key sponsor characteristics were tabulated from this census database.

Program Characteristics

The SFSP began in 1968 as a pilot program to provide meals to low-income children during the summer. In 1975, it was authorized as a permanent program, and participation (measured by reported average daily attendance in July) increased dramatically (fig. 1). However, findings of fraud and abuse (particularly among nonprofit sponsors) during the late 1970s led to greater administrative oversight of sponsors, and to

Figure 1
SFSP participation and program milestones



Note: Participation measure is average daily attendance in July.
Source: Food and Nutrition Service, 2002a.

restrictions on nonprofit sponsors. The Omnibus Budget Reconciliation Act of 1981 went further, prohibiting private nonprofit groups (except private schools and residential camps) from serving as sponsors. It also set a more restrictive income threshold for site eligibility. Participation declined from the mid-1970s through the mid-1980s but then began to increase as USDA and advocates worked to publicize and expand the program. In 1989, nonprofit sponsors were readmitted, but with restrictions. The program continued to expand throughout the early 1990s.

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 reduced reimbursement rates, reduced the number of reimbursable meals per day, and eliminated startup and expansion grants to sponsors. However, other legislative changes implemented in 1998 eased restrictions on nonprofit sponsors and streamlined paperwork requirements for experienced sponsors. Average daily attendance has changed little since the mid-1990s.

State Agencies

The SFSP operates in all 50 States, Puerto Rico, the Virgin Islands, and the District of Columbia (all of which are referred to as "States" in this report). In most States, a State government agency—usually the State education agency that administers the school meal programs—administers the SFSP. In 2001, State education agencies administered the entire SFSP program in 41 States; in New York, the State education agency administered the program for school and government sponsors. In nine States, a State agency other than the education agency administered the program. (Departments of agriculture, health, and social services were among the other agencies.) In two States in which the State governments did not operate the program—Virginia and Michigan—FNS regional offices performed the functions of the State agency. FNS also administered nonprofit and camp sponsors in New York.[1]

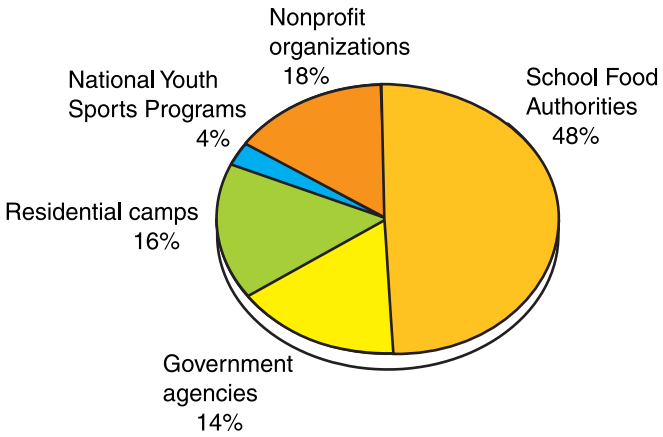
Sponsors

SFSP sponsors are extremely diverse in terms of the nature of their organizations, the size of their programs, and the way they prepare and serve meals. The nature of SFSP sponsor organizations affects the activities they offer with the program, their administrative capacities, and the fit between the SFSP and the sponsors' missions. The five major types of SFSP sponsors are (1) School Food Authorities (SFAs—the entities that administer the National School Lunch Program (NSLP) in schools or school districts), (2) government agencies, (3) residential camps, (4) National Youth Sports Programs (NYSPs—federally funded sports camps for low-income children run by colleges or universities), and (5) other nonprofit organizations (fig. 2).

(1) SFAs made up roughly half (48 percent) of all sponsors in 2001, ran about half (49 percent) of all sites, and served about half (51 percent) of all meals. SFAs generally are well-suited to serve as sponsors, as they are experienced in preparing meals for children and often have school buildings and staff available for sites. To increase access, some SFAs sponsor sites at other locations in the community in addition to schools.

(2) Government agencies (usually municipal recreation or social services departments) constituted 14 percent of sponsors but were the largest sponsors, on average, operating 36 percent of sites and serving 31 percent of meals. Government sponsors often lack the facilities and expertise needed to prepare meals at their sites and therefore are the most likely sponsor type to use vendors.

Figure 2
Types of SFSP sponsors
SFAs sponsored half the program



Note: SFA = School Food Authority.
Source: ERS SFSP 2001 Sponsor-Site Database. Total number of sponsors = 4,372.

[1] FNS regional office staff who administered State programs were included in the State administrator survey. For New York, staff from both the State education agency and the FNS regional office were interviewed, essentially counting New York as two States.

(3) Residential camps made up about 16 percent of all sponsors. Camps operated few sites relative to other sponsors but served three meals daily so that, overall, they ran 3 percent of sites and served 7 percent of meals. Although food service is an essential part of their programs, camps focus primarily on other activities. Camps almost always have staff and facilities on site to prepare meals.

(4) NYSPs constituted fewer than 4 percent of sponsors and served fewer than 1 percent of meals. Like camps, NYSPs focus on offering activities to participants. NYSPs may use college facilities or may contract with vendors for preparation of meals.

(5) Other nonprofit organizations (including religious organizations, youth organizations, and community agencies) represented 18 percent of sponsors. However, program regulations generally restricted them to no more than 25 sites. They operated 12 percent of sites and served 10 percent of all meals. Nonprofit sponsors offer a diverse range of activities and approaches to meal service.

Most SFSP sponsors operated small programs, but a few sponsors that operated large numbers of sites served a large proportion of program meals (fig. 3). Half of all sponsors ran only one site; these sponsors together served just 11 percent of all meals. Another 36 percent of sponsors ran 2 to 10 sites and served 20 percent of all meals. In contrast, 1 percent of sponsors operated more than 100 sites; they served 35 percent of all meals.

Most sponsors prepared meals themselves, most frequently at the serving site. Sixty-three percent prepared meals on site; however, many of these sponsors were small, serving only 26 percent of all SFSP meals (fig. 4). Other sponsors, including many large ones, prepared at least some meals at a central kitchen and delivered them to their sites; 19 percent of sponsors used central kitchens, but they prepared 44 percent of meals.[2] About 18 percent of sponsors (providing 30 percent of meals) purchased meals from vendors—12 percent contracted with private food service management companies, and 6 percent contracted with their local SFAs.

[2] Sponsors that used onsite preparation at some sites but delivered to others from a central kitchen are included in the "central kitchen" category here. A distinction is made in *Feeding Low-Income Children When School Is Out—The Summer Food Service Program: Final Report* between these sponsors and sponsors that only used a central kitchen.

Sites

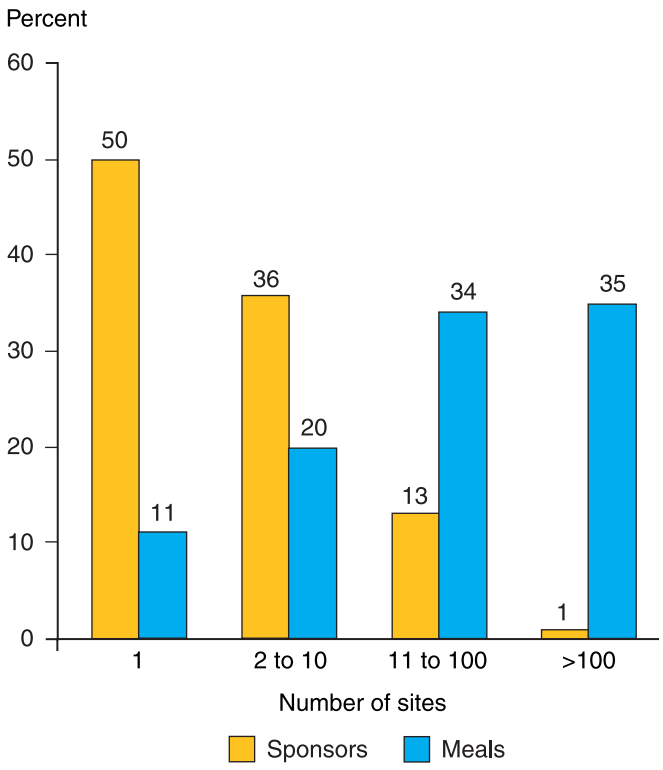
Most SFSP sites are in low-income neighborhoods and are open to all children. Sites qualify as SFSP sites in three major ways (fig. 5):

(1) ***Open sites*** (83 percent of sites) are eligible because they are located in neighborhoods in which at least 50 percent of children live in households with incomes at or below 185 percent of the poverty line. These sites must be open to all children who wish to attend.[3] They are reimbursed for all meals served to children.

