



November 2022

NATIONAL SCHOOL LUNCH PROGRAM

USDA Could Enhance Assistance to States and Schools in Providing Seafood to Students

Accessible Version

GAO Highlights

Highlights of [GAO-23-105179](#), a report to congressional requesters

Why GAO Did This Study

USDA helps millions of children from low-income households access healthy meals by purchasing food, including seafood, for the NSLP. USDA-purchased foods represent about 15 to 20 percent of the food served in the NSLP. According to the DGA, programs, such as the NSLP, can play an essential role in providing access to healthy meals. This can help reduce the health risks children may face from consuming a poor diet. Seafood offers particular health benefits, including omega-3 fatty acids, which can aid in the prevention of heart disease.

GAO was asked to review USDA's purchases of seafood for the NSLP. This report discusses (1) USDA's purchases of seafood for the NSLP, (2) factors affecting selected states' and SFAs' efforts to provide seafood to students, and (3) USDA's efforts to help address these factors.

GAO analyzed data from USDA on food purchases, including seafood, from fiscal years 2014 through 2019; interviewed state and SFA officials from a non-generalizable sample of 10 major domestic seafood-producing states with a range of NSLP funding levels; and interviewed USDA officials. GAO excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation.

What GAO Recommends

GAO is making three recommendations, including that USDA develop a plan to enhance its assistance in providing seafood to students, and for USDA and NOAA to collaborate and share NOAA's vendor information. USDA and NOAA agreed with our recommendations.

View [GAO-23-105179](#). For more information, contact Steve D. Morris at (202) 512-3841 or morris@gao.gov.

November 2022

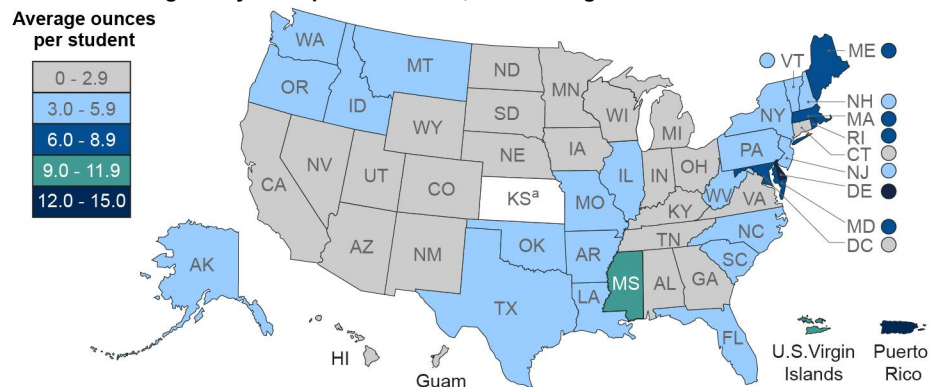
NATIONAL SCHOOL LUNCH PROGRAM

USDA Could Enhance Assistance to States and Schools in Providing Seafood to Students

What GAO Found

From states' and school food authorities' (SFAs) orders, the U.S. Department of Agriculture (USDA) purchased a limited quantity of seafood compared to other animal proteins (beef, eggs, pork, and poultry) for the National School Lunch Program (NSLP) for fiscal years 2014 through 2019. USDA's seafood purchases were between 1 and 2 percent of all animal proteins purchased annually for the program. Nationally, the average quantity of USDA-purchased seafood per student through the NSLP over this period was about 3 ounces per year. According to the 2020–2025 Dietary Guidelines for Americans (DGA), school-age children should consume between 4 and 10 ounces of seafood per week.

Average Quantity of Seafood That USDA Purchased per Student Participating in the National School Lunch Program by State per Fiscal Year, 2014 through 2019



Sources: GAO analysis of U.S. Department of Agriculture (USDA) information; Map Resources (map). | GAO-23-105179

^aKansas receives cash payments in lieu of USDA-purchased foods. Because Kansas does not order USDA-purchased food, Kansas is not represented in the seafood data reported for this program.

Officials from 10 selected states and SFAs, which operate the NSLP in schools, told GAO that several factors, such as student preference, concerns about allergens, and cost, affected their efforts to provide seafood to students. However, officials from six of 10 SFAs expressed an interest in serving more seafood, including some citing it as a healthy option. USDA officials said that at least some of the factors could be addressed with nutrition education.

USDA offers limited seafood-related assistance to states and SFAs. USDA has not developed a plan to enhance its assistance that could draw on existing efforts, such as webinars or USDA's previous efforts, including lessons learned from two USDA pilot projects. Without a plan, USDA may be missing an opportunity to enhance its seafood-related assistance.

The National Oceanic and Atmospheric Administration (NOAA) provides some seafood-related assistance to USDA, but USDA has not fully leveraged its relationship with NOAA. NOAA officials told GAO that it collects and maintains what is likely the most complete list of seafood vendors in the United States, but it does not share this list with USDA. Without obtaining and sharing such information, USDA may miss an opportunity to further assist states and SFAs in providing seafood to students.

