

USDA Summer Meals Study

Volume 3. Food Service Characteristics

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Authors

Tracy Vericker, Ph.D.
Melissa Rothstein, M.P.A.
Mary Gabay, M.S.
Hyunshik Lee, Ph.D.
Vivian Gabor, M.P.H.
Thea Zimmerman, M.S., R.D.
Sujata Dixit-Joshi, Ph.D.
Bibi Gollapudi, B.A.
Kevin Baier, Ph.D.
Laurie May, Ph.D.

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Food and Nutrition Service
U.S. Department of Agriculture
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Submitted by:

Westat
An Employee-Owned Research Corporation®
1600 Research Boulevard
Rockville, Maryland 20850-3129
(301) 251-1500

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Executive Summary

The USDA Summer Meals Study provides a comprehensive assessment of the two summer meal programs operated by the U.S. Department of Agriculture (USDA), the Summer Food Service Program (SFSP) and the Seamless Summer Option (SSO). This report, the third volume in the USDA Summer Meals Study report series, focuses on the **characteristics of food service environments at summer meal program sites** and **program site and sponsor perspectives on program implementation**.

Background

The summer meal programs provide free, nutritious meals and snacks to children ages 18 years and younger who rely on school meals during the school year. These programs serve meals at sites located in low-income areas and at sites in other areas serving a high proportion of low-income children,¹ both in the summer when school is not in session and during long school breaks in communities with year-round school calendars. Children who participate in the summer meal programs receive meals free of charge, regardless of household income. Meal types include breakfast, lunch, supper, and snack (morning, afternoon, and evening). Sites may receive reimbursement for up to two meals (including snacks) per child per day, with the exception of migrant sites and camps that can receive reimbursement for up to three meals each day.²

The summer meal programs are federally funded and State administered. In both the SFSP and SSO, sponsors are approved by the State to operate one or more summer meal sites. Sites are located in a variety of settings, such as schools, parks, community centers, Boys and Girls clubs, apartment complexes, churches, and migrant centers. Sites can be open or closed-enrolled and can also be camps. Open sites are located in a low-income area where at least half of the children in the defined geographic area are eligible for free or reduced-price school meals; any child age 18 and under can receive free meals at these sites. Closed-enrolled sites may or may not be located in a low-income area; however, at least half of the children enrolled at the program site (e.g., a parks and recreation

¹ Eligibility is determined based on household income at camps.

² Sites cannot serve a lunch and supper combination.

program, summer enrichment programs) must be eligible for free or reduced-price meals, and all children who are enrolled receive free meals. Residential or day camps only receive reimbursement for meals served to children who qualify for free and reduced-price meals.

Overview of the USDA Summer Meals Study

The USDA Summer Meals Study is a nationally representative study of summer meal program sites, program participants, and program nonparticipants. The study employed a mixed-methods design to address the research objectives. Approximately 450 program sponsors and 1,040 sites participated in data collection activities; participation varied by study instrument. Results presented in this report volume are based on data collected from surveys that were administered to program sponsor and site staff. In addition, in-depth interviews were conducted with a subset of sponsor and site staff. Results summarized from the surveys are presented as descriptive statistics, such as means and percentages. Information gathered from in-depth interviews with sponsors and sites is used to provide context to the survey results and to examine barriers and facilitators to program implementation, recommendations for changes to program rules, statute, and guidance, and to gauge satisfaction with the summer meal programs.

Key Findings

Meal Patterns and Menu Planning

Survey results are presented at the site level, to provide a nationally representative depiction of site operations. However, it is important to note that sponsors are responsible for many program operational decisions, which includes menu planning.

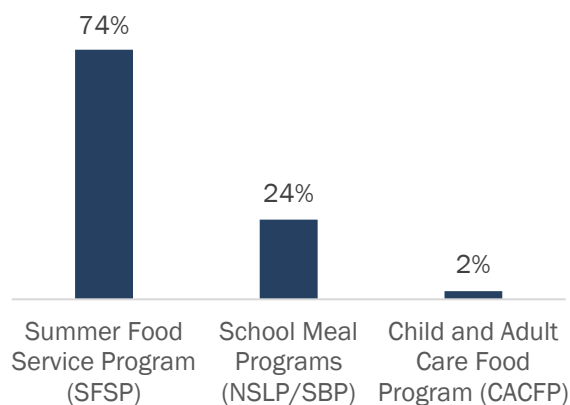
- **Nearly three out of four sites (74%) follow the SFSP meal pattern.** About one-quarter of sites (24%) follow the school meal programs' meal patterns, and only two percent follow the CACFP meal pattern³ (see Figure ES-1). All sites operated by SSO sponsors are required to follow the school meal program meal patterns, while SFA sponsors operating SFSP sites may choose the SFSP or school meal program meal

³ There are several instances in which the meal patterns for the Child and Adult Care Program (CACFP) may be used. First, State agencies may authorize sponsors to follow the CACFP meal pattern requirements for children under six years old, which include smaller serving sizes than are indicated in the SFSP meal pattern. Second, sponsors serving teenagers may choose to follow the adult meal patterns found in CACFP, which have larger portion sizes than the SFSP meal patterns.

patterns. Among SFSP sites that are sponsored by SFAs, only 17 percent choose to follow school meal program meal patterns. Those that do say that they do so because the school menus provide a good variety (72%), there is no need to retrain staff (66%), and it is cost effective (61%).

- **Sponsors play a significant role in planning summer menus.** For 67 percent of sites, sponsors are responsible for all aspects of menu planning, and for 24 percent of sites, sponsors review the menus prepared by sites and/or vendors or provide guidance materials.
- **More than three-quarters (81%) of menu planners use one or more menu planning tools.** Over half of menu planners (60%) use the USDA Summer Meals Toolkit to plan menus. Over forty percent use tools and resources developed by the State Agency (47%), USDA MyPlate materials (43%), and USDA Team Nutrition materials (42%). Most menu planners (95%) report that they have the tools and resources they need to plan menus.
- **About one-fifth (21%) of menu planners consider local or cultural preferences when they develop menus.** Of those that consider local or cultural food preferences, kosher, halal, or other religious preferences are considered in menu planning by 40 percent of sites. About one-quarter of menu planners consider vegetarian (26%) and Hispanic food options (24%).

Figure ES-1. Meal patterns used by summer meal sites



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 1,030; weighted n = 68,188.

Note: Total may not add to 100 due to rounding.

Meal Provision

- **Two-thirds of sites operated by SFSP sponsors have meals prepared on site or at a central kitchen, while nearly all sites operated by SSO sponsors have meals prepared on site or at a central kitchen (99%).** About one-quarter of sites operated by SFSP sponsors serve meals that are purchased from a private or commercial vendor.
- **Sponsors play a major role in meal provision and acquisition.** Eighty-seven percent of sites in SFSP and 71 percent of sites in SSO have sponsors that prepare, purchase, or assist with purchasing or delivering meals to sites.

- **Two-thirds of sites offer two meal/snack services.** About half (54%) of sites offer breakfast and lunch, 21 percent of sites offer lunch only, 10 percent offer lunch and a snack, and 5 percent offer breakfast, lunch and a snack.
- **Sites vary in their method of meal service.** About half of sites (52%) serve pre-plated or packaged meals, and 43 percent serve meals cafeteria-style; few (5%) use family-style or other meal service types (see Table ES-1). SFA sites are more likely to use cafeteria-style than non-SFAs (56% compared with 22%), whereas non-SFA sites are more likely to use pre-plated or packaged meals than SFA sites (72% compared with 41%).
- **Most sites (82%) serve meals indoors.** Ten percent of sites serve meals outdoors, and eight percent of sites serve meals indoors and outdoors.
- **About two-thirds (68%) of sites offer hot meals.** Forty-six percent of sites offer hot meals every day and 22 percent offer hot meals on some days only. Nearly one-third of sites (32%) never serve hot meals.
- **Nearly all sites offer meals at traditional meal times, and children have about 40 minutes, on average, to eat their meals.** Breakfast is served between 7:00 and 9:00 at 94 percent of sites. Ninety-four percent of sites offer lunch between 11:00 and 1:30. Supper is served between 4:00 PM and 7:00 PM for 91 percent of sites.

Table ES-1. Meal service types

Meal service characteristic	All sites (%)	Sponsor type	
		SFA sites (%)	Non-SFA sites (%)
Type of meal service system			
Cafeteria-style	43.1	55.8*	21.9
Pre-plated/pre-packaged	52.4	40.8*	71.6
Family-style	3.2	2.4	4.7
Other	1.3	1.0	1.8
Unweighted n	947	623	324
Weighted n	68,373	42,750	25,623

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

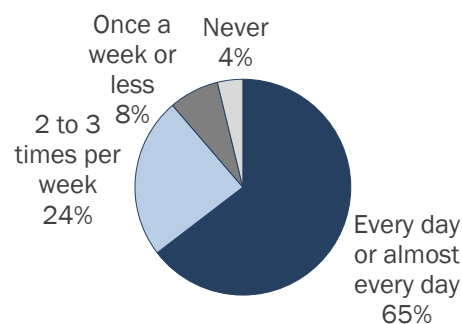
* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

Food Sources and Other Foods Served

- **Nearly two-thirds of sites (65%) use USDA Foods.** SFA sites are more likely to use USDA foods than non-SFA sites (86% compared with 24%) and to use them more often. The most common types of USDA Foods used are meat/poultry (81%), fruits (80%), vegetables (67%), and cheese and yogurt (62%).
- **About two-thirds (67%) of sites serve local foods.** Fruit is the most common local food, served by 83 percent of sites that serve local foods. Other frequently served local foods include vegetables (70%), milk (68%), and bakery products (34%). Among the sites that do not serve local foods, the primary factor for the decision not to serve local foods is limited availability of local vendors (41%), followed by limited availability of local foods (29%).

- **Most sites (89%) serve fresh fruits and/or vegetables twice a week or more.** Nearly two-thirds (65%) of sites serve fresh fruits and/or vegetables every day or almost every day (see Figure ES-2). Four percent never serve fresh fruits or vegetables.

Figure ES-2. Use of fresh fruits and vegetables



- **About one-third of sites (35%) offer adult meals.** The majority of these sites require adults to pay for the meal, with only 5 percent of sites offering free meals to adults.

Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 1,022; weighted n = 67,512.

Notes: Total may not add to 100 due to rounding.

- **Sixteen percent of sites offer extra foods to children, in addition to the reimbursable meal components.** The most common extra food offered is fruit (70%) and the most common beverage is water (43%). Few sites (7%) sell a la carte foods to children.

Accommodations

- **Eighty-five percent of sites have special accommodations in place for children with food allergies or special dietary needs.** Most sites (80%) determine what accommodations need to be made on a case-by-case basis (see Table ES-2).

Table ES-2. Types of guidelines to accommodate special dietary needs, among sites with guidelines

Types of guidelines	All sites (%)
Accommodations made on case-by-case basis	79.9
Signed statements from healthcare professional required	59.4
Menus adapted	58.3
Special training for staff	54.1
Special sanitation procedures in kitchen and/or dining area	40.0
Staff inspect trays of children	34.7
Team of parents/staff/health professionals makes determination	23.3
Separate tables	17.9
Other	4.2
Unweighted n	746
Weighted n	51,750

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Food Safety

- Ninety-three percent of sites have a written food safety plan.** Common food safety procedures followed by sites that have a written food safety plan include hand washing (94%), disposing of meals or foods that fail a food safety check (87%), wearing gloves while handling food (86%), keeping meals cold until serving (85%), using thermometers to check food holding temperatures (81%), serving perishable food within two hours of being left out (66%), and using thermometers to check food cooking temperatures (66%).

Facilitators to Preparing and Serving Summer Meals

Sponsor and site staff report several factors that facilitate preparing and serving summer meals, including:

- A high-quality and responsive vendor.** Several sponsors and sites praised the quality of their vendor and noted how accommodating they are to their program's and site's needs.
- Collaboration and support from their partner agencies.** Sponsors attributed their summer meal program's success to collaboration with the State agency, site staff, and other key partners, such as their vendors and the health department.
- Dedicated and high-quality staff and increased capacity with volunteers.** Comments from sponsors and site staff highlighted the importance of the front-line staff and volunteers who prepare and serve the meals to the program's success.

- **Being able to implement the program utilizing the SSO.** Several SFA sponsors indicated that they very much appreciate being able to use the SSO, which is intended to streamline summer operations for SFAs operating the school meal programs, instead of the SFSP. Sponsors explained that their staff are already familiar with the school meal program requirements and processes so it is easier to implement.

“The support that we get from the [name of State] Child Nutrition Program is also valuable to us. I believe it is the commitment that we all share for the sake of our children that makes this program as successful as it is.”

–Program Sponsor

“We credit a successful program to the positive collaboration with the [vendor name] and the health inspector, and the [name of State] State Department of Education.”

–Program Sponsor

Site and Sponsor Perspectives

Overall, sponsors and sites are satisfied with the summer meal programs, but they do report challenges.

- **All 38 program sponsors and sites interviewed reported overall satisfaction with the summer meal programs.** These respondents praised the program overall for the benefits it allows them to provide for children and the communities they are serving. Among these, the majority also indicated that the summer meal program resources were critical to their organization being able to feed food insecure children and in some cases provide other free or low-cost summer programming for children where none exists.
- **Eighty-five percent of primary menu planners experience challenges planning or preparing meals.** The most common challenges reported are food costs (72%), children’s food preferences (68%), and insufficient staff time (57%). SFSP sites were more likely to cite food costs as a challenge (74%) than SSO sites (57%). Several sponsors and sites noted that the meal reimbursement rates, which are established by statute, have not risen sufficiently to match the increased cost of purchasing, preparing, and transporting the meals, which has led to budgetary challenges.

“Many of the children would go hungry if there wasn’t a summer meal provided. This is crucial to the healthy development of the child and to enable them to learn and grow.”

–Program Site

“We have joined with our county library to provide meals to outlying rural communities; that has helped fill a need for activities for learning as well as nutrition needs.”

–Program Sponsor

Some sponsors and sites had suggestions for changing current program requirements, including the following, all of which would require changes to the program statute:

- **Relaxing the congregate feeding requirement.** Do not require children to stay onsite in situations where there are transportation or safety issues, nor when it is bad weather days for outdoor sites.
- **Allowing parents to receive meals with their children.** Several sponsors and sites noted that not allowing parents to receive meals paid for by the program was sometimes a barrier to children's participation.
- **Expanding the number of reimbursable meals and snacks to three meals or two meals and a snack per day.** This would allow sites operating all day to serve more meals to children. This recommendation aligns with the current combination of USDA meal programs that are available to low-income children through school meals and the Child and Adult Care Food Program (CACFP) during the school year.

"The congregate rule is very challenging. Parents worry about their children's safety when they have to remain onsite to consume the meal. Violence is a huge concern for many families who are served through our mobile feeding program."

–Program Site

"If we're having a driving rain, or if it's 120 degrees heat index, the kids have to wait outside in the rain or in that incredible heat, as do the adults that brought them, which is even more of a problem if they walked. We need the flexibility to let the kids take the lunch home on those days."

–Program Sponsor

1. Introduction and Background

The USDA Summer Meals Study provides a comprehensive assessment of the two summer meal programs operated by the U.S. Department of Agriculture (USDA), the Summer Food Service Program (SFSP), and the Seamless Summer Option (SSO). This study examines the characteristics of participating and nonparticipating children, including sociodemographic characteristics, household food security status, reasons for participation or nonparticipation, and satisfaction with the meals served to children in the summer of 2018. The USDA Summer Meals Study also describes the operational aspects of the programs at summer meal sites, characteristics of their food service environments, and the nutritional quality of the meals served to children.

This report, the third volume in the USDA Summer Meals Study report series, focuses on the characteristics of food service environments at summer meal program sites and program site and sponsor perspectives on program implementation. Volume 1 describes the characteristics of summer meal participants and nonparticipants; Volume 2 summarizes the operational characteristics of summer meal sponsors and sites; Volume 4 assesses the content and nutritional quality of summer menus; Volume 5 provides additional information about the study methodology; and Volume 6 contains all the study instruments.

Study Objectives

The USDA Summer Meals Study addresses six study objectives focused on participation, food quality, and implementation of the summer meal programs.

1. Identify reasons for participation and satisfaction levels with the summer meal programs;
2. Assess how characteristics differ between participants and nonparticipants;
3. Determine the reasons for nonparticipation;
4. Determine the food service characteristics of the summer meal sites;
5. Describe the characteristics and content of the summer meals; and
6. Assess facilitators and barriers to preparing and serving summer meals.

1.1 School Meal Programs

USDA's Food and Nutrition Service (FNS) administers several programs that address food insecurity among families and children, including

In 2018, the school meal programs delivered free and reduced price lunches to more than 21.9 million children, and free and reduced-price breakfasts to more than 12.5 million children every day (FNS, 2019).

programs that provide benefits to families to purchase food or to organizations that serve meals to children in congregate settings. The largest programs that provide meals directly to children are the school meal programs—the National School Lunch Program (NSLP) and the School Breakfast Program (SBP). These programs provide meals to children attending schools during the regular academic school year. The SFSP and SSO provide meals to children during the summer months when the NSLP and SBP are not operating.

The school meal programs are part of USDA’s overall effort to improve nutrition and reduce food insecurity among children in low-income households. In 2018, food insecurity—defined as not having consistent, dependable access to adequate food for active, healthy living—affected 13.9 percent of households with children at some time during the year (Coleman-Jensen et al., 2019). Because families allocate food within the household to shield children from disrupted eating patterns, fewer children experience food insecurity themselves. Research also suggests that some children fear stigma around hunger and actively hide it (Popkin, Scott, and Galvez, 2016). Compared to food secure children, those who experience food insecurity are at risk of numerous negative

Six million children experienced food insecurity in 2018 (Coleman-Jensen et al., 2019).

physical, emotional, and educational outcomes, including higher rates of obesity, more behavioral problems, poorer social skills, and poorer test scores and educational

achievement (Jyoti, Frongillo, and Jones, 2005; Metallinos-Katsaras, Must, and Gorman, 2012; Winicki and Jemison, 2003).

Findings from multiple studies with varying methodologies and data sources consistently show that the school meal programs reduce food insecurity. Specifically, past research shows that food insecurity rises during the summer months, when the NSLP and SBP are not operating. Using data from the Current Population Survey, Nord and Romig (2006) compared household food security during the school year to food security during the summer and found higher rates of household food insecurity when school was out for the summer. Similar analyses using the National Health and Nutrition Examination Study and the Early Childhood Longitudinal Study-Birth Cohort confirm these findings (Arteaga and Heflin, 2014; Gundersen, Kreider, and Pepper, 2012). These consistent findings from three large-scale, national studies suggest that the school meal programs play an important role in alleviating food insecurity among households with children and highlight the struggle for families to find alternative sources of food for children during the summer.

1.2 Summer Meal Programs

The summer meal programs help children who rely on school meals during the school year access nutrition assistance during the summer months. The SFSP and SSO, authorized under section 13(a) of the Richard B. Russell National School Lunch Act (42 U.S.C. 1761(a)), provide free, nutritious meals and snacks to children ages 18 years and younger.⁴ These programs serve meals at sites located in low-income areas and at sites in other areas serving a high proportion of low-income children, both in the summer when school is not in session and during long school breaks in communities with year-round school calendars. Children who participate in the summer meal programs receive meals free of charge, regardless of household income.⁵ Sponsors may receive reimbursement on behalf of sites for up to two meals (including snacks) per child per day, with the exception of migrant sites and camps that can receive reimbursement for up to three meals each day. Meal types include breakfast, lunch, supper, and snack (morning, afternoon, and evening).

The summer meal programs are federally funded and State administered. In both the SFSP and SSO, sponsors are approved by the State to operate one or more summer meal sites. Sites are located in a variety of settings, such as schools, parks, community centers, Boys and Girls clubs, apartment complexes, churches, and migrant centers. Sites can be open or have closed enrollment, and they can also be camps. Open sites are located in a low-income area where at least half of the children in the area are eligible for free or reduced-price school meals; any child aged 18 and under can receive free meals. Closed-enrollment sites may or may not be located in a low-income area; however, at least half of the children enrolled at the program site (e.g., a parks and recreation program, summer enrichment programs) must be eligible for free or reduced-price meals, and all children who are enrolled receive free meals. Residential or day camps only receive reimbursement for meals served to children who qualify for free and reduced-price meals.