(2) ***Enrolled sites*** (14 percent) establish eligibility by documenting that at least 50 percent of enrolled children live in households with incomes at or below 185 percent of the poverty line. A site that has demonstrated eligibility is reimbursed for all

[3] Some open sites may restrict attendance for safety, security, or control reasons. The study did not assess how common these "restricted open" sites were.

Figure 3
Number of sites per sponsor
A few sponsors with many sites served a large proportion of meals



Source: ERS SFSP 2001 Sponsor-Site Database. Total number of sponsors = 4,372.

meals served to enrolled children, regardless of the household income.[4]

(3) ***Residential camp sites*** (3 percent) are reimbursed only for meals served to children from households with incomes at or below 185 percent of the poverty line.

Most SFSP sites can be reimbursed for only two meals or snacks served per day. Camp sites and sites that serve primarily migrant children can be reimbursed for as many as three meals or snacks per day. Almost all sites served lunch in 2001, and about half served breakfast (fig. 6).[5] Considerably fewer sites served supper (5 percent) or a snack (19 percent).

Nearly all sites (93 percent) offered activities. More than three-quarters offered each of the following activities: educational activities, supervised free play, organized games or sports, and arts and crafts. About two-thirds offered field trips, and half offered swimming. Smaller percentages of sites offered a wide range of other activities, such as cooking, job training, and religious activities. The activities that open sites offered sometimes required enrollment, even though the meals were available to all children.[6] For example, SFAs that offer the SFSP in conjunction with summer school must open their sites to children who are not attending summer school. Some open sites made activities available on a "drop-in" basis. About one-third of sites provided some or all children with transportation.

On average, SFSP sites were open for slightly longer than 7 weeks. Sixty-two percent of sites were open for 6 weeks or longer, and 32 percent were open for 8 weeks or longer (fig. 7). Only 10 percent of sites were open for fewer than 4 weeks. Almost all sites (93 percent) were open at least 5 days per week.

Participant Characteristics

Based on site supervisors' estimates, the SFSP served primarily elementary-age children in 2001 (58 percent of children attending), although it also served preschoolers (17 percent) and older children (25 percent) (table 1). Boys and girls attended in equal numbers. Children who attended were of diverse racial and ethnic backgrounds — 39 percent were African American, 29 percent were White (non-Hispanic), 27 percent were Hispanic, and 5 percent were Asian, American Indian, or members of other racial and ethnic groups.

[4] NYSP sites (fewer than 1 percent of sites) are subject to special eligibility rules, but they are most similar to enrolled sites.

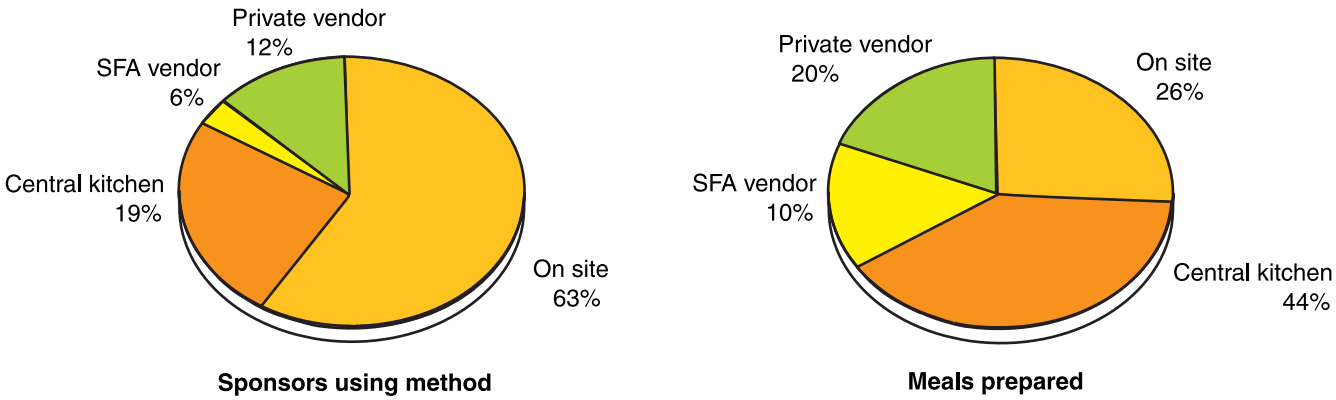
[5] All sites in the sample served lunch. Administrative data suggest that about 2 percent of sites did not serve lunch.

[6] The interviewers did not collect quantitative information on how often the activities were not open, but they observed that enrollment for activities was required at multiple sites.

Figure 4

Sponsors' meal preparation methods

Most sponsors prepared their own meals



Note: SFA = School Food Authority.
Source: ERS SFSP 2001 Sponsor Survey (n = 126).

Changes Since 1986

The last major study of the SFSP was conducted in 1986 (Ohls et al., 1988). At the time, the program was just beginning to grow after a period of decline. From 1986 to 2001, the number of sponsors nearly doubled, and average daily attendance in July grew 40 percent, from 1.5 million to 2.1 million. SFA sponsors and nonprofit sponsors accounted for nearly all of the growth in the number of sponsors and in participation. The number of SFA sponsors nearly tripled, and nonprofit sponsors, which were not part of the program in the late 1980s, comprised nearly one-fifth of sponsors in 2001. Partly as a reflection of the changes in the types of sponsors, SFSP sites were more likely to serve breakfast in 2001 than in 1986 and were more likely to be open for longer than 6 weeks. However, the proportion of sites that established eligibility as open sites did not change, nor did the proportion of children served who were of elementary-school age.

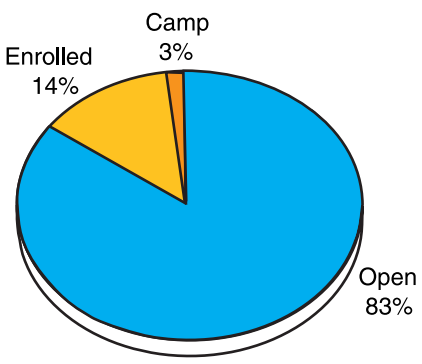
Program Administration

The study examined the interactions between SFSP State agencies and sponsors and between sponsor staff and site staff. These relationships are key to the administration of the SFSP.

State Agencies' Administration of Sponsors

State agencies play vital roles in the SFSP. These agencies recruit new sponsors, process sponsors' applications, provide training and technical assistance to sponsors, monitor their operations, and process their claims.

Figure 5
Types of SFSP sites
Most sites were "open" sites



Source: ERS SFSP 2001 Site Supervisor Survey (n = 162).

