

## FNS Research Corner

### Summary of Research

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The FNS Research Corner provides a continuing series to summarize recently completed and current research conducted by the U.S. Department of Agriculture's Food and Nutrition Service (FNS) in the area of child nutrition (CN). For further information, contact the Office of Policy Support (OPS) at (703) 305-2117. Links to published studies and reports as well as descriptions of ongoing studies conducted by OPS are available from the FNS web site at <http://www.fns.usda.gov/ops/research-and-analysis>.

### RECENTLY COMPLETED RESEARCH

#### **CHILD NUTRITION PROGRAM OPERATIONS DURING THE COVID-19 PANDEMIC, MARCH THROUGH SEPTEMBER 2020**

This data collection fulfills states' reporting requirements and describes trends in program participation during the early months of the COVID-19 pandemic. It is part of an ongoing study series examining CN program operations, repurposed to collect waiver reports from all states.

#### Key Findings:

- States reported that waivers of CN program requirements authorized by the Families First Coronavirus Response Act (FFCRA) improved services to children.
- The most-used waivers permitted use of the Seamless Summer Option (SSO) and Summer Food Service Program (SFSP) during unanticipated school closures and enabled new meal service methods that prioritized access and safety.
- SSO and SFSP were the primary CN programs used to serve meals. While the total number of meals served through CN programs was lower than that of a typical school year, more than twice as many SSO and SFSP meals were served in July 2020 than July 2019.
- The pandemic disrupted Child and Adult Care Food Program (CACFP) operations more in childcare centers than in family daycare homes.

## **CHILD NUTRITION PROGRAM OPERATIONS DURING THE COVID-19 PANDEMIC, JULY 2020 THROUGH DECEMBER 2021**

This data collection fulfills states' reporting requirements and describes trends in program participation during the COVID-19 pandemic. It is part of an ongoing study series examining CN program operations, repurposed to collect waiver reports from all states. This iteration of the study includes information about pandemic operations reported by 1,094 School Food Authorities (SFAs) through a web-based survey.

### Key Findings:

- During SY 2020–2021 most SFAs reported some or all students received instruction in school buildings. As schools resumed in-person instruction, most schools served meals in a cafeteria.
- FNS waivers contributed to greater access to healthy meals across all CN programs.
- Area Eligibility waivers were key to improving access to meals through CACFP and SFSP in SY 2020–2021 and Summer 2021.
- School Food Authorities reported three persistent challenges during SY 2020–2021 and Fall 2021: supply chain issues and food shortages; staffing; and obtaining meal packaging.
- By September 2021 (when most meals were served free and most children were back in school) the number of meals served through the National School Lunch Program (NSLP), Summer Breakfast Program (SBP), SSO, and SFSP had returned to pre-pandemic levels.

## **EVALUATION OF THE USDA SUMMER EBT DEMONSTRATIONS: LESSONS LEARNED FROM MORE THAN A DECADE OF RESEARCH**

The 2010 Agriculture Appropriations Act (PL 111-80) provided grant funding to states and Indian Tribal Organizations (ITOs) to test innovative strategies to end childhood hunger and food insecurity in the summer months. The Summer electronic benefit transfer (EBT) demonstrations, which began in 2011, were intended to supplement and bolster FNS nutrition assistance during the summer months. Prior research has found that childhood and household food insecurity rises when schools are out of session and school meals are unavailable.

The Act also provided funding for a rigorous evaluation of the newly authorized demonstration projects. The first evaluation studied how the demonstrations unfolded over the period 2011 to 2014 as well as impacts on outcomes such as food security and children's nutrition.

Subsequent evaluations were conducted as the demonstrations expanded and examined demonstrations operating from 2015 to 2018 and those operating from 2019 to 2022. These evaluations focused on objectives related to program implementation and administration. During the 2019 to 2022 evaluation period, only three ITOs continued to operate the

demonstrations. This evaluation provided highly detailed information on unique operational opportunities and challenges in ITOs.

Key Findings:

- Summer EBT reduces childhood food insecurity by a significant amount, including the most severe form of food insecurity.
- Summer EBT promotes a healthy diet.
- While parents and caregivers have positive opinions of Summer EBT some eligible households do not redeem some or all of their benefit.