In many ways, the SSO program is an extension of the school meal programs, while the SFSP differs in terms of management structure, meal pattern requirements, and reimbursements. First, SFSP program sponsors can include a variety of entities, including school food authorities (SFAs), private nonprofit organizations, and local governments. SSO program sponsors, in contrast, are exclusively

⁴ Individuals over age 18 who are enrolled in school programs for persons with disabilities may also receive meals.

⁵ Except for children in camps, who must be individually eligible for free or reduced-price meals to receive free summer meals.

SFAs. While all SSO sponsors are SFAs, SSOs can operate in a variety of settings. Second, the SFSP and SSO programs follow different meal patterns, with SSO sites required to follow the meal patterns set forth for the school meal programs. There are key differences between the SFSP and school meal patterns for milk, grains, fruits, and vegetables, and for calories, sodium, and saturated fat (see Table 1-1). Finally, the federal per meal reimbursement rates differ between the SFSP and SSO; SFSP reimbursement rates for meals are higher (the snack reimbursement rate is the same) (see Table 1-2). With a simplified meal pattern and higher reimbursement rates, many SFA sponsors choose to operate the SFSP over the SSO; however, the SSO offers continuity of operations over the entire year and requires less paperwork, making it easier and more attractive for many schools to serve meals to children during the summer months.

Table 1-1. Differences in the meal patterns used in SFSP and SSO in summer 2018

Meal component	SFSP	SSO
Milk	All varieties allowed	Only low-fat (1% milk fat or less, unflavored) or fat-free (unflavored or flavored) allowed
Grain	Whole grain-rich or enriched products allowed	All grain products must be whole grain-rich (unless the site has a waiver)
Fruits and vegetables	Single requirement for fruit and/or vegetable quantity No weekly quantity requirements for types of vegetables	Requires separate quantities of fruits and vegetables at lunch Weekly quantity requirements for types of vegetables
Calories, sodium, and saturated fat	No limits	Limits

Participation rates in the summer meal programs are much lower than in the school meal programs, suggesting that the programs may not reach everyone who may need food assistance. In July 2018, an average of 2.7 million children per day received meals through SFSP. An additional 1.0 million children received free and reduced-price lunches in NSLP⁶ that same month, some of which were lunches served through SSO (FNS, 2019). This is far below the school-year free and reduced-price lunch participation level of 21.9 million children per day in 2018 (FNS, 2019).

⁶ FNS does not collect separate program data for the SSO but reports it as part of NSLP/SBP.

Table 1-2. Federal reimbursement rates for meals served in SFSP and SSO, summer 2018¹

Meal type	SFSP rates for rural and self-prep sites	SFSP rates for all other types of sites	SSO ²
Breakfast	\$2.2325	\$2.1900	\$2.14
Lunch or supper	\$3.9225	\$3.8575	\$3.48
Snack	\$0.9300	\$0.9100	\$0.91

¹ Reimbursement rates are higher in Alaska, Hawaii and Puerto Rico.

² SFSP reimbursement rates also differ for rural or self-prep sites. SSO reimbursement rates are the same as the free reimbursement rates for the NSLP and the SBP. SSO reimbursement rates also differ for SFAs that serve fewer than 60 percent free or reduced-price meals and severe need sites. In addition, for SSO sites, school food authorities certified as meeting the meal pattern and nutrition standard requirements set forth in 7 CFR 210 and 220 are eligible to receive performance-based cash assistance for each reimbursable lunch served (an additional six cents per lunch, adjusted annually).

There are several fundamental differences between the summer meal programs and the school meal programs that likely account for the lower participation levels. First and foremost, USDA offers the school meal programs through schools where attendance is mandatory, thus ensuring access to all children. Provision of summer meals, in contrast, is through a variety of summer programs and delivery sites for which attendance is voluntary. Additionally, virtually every public school and many private schools make the school meal programs available and provide transportation, while the summer meal programs are primarily offered in areas with high concentrations of low-income children and may or may not provide transportation.⁷ Furthermore, summer meal sites may serve different populations or subgroups of children, depending on the programs and activities of the site. Finally, while the school meal programs operate for the entire duration of the school year, summer meal programs are available for varying lengths of time, ranging from less than one week to the entire summer and at specific times of the day.

⁷ The Richard B Russell National School Lunch Act (NSLA) allows the use of school or census data to establish area eligibility in the Summer Food Service Program. When determining area eligibility using school data, the proposed meal site must be located in the attendance area of a school where at least 50 percent of the children are eligible for free or reduced price school meals. When using census data to determine eligibility, the proposed site must be located in a Census Block Group (CBG) or Census Tract in which 50 percent or more of the children are eligible for free or reduced price meals.

2. Methods

The USDA Summer Meals Study is a nationally representative study of summer meal program sites and program participants and nonparticipants. The study employed a mixed-methods design to address the research objectives. Surveys were administered to sponsors, site staff, and participating and nonparticipating caregivers and children.⁸ In-depth interviews were conducted with a subset of current and former sponsors, site staff, and caregivers of participants and nonparticipants. Table 2-1 illustrates the primary data collection activities supporting each study objective. The results featured in this report volume respond to research questions related to understanding sponsor and site operational characteristics and sponsor and site perspectives on children's participation in the summer meal programs, featured in Study Objective 4: Determine the food service characteristics of the summer meal sites and Study Objective 6: Assess facilitators and barriers to preparing and serving meals.

Study Objectives	
The USDA Summer Meals Study addresses six study objectives focused on participation, food quality, and implementation of the summer meal programs.	
1.	Identify reasons for participation and satisfaction levels with the summer meal programs;
2.	Assess how characteristics differ between participants and nonparticipants;
3.	Determine the reasons for nonparticipation;
4.	Determine the food service characteristics of the summer meal sites;
5.	Describe the characteristics and content of the summer meals; and
6.	Assess facilitators and barriers to preparing and serving summer meals.

Provided below is a summary of the sampling methodology for the entire study. Following that is a description of the data sources, response rates, and analyses that underpin the results presented in this report. A more detailed description of the technical details of the study is provided in Volume 5 (Vericker et al., 2020).

⁸ Site Surveys and Caregiver Surveys were available in Spanish.

Table 2-1. Primary data collection activities supporting the research objectives

Respondent type and data collection method	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6
Caregivers of participants and nonparticipants						
Survey	✓	✓	✓			
In-depth interviews	✓		✓			
Child participants and teen participants and nonparticipants¹						
Survey	✓		✓			
Site staff						
Survey				✓		✓
Menus					✓	
In-depth interviews						✓
Current and former sponsors²						
Survey				✓		✓
In-depth interviews						✓

¹ Child nonparticipants did not complete a survey.

² Former sponsors did not complete a survey.

2.1 Sampling

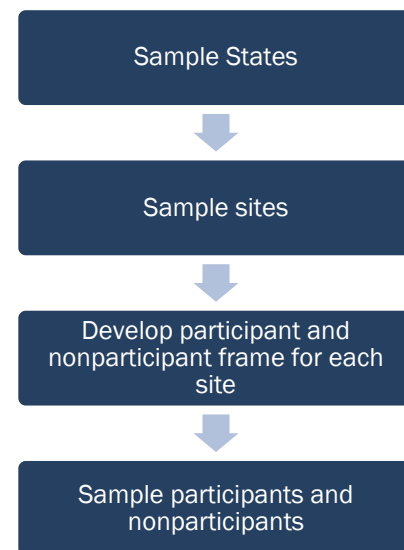
This study implemented a multi-stage sampling procedure to obtain a nationally representative sample of summer meal sites and program participants and nonparticipants.

Figure 2-1 illustrates the sampling approach employed.

First, 24 States were randomly selected using a systematic sampling method after first sorting by FNS region and a measure of size.⁹ Twenty-three States agreed to participate in the study. Figure 2-2 depicts the States that participated in the study.

The study States provided lists of summer meal sites planned for operation in 2018. From those lists, 3,349 sites were sampled using a stratified sampling approach. The site

Figure 2-1. Sampling approach



⁹ The measure of size used in this study was a normalized value for each State that combined the number of summer meal sites in the State with the average daily number of meals served in July 2018.

catchment areas. From the responses to the screener, the sample frames of participants and nonparticipants were built.

Sampling Participants. Participants were sampled using two strategies. First, hard copies of the survey were provided to the sites to distribute to caregivers and children directly. This was the most direct way to contact participants. Second, additional participants were identified through the screener process. All caregivers who responded to the screener and said there were children in the household who went to the sampled site were asked to complete a survey. Survey responses were reviewed to ensure that no individuals provided more than one survey response.

Sampling Nonparticipants. For nonparticipants, the screener was used to create the sample frame. A subsample of households was drawn from those that responded to the screener indicating that they had children but that no one in the household participated in the summer meal programs. This sample of nonparticipants was asked to complete a survey.

2.2 Data Collection and Analysis

Four data collection strategies were used to address study objectives featured in this report: (1) a survey of summer meal site staff (i.e., Site Survey); (2) a survey of summer program site meal planners¹¹ (i.e., Menu Planning Survey); (3) a survey of program sponsors (i.e., Sponsor Survey); and (4) in-depth telephone interviews with program site staff and program sponsor staff. Data collection activities took place between June and November 2018. The survey instruments and in-depth interviews covered a range of topics including meal patterns; meal provision/acquisition; food storage; menu planning; meals served; and facilitators and barriers to preparing and serving summer meals. Study instruments are provided in Volume 6 (Rothstein et al., 2020).

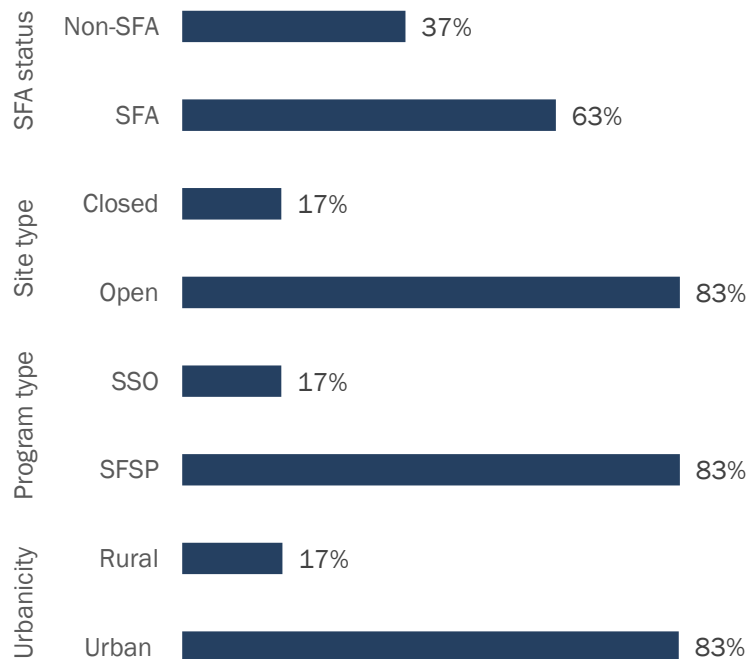
Analyses in this report volume are based on a sample size of 950 respondents to the Site Survey, 1,036 respondents to the Menu Planning Survey, 453 respondents to the Sponsor Survey, 19 in-depth interviews with site staff, and 19 in-depth interviews with program sponsors. The response rates to the Site Survey, Menu Planning Survey, and Sponsor Survey were 38 percent, 42 percent,

¹¹ Prior to study launch, sponsors were asked to provide the contact information for the primary menu planner for the sampled site. Sometimes this individual worked for the sponsor and sometimes for the site.

and 39 percent, respectively.¹² Survey respondents were a nationally representative sample of sites in 2018. Characteristics of these sites are displayed in Figure 2-3. In-depth interview respondents were selected and recruited from a list of survey respondents who volunteered to be interviewed. In-depth interview respondents were purposively recruited to include those from SFSP and SSO sponsors as well as different types of organizations, including SFAs, private nonprofits, and government agencies. Among the site staff, interviewees were also purposively recruited to include some rural sites, closed-enrollment meal sites, and sites identified in the survey as the primary meal planner.

Figure 2-3. Characteristics of study sites

Descriptive statistics such as proportions and means were used to summarize results from the surveys. Differences between sites sponsored by SFAs and those sponsored by non-SFAs were also examined; tables showing differences between SFSP and SSO program types are presented in Appendix A. Statistically significant differences between subgroups of interest were assessed using t-tests; results significant at the 0.05 confidence level are



Source: USDA Summer Meals Study, Menu Planning Survey, Summer 2018.
Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 1,036; weighted n = 68,611.
Note: Total may not add to 100 due to rounding.

reported.¹³ Survey weights were applied to analyses to account for survey nonresponse, and standard errors were adjusted to account for the complex survey design.

¹²Nonresponse bias analyses were conducted and no serious nonresponse bias was detected (see Vericker et al., 2020).

¹³The Bonferroni correction was used to account for multiple comparisons when comparisons were made between more than two groups.

The in-depth interviews with site staff and program sponsors were recorded and later transcribed. Each of the interview transcripts was imported into NVivo Version 11 Plus qualitative analysis software. A coding structure was developed based on the similarities and differences in responses identified in a review of the full transcripts and key findings summary documents prepared after each interview. Analyses of the coded interviews focused on identifying common responses, experiences and themes associated with the study research questions. A classification system was also entered into the database, allowing for simple descriptive analysis of sponsor and site characteristics, based on answers to selected survey and interview questions.

Table 2-2 shows the characteristics of current sponsors interviewed. The 19 sites interviewed include a broad cross-section of sponsors that use different approaches to deliver the summer meals program.

Table 2-2. In-depth interviews of current sponsors: characteristics by sponsor type

Characteristics	Sponsor type				Total
	SFSP (N=15)				
	SFA (N=6)	Private nonprofit (N=5)	Govt. agency (N=4)	SSO (N=4)	
Number of sites in 2018					
1-2 sites	0	1	0	1	2
3-9 sites	3	3	0	0	6
10 or more sites	3	1	4	3	11
Types of meals served in 2018					
Lunch and snack	1	0	1	0	2
Breakfast and lunch	2	4	2	4	12
Breakfast, lunch, and supper	0	1	0	0	1
Varies by site	3	0	1	0	4
Primary meal planner and vendor use					
Primary meal planner, no vendor	6	3	2	3	14
Primary meal planner, uses vendor	0	0	1	0	1
Not primary meal planner, uses vendor	0	2	1	1	4
Affiliation of sites to sponsor					
All affiliated	3	2	1	4	10
None affiliated	0	1	1	0	2
Some affiliated	3	2	2	0	7

Table 2-3 displays the characteristics sites represented by the 19 current site staff who were interviewed.

Table 2-3. In-depth interviews of current site staff: characteristics by site organization type

Characteristics	Organization type			Total
	SFA (n=9)	Private nonprofit (n=6)	Govt. agency (n=4)	
Urbanicity				
Urban	7	5	4	16
Rural	2	1	0	3
Types of meals served in 2018				
Lunch only	4	3	0	7
Breakfast and lunch	5	3	4	12
Site type				
Open	8	5	1	14
Closed	1	1	3	5
Primary meal planner				
Yes	3	1	0	4
No	7	5	4	15
Activities offered at site				
Yes	7	4	4	12
No	2	2	0	4

Table 2-4 displays the number of Sponsor Survey and Site Survey respondents who provided open-ended survey responses about the summer meals program. These numbers represent the open-ended survey comments that addressed the study research questions or provided either praise or recommendations for the summer meal program.

Table 2-4. Number of Sponsor Survey and Site Survey respondents who provided open-ended survey responses about the summer meals program¹

Respondent type	Program type		Total
	SFSP (n=240)	SSO (n=49)	
Sponsors	110	32	142
Site staff	130	17	147

¹ These numbers represent the open-ended survey comments that addressed the study research questions or provided either praise or recommendations for the summer meal program. There were an additional 81 open-ended survey comments (27 sponsors and 54 site staff) that provided general descriptive information about the characteristics of the respondents' programs or sites, cited reasons for not being able to provide certain data for the survey (e.g., child demographics), or expressed appreciation for the survey itself but did not comment on the program. These 82 comments were excluded from this table and the analysis of key qualitative findings.

3. Food Service Characteristics

Summer meal sites must meet food safety and meal pattern requirements. Sponsors have latitude in determining how their sites operate, including menu planning; meal provision/acquisition; types of meals served and meal service characteristics; meal schedules; types of food served; and meal accommodations. The study examined these characteristics using the data collected from surveys of menu planners¹⁴ and site staff and in-depth interviews with a subset of program sponsors and program staff in the summer and fall of 2018. Survey results in this chapter are presented at the site level, to provide a nationally representative depiction of site operations. However, it is important to note that sponsors are responsible for many program operational decisions, which in many cases includes menu planning.

3.1 Meal Patterns and Menu Planning

Overall, most sites are using the SFSP meal pattern requirements, which are not as prescriptive as the school meal program (i.e., NSLP and SBP) requirements. Typically, menu planning is done at the sponsor level, and sponsors report utilizing the available planning tools. These tools meet their needs, and very few report needing additional tools.

3.1.1 Meal Patterns

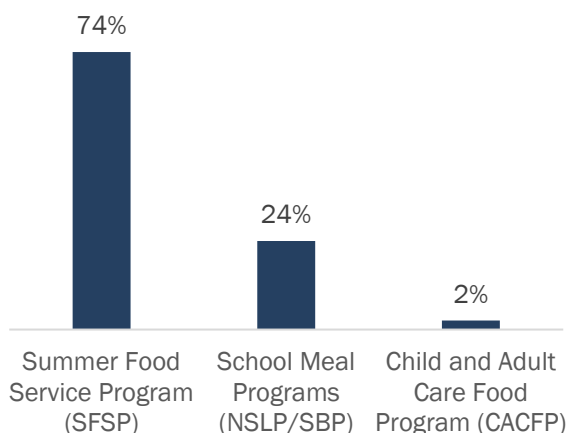
USDA requires sites operating the summer meal programs to follow meal patterns which specify food types and quantities. The SFSP has specific meal patterns; however, SFAs that operate the SFSP can use the SFSP meal patterns or the meal patterns required by the school meal programs. In contrast, SFAs operating the SSO must use the school meal program meal patterns at all of their sites. Additionally, there are several instances in which the meal patterns for the Child and Adult Care Program (CACFP) may be used. First, State agencies may authorize sponsors to follow the CACFP meal pattern requirements for children under six years old, which include smaller serving sizes than are indicated in the SFSP meal pattern. Second, sponsors serving teenagers may choose to

¹⁴Prior to study launch, sponsors were asked to provide the contact information for the primary menu planner for the sampled site. Sometimes this individual worked for the sponsor and sometimes for the site.

follow the adult meal patterns found in CACFP, which have larger portion sizes than the SFSP meal patterns.¹⁵ The detailed meal patterns for SFSP, the School Meal Programs, and CACFP are in Appendix B.

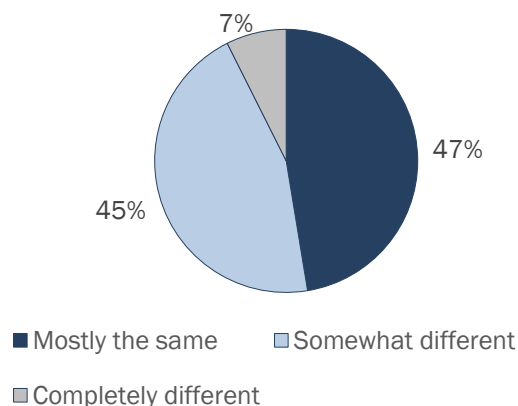
Nearly three out of four sites (74%) follow the SFSP meal pattern (see Figure 3-1). About one-quarter of sites (24%) follow the school meal programs' meal patterns, and only two percent follow the CACFP meal pattern. Among sites that use the school meal programs' meal patterns, 47 percent report that the summer menus were mostly the same as the school year menus, 45 percent report that the menus were somewhat different than the school year menus, and only 7 percent report that the summer menus were completely different from those used during the school year (see Figure 3-2).

Figure 3-1. Meal patterns used by summer meal sites



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 1,030; weighted n = 68,188.
Note: Total may not add to 100 due to rounding.

Figure 3-2. Comparison of summer menus to school meal program menus



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Sample limited to sites using the school meal program meal patterns. Unweighted n = 283; weighted n = 16,104.
Note: Total may not add to 100 due to rounding.