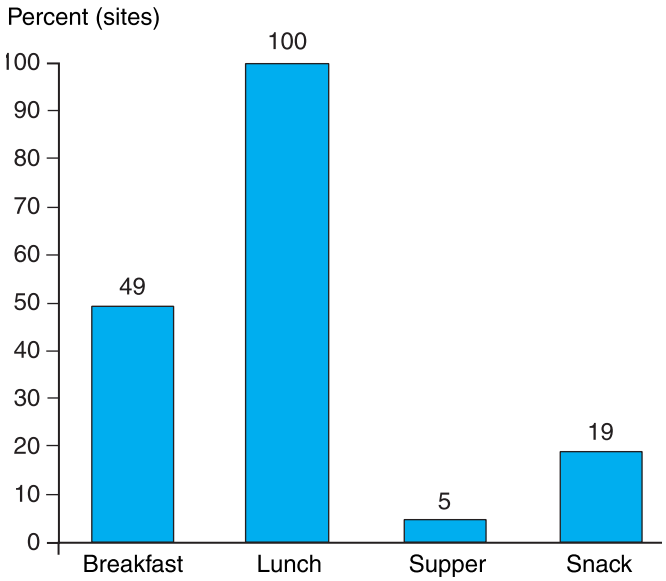
Applications

In their applications, new sponsors must establish their eligibility, describe how they will provide meals, and provide a budget for administrative and operating costs that meets program requirements. They also must provide detailed information on every site they intend to operate, including site location, estimated attendance, hours of meal service, and documentation of site eligibility. State staff also must visit the new sponsors' facilities before approval is granted. Experienced sponsors recently were allowed to omit some information from their applications that remains the same from year to year, but they still must provide a detailed budget.[7]

State administrators considered the application process for SFSP sponsorship to be demanding for their agencies and sponsors. Thirty-nine percent of State agencies reported that their staffing was inadequate for the application process. This shortfall may reflect the fact that most applications are processed in the spring. Most State agencies (82 percent) reported that they

[7] Some of these requirements have been changed for sponsors under current pilot or waiver projects; see the discussion in the concluding section. The pilot projects affected 25 percent of sponsors in summer 2001, based on data from the Sponsor-Site Database.

Figure 6
Types of meals served at SFSP sites
Half the sites served breakfast as well as lunch



Note: Administrative sources suggest that about 2 percent of sites did not serve lunch; however, all the sampled sites served lunch.
Source: ERS SFSP 2001 Site Supervisor Survey (n = 162).

often (as opposed to sometimes or rarely) provided technical assistance with the application process; applications ranked higher than any other topic in terms of frequency of technical assistance. According to 46 percent of the State administrators, budget preparation for applications was the most difficult of all the training topics for new sponsors both during and after training. State agencies ultimately accepted 96 percent of applications.

The questionnaire asked sponsors to comment on the application process in an open-ended question; only 25 percent volunteered any comments. Half the sponsors who did comment stated that the paperwork should be simplified; a few others suggested simplifying specific parts of the application.

Training and Technical Assistance

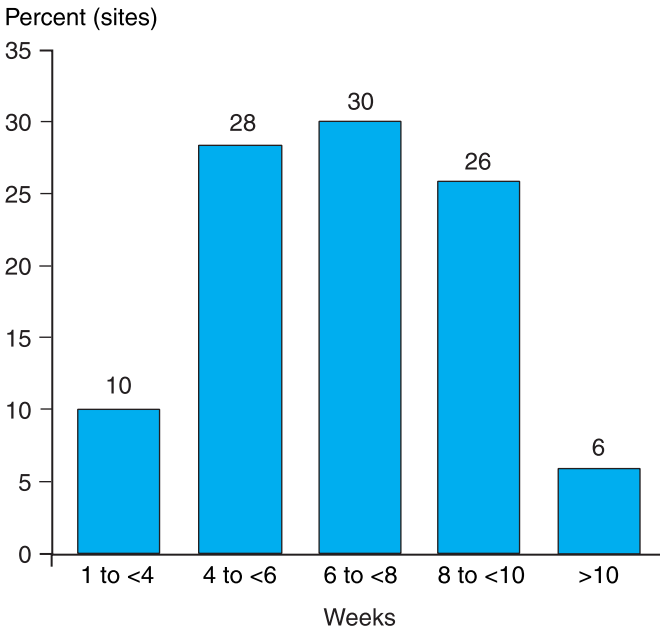
The State administrators reported that providing training and technical assistance to sponsors was one of their major activities. Most sponsors reported that the formal training sessions were helpful. States provided an average of 6 hours of sponsor training. Training sessions were held during the late winter or the spring, while sponsors were preparing applications. Many States (69 percent) provided longer sessions for new sponsors. Eighty-eight percent of sponsors reported that some of their staff attended the State training. All the sponsors that did not send staff were experienced sponsors.

Fifty-eight percent of sponsors reported receiving technical assistance (individualized help outside of a formal training session) from a State agency, and they were generally satisfied with the assistance they received. However, two out of every five sponsors would have liked additional technical assistance on at least one topic.

Monitoring

State administrators reported undertaking monitoring activities that were largely consistent with the monitoring required by SFSP regulations. To ensure that sponsors follow program rules and correct any problems, State agencies are required to conduct administrative reviews of all sponsors at least once every 3 years, to review all new sponsors, and to review annually sponsors with large programs or recent problems. Administrative reviews consist of a detailed inspection of all paperwork that sponsors must keep to document their reimbursement claims, including meal count sheets from sites, meal production or vendor delivery records, and staff time sheets. State monitors also visit some of the sponsors' sites to ensure that meals meet nutritional and safety requirements, and that they are counted appropriately.

Figure 7
Duration of SFSP site operations
Most sites were open at least 6 weeks



Source: ERS SFSP 2001 Site Supervisor Survey (n = 162).

Table 1—Characteristics of SFSP participants
Most participants were of elementary-school age

Characteristic	Meals served
	Percent
Grade level/age:	
Preschool age	17
Elementary-school age	58
Middle-school or junior high-school age	20
High-school age	5
Sex:	
Female	51
Male	49
Race/ethnicity:	
African American, not Hispanic	39
White, not Hispanic	29
Hispanic	27
Other[1]	5
Sample size	**162**

Note: Data have been weighted to estimate the percent of SFSP meals served to children in each group.
[1]Other racial or ethnic groups include American Indian, Alaskan Native, Asian, Pacific Islander, and any others.
Source: ERS SFSP 2001 Site Supervisor Survey.

The State administrators reported that, on average, State agencies reviewed about 94 percent of new sponsors and 58 percent of experienced sponsors; some of these estimates were preliminary.[8] State agencies visited 30 percent of all sites, on average. In 52 percent of the States, all or most site visits were unannounced. Unannounced visits are preferable for ensuring that the program is observed as it usually operates, but they may be impractical if monitors must travel long distances.

Sponsors' Administration of Their Sites

Sponsors are responsible for arranging for meal service at their sites, providing training and technical assistance to site staff, monitoring their sites' compliance with program rules, and preparing claims for reimbursement. The complexity of these activities varies considerably with the size and type of sponsor. In the case of single-site sponsors, sponsor and site staff may be the same. Larger sponsors may hire site staff directly, find other organizations to provide sites and staff (often, organizations that provide activities for children) and provide only the meals themselves (along with appropriate training, monitoring, and financial oversight), or operate some sites with their own staff and provide meals to others.

Costs and Funding

Most sponsors (72 percent) expected that SFSP reimbursements would not cover all their costs. Previous research also found that SFSP reimbursements did not fully cover most sponsors' costs (U.S. General Accounting Office, 1998). Fifty-seven percent of sponsors that did not expect costs to be fully covered planned to supplement SFSP resources with their own funds. Others planned to use funds from other State or Federal sources or from their parent organizations. About 75 percent of sponsors that had operated for longer than 1 year reported using one or more strategies, such as reducing the number of staff or sites, to control costs during the past few years.

Training and Technical Assistance

Sponsors generally provided the required training and often provided technical assistance. However, site staff reported varying amounts of contact with sponsors.