## CHILD NUTRITION DASHBOARDS

The Child Nutrition Dashboards are designed to make data more accessible to FNS, State agency partners, and the public. The public dashboard provides a user-friendly platform for accessing data published in the CN tables. Users can examine national and state level visualization of meals served, participation, and funding data for the NSLP, SBP, CACFP, and SFSP. The dashboard can be used by federal, state, and local organizations to assess trends in CN program activity from 1990 through 2023. The dashboard was developed with extensive stakeholder feedback to ensure it was designed in conjunction with users' interests and needs.

Key Findings:

- Access the Child Nutrition Dashboard here: [Child Nutrition Dashboard | Food and Nutrition Service \(usda.gov\)](#)

## RESULTS OF USDA'S FNS-ADMINISTERED SFA SURVEY II ON SUPPLY CHAIN DISRUPTION AND STUDENT PARTICIPATION

The COVID-19 pandemic significantly impacted school meal operations and has contributed to lasting supply chain issues affecting the cost and availability of food and labor. The School Food Authority Survey II on Supply Chain Disruption and Student Participation was administered to all SFAs operating CN programs in schools to gather information on the impacts of continued supply chain disruptions and the return to standard operations during the first quarter of SY 2022–23.

Key Findings:

- Ninety-seven percent of SFAs continue to experience one or more supply chain-related challenges.
- There are some signs of improvement in how operational challenges are impacting school food service.
- A vast majority of SFAs (92 percent) accepted all or some Supply Chain Assistance (SCA) funds in SY 2021–2022.
- The end of the Seamless Summer Option Waiver and other waivers used during SY 2021–2022 has been a source of challenges for schools and parents/guardians.

- The financial status of SFAs in SY 2021–2022 was more favorable than in a typical pre-pandemic year, while the financial status of SFAs in the first quarter of SY 2022–2023 was less favorable.

## RESEARCH IN PROGRESS

### EXPECTED IN 2024

#### USDA CHILD AND ADULT CARE FOOD PROGRAM PARTICIPATION AMONG U.S. CHILDCARE PROVIDERS

USDA’s Child and Adult Care Food Program (CACFP) provides reimbursements to participating providers for nutritious meals and snacks served to children in their care. Despite the benefits of CACFP, many eligible providers do not participate in the program. This study uses data from the National Survey of Early Care and Education to compare the characteristics of childcare centers and day care homes by CACFP participation. About two-thirds of childcare centers and day care homes participated in 2019, and participating providers were more likely to serve minority children, children from food insecure households, and disadvantaged communities. Most providers operating in 2019 were still operating in October 2020 during the pandemic, and most continued to participate in CACFP.

#### CACFP PROVIDER CHARACTERISTICS STUDIES

Preliminary evidence from the study of CN operations at the start of the pandemic led FNS to consider the differential impacts of the pandemic on two less frequently studied populations of CACFP providers, emergency shelters and adult daycare centers. The CACFP Emergency Shelter Characteristics Study and the CACFP Adult Daycare Characteristics Study aim to better understand a) the characteristics of emergency shelters and adult daycare centers participating in CACFP; b) the services they offer; c) the populations they serve; and d) any barriers to participation. Both studies relied on a census of providers who operated CACFP in Fiscal Year 2023 and a range of secondary data sources, including federal and state data sets. The findings from these studies will support guidance and technical assistance to state agencies and providers.

#### CACFP INTEGRITY STUDIES

U.S. laws have been in place since 2002 to reduce improper payments made by federal agencies. An improper payment is “any payment that should not have been made or that was made in an incorrect amount, including an overpayment or underpayment” (see Public Law 116-117). Federal agencies must give Congress information about the improper payments they make for federal programs. The Erroneous Payments in Childcare Centers Study (EPICCS) estimated the improper payments FNS makes when reimbursing child care centers for breakfast and lunch meals served through CACFP. Other studies—such as the series of CACFP Sponsor Tiering studies and feasibility studies examining ways to measure meal claiming errors in Family Day Care Homes (FDCHs)—have looked at other aspects of payment accuracy in CACFP. For



example, the CACFP Meal Claiming Error Methods Study is assessing the feasibility of using data from CACFP State Monitoring Reviews to estimate improper payments associated with meal claiming errors in FDCHs. Previous efforts to develop a reliable method for validating meal reimbursement vs. meals served to children at FDCHs produced unreliable results.