¹⁵ Sponsors that choose to provide larger portions to teens still receive the usual SFSP reimbursement rates.

Among SFSP sites—those sites with SFA sponsors that could choose between the SFSP and the school meal program meal patterns—80 percent follow the SFSP meal patterns, 17 percent follow the school meal patterns and 3 percent follow the CACFP meal patterns (data not shown). While only a small portion of SFSP sites had sponsors that chose to follow school meal program meal patterns, those that did said that they did so because the school menus provided good variety (72%), there was no need to retrain staff (66%), and it was cost effective (61%) (see Table 3-1). Other common reasons for following the school year meal patterns included children’s preferences (47%) and using the same vendors¹⁶ as during the school year (43%).

Sponsor and site perspectives: Factors that influence menu planning

Sponsors and site staff who are primary meal planners for their program sites reported that the most important factor determining which foods they serve, other than meeting USDA guidelines, is children’s preferences.

Meal planners who obtain children’s feedback to determine their preferences do so primarily through observation, including observing which foods tend to be eaten, plate waste, and the kinds of food items placed on the “share table.” A few meal planners use formal data collection efforts such as child and staff surveys, and focus groups with children. Other factors influencing summer meal planning included:

- food cost;
- availability of school year cycle menus;
- food storage capacity;
- meal transportation;
- staffing and meal production capacity;
- types of foods available;
- school year leftover inventory; and
- availability of USDA foods.

Source: In-depth interviews with 19 current summer meal program sponsors and 19 summer meal site staff.

Table 3-1. Reasons for using the school meal programs’ meal patterns, among SFSP sites using the school meal programs’ meal patterns

Reasons for using the NSLP/SBP meal patterns	SFA sites (%)
School menus provide good variety	71.5
No need to retrain staff	66.2
Cost-effective	60.9
Children like the school-year menus	46.9
Use same vendor as during the school year	42.8
Do not want to plan new menus	11.8
Ensure compliance with program requirements	4.6
Other	3.7
Number of sites (unweighted)	66
Number of sites (weighted)	5,316

Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Sample limited to sites using the school meal program meal patterns.

Note: Total may not add to 100 due to rounding.

¹⁶ A vendor is any commercial enterprise or nonprofit organization with which a sponsor may contract for meals.

3.1.2 Menu Planning

Sponsors play a significant role in planning summer menus. For 67 percent of sites, sponsors are responsible for all aspects of menu planning, and for 24 percent of sites, sponsors review the menus prepared by sites and/or vendors or provide guidance materials (see Table 3-2). There are no statistically significant differences in the role of sites in menu planning by program type (SFSP versus SSO).

More than three-quarters (81%) of menu planners use one or more menu planning tools, with more menu planners for SFA sites (85%) using menu planning tools or resources than those for non-SFA sites (74%) (see Table 3-3). These tools are developed and provided by a variety of sources including USDA and State agencies.

Sponsor and site perspectives: Menu planning resources

Sponsors and sites that participated in interviews said they either use federal and State agency resources to plan summer menus or have access to private menu planning resources that meet their needs.

Non-USDA resources frequently mentioned include recipe databases and meal planning tools of large distributors and food service companies, in-house dietitians, and menu planning software, including modules for menu planning and nutritional analysis.

Several sponsors and sites provided suggestions for additional resources that could help them plan menus. Most frequently, they suggested that examples of non-cycle menus and guidance to improve the variety and appeal of the meals for children of different ages would be useful. Site-type specific requests for additional resources included: menu ideas for mobile meal programs and meal planning resources that take into account small-scale sponsors with limited resources. Others said they could use additional support to incorporate fresh foods into child-friendly menus.

Source: In-depth interviews with 19 current summer meal program sponsors and 19 summer meal site staff.

Table 3-2. Sponsor and site roles in menu planning

Role of site staff in menu planning	All sites (%)
Menus are planned by sponsor staff with no involvement from site and/or meal vendors	67.3
Sponsor staff review menus planned by site and/or meal vendor	18.4
Sponsor staff provide guidance materials to the site and/or meal vendor	5.2
Other	9.0
Sample size, unweighted	862
Sample size, weighted	66,216

Source: USDA Summer Meals Study, Sponsor Survey, summer 2018. Tabulations are weighted to be nationally representative of all summer meal program sponsors.

Note: Total may not add to 100 due to rounding.

Overall, most menu planners (95%) report that they have the tools and resources they need to plan menus; however, among menu planners who report they lack all the tools and resources they need, more are at non-SFA sites (9%) than at SFA sites (2%). This may be because the non-SFA sites are not as likely to provide meals under other programs and therefore may not have as much knowledge about menu planning resources as SFA sites. There are no statistically significant differences in the use of menu planning tools and resources by program type (SFSP versus SSO).

Table 3-3. Use of menu planning tools and resources

Tools and resources	All sites (%)	Sponsor type	
		SFA sites (%)	Non-SFA sites (%)
Site reported use of one or more menu planning tools/resources			
Yes	80.7	85.0*	73.7
No	19.3	15.0*	26.3
Unweighted n	1,018	691	327
Weighted n	67,379	41,979	25,400
Sites reported needing other tools/resources that they do not have			
Yes	4.9	2.4*	9.0
No	95.1	97.6*	91.0
Unweighted n	1,032	700	332
Weighted n	68,383	42,832	25,551

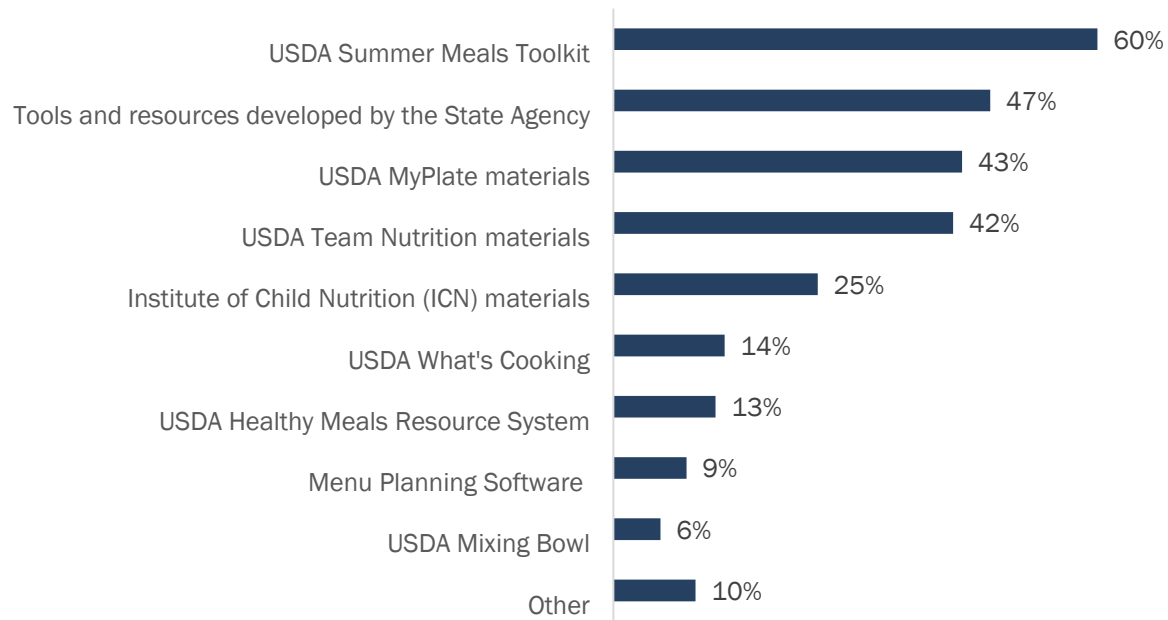
Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

Types of menu planning tools used by menu planners vary. Over half of menu planners (60%) use the USDA Summer Meals Toolkit to plan menus (see Figure 3-3). Over forty percent use tools and resources developed by the State Agency (47%), USDA MyPlate materials (43%), and USDA Team Nutrition materials (42%). One-quarter of menu planners use Institute of Child Nutrition materials. On average, menu planners use 2.7 menu tools or resources (data not shown).

Figure 3-3. Menu planning tools and resources used by sites



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 829; weighted n = 54,399.

A common approach to planning menus involves the use of cycle menus. Most sites (90%) use cycle menus, with the practice being slightly more common among non-SFA sites (94%) than SFA sites (88%) (see Table 3-4). Sites that use cycle menus offer the same sequence of meals served in a repeating pattern. Two weeks is the most commonly used cycle (46%), with roughly even percentages of sites using 1-week (17%), 3-week (19%), and 4-week (14%) cycles.

Table 3-4. Cycle menus

Use of cycle menus and length of cycle menus	All sites (%)	Sponsor type	
		SFA sites (%)	Non-SFA sites (%)
Site use of cycle menus			
Yes	90.4	88.0*	94.4
No	9.6	12.0*	5.6
Sample size, unweighted	1,034	701	333
Sample size, weighted	68,442	42,787	25,656
Length of menu cycle, among sites using cycle menus			
1 week	16.6	24.5*	4.4
2 weeks	45.8	43.8	48.9
3 weeks	18.5	12.4*	27.9
4 weeks	14.2	14.7	13.4
5 weeks	1.7	1.6	2.0
Other	3.1	3.0	3.3
Sample size, unweighted	937	625	312
Sample size, weighted	61,540	37,347	24,194

Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

About one-fifth (21%) of menu planners consider local or cultural preferences when they develop menus (see Table 3-5). More non-SFA sites (30%) consider local or cultural practices when menu planning than SFA sites (16%). Of those that consider local or cultural food preferences, kosher, halal, or other religious preferences are considered in menu planning by 40 percent of sites. And, about one-quarter of menu planners consider vegetarian (26%) and Hispanic foods (24%).

"If USDA could provide some special menus that work well with food buses and food trucks, [mobile programs], that would be helpful."

- Program Site

"USDA resources work best for schools and large churches and parks and libraries. It works least well for a small nonprofit... [We] hunger for better resources for our situation, for our experience."

- Program Site

Table 3-5. Local or cultural practices considered in menu planning

Local or cultural practices	All sites (%)	Sponsor type	
		SFA sites (%)	Non-SFA sites (%)
Site reported one or more local/cultural practices that influence menu planning			
Yes	21.0	15.5*	30.1
No	79.0	84.5*	69.9
Sample size, unweighted	1,026	699	327
Sample size, weighted	68,203	42,798	25,405
Type of local/cultural practice influencing menu planning, among sites reporting the use of one or more local/cultural practices			
Kosher/halal/religious preferences	39.5	28.0*	49.6
Meatless/vegetarian	25.8	17.3*	33.3
Hispanic foods	23.6	26.1	21.3
Other ¹	22.7	38.8*	8.6
Sample size, unweighted	189	109	80
Sample size, weighted	13,666	6,404	7,263

Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

¹ Examples of other types of local/cultural practices that influence menu planning include providing favorite foods from the school year, foods similar to local retail establishments, and foods served in their homes.

3.2 Meal Provision

Overall, most sites prepare meals on site, or the meals are prepared at a central kitchen. Among sites with sponsors that purchase meals from a private commercial vendor or a school or SFA, most do so due to lack of adequate facilities or staff to prepare summer meals. The majority of sites serve two meals, with lunch being the most common meal served, followed by breakfast. Pre-plated or pre-packaged meals are the most common form of meal service, though some sites use cafeteria style. The majority of sites report serving hot meals during the week; about one-third report never serving hot meals.

3.2.1 Meal Acquisition

There are several ways that sites can obtain summer meals, including preparing meals on site. Alternatively, sponsors can prepare meals for the site at a central kitchen, purchase meals from a private commercial vendor, or purchase meals from a school or SFA. Overall, nearly three-quarters of sites (72%) prepare meals on site or their sponsor prepares them at a central kitchen. At about one-fifth of sites (22%), sponsors purchase meals from a private commercial vendor (see Figure 3-4). Only six percent of sites receive meals purchased from a school or SFA or have an alternative way to provide or acquire meals. Sponsors play a major role in meal provision and acquisition—87 percent of sites with SFSP sponsors and 71 percent of sites with SSO sponsors have sponsors that prepare, purchase, or assist with purchasing or delivering meals to sites (data not shown). Sites operated by SFSP sponsors and those operated by SSO sponsors differ in their meal provision and acquisition strategies. Nearly all sites operated by SSO sponsors (99%) prepare meals onsite or at a central kitchen in contrast with 67 percent of sites operated by SFSP sponsors (see Figure 3-4). About one-quarter of sites with SFSP sponsors received meals from a private or commercial vendor.

Sites with sponsors that purchase meals from private commercial vendors do so primarily because they do not have kitchen facilities or equipment (70%) or staff (65%) to prepare meals (see Table 3-6). Some sites (44%) report that it is cost efficient to purchase meals from private vendors. The most frequently reported reasons for purchasing meals did not differ significantly between SFA and non-SFA sites (data not shown).

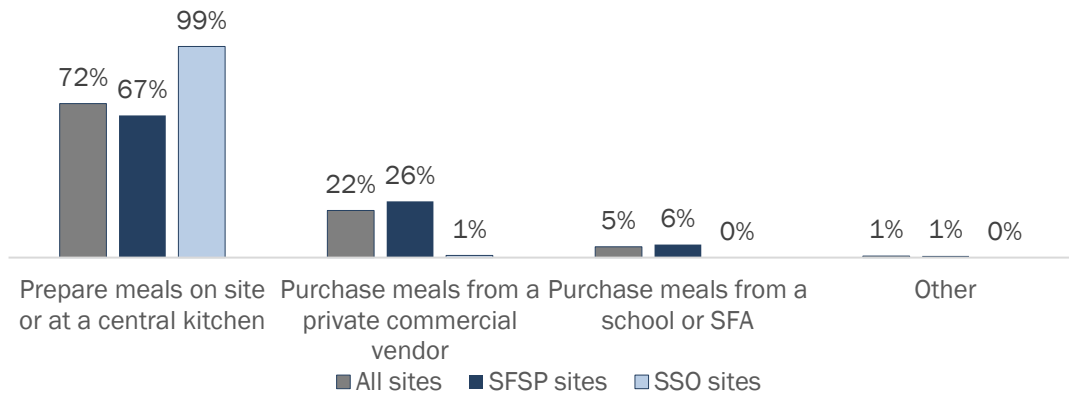
Sponsor and site perspectives: Factors that influence use of vendors

Sponsors and site staff who use vendors reported that they do so because they do not have the facilities or resources to prepare their own meals. Satisfaction with vended meals is high. In interviews and written open-ended survey comments, many supervisors and sponsors who use vendors praised the quality of the food they obtain as well as the collaborative relationships they have with their vendors in planning meals to ensure they meet the USDA guidelines and are appealing to children.

Among those that do not use vendors, most explained that they do not because their organizations have the resources and staff expertise to prepare high quality, nutritious meals. Others said that use of a central or on-site kitchen to prepare summer meals works very well and they can provide more meals to more sites this way.

Sources: In-depth interviews with 19 current summer meal program sponsors; 19 summer meal site staff; and open-ended responses to the Menu Planning Survey.

Figure 3-4. Meal preparation



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 1,019; weighted n = 67,198.

Notes: Total may not add to 100 due to rounding. Differences between SFSP sites and SSO sites are significant at the 0.05 confidence level using t-tests for all categories.

Among sites that receive purchased meals from private commercial vendors, for about half (53%) the private vendor delivers the meal. About one-third (35%) have meals delivered by the sponsor or someone hired from the sponsor. About 1 in 10 sites (11%) have meals delivered by site staff or by other means.

Table 3-6. Reasons for purchasing meals and who delivers purchased meals, among sites with purchased meals

Reasons for purchasing meals and how purchased meals are delivered	All sites (%)	SFSP sites (%)	SSO sites (%)
Reasons for purchasing meals			
Do not have kitchen facilities and equipment	69.5	69.5	-
Do not have staff to prepare meals	64.7	64.9	-
It is cost efficient to purchase meals	43.5	43.3	-
It allows us to serve a wider variety of foods	25.6	25.6	-
There are too many meals to prepare/sites to serve	9.9	10.0*	-
Other	6.5	6.5*	-
Sample size, unweighted	228	225	3
Sample size, weighted	18,828	18,719	108
Who delivers purchased meals			
Private vendor/company	53.7	53.5*	100.0
Sponsor or someone hired by the sponsor	35.3	35.5*	0.0
Site staff or someone hired by the site	9.2	9.2*	0.0
Other	1.8	1.8	0.0
Sample size, unweighted	239	236	3
Sample size, weighted	19,769	19,661	108

Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

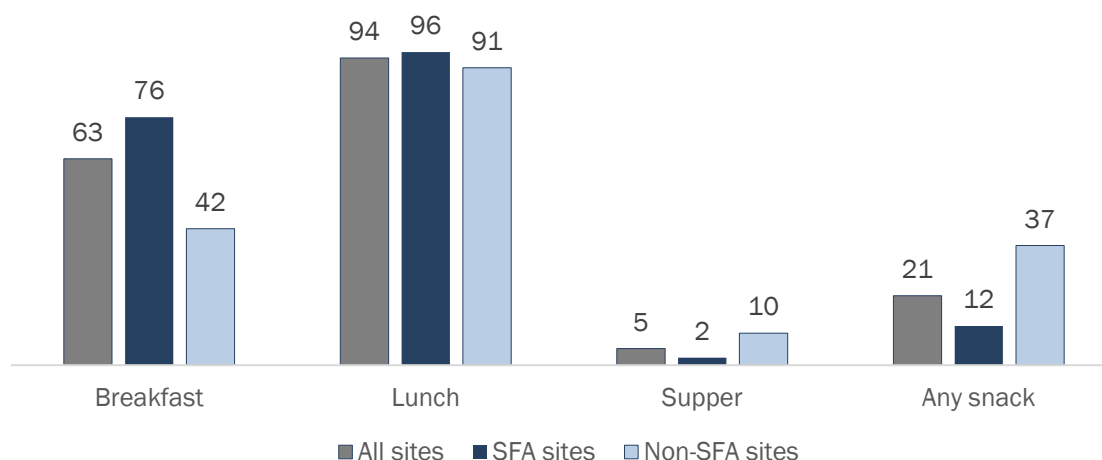
Note: Total may not add to 100 due to rounding. Characteristics with sample sizes less than three are not displayed.

* Differences between SFSP sites and SSO sites are significant at the 0.05 confidence level using t-tests.

3.2.2 Types of Meals Served and Meal Service Characteristics

Almost all summer meal sites (94%) serve lunch and nearly two-thirds (63%) serve breakfast (see Figure 3-5). About one-fifth of sites offered a snack in the morning, afternoon, or evening. While the provision of lunch was about equally common for SFAs (96%) and non-SFAs (91%), more SFAs (76%) serve breakfast than non-SFAs (42%). Conversely, more non-SFAs serve a snack (37%) and/or supper (10%) than SFAs (12% and 2%, respectively).

Figure 3-5. Percentage of sites that serve each meal/snack



Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 948; weighted n = 68,258.

Notes: Total may not add to 100 due to rounding. Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests for the following categories: “Breakfast,” “Supper,” and “Any snack.”

Most summer meal program sites may receive reimbursement for up to two meals and/or snacks per child per day. Migrant sites and camps may receive up to three meals and/or snacks per day. Most commonly, sites offer two meals and/or snacks (66%) and the most common meal combination is breakfast and lunch (54%) (see Table 3-7). One quarter of sites offer just one meal/snack and that is most typically lunch (21%), and fewer sites offer three or more¹⁷ meals/snacks (9%). Comparing sites operated by SFAs and non-SFAs, SFA sites are more likely to serve two meals/snacks than non-SFAs (74% compared with 52%) and this combination is most often breakfast and lunch (78% of SFA sites compared with 49% of non-SFA sites). Non-SFAs are more likely to serve one meal/snack (34%) or three meals (12%) than SFA sites (20% and 5%, respectively).

¹⁷ A small number of sites reporting more than three meals/snacks per day may be serving different groups of children during different parts of the day, or not receiving reimbursement for all meals served.