Most sponsors (93 percent) reported that they conducted training sessions for their site staff. Training lasted an average of 3 hours. The sessions covered such topics as meal count records, health regulations, and site violations. The sponsors that did not train their site staff were single-site sponsors with only a few staff; they sent some staff to the State-run training sessions.

As of the time of data collection, 60 percent of site supervisors reported receiving technical assistance from sponsor staff. The most frequent technical assistance topics were record keeping (mentioned by 88 percent of those receiving assistance), meal order adjustments (73 percent), and food safety (72 percent).

Site staff reported wide variation in the number of sponsor visits and the frequency of discussions with sponsors about menus.[9] Some sites had received no visits from sponsors at the time of data collection, whereas some had received as many as three visits daily. Twenty-five percent had frequently discussed menus with sponsors, and 34 percent sometimes discussed menus; 41 percent never had this discussion.

Monitoring

Sponsors reported monitoring their sites regularly, but a few sites reported that the sponsor had not yet visited. Sponsors are required to visit each of their sites at least once during the first week of program operations, and to conduct a more comprehensive review at least once during the first 4 weeks of operations. Eighty-four percent of sponsors reported that they reviewed all sites at least twice, and 73 percent reported that all visits to sites were unannounced. At the same time, about 10 percent of supervisors of sites that had been open more than a week before data collection reported that the sponsor had not yet visited.

Outreach and Participation

FNS has expressed its commitment to expanding the availability of the SFSP to low-income children (Food and Nutrition Service, 2002b). July SFSP participation is approximately 14 percent of the number of low-income children who received free or reduced-price school lunches through the NSLP during the school year. One reason participation is lower is that SFSP open sites must be located in low-income neighborhoods, whereas the NSLP is available everywhere. In

[8] State administrators provided estimates of new sponsors, new sponsor reviews, and experienced sponsor reviews, as many agencies had not completed reviews or paperwork at the time of the interview. Because these estimates were preliminary, it is not possible to conclude that States were not meeting the regulation to review all new sponsors.

[9] These questions were asked only of site supervisors for multisite sponsors.

addition, attendance at SFSP sites is voluntary, while children must attend school and, thus, are a "captive audience" for the school meal programs.

The study explored each of the major approaches to expanding participation in the SFSP: recruiting new sponsors, expanding the number of sites that existing sponsors operate, extending the duration of site programs, attracting more children to existing sites, and reducing the number of sponsors that leave the program.

Staffs' Views on Barriers and Outreach

Staff at the State, sponsor, and site levels provided their views on the barriers to increasing participation in the SFSP and on their outreach methods. Sponsor and site staff also discussed their capacity for and interest in expansion. Although staff's views help identify issues or areas of concern, they should be interpreted cautiously. For example, site supervisors or sponsors may believe that their programs meet local demand, when, in fact, family barriers or lack of awareness that sites exist keep additional children from attending. In other cases, supervisors may be concerned about barriers when, in fact, the area contains fewer unserved children than the supervisors believe are there.

State Agencies' Views on Outreach

State administrators believed that recruiting new sponsors was challenging. Although 41 percent of State administrators reported having inadequate numbers of staff for outreach, almost all State agencies (91 percent) worked with other organizations on outreach or publicity for the SFSP; about half (52 percent) worked with nutrition or antihunger advocacy groups. Help from partner organizations may have compensated to some extent for the shortage of staff resources.

Thirty-three percent of State administrators cited personal contact as the most successful approach used to recruit new sponsors—a higher percentage than mentioned any other approach. One-on-one meetings enabled State agencies to respond to sponsors' concerns about the complexities of managing the SFSP, to present the positive aspects of the program, and to provide assurance of assistance from the State. Twenty-four percent of State administrators mentioned outreach to school districts as their most successful approach. State agencies often identified school districts in low-income areas that did not participate and targeted them for recruiting efforts.

Sponsors' Interest in Expansion

Many sponsors were not interested in expanding the number of sites or the duration of their operations. More than half (59 percent) of sponsors stated that they were not interested in expanding the number of sites they operated. The reasons varied: 38 percent of these sponsors felt that their geographic area had a sufficient number of sites, 19 percent were not interested because they were a camp or single-site sponsor, 11 percent mentioned lack of staff, 10 percent mentioned lack of available locations for sites, and smaller percentages cited other reasons. More sponsors operating open sites than other sponsors were interested in expansion (53 percent versus 17 percent). Nearly three-quarters of sponsors of open sites who were not interested in expansion believed that the number of sites in their area was sufficient.

Half the sponsors were not interested in extending the duration of their SFSP operations, 27 percent reported that their program already ran all summer, and 23 percent reported that they might be interested in extending their program. Many sponsors were not interested in staying open longer because their schedules were dictated by their activity programs (24 percent); external constraints (32 percent), such as having to vacate school sites so maintenance could be performed; staffing constraints (22 percent); or financial constraints (20 percent).

Site Supervisors' Views on Expansion

Site supervisors typically reported that they had the capacity to serve additional children at their sites. One-third estimated that they could serve more than 50 additional children, and 48 percent estimated that they could serve 1 to 50 additional children. Only 18 percent reported that they were unable to serve additional children. Site supervisors cited a range of barriers that might explain why children do not attend, including lack of transportation (mentioned by 33 percent), lack of publicity about the program (26 percent), limited hours (17 percent), children's dislike of the food (16 percent), lack of or insufficient numbers of activities (12 percent), and parents' concerns about neighborhood safety (11 percent).

Sponsor Entry and Exit

For SFSP sponsorship to grow, it is important not only to recruit new sponsors, but to minimize the exit of current sponsors. Some turnover unrelated to SFSP

policies is inevitable, however, as staff or priorities change and sponsors periodically renovate their facilities or perform other temporary activities. Furthermore, some sponsors, particularly new ones, leave after realizing that they have overestimated demand for the program or their administrative capacity to operate it. The study interviewers collected data on turnover in the SFSP to inform discussions of these issues.

The percentages of sponsors entering and exiting the program in 2001 were similar, as estimated from State agency administrative data. In summer 2001, 10 percent of sponsors were new. Half the new sponsors were SFAs, and one-third were nonprofit organizations. New sponsors were smaller than continuing sponsors, and fewer new sponsors than continuing sponsors offered breakfast and supper.

Between summer 2000 and summer 2001, 8 percent of SFSP sponsors left the program. Former sponsors were disproportionately small, new, or nonprofit organizations. Inadequate reimbursement rates and time-consuming paperwork were the main reasons that former sponsors gave for leaving the SFSP; each reason was cited by about 45 percent of former sponsors. Forty percent reported that low participation levels were a contributing factor. Thirty percent of former sponsors reported that another SFSP sponsor had taken over some or all of their sites.

Meal Service

SFSP sites serve food in a variety of settings and facilities, such as outdoor shelters at parks; recreation centers that have refrigerators but no cooking facilities; and cafeterias at schools, universities, and residential camps. The study examined how SFSP meals were served, their nutritional content, and the extent of plate waste.

Meal Service Arrangements

In 2001, 76 percent of all sites served meals indoors. More than two-thirds (70 percent) of sites served meals in a serving line or food pickup line, and 80 percent had access to refrigerators.

Most sites (81 percent) served more than 90 percent of their available meals on the day of the observation. In general, 29 percent of the sites that had leftover meals discarded all of them (sometimes because of health regulations), 22 percent stored all of them, and 39 percent discarded some meals or parts of meals and stored others; smaller numbers used other approaches to handling leftovers (fig. 8). About 22 percent of site supervisors reported that their site had run out of food or meals during SFSP meal service at some point during the summer.