### **FAMILY DAY CARE HOME PARTICIPATION STUDY**

Since 2008, the number of Family Daycare Homes (FDCHs) participating in the Child and Adult Care Food Program (CACFP) has declined. Recruiting and retaining FDCHs can be challenging because of CACFP program and state licensing requirements, negative perception of CACFP program requirements and reimbursement rates, and low awareness of CACFP. While many studies have focused on CACFP program operators, few FNS studies have specifically focused on family day care homes. This study examines the reasons why FDCH program operators discontinue participation and identifies suggestions for feasible policy and program flexibilities and supports, including technical assistance, to retain and attract new homes in CACFP.

### **EVALUATION OF THE TEAM NUTRITION E-STAR TRAINING PROGRAM**

In 2019, USDA's Team Nutrition awarded a Training Grant to the Michigan Department of Education to implement the E-STAR program. E-STAR stands for Enhanced Strategies, Training, Action Plans, and Resources, and was developed by Team Nutrition in collaboration with the Institute of Child Nutrition. E-STAR is a two-year program that provides training for School Nutrition Managers and ongoing support from a Mentor to help Managers develop and implement action plans to improve school meal quality. This study is a process evaluation of the Michigan Department of Education's implementation of E-STAR, which was intended to begin in the summer of 2020 but was delayed one year due to the COVID-19 pandemic.

### **FY 2018 AND FY 2019 FARM TO SCHOOL GRANT EVALUATION**

Each year since 2013, USDA has provided between 65 and 177 Farm to School Grants, totaling \$5 to \$10 million per year. This project is evaluating baseline, progress, and final reports submitted by the 197 fiscal year (FY) 2018 and 2019 Farm to School Grant recipients. This project will collect information on the activities and impacts reported by FY 2018 and 2019 grantees as well as grantees' reported needs and challenges with respect to implementation of activities and the grant itself. This evaluation will help FNS better understand the experience of state, local and regional organizations providing farm to school activities and the value provided by the Farm to School Grant Program. It will also support FNS to continue to improve the grant process and the technical assistance it provides to Farm to School Grant recipients and other farm to school stakeholders.



## **2023 FARM TO SCHOOL CENSUS**

This census of all SFAs participating in the NSLP collects information on SFA participation in farm to school and the scope and details of the activities they engage in (i.e., local food procurement and promotion, gardening, and food/agriculture education). The 2023 Census was fielded in Fall 2023 and collected information about school year (SY) 2022–23. It provides the only nationally representative data available on farm to school participation and activities in the United States. Previous censuses were conducted in 2013, 2015, and 2019, allowing for analysis of trends over time in Farm to School participation and activities.

## **2023 SUMMER NON-CONGREGATE SPONSOR SURVEY**

In spring 2024, FNS conducted a survey of organizations who sponsored non-congregate summer meals sites in summer 2023. This census collected information on sponsors perception of the summer non-congregate meal option, how their sites operated non-congregate meal service in summer 2023, and their plans for summer 2024. The information will be combined with data from state agencies to produce a more complete picture of initial implementation of the summer non-congregate meal service option and inform future guidance and technical assistance for providers and state agencies.

## **EXPECTED IN 2025**

### **CHILD NUTRITION PROGRAM OPERATIONS DURING THE COVID-19 PANDEMIC, JULY 2021 TO JUNE 2022**

This study is part of an ongoing study series examining CN program operations, repurposed to collect information about the response to the COVID-19 pandemic. This iteration of the study includes a survey of state CN agencies and a survey of SFAs. The State agency survey examines the implementation of COVID-19 waivers and universal free school meals at the state level. The SFA survey will examine school meal prices, funding, and expenditures as well as school meal preparation methods at a sample of SFAs.

### **SCHOOL FOOD PREPARATION STUDY**

Due to increasing interest in serving more local and scratch-cooked foods in school meals, this project aims to help FNS understand food preparation methods used by SFAs and how SFAs incorporate fresh food preparation into their operations. Case study data will be collected from a diverse set of 36 SFAs during school year 2024–25. Data will be collected through questionnaires, in-depth interviews, document review, and site visits. The findings from this study may be used to create resources and technical assistance as well as inform future policy guidance and rulemaking to help SFAs include fresh food preparation in their operations more easily.