Table 3-7. Number and types of meals and/or snacks served

Number and type of meals/snacks served	All sites (%)	SFA sites (%)	Non-SFA sites (%)
Number of meals/snacks served¹			
One	25.3	19.9*	34.2
Two	65.6	73.5*	52.3
Three or more ²	9.2	6.6*	13.5
Unweighted n	948	623	325
Weighted n	68,258	42,750	25,507
Types of meals/snacks served			
Lunch	20.9	16.4*	28.6
Breakfast and lunch	53.6	68.7*	28.4
Lunch and snack	10.2	4.1*	20.5
Breakfast, lunch, and snack	5.4	3.7*	8.2
Unweighted n	948	623	325
Weighted n	68,258	42,750	25,507

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding. A small number of sites reporting more than three meals/snacks per day may be serving different groups of children during different parts of the day, or not receiving reimbursement for all meals served.

* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

¹ Except for migrant sites and camps, which receive reimbursement for up to three meals/snacks per child per day, most summer meal program sites receive reimbursement for up to two meals/snacks per day.

² A small number of sites reporting more than three meals/snacks per day may be serving different groups of children during different parts of the day, or not receiving reimbursement for all meals served.

Sites vary in their method of meal service. The majority of sites (82%) serve meals indoors. About half of sites (52%) serve pre-plated or packaged meals, and 43 percent serve meals cafeteria-style; few (5%) use family-style or other meal service types (see Table 3-8). Fewer than half of sites (45%) use the offer versus serve option at any meal, which would allow children to decline some of the food offered. About half (51%) of sites that offer breakfast use offer versus serve at breakfast, and of those that offer lunch 45 percent use it at lunch.

"We leave it up to the sites to decide which meals they serve; each site it varies. It could be based on programming. Some sites start at 7 or 8am, some start 10 or 12 o'clock. Some can have staff early, some can't have staff there until later in the day."

–Program Sponsor

"The kids come in, and they're hungry. For us, breakfast assures that we can get productivity out of them before lunchtime because if you're hungry, you're not going to participate."

–Program Site

"As a mobile program we can only be there one time each day and this is maybe the only meal they're receiving, and so we wanted to give them the meal that has the highest nutritional impact, and so lunch was the best option for that."

–Program Site

"We start a little late in the morning, so we don't get the breakfast; plus, we wouldn't have a place to store the food here to serve two meals."

–Program Site

Sponsor and site perspectives: Determining the types of meals served

Sponsors report that the number and type of meals they provide for each site are driven by the sites' interest and capacity. Sponsors that serve different types of sites report that the meal(s) served is a decision made primarily by the sites based on their program hours, onsite staffing, and food storage or preparation capacity.

Sites that provide activities with meals report that their decision regarding whether to provide breakfast in addition to lunch (or lunch and a snack) is based on the time when children arrive at the site. The majority of sponsors and site staff running programs in summer school locations with transportation explained that they bring the children in early enough to make sure the children are fed before the program starts.

The large majority of sites that do not provide activities, or where activities are limited, serve only lunch. Factors noted as affecting this decision include limited capacity for supervision, choosing lunch over breakfast because it can provide more of a child's daily nutritional needs, and an expectation that children would not come to breakfast because the site does not provide transportation or, if no transportation is needed, the children will not get up early enough in summer to participate.

Sources: In-depth interviews with 19 current summer meal program sponsors and 19 summer meal site staff.

Table 3-8. Meal service types and where meals are typically served

Meal service characteristic	All sites (%)	Sponsor type	
		SFA sites (%)	Non-SFA sites (%)
Type of meal service system			
Cafeteria-style	43.1	55.8*	21.9
Pre-plated/pre-packaged	52.4	40.8*	71.6
Family-style	3.2	2.4	4.7
Other	1.3	1.0	1.8
Unweighted n	947	623	324
Weighted n	68,373	42,750	25,623
Use of offer vs. serve			
At breakfast	51.1	59.8*	24.2
Unweighted n	629	477	152
Weighted n	42,894	32,356	10,538
At lunch	44.5	56.6*	22.7
Unweighted n	886	593	293
Weighted n	63,736	40,892	22,844
At supper	31.9	39.3	29.0
Unweighted n	58	13	45
Weighted n	3,449	975	2,474
Not used at any meal	54.7	42.0*	76.2
Unweighted n	931	614	317
Weighted n	67,146	42,274	24,871
Where meals are typically served			
Indoors	81.9	86.0*	75.3
Outdoors (except in bad weather)	10.1	7.5*	14.3
Both	8.0	6.5	10.4
Unweighted n	949	623	326
Weighted n	68,583	42,776	25,807

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

How meals are served and where they are served differs between sites sponsored by SFAs and non-SFAs. SFA sites are more likely to use cafeteria-style (56%) meal service compared with non-SFA sites (22%). In contrast, non-SFA sites are more likely to use pre-plated or pre-packaged (72%) than SFA sites (42%). Non-SFA sites are less likely to use offer versus serve than SFA sites. Almost three-quarters of non-SFA sites (76%) do not use offer versus serve at any meal compared to 42 percent of SFA sites. While most SFA sites and non-SFA sites serve meals indoors, more SFA

sites serve meals indoors (86%) than non-SFA sites (75%), and more non-SFA sites serve meals outdoors (14%) than SFA sites (8%).

Summer meals are served to a wide age range—children ages zero through age 18—who have different calorie requirements. Nearly one-third percent of sites (31%) modify portion sizes to accommodate the different ages of children served (see Table 3-9). SFA sites reported this practice more frequently than non-SFA sites (37% compared with 21%, respectively).

Table 3-9. Meal portion sizes and hot meals

Portion sizes and hot meals	All sites (%)	Sponsor type	
		SFA sites (%)	Non-SFA sites (%)
Portion size			
Do not differ by age group	69.2	63.5*	78.8
Differ by age group	30.8	36.5*	21.2
Unweighted n	940	619	321
Weighted n	67,862	42,584	25,278
How often hot meals are served			
Every day	45.6	56.7*	27.1
Some days	22.2	21.7	23.1
Never served	32.2	21.6*	49.8
Unweighted n	947	622	325
Weighted n	68,503	42,748	25,755

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

About two-thirds (68%) of sites offered hot meals, with 46 percent of sites offering hot meals every day and 22 percent offering hot meals on some days only (see Table 3-9). Nearly one-third of sites (32%) never serve hot meals. SFA sites serve hot meals more often than non-SFA sites; half of non-SFA sites never serve hot meals, compared with 22 percent of SFA sites.

3.2.3 Meal Schedules

Nearly all sites offer meals at traditional meal times. Breakfast is served between 7:00 and 9:00 at 94 percent of sites (data not shown), with a common start time of 8:00 AM (see Table 3-10). Ninety-four percent of sites offer lunch between 11:00 and 1:30, and 12:00 PM is the most commonly

reported lunch start time. Supper is served between 4:00 PM and 7:00 PM for 91 percent of sites, and 5:30 PM is the most common start time. Children have about 40 minutes, on average, to eat their meals.

Table 3-10. Meal schedules

Meal schedules	Breakfast	Lunch	Supper
Time meal service start time	Time of day		
Mean	8:06 AM	11:37 AM	5:04 PM
Median	7:57 AM	11:28 AM	4:57 PM
Mode	8:00 AM	12:00 PM	5:30 PM
Unweighted n	615	863	55
Weighted n	42,054	62,168	2,983
Length of time given to eat	Minutes		
Mean	37.8	41.1	39.7
Median	28.6	29.4	29.9
Mode	30.0	30.0	60.0
Unweighted n	487	670	48
Weighted n	33,161	47,884	2,560

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding. Includes start times after 6:00am and meal durations that were ≥ 5 minutes.

3.3 Food Sources and Other Foods Served

Overall, most sites use foods such as meats, fruits and vegetables, and dairy from the USDA Foods program to stretch their food budgets. Nearly all sites use fresh produce during the week and about two-thirds use local foods. Adult meals are offered at about one-third of sites and most sites require adults to pay for their meal. While most sites provide extra foods to children, few offer à la carte items.

3.3.1 USDA Foods

The USDA Foods program supports domestic agricultural producers and meal programs by purchasing American agricultural products and, through State distributing agencies, providing them to meal sites. Nearly two-thirds of sites (65%) use USDA foods; most SFA sites (86%) use them, and about one-quarter of non-SFA sites use them (see Table 3-11).¹⁸ Among sites that use USDA Foods, 44 percent use them every day or almost every, 39 percent use them two to three times per week, and 17 percent use them once a week or less. SFA sites that use USDA Foods use them more regularly than non-SFA sites.

Sponsor and site perspectives: USDA Foods

Among in-depth interview respondents reporting using USDA Foods, all but two were SFA-sponsored sites. These meal planners report that the quality and variety of USDA foods are good. As they do during the school year, they use the foods to stretch their food budget for providing summer meals and to expand the variety of foods they can serve. Several mentioned that they use the cash reimbursement from the summer meal programs to have vendors process some USDA Foods into kid-friendly items, such as pizza or chicken tenders.

When site and sponsor interview respondents mentioned a concern about USDA Foods, the most common concern was that the types and amounts of available foods are limited. A few site staff and sponsors noted that the large containers of USDA Foods are too difficult to use in their pre-packaged brown-bag or boxed lunches.

Others noted that the USDA Foods are not consistently available or that they are not available until too late in the year to impact the menu planning process.

Sources: In-depth interviews with 19 current summer meal program sponsors and 19 summer meal site staff.

¹⁸ There is no per meal entitlement of USDA Foods for the SFSP; however, sponsors may use USDA Foods they receive from any other USDA child nutrition program.

Table 3-11. Use of USDA Foods

USDA foods	All sites (%)	SFA sites (%)	Non-SFA sites (%)
USDA foods used by the site			
Yes	64.6	86.3*	24.4
No	35.4	13.7*	75.6
Unweighted n	935	658	277
Weighted n	61,762	40,079	21,683
Frequency of use among those that use USDA foods			
Every day or almost every day	44.4	46.3*	31.7
2 to 3 times per week	38.6	40.5*	26.1
Once a week or less	17.0	13.1*	42.2
Unweighted n	656	581	75
Weighted n	39,889	34,064	5,285

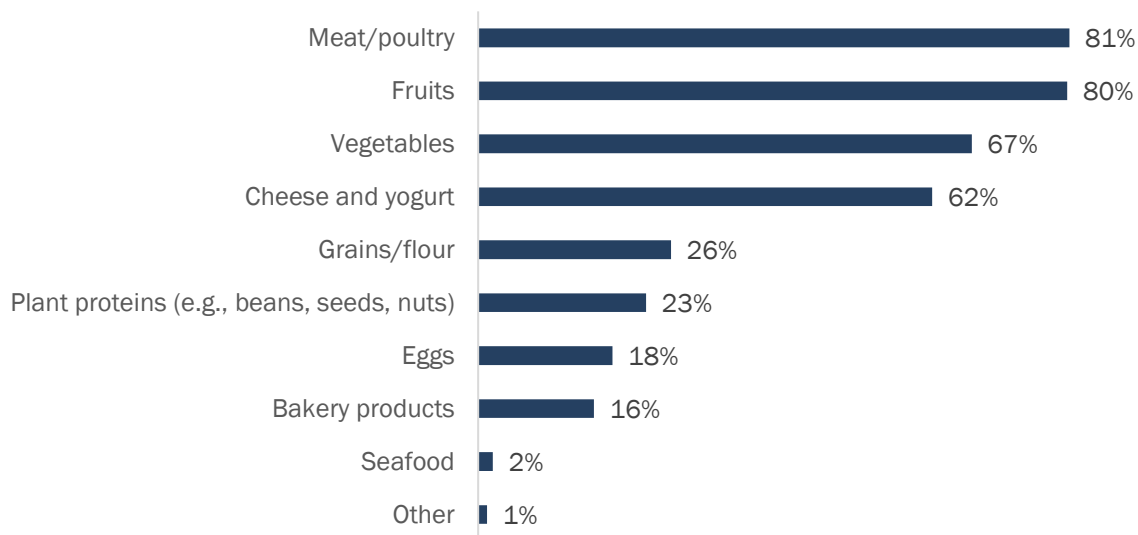
Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

The most common types of USDA Foods used are meat/poultry (81%), fruits (80%), vegetables (67%), and cheese and yogurt (62%) (see Figure 3-6).

Figure 3-6. Types of USDA Foods used, among sites using USDA Foods



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Figure limited to sites that use USDA Foods. Unweighted n = 654; weighted n = 39,771.

Notes: Total may not add to 100 due to rounding.

3.3.2 Local Foods

About two-thirds (67%) of sites purchase local foods, with the practice being more common among SFA sites (72%) than non-SFA sites (59%) (see Table 3-12). Among sites that purchase local foods, most sites (86%) use local foods more than once a week, with 58 percent of sites saying they use local food every day or almost every day.

Fruit is the most commonly purchased local food, purchased by 83 percent of sites that purchase local foods (see Figure 3-7). Other frequently purchased local foods include vegetables (70%), milk (68%), and bakery products (34%).

Sponsor and site perspectives: Local foods

SFA sponsors and school-based sites noted their use of local foods more often than non-SFA sponsors, which they attributed to increased access through the farm-to-school program and increased availability through local distributors.

Perceived benefits of using local produce included improved taste and child approval, support of local agriculture, and educating children about where food comes from.

Key challenges with using local foods include higher cost, limited types and quantities, inconsistent quality, and inadequate staffing to support obtaining the foods.

Sources: In-depth interviews with 19 current summer meal program sponsors and 19 summer meal site staff.

Table 3-12. Local foods

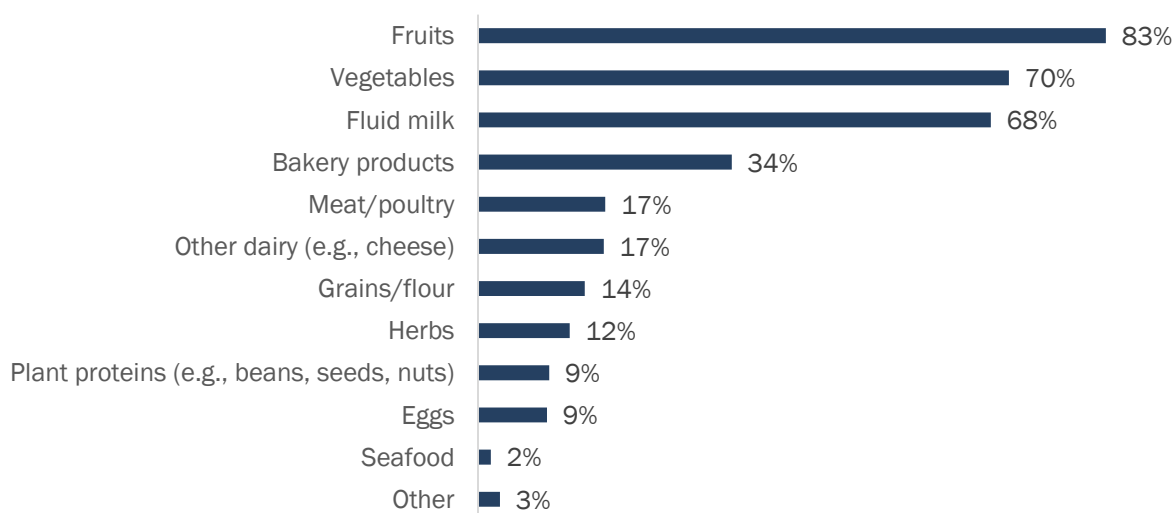
Use of local foods	All sites (%)	SFA sites (%)	Non-SFA sites (%)
Site reported purchasing local foods			
Yes	67.1	71.8*	59.1
No	32.9	28.2*	40.9
Unweighted n	999	689	310
Weighted n	66,228	42,017	24,211
How often local foods are used, among sites that purchase local foods			
Every day/almost every day	58.0	57.8	58.7
2 to 3 times per week	27.6	27.8	27.1
Once a week or less	14.4	14.4	14.2
Unweighted n	615	461	154
Weighted n	39,901	28,285	11,617

Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

Figure 3-7. Types of local foods purchased, among sites purchasing local foods



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Figure limited to sites that use local foods. Unweighted n = 667; weighted n = 44,450.

Notes: Total may not add to 100 due to rounding.

Among the approximately one-third of sites that do not purchase local foods, the primary factor for the decision not to purchase local foods is limited availability of local vendors (41%), followed by limited availability of local foods (29%). About one-quarter (23%) of sites said they did not purchase local foods because their vendor is responsible for food purchasing (see Table 3-13). Cost is less of an issue, with just 15 percent of sites that do not purchase local foods citing the cost to purchase these foods as affecting their decision, and 7 percent citing cost to prepare the foods.

Table 3-13. Factors affecting the decision not to purchase local foods

Factors affecting decision	All sites (%)
Limited availability of vendors	40.7
Limited availability of foods	29.3
Vendor does food purchasing	23.4
Food safety concerns and/or requirements prohibit local food purchasing	19.5
Cost to purchase local foods	15.2
Not enough staff and equipment	15.2
Delivery schedules	9.6
Limited storage capacity	9.1
Cost to prepare local foods	7.0
Other	11.8
Unweighted n	295
Weighted n	19,274

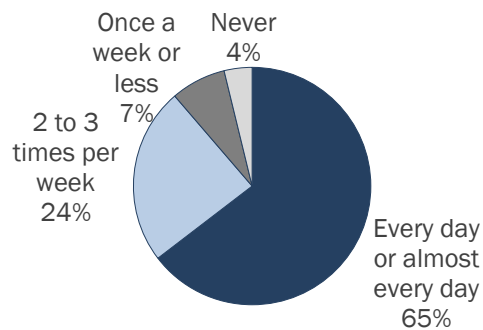
Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

3.3.3 Fresh Fruits and/or Vegetables

While the serving of fresh produce is not required, most sites (89%) serve fresh fruits and/or vegetables twice a week or more (see Figure 3-8). Nearly two-thirds (65%) of sites serve fresh fruits and/or vegetables every day or almost every day, and one-fourth serve fresh fruits and/or vegetables two to three times per week. Only seven percent serve fresh fruits and/or vegetables once a week or less, and four percent never serve fresh fruits and/or vegetables.

Figure 3-8. Use of fresh fruits and vegetables

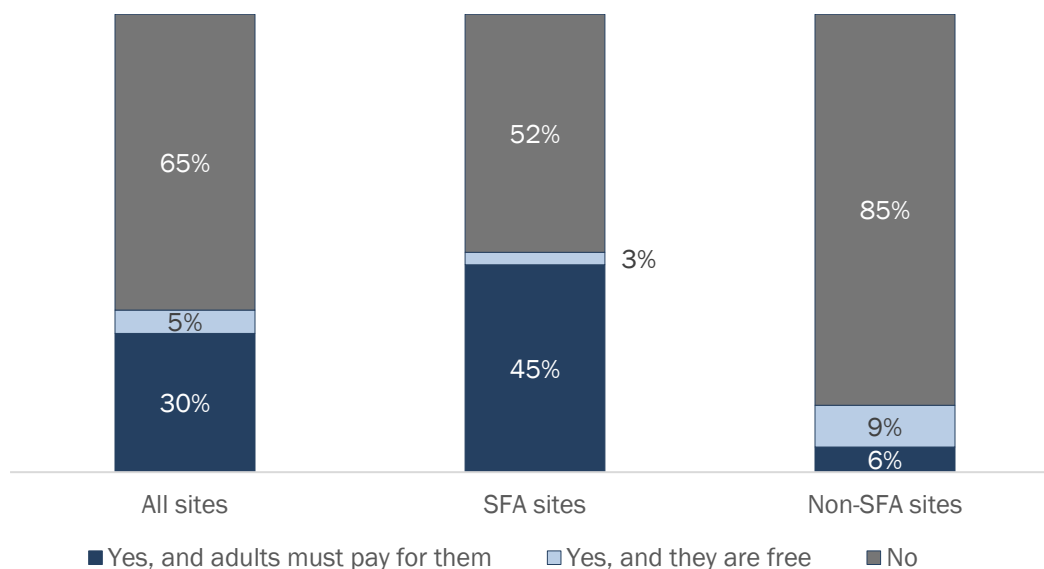


Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 1,022; weighted n = 67,512. Notes: Total may not add to 100 due to rounding.

3.3.4 Adult Meals

Some sites offer meals to adults who accompany their children to the site. More than one-third of sites (35%) offer adult meals (see Figure 3-9). The majority of these sites require adults to pay for the meal, with 5 percent of sites offering free meals to adults. Free meals offered to adults at summer

Figure 3-9. Adult meals



Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 944; weighted n = 68,183. Notes: Total may not add to 100 due to rounding. All differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

meal sites are not offered as part of the summer meals program. Adult meals are supported with funds other than Federal program reimbursements. The practice of offering meals to adults is more common in SFA sites (48%) than non-SFA sites (15%).