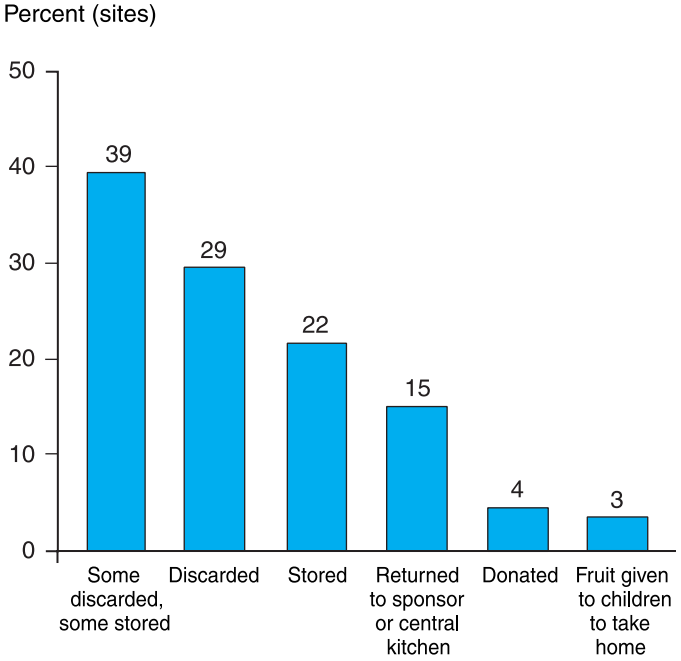
SFSP Meal Pattern Requirements

To ensure that sites serve nutritious meals, SFSP regulations specify a meal pattern that all non-SFA sponsors must follow. The meal pattern specifies that SFSP lunches include foods from the following food groups: (1) milk, (2) a bread or a bread alternate, (3) two fruits or vegetables, and (4) a meat or a meat alternate. It also specifies minimum serving sizes for foods from each food group.[10]

Instead of using the SFSP meal pattern, SFA sponsors have the option of using the same system that they use for the NSLP. The system may be a food-component-based system similar to the SFSP meal pattern or a

[10] Compliance with the SFSP meal pattern at breakfast is discussed in *Feeding Low-Income Children When School Is Out–The Summer Food Service Program: Final Report* (E-FAN-03-001).

Figure 8
What happens to leftover meals?
Sites' approaches varied



Notes: Multiple responses were allowed. Figure represents usual practices, as reported by site supervisors.
SFSP regulations permit children to take fruit home at some sites.
Source: ERS SFSP 2001 Site Supervisor Survey (n = 162).

nutrient-based system, called "nutrient standard menu planning," which is based on nutritional analysis of menus, rather than on specific food components. SFA sponsors also may use "offer versus serve" (OVS), which is intended to reduce waste by permitting children to refuse some items offered and still have the meal count as meeting program requirements. Other types of sponsors may not use OVS.

Because SFA sponsors may use other meal planning approaches and/or OVS, compliance with the SFSP meal pattern was assessed only for non-SFA sponsors. Seventy-one percent of the SFSP lunches that non-SFA sponsors served met all the meal pattern requirements (fig. 9). Most lunches that fell short served all the required components but did not meet the minimum serving size for one of them. The meat/meat alternate was the component most often served in an inadequate amount; it was nearly always served, but 20 percent of lunches did not include it in the required minimum serving size. Various factors, such as cooks' measurement errors, food shrinkage during cooking, lack of training on the requirements, or measurement errors associated with the visual estimation and coding of food portion sizes, may explain these findings.

Nutritional Standards Used To Assess Meals

The SFSP regulations do not specify nutritional goals for the SFSP other than the meal pattern. This study adapted the standards used in the school meals programs — the School Breakfast Program (SBP) and the NSLP — to evaluate SFSP meals. These standards include the following:

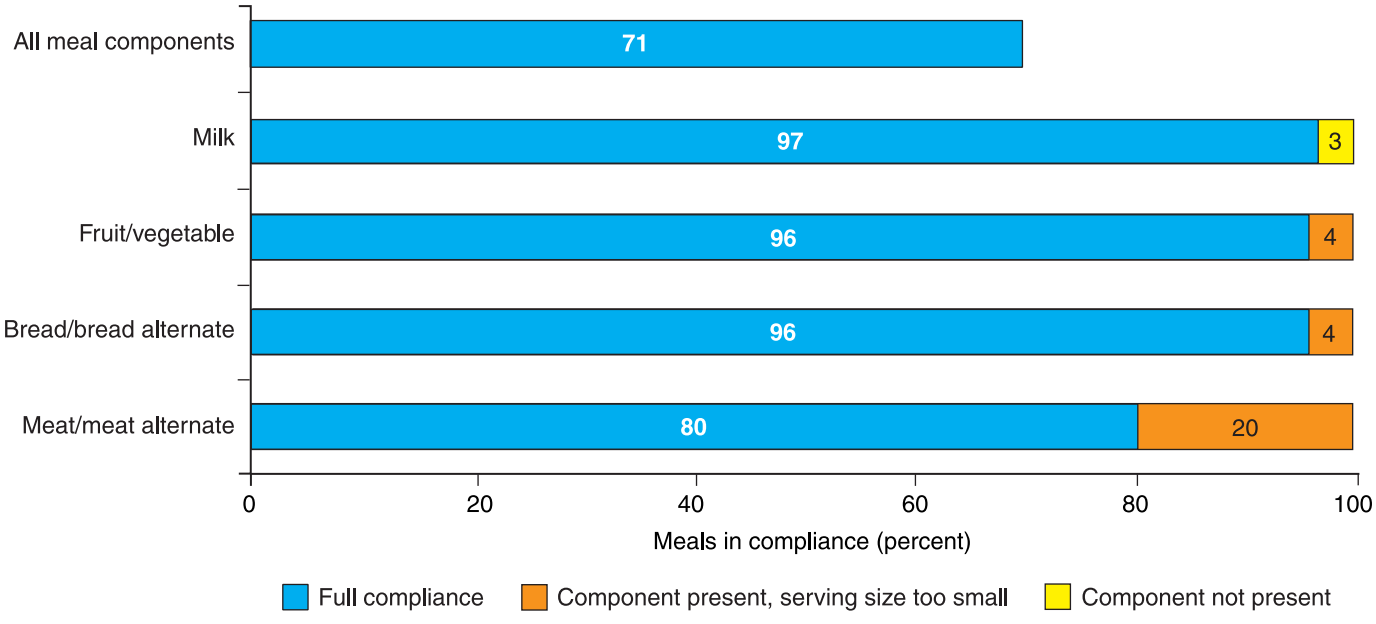
- On average over a week, meeting one-fourth of the Recommended Dietary Allowance (RDA) at breakfast and one-third of the RDA at lunch for key nutrients.[11] Key nutrients specified in the SBP and

[11] The RDA is the average daily nutrient intake level sufficient to meet the nutrient requirements of nearly all healthy individuals in a particular life stage and gender group (Institute of Medicine, National Academy of Sciences, 2000). Standards for school meals are based on the 1989 RDAs. Beginning in 1997, the Institute of Medicine gradually has been releasing updated RDAs for specific nutrients based on the Dietary Reference Intakes (DRIs). The DRIs include nutrient standards for RDAs and for Adequate Intakes (AIs), to be used when the available scientific evidence is insufficient to establish an RDA. In this study, the AI was used as the nutrition standard for calcium, as an RDA for calcium is not available. To evaluate whether SFSP meals met the RDA standard, the mean nutrient content of meals served was compared with the RDA standard for the two DRI age groups that most closely correspond to the age range of most children in the SFSP (4 to 8 years and 9 to 13 years). However, because DRIs for energy and protein were not available at the time of the analysis, the means for these nutrients were compared with the 1989 RDAs, which were defined for children aged 7 to 10 years.