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Abbreviations

CSFP	Commodity Supplemental Food Program
DGA	Dietary Guidelines for Americans
FDPIR	Food Distribution Program on Indian Reservations
NOAA	National Oceanic and Atmospheric Administration

NSLP	National School Lunch Program
SFA	School Food Authority
SNAP	Supplemental Nutrition Assistance Program
TEFAP	The Emergency Food Assistance Program
USDA	U.S. Department of Agriculture

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November 17, 2022

The Honorable Tammy Baldwin
Chair
Subcommittee on Agriculture, Rural Development,
Food and Drug Administration, and Related Agencies
Committee on Appropriations
United States Senate

The Honorable Jeff Merkley
United States Senate

The Honorable Jack Reed
United States Senate

The U.S. Department of Agriculture (USDA) helps millions of children from low-income households access healthy meals by, among other things, purchasing food, including seafood, for the National School Lunch Program (NSLP). In 2020, the NSLP served almost 23 million children, or about 41 percent of all school-age children in the United States. According to a 2015 Congressional Budget Office report,¹ children participating in the NSLP are more likely to identify as Black or Hispanic and come from households headed by a single woman.² Nearly half of low-income households with children that receive a free or reduced-price lunch experience food insecurity or difficulty providing enough food for all members of the household.

With the goal of improving nutrition nationwide, USDA ensures that the meals offered through the NSLP include sources of protein, as recommended by the *2020–2025 Dietary Guidelines for Americans*

¹Congressional Budget Office, *Child Nutrition Programs: Spending and Policy Options* (Washington, D.C.: September 2015).

²According to the *2020–2025 Dietary Guidelines for Americans*, of the children and adolescents in the United States who are overweight or have obesity, the prevalence is higher among non-Hispanic Black and Hispanic children. See U.S. Department of Agriculture and U.S. Department of Health and Human Services, *Dietary Guidelines for Americans, 2020–2025*, 9th ed. (December 2020).

(DGA).³ USDA and the Department of Health and Human Services jointly produce the DGA, which states that government programs such as the NSLP can play an essential role in providing access to healthy meals and educational resources to support healthy dietary patterns for all children and adolescents. The school meal programs can provide nearly two-thirds of a participating student's daily calories during the school year and, therefore, play an influential role in the development of a healthy dietary pattern.⁴

The DGA highlights the importance of encouraging healthy dietary patterns at every life stage, from infancy through older adulthood. Diet-related chronic diseases, such as cardiovascular disease, type 2 diabetes, obesity, and some types of cancer, are prevalent among Americans and pose a major public health problem.⁵ About 40 percent of children and adolescents are overweight or have obesity;⁶ the rate of obesity increases throughout childhood and the teen years. Youth with obesity are more likely to have immediate health risks, including high blood pressure and high cholesterol. They also are at increased risk of cardiovascular disease and type 2 diabetes, beginning as soon as the teenage years and into adulthood. The DGA further states that the importance of following the Dietary Guidelines across all life stages was highlighted with the emergence of COVID-19, as people living with diet-related chronic conditions and diseases are at an increased risk of severe illness from the coronavirus.⁷

³In accordance with statute, the DGA is based on the preponderance of current scientific and medical knowledge. See 7 U.S.C. § 5341. All federal dietary guidance must be reviewed by the secretaries of Agriculture and Health and Human Services for consistency with the DGA. These guidelines must be published every five years.

⁴These programs include the NSLP and the School Breakfast Program. Seafood is generally served only during lunch. USDA-purchased foods typically represent about 15 to 20 percent of the food served in the NSLP.

⁵For more information on diet-related chronic health conditions, see GAO, *Chronic Health Conditions: Federal Strategy Needed to Coordinate Diet-Related Efforts*, [GAO-21-593](#) (Washington, D.C.: Aug. 17, 2021).

⁶This situation appears to be worsening. The *2015–2020 Dietary Guidelines for Americans* stated that about 33 percent of children and youth were overweight or had obesity.

⁷See U.S. Department of Agriculture and U.S. Department of Health and Human Services, *Dietary Guidelines for Americans, 2020–2025*.

According to USDA documents and the DGA, seafood contains a range of nutrients—notably, omega-3 fatty acids, which can aid in the prevention of heart disease.⁸ According to the Department of Health and Human Services' Food and Drug Administration documents, eating seafood as part of a healthy diet may also reduce the risk of obesity.⁹ In addition, seafood offers other health benefits. For example, it provides more vitamin B12 and vitamin D than any other type of food and contains other minerals like selenium, zinc, and iodine.¹⁰ The DGA reports that only about 10 percent of Americans are eating the recommended amount of seafood, which is at least 8 ounces per week. In addition, the DGA recommends that school-age children (ages 5 to 18 years) consume between 4 and 10 ounces of seafood per week.¹¹

You asked us to review USDA purchases of seafood for the National School Lunch Program. This report (1) examines USDA's purchases of seafood for its National School Lunch Program, (2) identifies factors affecting selected states' and school food authorities' efforts to provide seafood to students, and (3) assesses the extent to which USDA has helped address these factors.