3.3.5 À la Carte Foods

Sites can sell à la carte foods (i.e., foods that are not part of the summer meals program) to participating children; however, only 7 percent of sites do (see Table 3-14). Among the 7 percent of sites that do serve à la carte foods, the most common place to sell them is in the meal service area (52%). Snacks such as chips, energy bars, or jerky are the most common type of à la carte food sold (65%), and water is the most common beverage (61%) sold.

Table 3-14. À la carte foods sold

À la carte foods sold	All sites (%)
Site sells à la carte foods to children	
Yes	7.4
No	92.6
Unweighted n	940
Weighted n	67,774
Where à la carte foods are sold, among sites selling à la carte foods	
The meal service area	51.7
Away from the meal service area	21.3
In vending machines	40.2
In snack bars	5.4
Other	2.7
Unweighted n	79
Weighted n	5,017
Types of à la carte foods sold, among sites selling à la carte foods	
Foods	
Snacks such as chips, energy bars, or jerky	65.0
Breads or grain products such as bagels, pretzels, or crackers	38.7
Baked goods or desserts such as cookies, cakes, or pastries (not including frozen desserts)	37.0
Prepared entrees such as sandwich, pizza, or burritos	30.2
Fruits	28.2
Vegetables	23.9
Candy	23.4
Meats or meat alternatives such as nuts, nut butters, cheese, or yogurt	22.7

Table 3-14. À la carte foods sold (continued)

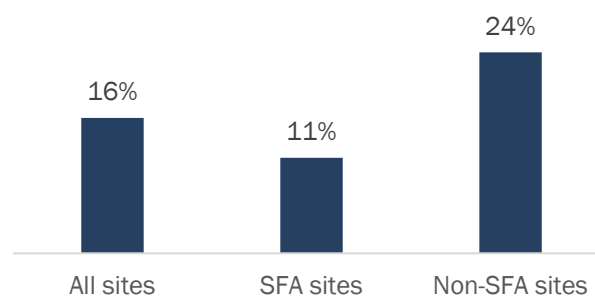
À la carte foods sold	All sites (%)
Types of à la carte foods sold, among sites selling à la carte foods	
Frozen desserts such as ice cream or popsicles	19.4
Prepared non-entrée food such as French fries or onion rings	14.0
Other foods	2.4
Beverages	
Water	61.3
100% juice	52.8
Milk	38.5
Other beverages (e.g., sports drinks or juice drinks)	46.4
Unweighted n	77
Weighted n	4,930

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

3.3.6 Extra Foods

The summer meal programs allow sites to offer extra foods in addition to the meal components required for reimbursement in order to improve the nutritional status of children. However, sites do not receive additional reimbursement if they choose to offer extra foods. Overall, 16 percent of sites offer extra foods to children, with the practice more common among non-SFA sites (24%) than SFA sites (11%) (see Figure 3-10). The most common extra food offered is fruit (70%) and the most common beverage is water (43%) (see Table 3-15).

Figure 3-10. Extra foods offered



Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 935; weighted n = 67,558. Notes: Total may not add to 100 due to rounding. All differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

Table 3-15. Types of extra foods provided free to children, among sites providing extra foods

Types of food provided free to children	All sites (%)
Foods	
Fruits	69.5
Snacks such as chips, energy bars, or jerky	50.2
Vegetables	47.2
Breads or grain products such as bagels, pretzels, or crackers	43.2
Prepared entrees such as sandwich, pizza, or burritos	39.1
Baked goods or desserts such as cookies, cakes, or pastries (not including frozen desserts)	31.2
Meats or meat alternatives such as nuts, nut butters, cheese, or yogurt	30.8
Frozen desserts such as ice cream or popsicles	29.4
Prepared non-entrée food such as French fries or onion rings	15.6
Beverages other than milk, 100% juice or water such as sports drinks or juice drinks	9.0
Leftover or second meals/pre-packaged foods	6.6
Candy	6.2
Other foods	1.2
Beverages	
Water	43.1
Milk	38.4
100% juice	35.2
Unweighted n	156
Weighted n	10,868

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Notes: Total may not add to 100 due to rounding.

3.4 Meal Accommodations

Overall, most sites make accommodations for children with food allergies or special dietary needs, and nearly all have a written food safety plan. In most cases, accommodations are made on a case-by-case basis. Most sites follow several safety procedures such as hand washing and wearing gloves while handling food.

3.4.1 Meal Accommodations

Most sites—85 percent—have written guidelines in place for children with food allergies or special dietary needs (see Figure 3-11). SFA sites (90%) are more likely to have guidelines for children with special dietary needs than non-SFA sites (76%). Most sites (80%) determine what accommodations need to be made on a case-by-case basis (see Table 3-16). Other common guidelines sites use include requiring a signed statement from a physician or healthcare professional before an accommodation is made (59%), menus that are adapted to special dietary needs (58%), and providing special training for staff (54%).

Sponsor and site perspectives: Meal accommodations

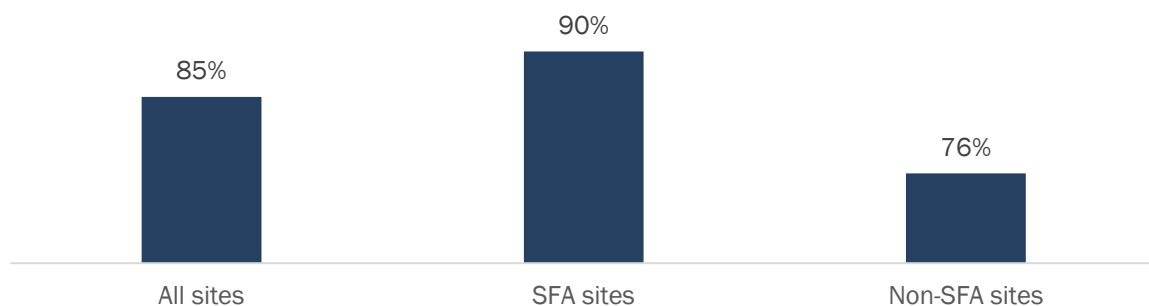
The majority of site staff interviewed acknowledged having children with special dietary needs at their programs. Nearly all of these staff said they regularly provide special meals or foods to accommodate children's allergies and try to provide options each day for children with special diets.

Several site staff described the ways they identify which children need special meal accommodations for medical conditions. Among SFA-sponsored programs, the most common procedure is to let families know that if their child has special dietary needs they can bring in a medical note and the school will make sure these needs are accommodated. Another school program mentioned that they have a school nurse onsite year-round who visits the cafeteria and informs the meal program when children should have special meal accommodations.

Several site staff expressed concerns that the meals their sponsor provides do not have an entree option for the growing number of children they serve who cannot eat pork or are vegetarian.

Source: Open-ended survey respondent comments from the Site Survey and the Sponsor Survey.

Figure 3-11. Sites with guidelines for special dietary needs



Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 859; weighted n = 61,526.

Notes: Total may not add to 100 due to rounding. Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

Table 3-16. Types of guidelines to accommodate special dietary needs, among sites with guidelines

Types of guidelines	All sites (%)
Accommodations made on case-by-case basis	79.9
Signed statements from healthcare professional required	59.4
Menus adapted	58.3
Special training for staff	54.1
Special sanitation procedures in kitchen and/or dining area	40.0
Staff inspect trays of children	34.7
Team of parents/staff/health professionals makes determination	23.3
Separate tables	17.9
Other	4.2
Unweighted n	746
Weighted n	51,750

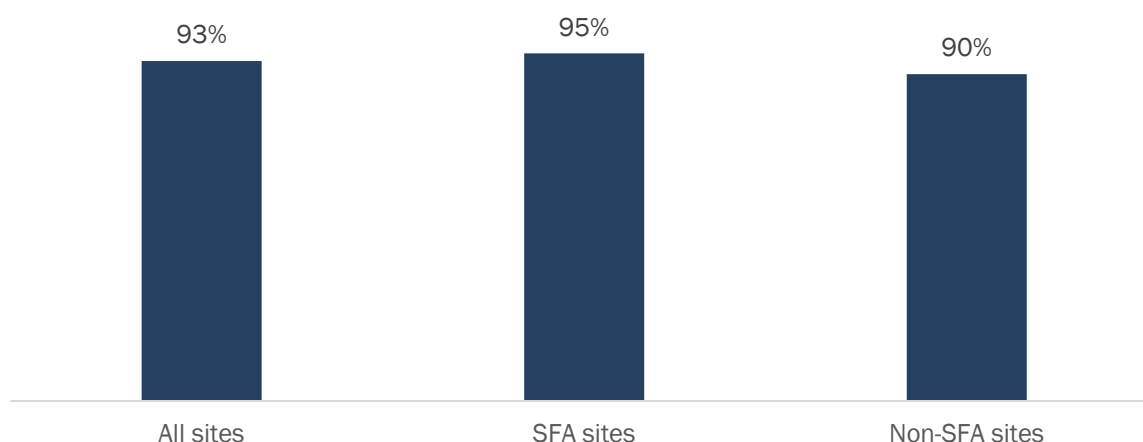
Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

3.5 Food Safety

Nearly all sites—93 percent—have a written food safety plan¹⁹ (see Figure 3-12). This practice is slightly more common among SFA sites (95%) than non-SFA sites (90%). Common food safety procedures followed by sites that have a written food safety plan include hand washing (94%), disposing of meals or foods that fail a food safety check (87%), wearing gloves while handling food (86%), keeping meals cold until serving (85%), using thermometers to check food holding temperatures (81%), serving perishable food within 2 hours of being left out (66%), and using thermometers to check food cooking temperatures (66%) (see Table 3-17).

¹⁹ School food authorities participating in the NSLP are required to have a written food safety program in accordance with 7 CFR 210.13(c). There is no similar requirement for sponsors in SFSP.

Figure 3-12. Sites with a written food safety plan



Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 856; weighted n = 61,946.

Notes: Total may not add to 100 due to rounding. Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

Table 3-17. Food safety procedures followed, among sites with a written food safety plan

Food safety procedures followed	All sites (%)
Wash hands before handling food	93.8
Dispose of meals or foods that fail a quality check	86.8
Wear gloves while handling food	86.0
Keep meals in a cooler or other cold storage until serving	85.4
Use thermometers to check food holding temperatures	81.1
Serve perishable foods within 2 hours if they are kept out	65.9
Use thermometers to check cooking temperatures	65.5
Transport cold food in a cooler in a non-refrigerated vehicle	41.9
Transport cold food in a refrigerated vehicle	21.3
Staff are ServSafe® certified, follow HACCP procedures or follow Health Department regulations	1.9
Other	9.2
Unweighted n	941
Weighted n	67,932

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Notes: Total may not add to 100 due to rounding.

4. Sponsor and Site Perspectives on Summer Meal Program Implementation

“Many of the children would go hungry if there wasn’t a summer meal provided. This is crucial to the healthy development of the child and to enable them to learn and grow.”

–Program Site

This chapter examines facilitators and barriers to preparing and serving summer meals; sponsor and site perspectives on children’s satisfaction with meals; and sponsor and site

recommendations for changes to program rules and guidance. Results presented in this chapter are based on data collected from surveys of menu planners and sponsor and site staff, and on in-depth interviews with a subset of sites and program sponsors in the summer of 2018.

4.1 Facilitators to Preparing and Serving Summer Meals

Fifty-two respondents provided comments in the Sponsor Survey, the Site Survey and interviews that highlight factors contributing to the effective operation of their summer meal program. These comments are diverse because many respondents describe attributes specific to an individual program’s design or location. However, there are several common positive attributes cited by three to eight respondents as key to facilitating their summer meal program operations:

- **A high-quality and responsive vendor**

Several sponsors and sites praised the quality of their vendor and noted how accommodating they are to their program’s and site’s needs.

“I am extremely satisfied with the quality of food that they (vendor) provide. I’m extremely satisfied with the customer service that they provide. They make the difference for our program. When they do the summer food program, they’re actually able to hire extra people from low-income neighborhoods to come in and help prepare the meals, so it’s a win-win for our community.”—Program Sponsor

- **Collaboration and support from their partner agencies**

Sponsors attributed their summer meal program's success to collaboration with the State agency, site staff, and other key partners such as their vendors and the health department.

"The support that we get from the [name of State] Child Nutrition Program is also valuable to us. I believe it is the commitment that we all share for the sake of our children that makes this program as successful as it is."—Program Sponsor

"We have joined with our county library to provide meals to outlying rural communities; that has helped fill a need for activities for learning as well as nutrition needs."—Program Sponsor

"We credit a successful program to the positive collaboration with the [vendor name] and the health inspector, and the [name of State] State Department of Education." Program Sponsor

Several site staff praised their sponsor and the importance of their role to the program's success in their community. These comments noted how well the site and sponsor work together as well as the high quality of the sponsor's services and meals. Several emphasized the importance of having a sponsor that is dedicated to serving the needs of their community.

- **Dedicated and high-quality staff and increased capacity with volunteers**

Comments from sponsors and site staff underscored the importance of the front-line staff and volunteers who prepare and serve the meals to the program's success. They noted that having staff who care about the children and are dedicated to providing them quality meals is key. A few nonprofit sponsors and sites highlighted the key roles of trained youth who are paid for their summer work, and of volunteers, without whom the food could not be transported or served.

"[I] need to give thanks to the many staff and volunteers of the summer food program that make things happen at the ground level. Without their dedication to the program and participants, we would not be touching the lives of the children like we do."—Program Sponsor

"[Name of sponsor] has very dedicated staff who have the passion to provide meals to students even when kitchen temperatures are quite warm."—Program Sponsor

"[Name of program] volunteers have been a tremendous blessing. I don't know what we would do without them really...they are very nice, they treat the kids with respect and they are totally supportive of everything we are trying to do here."—Program Site

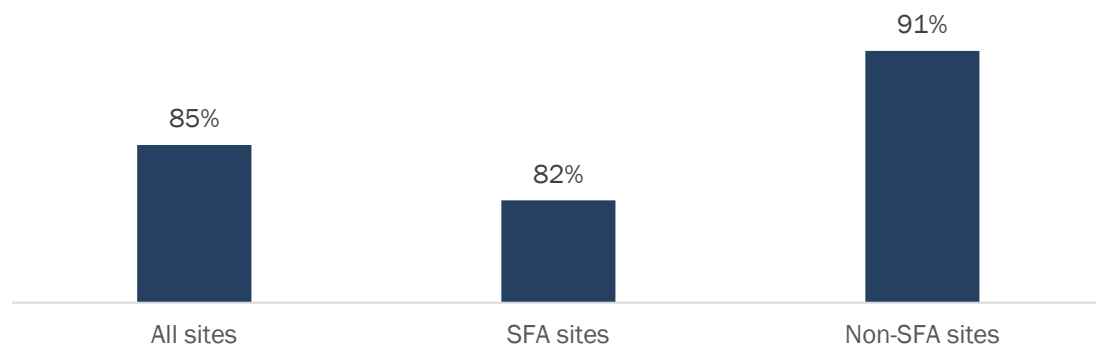
“Our mobile service utilizes AmeriCorps members to deliver and serve the meals. Partner programs utilize site staff to serve meals. Our vendor delivers to partner programs on a daily basis. By using both models we are able to reach more children in need.” –Program Sponsor

- **Being able to implement the program utilizing SSO**

Several SFA sponsors’ write-in responses to the survey indicated that they very much appreciate being able to use the SSO instead of the SFSP. Commenters explained that their staff are already familiar with the school meal program requirements so it is easier to implement. One sponsor also noted that they appreciate the reduced paperwork required for monitoring each site under SSO compared to SFSP.

“The SSO is easier for everybody in our staff. It is a continuation of the National School Lunch Program. It is easier for all our staff to do and execute the program. With [number] sites this summer, it sure is less paper work for our monitors.” –Program Sponsor

Figure 4-1. Menu planner experiences challenges planning or preparing meals



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs. Unweighted n = 1,025; weighted n = 67,841.

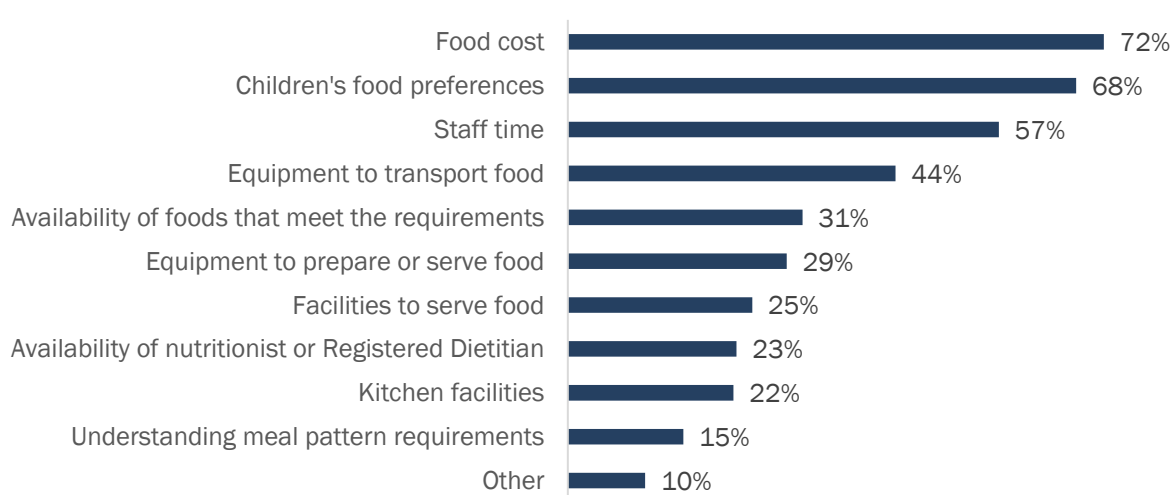
Notes: Total may not add to 100 due to rounding. Differences between SFA sites and non-SFA sites are significant at the 0.05 confidence level using t-tests.

4.2 Barriers to Preparing and Serving Summer Meals

For most sites—85 percent—the menu planner experiences one or more challenges planning or preparing meals (see Figure 4-1). Non-SFA sites are more likely to report facing challenges (91%) than SFA sites (82%). The most common challenges reported are food costs (72%), children’s food preferences (68%), and staff time (57%) (see Figure 4-2). In the in-depth interviews and write-in responses to the surveys, several sponsors and sites noted that one of their greatest challenges in

operating the program is that the meal reimbursement rates, which are established in statute, have not risen to match the increased cost of purchasing, preparing, and transporting the meals. These respondents noted diverse negative consequences of this including: difficulty finding vendors who are willing to participate, having to find funding in other parts of their program budgets and/or volunteer community resources when available, and difficulties paying the costs for transporting meals to distant sites in rural areas.

Figure 4-2. Factors that are a challenge, among sites that reported challenges in planning or preparing meals



Source: USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: N's differ by factor. See Table A-13 for unweighted and weighted n's by factor.

The third most frequently noted challenge is staffing. The primary challenge with staffing is having enough staff to prepare the meals and enough paid or volunteer staff to serve and supervise the children at the open sites where there are no structured programs funded by another source like the school district, or parks and recreation departments.

Most sites do not report that they face challenges in congregate feeding (86%) (see Table 4-1). Of the 14 percent of sites that report congregate feeding as a challenge, more than half (58%) said attracting children to the site was a challenge, and half said that not offering food to adults was a challenge (see Figure 4-3).