Figure 9

Non-SFA-sponsored sites' compliance with lunch meal pattern requirements

Some serving sizes fell short



Note: Compliance was assessed for 449 plates observed at 83 non-SFA-sponsored sites. Compliance was not assessed for SFA-sponsored sites, as regulations permit these sites to use either the SFSP meal pattern or the menu planning approach they use for the school meal programs.
Source: ERS SFSP site observations (2001).

NSLP regulations are energy, protein, vitamin A, vitamin C, calcium, and iron.

- On average over a week, providing 30 percent of calories or less from total fat and less than 10 percent of calories from saturated fat, as recommended by the Dietary Guidelines for Americans.[12]

The average nutrient content of SFSP breakfasts and lunches was compared with these standards to assess how well SFSP meals were meeting the nutritional needs of children.

Nutrient Content of Meals

On average, SFSP meals provided at least one-quarter of the RDAs for most key nutrients at breakfast (fig. 10). Breakfasts fell slightly below the standard for energy, providing an average of 21 percent of the RDA. The mean levels of most other nutrients were substantially above the standard. The nutrient patterns of SFSP breakfasts reflect the fact that many of the observed meals consisted of ready-to-eat cereals, milk, and 100-percent fruit juice. These foods provided children with energy and other key nutrients — fortified cereals and grains contributed iron and vitamin A; milk contributed protein, calcium, and vitamin A; and juice contributed vitamin C.

Nutrient patterns in SFA- and non-SFA-sponsored breakfasts generally were similar. Mean energy in both groups' breakfasts was below the RDA standard of 25 percent (21 percent of the RDA in SFA-sponsored breakfasts and 22 percent in non-SFA-sponsored ones). Means for other key nutrients were above the RDA standard for both SFA- and non-SFA-sponsored breakfasts.

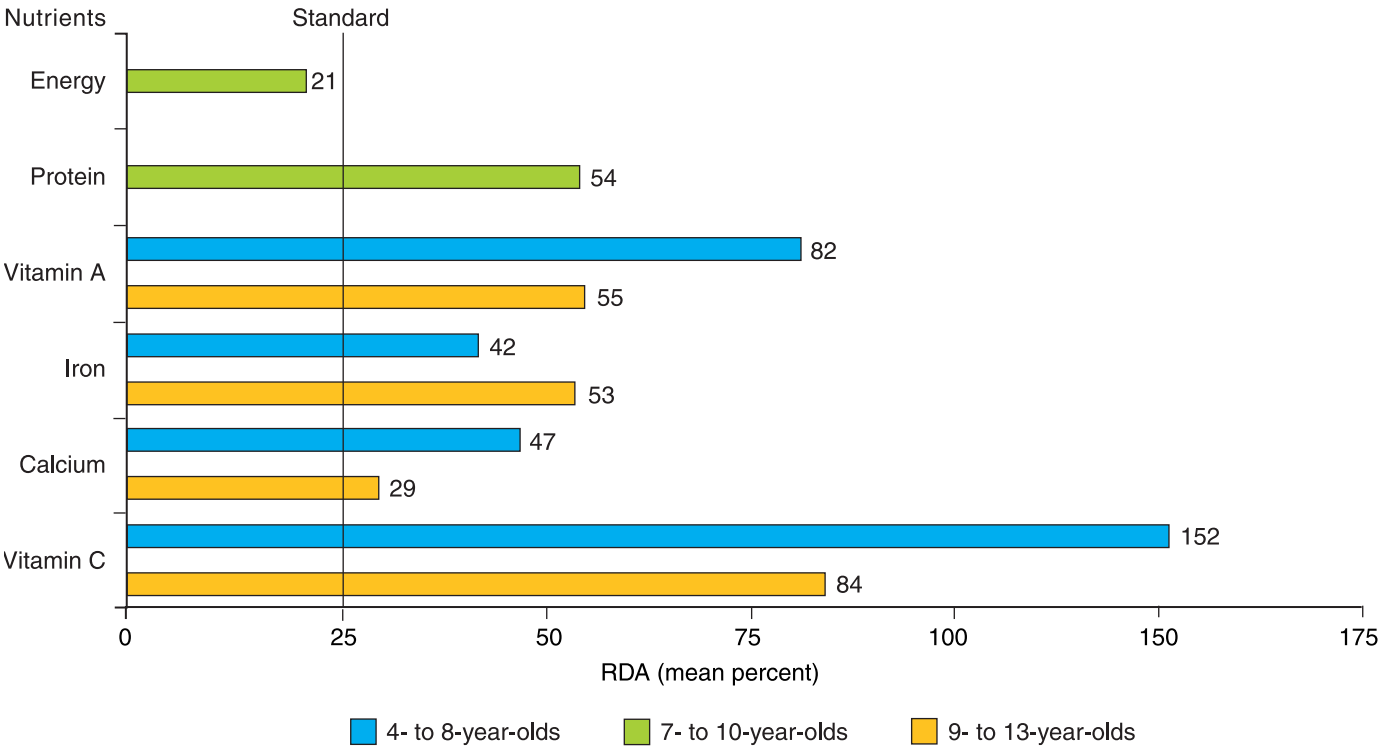
On average, SFSP lunches provided at least one-third of the RDA for energy and for other key nutrients (fig. 11). Lunches provided average energy just equal

[12] Results for other vitamins and minerals, sodium, cholesterol, and fiber are discussed in *Feeding Low-Income Children When School Is Out–The Summer Food Service Program: Final Report* (E-FAN-03-001).

Figure 10

Nutrients served at SFSP breakfasts

Breakfasts met nutritional standards, on average, but were slightly below the standard for food energy



Note: The standard for breakfast is 25 percent of the RDA (vertical line). Means of energy and protein were compared with the 1989 RDA for children aged 7 to 10 years. (Updated RDAs were not available at the time of the analysis.) Means of calcium were compared with the AI.
Source: ERS SFSP site observations (2001). Sample size = 556 breakfast plates observed at 85 sites.

to the standard of 33 percent of the RDA. As at breakfast, other key nutrients were provided at levels above the standard. More than 90 percent of lunch plates included fruit, so it is not surprising that the meals' vitamin C contributions were high. (For example, one orange would provide both age groups with more than 100 percent of the RDA for vitamin C.) Milk and vegetables contributed vitamin A. Along with meats, fortified breads and rolls provided significant amounts of iron. Milk and dairy products helped the lunches to meet the standard for calcium for children in both age groups. The average content of both SFA- and non-SFA-sponsored lunches met the RDA standards for energy and for other key nutrients.