## **STUDY OF NUTRITION AND ACTIVITY IN CHILD CARE CENTERS II**

The Study of Nutrition and Activity in Child Care Settings (SNACS-II) is the second comprehensive study of CACFP that examines the characteristics of providers and participants, the food and nutrition content of meals and snacks, operating costs, and many other program topics. The study will compare changes over time since the first study was fielded in 2016. Since nutrition guidelines were updated in 2017, SNACS II will examine changes in compliance and program offerings. SNACS II also measures physical activity among children, a unique contribution of the study. Data was collected in the first half of 2023, and final reports will be available in summer 2025.

## **RESULTS OF USDA'S FNS-ADMINISTERED SFA SURVEY III ON SUPPLY CHAIN DISRUPTION AND STUDENT PARTICIPATION**

The COVID-19 pandemic significantly impacted school meal operations and has contributed to lasting supply chain issues affecting the cost and availability of food and labor. The School Food Authority Survey III on Supply Chain Disruption and Student Participation has been administered to all SFAs operating CN programs in schools to gather information on the impacts of continued supply chain disruptions and the return to standard operations during the first quarter of SY 2023–2024. Data and an accompanying interactive dashboard are expected to be published by the end of 2024.

## **EXPECTED IN 2026 AND BEYOND**

### **ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY IV**

The fourth study on Access, Participation, Eligibility and Certification (APEC IV) will provide FNS with key information on annual error rates and improper payments for the National School Lunch Program and School Breakfast Program. In addition, APEC IV will identify school food authority, school and student/household characteristics that may be related to errors; test a new method of using cameras to collect meal observation data; and evaluate the accuracy of certification decisions made using different types of applications. Data collection is ongoing and will conclude in June 2024.

### **CHILD NUTRITION PROGRAM OPERATIONS DURING THE COVID-19 PANDEMIC, JULY 2023 TO JUNE 2024**

This study is part of an ongoing study series examining CN program operations. A survey of State agencies will focus on the implementation of summer non-congregate meal service in summer 2024, implementation of updated meal pattern requirements, and the role of state data systems implementing Summer-EBT and non-congregate meal service.



## **2024–2025 NATIONAL SCHOOL FOODS STUDY**

Given FNS's commitment to periodically review the school meal programs and provide critical information to policymakers and other stakeholders, the 2024–2025 National School Foods Study (NSFS), a combination of the School Nutrition and Meal Cost Study-II (SNMCS-II) and School Food Purchase Study-IV (SFPS-IV), will be the newest contribution to the two ongoing study series that examine topics such as the nutritional quality of meals, meal costs, student participation, plate waste, and school food purchase practices.

This study will provide a complete picture of the school food environment, food service operating policies and practices, student participation, and other characteristics of SFAs and schools participating in the National School Lunch Program, School Breakfast Program, and the Fresh Fruit and Vegetable Program, as well as develop national estimates for the cost of food purchases and an understanding of the mix of program and non-program foods purchased, with comparisons to the previous studies. In addition to the 48 contiguous states, this study will include research on the cost to produce school meals for five outlying areas (Alaska, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands).

Data collection will begin in early SY 2024–25 and will continue throughout the school year.

## **RESEARCH CONDUCTED THROUGH GRANT ACTIVITIES**

### **EQUITABLE ACCESS IN CHILD NUTRITION PROGRAMS**

FNS awarded a cooperative agreement to the Food Research & Action Center (FRAC) to fund projects researching 1) barriers to equitable access and program delivery in the federal CN programs and 2) strategies to eliminate these barriers. In Fall 2023 FRAC awarded \$1.1 million to five subgrantees located in Texas, Maryland, Kentucky, Indiana, and Minnesota to conduct research on equitable access across a broad swathe of FNS CN programs.

### **SCHOOL FOODSERVICE WORKFORCE COOPERATIVE AGREEMENT**

This cooperative agreement, awarded to the University of Wisconsin in April 2024, will support research projects to better understand and generate information related to the school foodservice workforce focused on dimensions such as worker satisfaction, workforce experience, and training and development. Relevant research activities may include, but are not limited to, examining career pathways for the school foodservice workforce, identifying skills used on the job by role, and analyzing worker satisfaction and workplace conditions.