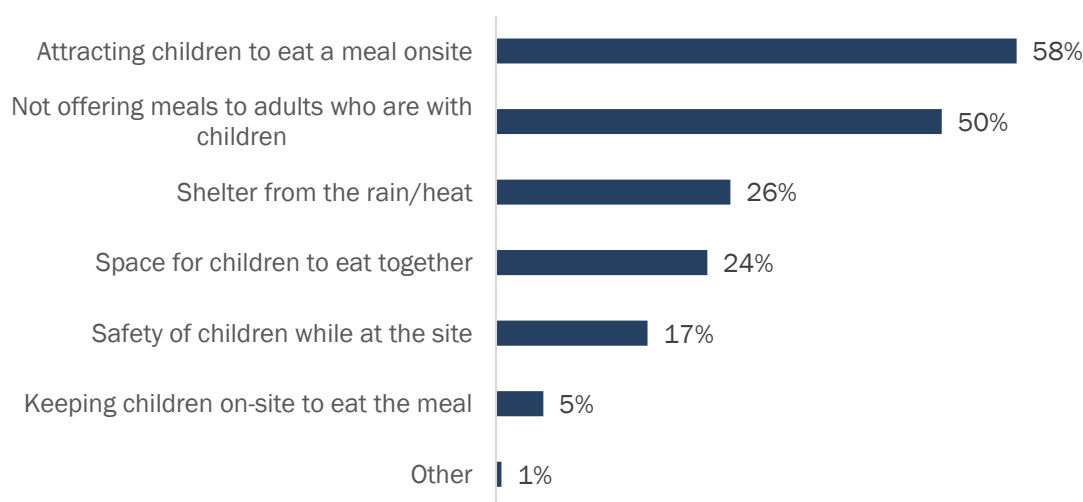
Table 4-1. Challenges with serving meals in a congregate setting

Sites have challenges with serving meals in a congregate setting	All sites (%)	SFA sites (%)	Non-SFA sites (%)
Yes	13.9	11.3	18.1
No	86.1	88.7	81.9
Unweighted n	945	621	324
Weighted n	68,439	42,702	25,737

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

Figure 4-3. Factors that are a challenge, among sites with challenges serving meals in congregate settings



Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: N's differ by factor. See Table A-17 for unweighted and weighted n's by factor.

4.3 Sponsor and Site Perspectives on Children's Satisfaction with Meals

Nearly one-third of those interviewed (11 out of 38 interviews) and about 10 percent of survey comments about the program (27 out of 289 open-ended survey responses) indicated that children enjoy the meals and snacks served by the summer meals program. Some respondents emphasized that the children seem to look forward to coming to the program and to eating their favorite meals. Several of these commenters noted that sponsor and site staff enjoy working in the program because they can see the children are happy and benefiting from the meals served. Among site staff at school

sites, several mentioned that they think the children like the food they serve because they try to serve healthy dishes that are familiar and have names that the children recognize, such as General Tso's Chicken, a Chinese buffet, chicken nachos, or different kinds of pizza and submarine sandwiches. Practices that a few site staff cited as successful in having children eat more of their meals include having friendly adults on site to keep the children company while they eat, and having a "share table" where children give away the items they do not like and can take more of the foods they do like. Several sponsors and sites said their attendance numbers increase when there are more popular foods on the menu and decrease on days when the foods are not popular with the children.

Several other respondents reported concerns regarding children's satisfaction with the meals served, however. These meal planners emphasized that because the meals they provide are limited in variety, they are not appealing to the children. They feel limited because the sites they serve have only one short cycle menu and/or because they are not aware of a better way to meet the USDA guidelines within their budget and resources.

"The food was good but too repetitive. The kids loved each meal at first but by the end of the summer, they were sick of the same foods... Perhaps a wider variety of meals would appeal."—Program Site

An additional six interview respondents and six open-ended survey commenters said that children do not like certain types or much of the foods commonly served, mentioning pre-packaged meals and specific foods like fresh carrots served in cold water and plain milk. Some of these respondents acknowledged that it is hard to please all the children they serve because their tastes vary; and many children are picky and do not want to try new foods; and/or it is hard to find foods that are liked by the age range of children they serve.

An additional four sponsors who provided open-ended survey comments attributed their program's current or past low child participation to only serving cold meals. Two of these sponsors reported that since they had started serving hot meals, student participation has increased. The other two sponsors noted that despite switching to serving hot meals, their program participation had not increased and remained lower than they desired.

"We are trying to change the meals served to encourage more children to eat the meals. Currently cold cuts are served and sometimes the kids would prefer a hot meal. Trying to have at least one hot meal per week at all sites."—Program Sponsor

Three sponsor and site staff, all in urban areas, said they did not think the type of food served was an important influence on attendance but said that attendance is driven by the availability of any food. These respondents reported that they know that the children they serve are hungry, overcome obstacles to get from their homes to the site, and would otherwise go without a meal.

4.4 Sponsor and Site Recommendations for Changes to Program Rules and Guidance

During their interviews and in open-ended survey comments, many current sponsors and sites provided suggestions for changes to the program rules that they believed would improve program service, participation, and/or ease administrative burdens for program staff. All of these changes would require a change to the program statute. The most common recommendations provided by the respondents are summarized below.

- **Relax the congregate feeding requirement for programs where children cannot stay on site due to transportation or safety issues, or relax it only for outdoor sites on bad weather days.** Three of these respondents operated mobile feeding sites, and three others operated sites in outdoor, non-school settings (12 respondents).

“Some parents... just didn’t feel comfortable with the younger children being around older kids. If there was the availability of sending food home and they knew who the kids were they were sending it with... they could be feeding more kids. Everybody wants to do more. In our neighborhoods they need it, but the rules don’t always allow us to do that.”

—Program Site

“We’ve actually worked a couple of years to try to get a waiver so that kids don’t have to stay congregate; that they can just grab a meal and go home. Yeah, congregate can be a challenge, especially in some of our parts of our region that are experiencing high rates of violence. So kids wanting to stay outside in a park or sitting on the stairs to eat or even walking down to their library can be a challenge. The congregate feeding, having that as a requirement, can be prohibitive for those kids to access meals.” —Program Site

“The congregate rule is very challenging. Parents worry about their children’s safety when they have to remain onsite to consume the meal. Violence is a huge concern for many families who are served through our mobile feeding program.” —Program Site

“If we’re having a driving rain, or if it’s 120 degrees heat index, the kids have to wait outside in the rain or in that incredible heat, as do the adults that brought them, which is even more of a problem if they walked. We need the flexibility to let the kids take the lunch home on those days.” —Program Sponsor

- **Change the program statute to allow reimbursement for meals served to parents accompanying their children at sites.** One of these respondents suggested finding

effective ways to implement such an expansion to ensure that it is serving those with the greatest need (5 respondents).

- **Change the program statute to expand the number of reimbursable meals and snacks** to three meals or two meals and a snack per day, similar to the combination of USDA meal programs that are available to low-income children through school meals and the Child and Adult Care Food Program (CACFP) during the school year (4 respondents).

“This site offers structured activities from 8 AM to 6 PM and during that time we provide breakfast in the morning and lunch in the afternoon. Since the children remain until 6 PM, there is a 5-hour span without a meal service. Another meal would be beneficial.” –Program Site

4.5 Sponsor and Site Satisfaction with the Summer Meal Programs

Each of the 19 sponsors and 19 site staff who were interviewed were asked what their overall view of the program was and whether its benefits outweighed any challenges they may have experienced. These respondents praised the program overall for the benefits it allows them to provide for children and the communities they are serving. Among these, the majority also indicated that the summer meal program resources were critical to their organization being able to feed food insecure children and in some cases provide other free or low-cost summer programming for children where none exists. Below are examples of feedback from sponsor and site staff about how much the children they serve need and benefit from the program.

“Some of my staff, they collect stuffed animals and clothes and stuff. Then we hand out that kind of stuff too, just—because they care so much, and the kids love that. But, it really is the food. That’s what they’re looking for.” –Program Sponsor

“At least, these kids they can have something during the summer...when school gets out, a place to go, a place to eat. And they sit with other students, I don’t think they would have sat with. You see, I mean, it really is important for feeding the kids, but it does more than you realize. I see it.” –Program Site

“I had a kid that took a couple items out of the share bowl and said, ‘Well, these aren’t for me. These are for a friend that hasn’t eaten much,’ and I’m pretty sure it was him. I thought to myself, with everything else I had to do and said, ‘This is important, and I’m glad we’re doing this, because it’s very much needed.’” –Program Site

Among the 288 survey respondents who provided open-ended survey comments, the large majority (171) discussed how much they and their staff liked the program and highlighted its benefits for the

children and the communities they serve. Of these commenters, approximately two-thirds (118) were general expressions of praise that emphasized how much they liked the program and the support and partnerships they have with organizations that help them implement it. The other 53 positive commenters were more specific in their praise, emphasizing how important the program is in helping ensure children receive a healthy meal during the summer and filling a community need that would otherwise go unmet.

“The summer feeding program in our area has become crucial to our children receiving good, healthy, hot meals. We are able to target and feed those that are most in need, and [provide programming] to keep them moving and active.” –Program Sponsor

“We feel that our summer program is one of the most positive contributions we can make to our community’s children during the summer months.” –Program Sponsor

“I know children that would go hungry in the summer if not for our program.” –Program Site

“For some girls it is the only meal they may have to eat that day.” –Program Site

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Appendix A
Supplemental Tables

Appendix A

Supplemental Tables

The supplemental tables in this Appendix provide all the descriptive characteristics presented in the report for all sites and compare sites by summer meal program type (SFSP and SSO) and by sponsor type (SFA and non-SFA). These comparisons are made to address the study objectives.

Table A-1. Meal preparation, by summer meal program type and sponsor type

Meal preparation	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Prepare or cook meals on-site or at a central kitchen	72.2	66.7*	99.0	92.5*	37.8
Purchase meals from a private commercial vendor	22.1	26.4*	1.0	2.4*	55.5
Purchase meals from a school or SFA	5.1	6.1*	0.0	4.8	5.5
Other	0.7	0.8*	0.0	0.3	1.2
Number of sites (unweighted)	1,019	789	230	692	327
Number of sites (weighted)	67,198	55,839	11,359	42,222	24,975

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences are significant at the 0.05 confidence level using t-tests.

Table A-2. Reasons for choosing to purchase meals and how purchased meals are delivered, by summer meal program type and sponsor type

Reasons for purchasing meals and how purchased meals are delivered	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Reasons for purchasing meals					
Do not have kitchen facilities and equipment	69.5	69.5	-	68.0	69.8
Do not have staff to prepare meals	64.7	64.9	-	67.0	64.2
It is cost efficient to purchase meals	43.5	43.3	-	50.1	42.1
It allows us to serve a wider variety of foods	25.6	25.6	-	15.5	27.8
There are too many meals to prepare/sites to serve	9.9	10.0*	-	0.0*	12.0
Other	6.5	6.5*	-	1.6*	7.5
Number of sites (unweighted)	228	225	3	41	187
Number of sites (weighted)	18,828	18,719	108	3,278	15,550
Who delivers purchased meals to the site					
Private vendor/company	53.7	53.5*	100.0	26.2*	60.1
Sponsor or someone hired by the sponsor	35.3	35.5*	0.0	56.3*	30.5
Site staff or someone hired by the site	9.2	9.2*	0.0	14.2	8.0
Other	1.8	1.8	0.0	3.3	1.4
Number of sites (unweighted)	239	236	3	44	195
Number of sites (weighted)	19,769	19,661	108	3,683	16,086

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding. Sample limited to sites that purchase meals.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-3. Meal patterns, by summer meal program type and sponsor type

Meal pattern	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO ¹	SFA	Non-SFA
Meal pattern used					
Summer Food Service Program (SFSP)	74.0	86.5*	11.1	61.9*	94.2
School Meal Programs (NSLP/SBP)	23.6	10.7*	88.6	35.9*	3.0
Child and Adult Care Food Program (CACFP)	2.4	2.8*	0.3	2.2	2.8
Number of sites (unweighted)	1,030	801	229	699	331
Number of sites (weighted)	68,188	56,874	11,314	42,729	25,459
Among those using the NSLP/SBP meal pattern, comparison with school-year menus					
Mostly/exactly the same	47.4	34.1*	55.5	47.2	51.5
Somewhat different	45.2	51.5	41.4	45.0	48.5
Completely different	7.4	14.3	3.1	7.7	0.0
Number of sites (unweighted)	283	77	206	272	11
Number of sites (weighted)	16,104	6,075	10,029	15,345	759
Among those using the NSLP/SBP meal pattern, reason for using the NSLP/SBP meal pattern					
School menus provide good variety	74.6	72.8	75.7	74.3	85.9
No need to re-train staff	69.2	67.8	70.0	68.7	83.7
Cost-effective	64.2	61.8	65.6	64.0	71.3
Children like the school-year menus	56.4	47.8	61.4	56.4	57.3
Use same vendor as during the school year	42.6	45.2	41.1	41.7	69.6
Do not want to plan new menus	18.5	16.4	19.7	17.0	63.5
Ensures compliance with meal patterns and other program requirements	6.4	4.2	7.7	6.6*	0.0
Other	3.4	3.4	3.4	3.5*	0.0
Number of sites (unweighted)	280	75	205	271	9
Number of sites (weighted)	15,824	5,831	9,992	15,308	516

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

¹ A small percentage of SSO sponsors reported using the SFSP meal patterns, which is not allowed. It is not clear whether the sponsors reported incorrectly to this study, or if they are using the incorrect meal pattern.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-4. Use of cycle menus, by summer meal program type and sponsor type

Sites use cycle menus	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Yes	90.4	90.1	91.7	88.0*	94.4
No	9.6	9.9	8.3	12.0*	5.6
Number of sites (unweighted)	1,034	804	230	701	333
Number of sites (weighted)	68,442	57,083	11,359	42,787	25,656
Length of menu cycle, among sites using a cycle menu					
1 week	16.6	12.5*	37.1	24.5*	4.4
2 weeks	45.8	49.9*	25.8	43.8	48.9
3 weeks	18.5	19.0	16.0	12.4*	27.9
4 weeks	14.2	14.6	12.4	14.7	13.4
5 weeks	1.7	1.4	3.2	1.6	2.0
Other	3.1	2.6	5.4	3.0	3.3
Number of sites (unweighted)	937	722	215	625	312
Number of sites (weighted)	61,540	51,160	10,380	37,347	24,194

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-5. Factors considered in menu planning, by summer meal program type and sponsor type

Factors considered	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Nutritional quality of the meal	94.6	94.4	95.6	93.7	96.1
Types of meals served (i.e., breakfast, lunch, supper, snacks)	84.1	85.1	79.5	82.3	87.2
Preferences of children	81.5	79.9*	89.6	80.8	82.7
Availability of foods	77.5	76.4	83.1	83.5*	67.5
Food cost	76.4	75.8	79.5	76.7	75.9
Labor cost	57.0	55.1*	66.4	65.2*	43.1
Predominant age of children being served	55.0	53.2*	64.0	55.0	54.9
Availability of kitchen facilities to prepare and/or store food	50.7	50.1	53.5	56.3*	41.3
Type of eating facilities	40.4	40.6	39.2	42.5	36.8
Staff cooking or food preparation skills	36.7	34.3*	48.9	46.1*	20.8
Local or cultural practices	21.0	21.0	20.9	15.5*	30.1
How the meal will hold	2.0	1.7	3.3	1.4	3.0
Transportability	1.7	1.9	0.7	0.7	3.4
What remains in inventory at the end of the school year	1.4	0.1*	8.0	2.2*	0.0
Food allergies and children's special needs	1.3	1.5*	0.0	0.2*	3.1
Other	3.3	3.8*	0.4	2.8	4.0
Number of sites (unweighted)	1,026	797	229	699	327
Number of sites (weighted)	68,203	56,878	11,326	42,798	25,405

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-6. Local or cultural practices considered in menu planning, by summer meal program type and sponsor type

Local or cultural practices	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Site reported one or more local/cultural practices that influence menu planning					
Yes	21.0	21.0	20.9	15.5*	30.1
No	79.0	79.0	79.1	84.5*	69.9
Number of sites (unweighted)	1,026	797	229	699	327
Number of sites (weighted)	68,203	56,878	11,326	42,798	25,405
Type of local/cultural practice influencing menu planning, among sites that report one or more practices					
Kosher/halal/religious preferences	39.5	46.0*	5.0	28.0*	49.6
Meatless/vegetarian	25.8	23.1	40.1	17.3*	33.3
Hispanic foods	23.6	20.9	37.6	26.1	21.3
Other	22.7	23.2	20.5	38.8*	8.6
Number of sites (unweighted)	189	141	48	109	80
Number of sites (weighted)	13,666	11,489	2,178	6,404	7,263

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-7. Use of menu planning tools and resources, by summer meal program type and sponsor type

Tools and resources	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Site reported use of one or more menu planning tools/resources					
Yes	80.7	80.9	79.8	85.0*	73.7
No	19.3	19.1	20.2	15.0*	26.3
Number of sites (unweighted)	1,018	792	226	691	327
Number of sites (weighted)	67,379	56,225	11,154	41,979	25,400
Menu planning tools/resources used					
USDA Summer Meals Toolkit	59.9	64.1*	38.3	54.3*	70.4
Tools and resources developed by the State Agency	46.5	49.4*	31.8	42.9*	53.4
USDA MyPlate materials	43.1	42.7	45.0	33.5*	61.5
USDA Team Nutrition materials	42.0	42.1	41.6	33.3*	58.6
Institute of Child Nutrition (ICN) materials	25.2	24.6	28.3	26.7	22.5
USDA What's Cooking	13.8	11.2*	27.3	13.5	14.3
USDA Healthy Meals Resource System	12.7	12.6	12.7	8.6*	20.4
Menu Planning Software such as Webtrition, Mosaic, Nutrikids, Primero	9.1	8.0	14.3	13.3*	0.9
USDA Mixing Bowl	5.8	4.1*	14.5	5.5	6.3
Other	10.2	11.1*	5.8	9.3	11.9
Average number of menu planning tools/resources used	2.7	2.7	2.6	2.4*	3.2
Median number of menu planning tools/resources used	1.8	1.8	1.7	1.5*	2.6
Number of sites (unweighted)	829	650	179	576	253
Number of sites (weighted)	54,399	45,494	8,904	35,686	18,713
Sites reported needing other tools/resources that they do not have					
Yes	4.9	5.4	2.5	2.4*	9.0
No	95.1	94.6	97.5	97.6*	91.0
Number of sites (unweighted)	1,032	802	230	700	332
Number of sites (weighted)	68,383	57,024	11,359	42,832	25,551

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-8. Challenges in finding and using menu planning tools and resources, by summer meal program type and sponsor type

Sites have challenges with finding and using menu planning tools/resources	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Yes	3.7	3.9	2.6	1.3*	7.8
No	96.3	96.1	97.4	98.7*	92.2
Number of sites (unweighted)	1,028	798	230	696	332
Number of sites (weighted)	68,119	56,760	11,359	42,546	25,574

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences are significant at the 0.05 confidence level using t-tests.

Table A-9. Local foods, by summer meal program type and sponsor type

Foods purchased from local growers, farmers, processors, and/or manufacturers	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Site reported purchasing local foods					
Yes	67.1	66.3	71.2	71.8*	59.1
No	32.9	33.7	28.8	28.2*	40.9
Number of sites (unweighted)	999	772	227	689	310
Number of sites (weighted)	66,228	55,038	11,190	42,017	24,211
Type of local food purchased, among sites purchasing local foods					
Fruits	82.9	83.1	82.5	81.1	86.9
Vegetables	70.1	68.4	78.1	67.4*	75.9
Fluid milk	67.7	66.5	73.1	70.4	61.9
Bakery products	33.5	34.2	30.4	26.0*	49.4
Meat/poultry	16.8	18.0	11.7	11.9*	27.4
Other dairy (e.g., cheese)	16.6	18.1	9.9	9.3*	32.1
Grains/flour	14.1	15.2*	9.1	12.1	18.4
Herbs	12.1	14.1*	3.2	5.7*	25.6
Plant-based protein items such as beans, seeds, nuts	9.4	10.7*	3.5	4.4*	19.9
Eggs	9.1	9.7	6.6	4.5*	18.9
Seafood	1.7	1.7	–	1.2	2.6
Other	2.9	1.2*	11.0	3.9*	–
Average number of types of local food purchased	3.4	3.4	3.2	3.0*	4.2
Median number of types of local food purchased	2.3	2.3	2.5	2.1*	2.9
Number of sites (unweighted)	667	502	165	489	178
Number of sites (weighted)	44,450	36,479	7,972	30,151	14,300
How often local foods are used, among sites purchasing local foods					
Every day/almost every day	58.0	59.8	50.0	57.8	58.7
2 to 3 times per week	27.6	24.9	39.6	27.8	27.1
Once a week or less	14.4	15.3	10.3	14.4	14.2
Number of sites (unweighted)	615	458	157	461	154
Number of sites (weighted)	39,901	32,571	7,330	28,285	11,617

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences are significant at the 0.05 confidence level using t-tests.