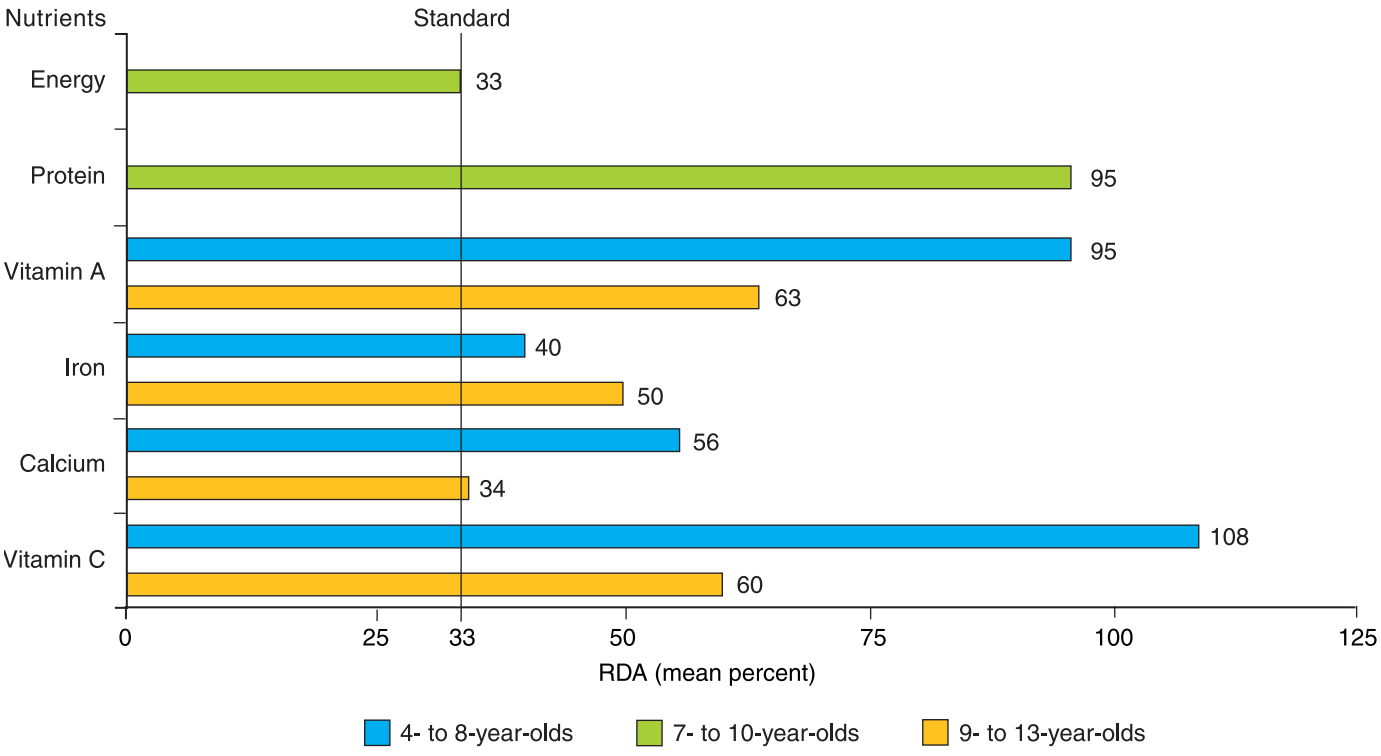
On average, SFSP breakfasts exceeded the Dietary Guidelines standard for saturated fat content, and SFSP lunches exceeded the standard for fat and saturated fat (fig. 12). At the same time, the average fat and saturated fat contents of SFSP meals were similar to those reported for school breakfasts and school lunches provided in elementary schools in 1998-99 (Fox et al., 2001).

Plate Waste

Plate waste is defined as foods that children select or are served, but do not eat. It does not include either leftover meals that are not served to children or food wasted during meal preparation. In this study, it also excludes foods left by children in a designated area, known as a "share box," which other children could then take, but which were occasionally wasted. Share boxes were available at 44 percent of the sites. The extent of plate waste in the SFSP is important because it affects the nutritional benefit that children obtain from SFSP meals, as well as sponsors' costs (and thus their ability to operate the SFSP cost-effectively).

Although some wasted food on children's plates is to be expected, many factors may influence the extent of plate waste: the children's age, sex, and family background; their food preferences; the extent to which

Figure 11
Nutrients served at SFSP lunches
Lunches met nutritional standards, on average



Note: The standard for lunch is 33 percent of the RDA (vertical line). Means of energy and protein were compared with the 1989 RDA for children aged 7 to 10 years. (Updated RDAs were not available at the time of the analysis.) Means of calcium were compared with the AI.
Source: ERS SFSP site observations (2001). Sample size = 989 lunch plates observed at 161 sites.

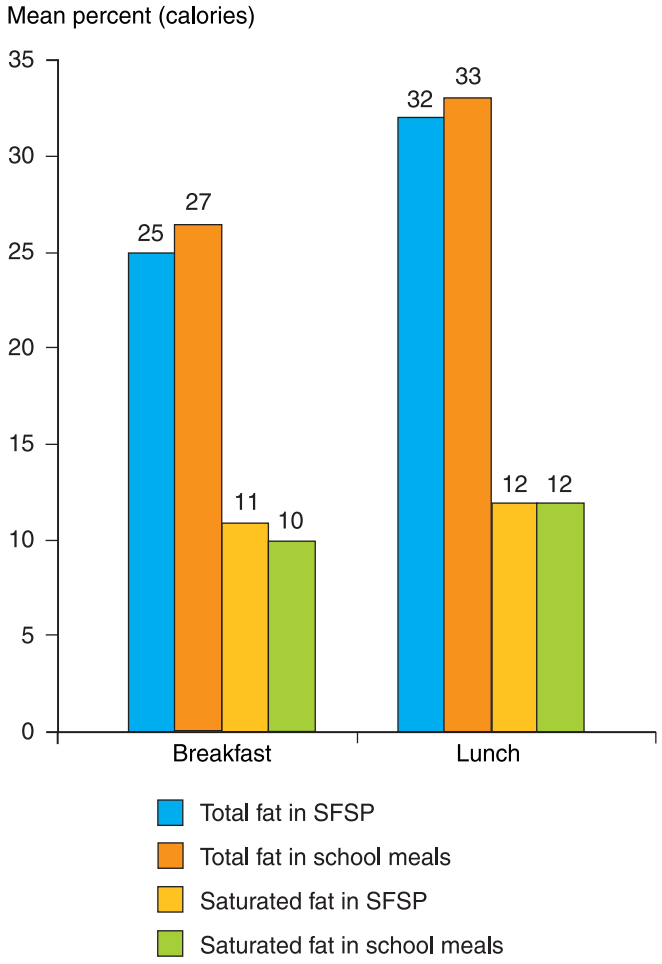
they can choose or refuse specific foods; the serving temperature of the foods; specific forms of preparation or presentation, such as whether fresh fruits are cut up; the time available for children to eat; how hungry they are at meal time; the environment (including cleanliness, comfort, and air or room temperature); and the site staff's interactions with the children during meals.

Children wasted an average of about one-third of the calories and nutrients they were served at both breakfast and lunch (fig. 13). However, this fraction varied across sites and by foods. The children ate 11 percent of meals completely, with no plate waste. Vitamin A at lunch had the highest level of waste (53 percent), which reflects a relatively high level of wasted vegetables (48 percent of serving weight wasted), particularly raw carrots (73 percent) and salads (66 percent). At lunch, 30 percent of milk served was wasted, 37 percent of fruit, and 39 percent of breads or bread alternates not in mixed dishes. Waste was 32 percent for mixed dishes and 36 percent for meats not part of mixed dishes. The level of waste observed for specific foods and food groups is similar to the level observed in previous studies of children in the SFSP (Ohls et al., 1988) and in the NSLP (Reger et al., 1996).

Figure 12

Fat and saturated fat in SFSP meals and school meals

Both programs' meals exceeded Dietary Guidelines for fat at lunch



Note: The standard for total fat is less than or equal to 30 percent of calories; the standard for saturated fat is less than 10 percent of calories.
Source: SFSP data are from SFSP site observations for this study (2001). School meals data are from a nationally representative sample of elementary schools in school year 1998-99, from the School Nutrition Dietary Assessment-II study (Fox et al., 2001).

Conclusions

The study findings suggest several key SFSP challenges: (1) how to simplify the required paperwork and the reimbursement structure without compromising program quality and integrity; (2) where to target SFSP expansion efforts; and (3) how to increase meal pattern compliance and improve the acceptance of meals to reduce plate waste, yet maintain or improve nutritional content.

Simplifying Program Administration

To safeguard program integrity and meal quality, SFSP regulations require both careful documentation for sponsor applications and claims and ongoing monitoring of site operations by State agencies and sponsors. However, responses to a range of questions indicated that many State and sponsor staff perceived the detailed program rules and the complex reimbursement procedures as burdensome, and some believed that they could discourage program growth.