Table A-10. Factors affecting the decision not to purchase local foods, by summer meal program type and sponsor type

Factors affecting decision	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Limited availability of local vendors	40.7	37.0*	61.8	50.2*	29.1
Limited availability of local foods	29.3	28.4	34.4	37.8*	19.1
Vendor does food purchasing	23.4	27.3*	1.6	6.9*	43.5
Food safety concerns and/or requirements prohibit local food purchasing	19.5	19.1	21.3	18.9	20.2
Cost to purchase local foods	15.2	16.2	9.6	11.5	19.7
Not enough staff and equipment to process and/or serve local foods	15.2	16.2	9.4	10.9	20.4
Delivery schedules	9.6	11.3*	0.0	6.7	13.2
Limited storage capacity	9.1	9.8	5.6	3.5*	16.0
Cost to prepare local foods	7.0	8.3*	0.0	4.3	10.4
Other	11.8	13.1*	4.0	15.7	7.0
Number of sites (unweighted)	295	238	57	181	114
Number of sites (weighted)	19,274	16,399	2,874	10,574	8,699

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding. Sample limited to sites that do not purchase local foods.

*Differences are significant at the 0.05 confidence level using t-tests.

Table A-11. Use of fresh fruits and/or vegetables, by summer meal program type and sponsor type

Frequency of use	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Every day/almost every day	64.6	62.8*	73.8	64.9	64.0
2 to 3 times per week	24.1	25.6*	16.8	21.8	28.0
Once a week or less	7.5	7.5	7.2	9.0*	4.8
Never	3.8	4.2	2.2	4.2	3.1
Number of sites (unweighted)	1,022	794	228	697	325
Number of sites (weighted)	67,512	56,242	11,271	42,521	24,991

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-12. Use of USDA Foods, by summer meal program type and sponsor type

USDA Foods	Percentage of sites and average number of USDA foods				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
USDA Foods are used by the site					
Yes	64.6	57.9*	97.0	86.3*	24.4
No	35.4	42.1*	3.0	13.7*	75.6
Number of sites (unweighted)	935	716	219	658	277
Number of sites (weighted)	61,762	51,236	10,526	40,079	21,683
Frequency of use, among sites that use USDA Foods					
Every day or almost every day	44.4	43.5	47.0	46.3*	31.7
2 to 3 times per week	38.6	37.3	42.3	40.5*	26.1
Once a week or less	17.0	19.2*	10.7	13.1*	42.2
Number of sites (unweighted)	656	443	213	581	75
Number of sites (weighted)	39,889	29,680	10,209	34,604	5,285
Types of USDA Foods used, among sites that use USDA Foods					
Meat/poultry	80.6	79.3	84.2	83.7*	60.3
Fruits	80.3	83.4*	71.2	79.4	86.2
Vegetables	67.3	63.2*	79.0	67.0	68.9
Cheese and yogurt	61.9	59.6	68.5	64.3*	45.9
Grains/flour	26.3	27.9	21.8	25.5	31.7
Plant-based protein items such as beans, seeds, nuts	22.9	21.4	27.4	24.3	14.1
Eggs	18.3	18.2	18.5	18.7	15.5
Bakery products	15.8	19.0*	6.4	14.3	25.5
Seafood	2.0	2.0	2.0	1.9	2.6
Other	1.2	1.1	1.4	1.0	2.4
Average number of USDA Foods used	3.8	3.8	3.8	3.8	3.5
Median number of USDA Foods used	3.1	3.0	3.1	3.1	2.1
Number of sites (unweighted)	654	441	213	579	75
Number of sites (weighted)	39,771	29,562	10,209	34,486	5,285

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-13. Challenges in planning or preparing meals, by summer meal program type and sponsor type

Challenges in planning or preparing meals	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Yes	85.4	87.1*	77.0	82.1*	91.0
No	14.6	12.9*	23.0	17.9*	9.0
Number of sites (unweighted)	1,025	795	230	702	323
Number of sites (weighted)	67,841	56,482	11,359	42,919	24,922
Among those that reported challenges in planning or preparing meals, factors that are a challenge					
Food cost	71.5	74.0*	57.3	67.9*	77.1
Number of sites (unweighted)	868	683	185	573	295
Number of sites (weighted)	57,714	49,001	8,713	35,122	22,592
Children's food preferences	67.8	68.0	66.8	58.6*	82.1
Number of sites (unweighted)	864	678	186	570	294
Number of sites (weighted)	57,455	48,708	8,746	34,979	22,476
Staff time	57.5	56.2	64.4	64.5*	45.5
Number of sites (unweighted)	845	660	185	571	274
Number of sites (weighted)	55,649	46,940	8,709	35,006	20,643
Equipment to transport food	43.7	43.3	46.0	46.9*	38.7
Number of sites (unweighted)	845	667	178	559	286
Number of sites (weighted)	55,887	47,558	8,329	34,115	21,773
Availability of foods that meet the requirements	31.3	31.8	28.6	25.6*	40.3
Number of sites (unweighted)	862	677	185	572	290
Number of sites (weighted)	57,213	48,499	8,713	35,073	22,140
Equipment to prepare or serve food	29.2	29.2	29.4	28.9	29.9
Number of sites (unweighted)	836	655	181	567	269
Number of sites (weighted)	54,953	46,441	8,512	34,809	20,144
Facilities to serve food	24.6	27.2*	10.5	20.5*	31.2
Number of sites (unweighted)	860	675	185	570	290
Number of sites (weighted)	57,007	48,298	8,709	34,836	22,170
Availability of nutritionist or registered dietitian	22.5	24.5*	12.2	13.4*	37.6
Number of sites (unweighted)	817	635	182	551	266
Number of sites (weighted)	53,518	45,088	8,430	33,248	20,270
Kitchen facilities	22.1	22.1	22.5	20.8	24.3
Number of sites (unweighted)	846	661	185	570	276
Number of sites (weighted)	55,501	46,792	8,709	34,933	20,567
Understanding meal pattern requirements	15.4	15.3	16.4	14.7	16.6
Number of sites (unweighted)	867	682	185	572	295
Number of sites (weighted)	57,693	48,980	8,713	35,073	22,620

Table A-13. Challenges in planning or preparing meals, by summer meal program type and sponsor type (continued)

Challenges in planning or preparing meals	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Other	10.3	9.7	13.7	8.6	12.8
Number of sites (unweighted)	871	685	186	575	296
Number of sites (weighted)	57,932	49,186	8,746	35,250	22,682

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Menu Planning Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-14. Sites serving each meal by day of the week, by summer meal program type and sponsor type

Days of the week	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Monday					
Breakfast	61.3	56.6*	84.8	74.8*	38.7
Lunch	88.8	87.3*	96.3	92.9*	81.9
Supper	3.8	4.5*	-	1.4*	7.8
Any snack	19.6	21.7*	8.9	11.0*	34.0
Tuesday					
Breakfast	61.8	57.4*	84.1	74.8*	40.1
Lunch	90.1	88.9*	96.3	93.5*	84.3
Supper	4.0	4.8*	-	1.0*	9.0
Any snack	20.7	22.9*	9.7	11.7*	35.9
Wednesday					
Breakfast	61.4	56.9*	84.0	73.9*	40.3
Lunch	90.0	88.9*	95.5	92.7*	85.4
Supper	4.4	5.1*	-	1.9*	8.7
Any snack	20.1	22.1*	9.7	11.5*	34.4
Thursday					
Breakfast	61.5	57.2*	82.9	74.1*	40.3
Lunch	90.3	89.3*	95.3	92.4*	86.7
Supper	4.0	4.8*	-	1.0*	9.0
Any snack	20.2	22.3*	9.7	11.1*	35.5
Friday					
Breakfast	42.8	41.3	50.1	48.1*	33.7
Lunch	66.0	67.8*	57.2	61.3*	73.9
Supper	2.3	2.7*	-	0.5*	5.2
Any snack	16.3	17.8*	8.8	8.2*	29.9

Table A-14. Sites serving each meal by day of the week, by summer meal program type and sponsor type (continued)

Days of the week	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Weekend					
Breakfast	0.8	0.9	0.3	0.5	1.5
Lunch	1.7	1.8	1.1	1.2	2.6
Supper	1.6	1.9*	-	0.5*	3.4
Any snack	1.0	1.2*	0.0	0.6	1.7
Serve meal any day of the week					
Breakfast	63.1	58.6*	85.3	75.8*	41.7
Lunch	93.9	93.1*	98.1	95.7	90.9
Supper	5.1	5.9*	-	2.3*	9.8
Any snack	21.2	23.5*	9.7	12.0*	36.6
Do not serve meal					
Breakfast	36.9	41.1*	14.7	24.2*	58.3
Lunch	6.1	6.9*	1.9	4.3	9.1
Supper	94.9	94.0*	99.0	97.7*	90.2
Any snack	78.8	76.5*	90.3	88.0*	63.4
Number of sites (unweighted)	948	744	204	623	325
Number of sites (weighted)	68,258	56,899	11,359	42,750	25,507

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-15. Number and types of meal and/or snack services, by summer meal program type and sponsor type

Number and type of meals/snacks served	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Number of meals/snacks served ¹					
One	25.3	27.7*	13.1	19.9*	34.2
Two	65.6	62.6*	80.5	73.5*	52.3
Three or more ²	9.2	9.7	6.5	6.6*	13.5
Number of sites (unweighted)	948	744	204	623	325
Number of sites (weighted)	68,258	56,899	11,359	42,750	25,507
Types of meals/snacks served					
Lunch	20.9	22.9*	11.2	16.4*	28.6
Breakfast and lunch	53.6	48.8*	77.7	68.7*	28.4
Lunch and snack	10.2	11.7*	2.8	4.1*	20.5
Breakfast, lunch, and snack	5.4	5.6	4.6	3.7*	8.2
Number of sites (unweighted)	948	744	204	623	325
Number of sites (weighted)	68,258	56,899	11,359	42,750	25,507

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

¹ Except for migrant sites and camps, which receive reimbursement for up to three meals/snacks per child per day, most summer meal program sites receive reimbursement for up to two meals/snacks per day. The small number of sites reporting more than three meals/snacks may be serving different groups of children on the same day, or not receiving reimbursement for all meals served.

² A small number of sites reporting more than three meals/snacks per day may be serving different groups of children during different parts of the day, or not receiving reimbursement for all meals served.

Table A-16. Percentage of summer meal sites by meal service characteristic, by summer meal program type and sponsor type

Meal service characteristic	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Type of meal service system					
Pre-plated/pre-packaged	52.4	58.3*	22.3	40.8*	71.6
Cafeteria-style	43.1	36.6*	75.5	55.8*	21.9
Family-style	3.2	3.6	1.4	2.4	4.7
Other	1.3	1.4	0.8	1.0	1.8
Number of sites (unweighted)	947	743	204	623	324
Number of sites (weighted)	68,373	57,014	11,359	42,750	25,623
Portion sizes					
Do not differ by age group	69.2	70.6	62.1	63.5*	78.8
Differ by age group	30.8	29.4	37.9	36.5*	21.2
Number of sites (unweighted)	940	738	202	619	321
Number of sites (weighted)	67,862	56,561	11,301	42,584	25,278
Use of Offer vs. Serve					
At breakfast	33.0	25.9*	68.1	46.3*	10.2
At lunch	42.4	35.8*	75.1	55.1*	20.9
At supper	3.0	3.3	1.4	2.7	3.6
Not used at any meal	54.7	61.1*	22.8	42.0*	76.2
Number of sites (unweighted)	931	728	203	614	317
Number of sites (weighted)	67,146	55,864	11,282	42,274	24,871
Where meals are typically served					
Indoors	81.9	79.5*	94.5	86.0*	75.3
Outdoors (except in bad weather)	10.1	11.5*	2.8	7.5*	14.3
Both	8.0	9.0*	2.8	6.5	10.4
Number of sites (unweighted)	949	745	204	623	326
Number of sites (weighted)	68,583	57,224	11,359	42,776	25,807
How often hot meals are served					
Every day	45.6	39.8*	75.0	56.7*	27.1
Some days	22.2	22.7	19.8	21.7	23.1
Never served	32.2	37.5*	5.2	21.6*	49.8
Number of sites (unweighted)	947	744	203	622	325
Number of sites (weighted)	68,503	57,177	11,326	42,748	25,755

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-17. Sites reporting challenges with serving meals in a congregate setting, by summer meal program type and sponsor type

Sites that reported challenges with serving meals in congregate settings	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Reported challenges	13.9	15.1*	7.6	11.3	18.1
Number of sites (unweighted)	945	743	202	621	324
Number of sites (weighted)	68,439	57,128	11,311	42,702	25,737
Factors that are a challenge, among those that reported challenges with serving meals in a congregate setting					
Attracting children to eat a meal onsite	58.4	58.2	60.4	64.3	51.8
Number of sites (unweighted)	107	88	19	63	44
Number of sites (weighted)	8,985	8,129	856	4,733	4,252
Not offering meals to adults who are with children	50.0	51.0	40.1	53.0	46.9
Number of sites (unweighted)	101	84	17	58	43
Number of sites (weighted)	8,551	7,784	767	4,352	4,199
Shelter from the rain/heat	26.3	27.1	18.2	26.4	26.1
Number of sites (unweighted)	107	88	19	63	44
Number of sites (weighted)	9,104	8,248	856	4,733	4,371
Space for children to eat together	23.7	24.3	18.2	19.7	28.2
Number of sites (unweighted)	107	88	19	63	44
Number of sites (weighted)	9,049	8,193	856	4,798	4,252
Safety of children while at the site	17.0	18.1	7.0	18.2	15.6
Number of sites (unweighted)	108	89	19	63	45
Number of sites (weighted)	9,036	8,180	856	4,734	4,302
Keeping children on-site to eat the meal	5.3	5.8*	0.0	4.8	5.8
Number of sites (unweighted)	111	92	19	65	46
Number of sites (weighted)	9,354	8,498	856	4,843	4,511
Other	1.4	1.1	3.8	1.3	1.5
Number of sites (unweighted)	111	92	19	65	46
Number of sites (weighted)	9,354	8,498	856	4,843	4,511

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences are significant at the 0.05 confidence level using t-tests.

Table A-18. Role of site staff in menu planning, by summer meal program type and sponsor type

Role of site staff in menu planning	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Site staff do not have a role in menu planning	70.8	71.3	68.2	71.1	70.3
Site staff provide suggestions to the sponsor and/or meal vendor	19.3	19.6	18.2	18.7	20.4
Site staff plan menus and submit to sponsor for review	9.5	8.7	13.6	9.9	8.9
Other	0.4	0.4	0.0	0.3	0.4
Number of sites (unweighted)	940	739	201	617	323
Number of sites (weighted)	68,015	56,769	11,246	42,405	25,610

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

Table A-19. Food safety plans and procedures, by summer meal program type and sponsor type

Food safety characteristic	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Sites have a written food safety plan					
Yes	93.3	92.3*	98.2	95.4*	89.7
No	6.7	7.7*	1.8	4.6*	10.3
Number of sites (unweighted)	856	663	193	567	289
Number of sites (weighted)	61,946	51,183	10,763	38,715	23,231
Food safety procedures followed					
Wash hands before handling food	93.8	93.0*	98.1	94.8	92.2
Dispose of meals or foods that fail a quality check	86.8	85.5*	93.1	88.1	84.5
Wear gloves while handling food	86.0	83.9*	96.6	89.7*	79.6
Keep meals in a cooler or other cold storage until serving	85.4	85.7	83.8	86.6	83.4
Use thermometers to check food holding temperatures	81.1	78.7*	93.2	84.9*	74.8
Serve perishable foods within 2 hours if they are kept out	65.9	65.7	66.6	70.2*	58.7
Use thermometers to check cooking temperatures	65.5	60.8*	89.5	76.0*	48.0
Transport cold food in a cooler in a non-refrigerated vehicle	41.9	44.9*	26.5	41.1	43.2
Transport cold food in a refrigerated vehicle	21.3	21.3	21.4	21.9	20.4
Site serves pre-packaged meals and has no contact with food	3.2	3.8*	0.0	1.8*	5.4
Staff are ServSafe® certified, follow HACCP procedures, or follow Health Department regulations	1.9	1.8	2.1	2.5	0.8
Other	6.1	6.6	3.4	5.8	6.6
Average number of food safety procedures reported	6.4	6.3*	6.8	6.6*	5.9
Median number of food safety procedures reported	6.1	6.0	6.4	6.3*	5.7
Number of sites (unweighted)	941	739	202	620	321
Number of sites (weighted)	67,932	56,732	11,200	42,564	25,368

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences are significant at the 0.05 confidence level using t-tests.

Table A-20. Accommodations for special dietary needs, by summer meal program type and sponsor type

Accommodation characteristics	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Have guidelines					
Yes	84.8	82.4*	96.4	90.2*	75.7
No	15.2	17.6*	3.6	9.8*	24.3
Number of sites (unweighted)	859	669	190	564	295
Number of sites (weighted)	61,526	51,188	10,338	38,386	23,141
Types of guidelines, among sites reporting guidelines					
Accommodations are made on a case-by-case basis	79.9	79.3	82.2	81.6	76.4
Signed statements from child's physician or other healthcare professional required before an accommodation is made	59.4	56.8*	70.6	66.7*	45.0
Menus are adapted for children with allergies or special dietary needs	58.3	57.0	63.9	62.8*	49.5
Special training for staff	54.1	53.9	54.9	56.5	49.2
Special sanitation procedures in the kitchen and/or dining area	40.0	39.2	43.2	41.0	37.9
Staff required to inspect trays of children	34.7	34.3	36.7	37.2	30.0
A team of parents, site/sponsor staff, health professionals, and/or registered dietitians determine how best to address a child's dietary needs	23.3	21.0*	33.2	25.4	19.2
Separate tables required	17.9	18.3	16.3	15.5	22.6
Other	4.2	4.9*	1.0	3.9	4.8
Average number of guidelines	3.7	3.6	4.0	3.9*	3.3
Median number of guidelines	2.9	2.8	3.4	3.1*	2.3
Number of sites (unweighted)	746	563	183	508	238
Number of sites (weighted)	51,750	41,785	9,965	34,394	17,356

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-21. Adult meals, by summer meal program type and sponsor type

Summer meals received by adults	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO ¹	SFA	Non-SFA
Yes, and adults must pay for them	30.3	25.3*	55.3	45.3*	5.5
Yes, and they are free	5.1	6.0*	-	2.7*	9.1
No	64.6	68.8*	43.9	52.0*	85.4
Number of sites (unweighted)	944	740	204	619	325
Number of sites (weighted)	68,183	56,824	11,359	42,411	25,772

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences are significant at the 0.05 confidence level using t-tests.

¹ A small number of SSO sites offer meals to adults free of charge.

Table A-22. À la carte foods sold, by summer meal program type and sponsor type

À la carte foods sold	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Site sells à la carte foods to children					
Yes	7.4	6.5	12.1	8.1	6.2
No	92.6	93.5	87.9	91.9	93.8
Number of sites (unweighted)	940	737	203	617	323
Number of sites (weighted)	67,774	56,428	11,347	42,148	25,626
Where à la carte foods are sold, among sites selling à la carte food					
The meal service area	51.7	38.4*	87.0	69.0*	14.7
In vending machines	40.2	49.9*	14.5	30.1*	61.9
Away from the meal service area	21.3	25.5	10.2	13.0*	39.3
In snack bars	5.4	5.9	4.2	-	13.5
Other	2.7	3.7	0.0	0.0	8.4
Number of sites (unweighted)	79	54	25	50	29
Number of sites (weighted)	5,017	3,645	1,371	3,423	1,594
Types of à la carte foods sold, among sites selling à la carte foods					
Snacks such as chips, energy bars, or jerky	65.0	69.3	53.3	64.0	67.1
Water	61.3	59.1	67.1	60.3	63.4
100% juice	52.8	50.4	59.2	58.0	41.9
Beverages other than milk, 100% juice or water such as sports drinks or juice drinks	46.4	52.5	30.1	39.7	60.5
Breads or grain products such as bagels, pretzels, or crackers	38.7	35.3	47.9	39.4	37.4
Milk	38.5	29.8	61.6	52.2*	9.6
Baked goods or desserts such as cookies, cakes, or pastries (not including frozen desserts)	37.0	38.6	32.7	35.6	39.9
Prepared entrees such as sandwich, pizza, or burritos	30.2	26.8	39.4	41.9*	5.8
Fruits	28.2	26.5	32.7	34.5	15.0
Vegetables	23.9	20.7	32.7	34.5*	1.8
Candy	23.4	29.8*	6.1	14.4*	42.2
Meats or meat alternatives such as nuts, nut butters, cheese, or yogurt	22.7	24.0	19.3	25.1	17.9
Frozen desserts such as ice cream or popsicles	19.4	18.4	22.2	18.8	20.8

Table A-22. À la carte foods sold, by summer meal program type and sponsor type (continued)

À la carte foods sold	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Types of à la carte foods sold, among sites selling à la carte foods					
Prepared non-entrée food such as					
French fries or onion ring	14	16.9	6.3	13.7	14.7
Other	2.4	3.4	0.0	1.7	4.0
Number of sites (unweighted)	77	53	24	48	29
Number of sites (weighted)	4,930	3,592	1,338	3,336	1,594

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-23. Extra foods, by summer meal program type and sponsor type

Extra foods provided free to children in addition to summer meals	Percentage of sites				
	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Sites provide extra foods free to children					
Yes	16.3	18.6*	4.7	11.5*	24.2
No	83.7	81.4*	95.3	88.5*	75.8
Number of sites (unweighted)	935	732	203	614	321
Number of sites (weighted)	67,558	56,256	11,302	42,195	25,362
Types of food provided free to children, among sites that provide extra foods					
Fruits	69.5	69.8	64.1	74.1	65.8
Snacks such as chips, energy bars, or jerky	50.2	51.8*	18.0	38.7	59.3
Vegetables	47.2	46.7	57.8	51.5	43.9
Breads or grain products such as bagels, pretzels, or crackers	43.2	43	48.6	31.3*	52.7
Water	43.1	42.8	49.3	34.3	50.0
Prepared entrees such as sandwich, pizza, or burritos	39.1	38.1	60.0	35.3	42.1
Milk	38.4	37.6	54.8	39.2	37.8
100% juice	35.2	34.2	54.8	26.0	42.4
Baked goods or desserts such as cookies, cakes, or pastries (not including frozen desserts)	31.2	31.4	27.3	28.2	33.5
Meats or meat alternatives such as nuts, nut butters, cheese, or yogurt	30.8	29.5	54.8	25.6	34.8
Frozen desserts such as ice cream or popsicles	29.4	30.9*	0.0	27.4	31.0
Prepared non-entrée food such as French fries or onion rings	15.6	14.6	34.0	17.3	14.2
Beverages other than milk, 100% juice or water such as sports drinks or juice drinks	9.0	9.1	6.3	7.9	9.8
Leftover or second meals/pre- packaged foods	6.6	6.4	9.9	12.3	2.0
Candy	6.2	6.5*	0.0	6.8	5.7
Other	1.2	1.3	0.0	0.6	1.7
Number of sites (unweighted)	156	147	9	66	90
Number of sites (weighted)	10,868	10,341	527	4,796	6,072

Source: U.S. Department of Agriculture, Food and Nutrition Service, USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding.

*Differences are significant at the 0.05 confidence level using t-tests.

Table A-24. Breakfast schedules, by summer meal program type and sponsor type

Meal schedules	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Time meal service start time		Time of day			
Mean	8:06 AM	8:14 AM*	7:42 AM	7:57 AM*	8:34 AM
Median	7:57 AM	7:58 AM	7:29 AM	7:55 AM*	8:24 AM
Mode	8:00 AM	8:00 AM	7:30 AM	8:00 AM	8:00 AM
Unweighted n	615	446	169	465	150
Weighted n	42,054	32,572	9,482	31,564	10,489
Length of time given to eat		Minutes			
Mean	37.8	38.5	35.6	36.5*	42.1
Median	28.6	28.8	28.1	28.3	35.8
Mode	30.0	30.0	30.0	30.0	30.0
Unweighted n	487	352	135	369	118
Weighted n	33,161	25,329	7,832	25,328	7,833

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding. Includes start times after 6:00am and meal durations that were ≥ 5 minutes. Sample limited to sites that offer breakfast.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-25. Lunch schedules, by summer meal program type and sponsor type

Meal schedules	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Time meal service start time		Time of day			
Mean	11:37 AM	11:42 AM*	11:16 AM	11:29 AM*	11:51 AM
Median	11:28 AM	11:29 AM	10:59 AM	11:24 AM*	11:56 AM
Mode	12:00 PM	12:00 PM	11:00 AM	11:00 AM	12:00 PM
Unweighted n	863	669	194	574	289
Weighted n	62,168	51,793	10,375	39,241	22,927
Length of time given to eat		Minutes			
Mean	41.1	41.8*	37.6	38.4*	45.5
Median	29.4	29.7	28.5	28.7*	43.4
Mode	30.0	30.0	30.0	30.0	60.0
Unweighted n	670	519	151	438	232
Weighted n	47,884	39,210	8,674	29,981	17,903

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding. Includes start times after 6:00am and meal durations that were ≥ 5 minutes. Sample limited to sites that offer lunch.

* Differences are significant at the 0.05 confidence level using t-tests.

Table A-26. Supper schedules, by summer meal program type and sponsor type

Meal schedules	All sites	Program type		Sponsor type	
		SFSP	SSO	SFA	Non-SFA
Time meal service start time		Time of day			
Mean	5:04 PM	5:04 PM	-	4:54 PM	5:06 PM
Median	4:57 PM	4:56 PM	-	4:31 PM	5:15 PM
Mode	5:30 PM	5:30 PM	-	†	5:30 PM
Unweighted n	55	53	-	11	44
Weighted n	2,983	2,875	-	605	2,377
Length of time given to eat		Minutes			
Mean	39.7	40.1*	-	37.3	40.2
Median	29.9	40.3	-	30.0	41.5
Mode	60.0	60.0	-	30.0	60.0
Unweighted n	48	46	-	9	39
Weighted n	2,560	2,452	-	475	2,085

Source: USDA Summer Meals Study, Site Survey, summer 2018. Tabulations are weighted to be nationally representative of all sites offering the summer meal programs.

Note: Total may not add to 100 due to rounding. Includes start times after 6:00am and meal durations that were ≥ 5 minutes. Sample limited to sites that offer supper.

†Data contains 3 modes: 5:00pm, 5:30pm, and 6:00pm.

* Differences are significant at the 0.05 confidence level using t-tests.

Appendix B

Meal Patterns

Appendix B

Meal Patterns

Table B-1. Summer Food Service Program meal patterns

In effect in Summer 2018

Meal component		Component definition	Number offered
Breakfast: select all three			
Milk	1 cup	fluid milk	1
Fruit/vegetable	½ cup	juice, ¹ fruit and/or vegetable	1
Grains/bread ²	1 slice	bread or	1
	1 serving	cornbread or biscuit or roll or muffin or	
	¾ cup	cold dry cereal or	
	½ cup	hot cooked cereal or	
	½ cup	pasta or noodles or grains	
Lunch: Select all four			
Milk	1 cup	fluid milk	1
Fruit/vegetable	¾ cup	juice, ¹ fruit and/or vegetable	2
Grains/bread ²	1 slice	bread or	1
	1 serving	cornbread or biscuit or roll or muffin or	
	½ cup	hot cooked cereal or	
	½ cup	pasta or noodles or grains	
Meat/meat alternate	2 oz.	lean meat or poultry or fish ³ or	1
	2 oz.	alternate protein product or	
	2 oz.	cheese or	
	1 large	egg or	
	½ cup	cooked dry beans or peas or	
	4 Tbsp.	peanut or other nut or seed butter or	
	1 oz.	nuts and/or seeds ⁴ or	
	8 oz.	yogurt ⁵	
Snack: Select two of four			
Milk	1 cup	fluid milk	1
Fruit/vegetable	¾ cup	juice, ¹ fruit and/or vegetable	1
Grains/bread ²	1 slice	bread or	1
	1 serving	cornbread or biscuit or roll or muffin or	
	¾ cup	cold dry cereal or	
	½ cup	hot cooked cereal or	
	½ cup	pasta or noodles or grains	

Table B-1. Summer Food Service Program meal patterns (continued)

Meal component	Component definition		Number offered
Snack: Select two of four (continued)			
Meat/meat alternate	1 oz.	lean meat or poultry or fish ³ or	1
	1 oz.	alternate protein product or	
	1 oz.	cheese or	
	½ large	egg or	
	¼ cup	cooked dry beans or peas or	
	2 Tbsp.	peanut or other nut or seed butter or	
	1 oz.	nuts and/or seeds or	
	4 oz.	yogurt ⁵	

¹ Fruit or vegetable juice must be full-strength. At snack, juice cannot be served when milk is the only other snack component.

² Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified.

³ A serving consists of the edible portion of cooked lean meat or poultry or fish.

⁴ Nuts and seeds may meet only one-half of the total meat/meat alternate serving and must be combined with another meat/meat alternate to fulfill the lunch or supper requirement.

⁵ Yogurt may be plain or flavored, unsweetened or sweetened.

<https://www.fns.usda.gov/sfsp/meal-patterns>

Accessed February 15, 2017

Table B-2. School Meal Programs meal patterns

In effect in Summer 2018

Requirements	School Breakfast Program			National School Lunch Program		
	Grades K-5 ^a	Grades 6-8 ^a	Grades 9-12 ^a	Grades K-5	Grades 6-8 ^a	Grades 9-12
Meal pattern	Amount of food^b per week (minimum per day)					
Fruits (cups) ^{c,d}	5 (1) ^e	5 (1) ^e	5 (1) ^e	2½ (½)	2½ (½)	5 (1)
Vegetables (cups) ^{c,d}	0	0	0	3¾ (¾)	3¾ (¾)	5 (1)
Dark green ^f	0	0	0	½	½	½
Red/Orange ^f	0	0	0	¾	¾	1¼
Beans/Peas (Legumes) ^f	0	0	0	½	½	½
Starchy ^f	0	0	0	½	½	½
Other ^{f,g}	0	0	0	½	½	¾
Additional veg to reach total ^h	0	0	0	1	1	1½
Grains (oz. eq.) ⁱ	7-10 (1) ^j	8-10 (1) ^j	9-10 (1) ^j	8-9 (1)	8-10 (1)	10-12 (2)
Meats/Meat Alternates (oz. eq.)	0 ^k	0 ^k	0 ^k	8-10 (1)	9-10 (1)	10-12 (2)
Fluid milk (cups) ^l	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)	5 (1)
Other specifications: Daily amount based on the average for a 5-day week						
Min-max calories (kcal) ^{m,n,o}	350-500	400-550	450-600	550-650	600-700	750-850
Saturated fat (% of total calories) ^{n,o}	< 10	< 10	< 10	< 10	< 10	< 10
Sodium (mg) ^{n,p}	< 430	< 470	< 500	< 640	< 710	< 740
Trans fat ^{n,o}	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.					

^a In the SBP, the above age-grade groups are required beginning July 1, 2013 (SY 2013-14). In SY 2012-2013 only, schools may continue to use the meal pattern for grades K-12 (see § 220.23).

^b Food items included in each food group and subgroup and amount equivalents. Minimum creditable serving is ⅓ cup.

^c One quarter-cup of dried fruit counts as ½ cup of fruit; 1 cup of leafy greens counts as ½ cup of vegetables. No more than half of the fruit or vegetable offerings may be in the form of juice. All juice must be 100% full-strength.

^d For breakfast, vegetables may be substituted for fruits, but the first two cups per week of any such substitution must be from the dark green, red/orange, beans and peas (legumes) or "Other vegetables" subgroups as defined in §210.10(c)(2)(iii).

^e The fruit quantity requirement for the SBP (5 cups/week and a minimum of 1 cup/day) is effective July 1, 2014 (SY 2014-2015).

^f Larger amounts of these vegetables may be served.

^g This category consists of "Other vegetables" as defined in §210.10(c)(2)(iii)(E). For the purposes of the NSLP, "Other vegetables" requirement may be met with any additional amounts from the dark green, red/orange, and beans/peas (legumes) vegetable subgroups as defined in §210.10(c)(2)(iii).

^h Any vegetable subgroup may be offered to meet the total weekly vegetable requirement.

ⁱ At least half of the grains offered must be whole grain-rich in the NSLP beginning July 1, 2012 (SY 2012-2013), and in the SBP beginning July 1, 2013 (SY 2013-2014). All grains must be whole grain-rich in both the NSLP and the SBP beginning July 1, 2014 (SY 2014-15).

^j In the SBP, the grain ranges must be offered beginning July 1, 2013 (SY 2013-2014).

^k There is no separate meat/meat alternate component in the SBP. Beginning July 1, 2013 (SY 2013-2014), schools may substitute 1 oz. eq. of meat/meat alternate for 1 oz. eq. of grains after the minimum daily grains requirement is met.

^l Fluid milk must be low-fat (1 percent milk fat or less, unflavored) or fat-free (unflavored or flavored).

^m The average daily amount of calories for a 5-day school week must be within the range (at least the minimum and no more than the maximum values).

- ⁿ Discretionary sources of calories (solid fats and added sugars) may be added to the meal pattern if within the specifications for calories, saturated fat, trans fat, and sodium. Foods of minimal nutritional value and fluid milk with fat content greater than 1 percent milk fat are not allowed.
- ^o In the SBP, calories and trans fat specifications take effect beginning July 1, 2013 (SY 2013-2014).
- ^p Final sodium specifications are to be reached by SY 2022-2023 or July 1, 2022. Intermediate sodium specifications are established for SY 2014-2015 and 2017-2018. See required intermediate specifications in § 210.10(f)(3) for lunches and § 220.8(f)(3) for breakfast.

Table B-3. Child and Adult Care Food Program meal patterns

In effect in Summer 2018

Food components and food items	Ages 1-2	Ages 3-5	Ages 6-12	Ages 13-18 ¹ (at-risk afterschool programs and emergency shelters)
Breakfast: Select all three				
Fluid milk ²	4 fluid ounces	6 fluid ounces	8 fluid ounces	8 fluid ounces
Vegetables, fruits or portions of both ³	¼ cup	½ cup	½ cup	½ cup
Grains (oz. eq.) ^{4,5}				
Whole grain-rich or enriched bread	½ slice	½ slice	1 slice	1 slice
Whole grain-rich or enriched bread product, such as biscuit, roll, muffin	½ serving	½ serving	1 serving	1 serving
Whole grain-rich, enriched or fortified cooked breakfast cereal ⁶ , cereal grain, and/or pasta	¼ cup	¼ cup	½ cup	½ cup
Whole grain-rich, enriched or fortified ready-to-eat breakfast cereal (dry, cold) ^{6,7}				
Flakes or rounds	½ cup	½ cup	1 cup	1 cup
Puffed cereal	¾ cup	¾ cup	1¼ cup	1¼ cup
Granola	1/8 cup	1/8 cup	¼ cup	¼ cup
Lunch: Select all five				
Fluid milk ²	4 fluid ounces	6 fluid ounces	8 fluid ounces	8 fluid ounces
Meat/meat alternates				
Edible portions as served:				
Lean meat, poultry, or fish	1 ounce	1½ ounces	2 ounces	2 ounces
Tofu, soy products, or alternate protein products ⁸	1 ounce	1½ ounces	2 ounces	2 ounces
Cheese	1 ounce	1½ ounces	2 ounces	2 ounces
Large egg	½	¾	1	1
Cooked dry beans or peas	¼ cup	3/8 cup	½ cup	½ cup
Peanut butter or soy nut butter or other nut or seed butters	2 Tbsp.	3 Tbsp.	4 Tbsp.	4 Tbsp.
Yogurt, plain or flavored unsweetened or sweetened ⁹	4 ounces or ½ cup	6 ounces or ¾ cup	8 ounces or 1 cup	8 ounces or 1 cup

Table B-3. Child and Adult Care Food Program meal patterns (continued)

Food components and food items	Ages 1-2	Ages 3-5	Ages 6-12	Ages 13-18 ¹ (at-risk afterschool programs and emergency shelters)
Lunch: Select all five (continued)				
The following may be used to meet no more than 50 percent of the requirement:				
Peanuts, soy nuts, tree nuts, or seeds, as listed in program guidance, or an equivalent quantity of any combination of the above meat/meat alternates (1 ounce of nuts/seeds = 1 ounce of cooked lean meat, poultry or fish)	½ ounce = 50%	¾ ounce = 50%	1 ounce = 50%	1 ounce = 50%
Vegetables ³	1/8 cup	¼ cup	½ cup	½ cup
Fruits ^{3,10}	1/8 cup	¼ cup	¼ cup	¼ cup
Grains (oz eq) ⁴				
Whole grain-rich or enriched bread	½ slice	½ slice	1 slice	1 slice
Whole grain-rich or enriched bread product, such as biscuit, roll, muffin	½ serving	½ serving	1 serving	1 serving
Whole grain-rich, enriched or fortified cooked breakfast cereal ⁶ , cereal grain, and/or pasta	¼ cup	¼ cup	½ cup	½ cup
Snack: Select two of five				
Fluid milk ²	4 fluid ounces	4 fluid ounces	8 fluid ounces	8 fluid ounces
Meat/meat alternates				
Edible portions as served:				
Lean meat, poultry, or fish	½ ounce	½ ounce	1 ounce	2 ounces
Tofu, soy products, or alternate protein products ⁸	½ ounce	½ ounce	1 ounce	2 ounces
Cheese	½ ounce	½ ounce	1 ounce	2 ounces
Large egg	½	½	½	1
Cooked dry beans or peas	1/8 cup	1/8 cup	¼ cup	½ cup
Peanut butter or soy nut butter or other nut or seed butters	1 Tbsp.	1 Tbsp.	2 Tbsp.	4 Tbsp.
Yogurt, plain or flavored unsweetened or sweetened ⁹	2 ounces or ¼ cup	2 ounces or ¼ cup	4 ounces or ½ cup	8 ounces or 1 cup
Peanuts, soy nuts, tree nuts, or seeds	½ ounce	½ ounce	1 ounce	1 ounce = 50%
Vegetables ³	½ cup	½ cup	¾ cup	¾ cup
Fruits ³	½ cup	½ cup	¾ cup	¾ cup

Table B-3. Child and Adult Care Food Program meal patterns (continued)

Food components and food items	Ages 1-2	Ages 3-5	Ages 6-12	Ages 13-18 ¹ (at-risk afterschool programs and emergency shelters)
Snack: Select two of five (continued)				
Grains (oz. eq.)⁴				
Whole grain-rich or enriched bread	½ slice	½ slice	1 slice	1 slice
Whole grain-rich or enriched bread product, such as biscuit, roll, muffin	½ serving	½ serving	1 serving	1 serving
Whole grain-rich, enriched or fortified cooked breakfast cereal ⁶ , cereal grain, and/or pasta	¼ cup	¼ cup	½ cup	½ cup
Whole grain-rich, enriched or fortified ready-to-eat breakfast cereal (dry, cold) ^{6,7}				
Flakes or rounds	½ cup	½ cup	1 cup	1 cup
Puffed cereal	¾ cup	¾ cup	1¼ cup	1¼ cup
Granola	1/8 cup	1/8 cup	¼ cup	¼ cup

¹ Larger portion sizes than specified may need to be served to children 13 through 18 years old to meet their nutritional needs.

² Must be unflavored whole milk for children age one. Must be unflavored low-fat (1 percent) or unflavored fat-free (skim) milk for children two through five years old. Must be unflavored low-fat (1 percent), unflavored fat-free (skim), or flavored fat-free (skim) milk for children six years old and older.

³ Pasteurized full-strength juice may only be used to meet the vegetable or fruit requirement at one meal, including snack, per day.

⁴ At least one serving per day, across all eating occasions, must be whole grain-rich. Grain-based desserts do not count towards meeting the grains requirement.

⁵ Meat and meat alternates may be used to meet the entire grains requirement a maximum of three times a week. One ounce of meat and meat alternates is equal to one ounce equivalent of grains.

⁶ Breakfast cereals must contain no more than 6 grams of sugar per dry ounce (no more than 21.2 grams sucrose and other sugars per 100 grams of dry cereal).

⁷ Until October 1, 2019, the minimum serving size for any type of ready-to-eat breakfast cereals is 1/4 cup for children ages 1-2; 1/3 cup for children ages 3-5; 3/4 cup for children ages 6-12 and ages 13-18.

⁸ Alternate protein products must meet the requirements in appendix A to CFR Part 226.

⁹ Yogurt must contain no more than 23 grams of total sugars per 6 ounces.

¹⁰A vegetable may be used to meet the entire fruit requirement. When two vegetables are served at lunch or supper, two different kinds of vegetables must be served.