In 2001, FNS began experimenting with several approaches to simplifying the reimbursement process. A 14-State pilot project — targeted to States with low SFSP participation rates — allows sponsors to combine administrative and operating costs and to be reimbursed at a fixed reimbursement rate per meal, with less paperwork. A second initiative, the "Seamless Summer" waiver, allows SFAs to run community-based summer feeding programs under the NSLP and to receive the NSLP free rate (slightly lower than the SFSP rate) for all meals served. Without the waiver, SFAs have to follow SFSP rules if they serve children during the summer in community-based programs.[13]

[13] SFAs that serve only summer school students operate under the NSLP and are reimbursed on the basis of the students' meal-price eligibility status (free, reduced, or paid).

Studies of these initiatives will help to assess whether the approaches should be adopted more widely.

Expanding Participation

USDA is developing a Web-based geographic information systems tool, based partly on data collected in this study on locations of sponsors and sites, to help State agencies and local groups identify underserved areas. This tool will make it possible to target outreach efforts more effectively.

At the same time, the views of State agency staff, sponsors, and former sponsors suggest that, by themselves, better targeting and outreach are not enough. Simplifying program administration through initiatives such as those just described may also be important to expand participation and reduce sponsor attrition. New sponsors, nonprofit sponsors, and smaller sponsors seem to have the most difficulty administering the program. Reimbursement rates may also affect sponsor participation. Nearly half of former sponsors mentioned reimbursement rates as reasons for leaving the program, and 72 percent of current sponsors did not expect SFSP reimbursements to cover all of their costs.

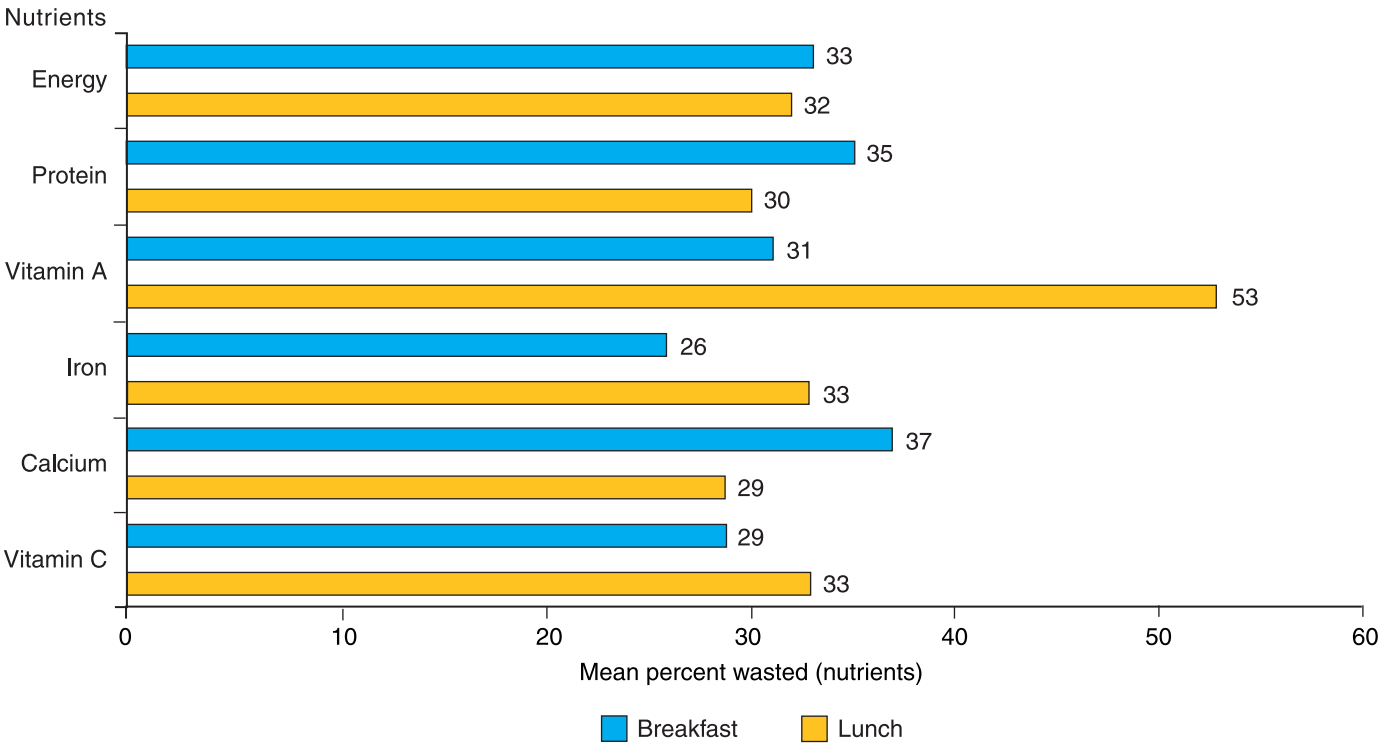
Improving Meals and Reducing Waste

The findings on meal pattern compliance and on the food and nutrient content of SFSP meals may guide USDA in determining which changes in program requirements and which kinds of assistance might help sponsors provide meals that meet program requirements and nutrition standards. The findings on plate waste suggest that sponsors should be encouraged to consider children's preferences, present meals in an appealing way, and offer children choices, whenever possible. The study findings also suggest that nutrition education for sponsors' staff, site staff, and SFSP participants may help improve menus, promote healthy eating, and reduce waste. For example, nutrition education may teach sponsor and site staff to offer lower fat options, and to offer fruits and vegetables in forms that appeal to children. Nutrition education could encourage children to eat more fruits and vegetables.

Figure 13

Plate waste at breakfast and lunch

About one-third of nutrients was wasted



Note: Plate waste estimates were based on 815 breakfast plate wastes at 85 sites and 1,570 lunch plate wastes at 161 sites. The percent wasted was calculated as mean nutrient wasted divided by mean nutrient served times 100.
Source: ERS SFSP site observations (2001).

References

Fox, M.K., M.K. Crepinsek, P. Connor, and M. Battaglia. *School Nutrition Dietary Assessment Study—II (SNDA-II) Summary of Findings.* U.S. Department of Agriculture, Food and Nutrition Service, April 2001.

Gordon, Anne, Ronette Briefel, Karen Needels, Nancy Wemmerus, Teresa Zavitsky, Randy Russo, Tania Tasse, Laura Kalb, Anne Peterson, and Darryl Creel. *Feeding Low-Income Children When School Is Out—The Summer Food Service Program: Final Report.* E-FAN-03-001. U.S. Department of Agriculture, Economic Research Service, February 2003.

Institute of Medicine, National Academy of Sciences. *Dietary Reference Intakes: Applications in Dietary Assessment.* Washington, DC: National Academy Press, 2000.

Ohls, J., E. Cavin, E. Kisker, N. Chapman, and J. Homrighausen. *An Evaluation of the Summer Food Service Program: Final Report.* Princeton, NJ: Mathematica Policy Research, Inc., July 1988.

Reger, Christina, Carol E. O'Neil, Theresa A. Nicklas, Leann Myers, and Gerald S. Berenson. "Plate Waste of School Lunches Served to Children in a Low-Socioeconomic Elementary School in South Louisiana." *School Food Service Research Review,* 20 (supplement 1996) 13-19.

U.S Department of Agriculture, Food and Nutrition Service. "Summer Food Service Program." Program participation data. (www.fns.usda.gov/pd/sfsummar). Accessed January 18, 2002a.

U.S. Department of Agriculture, Food and Nutrition Service. "A Message from Eric M. Bost: Under Secretary for Food, Nutrition, and Consumer Services." (www.fns.usda.gov/cnd/Summer/States/message). Accessed February 25, 2002b.

U.S. General Accounting Office. *Welfare Reform: Effects of Reduced Reimbursements on the Summer Food Service Program.* GAO/RCED-99-20. December 1998.