To examine USDA purchases of seafood for the NSLP, we analyzed USDA data on its purchases of seafood and other animal proteins, including beef, eggs, pork, and poultry, as well as student participation for

⁸For the purposes of this report, we use the DGA description of seafood, which includes catfish, cod, pollock, salmon, and tuna. Also, according to the National Institutes of Health's Office of Dietary Supplements documents, omega-3s are important components of the membranes that surround each cell in your body. They provide calories to give your body energy and have many functions in your heart, blood vessels, lungs, immune system, and endocrine system—the network of hormone-producing glands.

⁹The Food and Drug Administration is responsible for promoting the public health by fostering good nutrition and ensuring the safety of our nation's food supply.

¹⁰According to the National Institutes of Health's Office of Dietary Supplements documents, vitamin B12 is a nutrient that helps keep your body's blood and nerve cells healthy and also helps prevent anemia. Vitamin D helps the body absorb calcium, which is necessary for strong bones. In addition, the body's immune system needs vitamin D to fight off invading bacteria and viruses. Selenium is important for protecting the body from damage due to infections. Zinc is also important for helping the immune system fight off invading bacteria and viruses. Iodine is a mineral that the body uses to make thyroid hormones that control the body's metabolism and other important functions.

¹¹These recommendations for seafood consumption include 4–8 ounces for children 5 through 8 years old, 6–10 ounces for children 9 through 13 years old, and 8–10 ounces for children 14 through 18.

the NSLP, from fiscal years 2014 through 2019.¹² We excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation, since schools closed and student participation in the NSLP declined. We reviewed USDA seafood purchase data from USDA's Web-Based Supply Chain Management database,¹³ and we discussed general trends in seafood purchases with USDA officials to get their perspectives on these trends.

To assess the reliability of USDA's data, we reviewed documentation for USDA's supply chain management database; reviewed regulations for the collection of the participation data and assessment of those data collection systems, and interviewed USDA officials regarding data quality controls, among other things. We conducted electronic testing of the data for any obvious errors. We determined that the data were sufficiently reliable for the purposes of reporting the quantity and types of seafood and other animal proteins states and school food authorities (SFAs) ordered and USDA purchased, per-student purchases of seafood and other animal proteins in the NSLP, vendor information on seafood purchases, and student participation data.

To identify factors that affected selected states' and SFAs' efforts to provide seafood to students through the NSLP, we interviewed state officials responsible for administering the NSLP at the state level and SFA officials responsible for operating the NSLP at the schools.¹⁴ We selected a non-generalizable sample of 10 states (Alabama, Alaska, California, Florida, Louisiana, Maine, Massachusetts, Mississippi, Texas, and Washington). We selected these states because they were more likely to have experience with seafood and, thus, may be affected by these factors to a lesser extent than other states, as indicated by the presence of seafood processing facilities and catfish production sites and a high

¹²For this report, we define "poultry" as chicken and turkey.

¹³USDA's supply chain management database includes information about the food product type, vendor, state that ordered and received food products, delivery date, quantity, and value. The data we analyzed from USDA's supply chain management database match the purchase data available on USDA's public website. USDA officials told us that these data represent the quantities in the contracts awarded to vendors, which are the maximum amounts for which USDA would have paid vendors to supply to the states. These data, however, do not always reflect the quantity that was actually delivered and invoiced by the vendor and paid for by USDA.

¹⁴In many cases, school food authorities are school districts that are responsible for operating the NSLP in schools.

volume of domestic landings of seafood in the state.¹⁵ They also represent a range of NSLP funding levels.

We asked representatives from these states and an SFA from each state to identify the primary factors affecting their efforts to provide seafood, including ordering, receiving, and serving seafood purchased either by USDA or directly by the SFA from a commercial vendor for the NSLP. The list of factors that we identified affecting selected states' and SFAs' efforts to provide seafood to students through the NSLP is not intended to be exhaustive. However, the list provides examples of key factors that affect selected states' and SFAs' efforts to provide seafood to students through the NSLP.¹⁶

To assess the extent to which USDA has helped address factors affecting selected states' and SFAs' efforts to provide seafood to students, we interviewed USDA officials to identify the types of assistance the department provided to SFAs on the use of USDA-purchased foods, including seafood. We reviewed 26 newsletters dated from October 2020 to March 2022 and available on a USDA website for the department's nutrition programs. We also reviewed 60 USDA webinars produced for the NSLP from May 1, 2013, through April 21, 2022. In addition, we reviewed 344 recipes offered by USDA for its nutrition programs. We discussed these factors with USDA officials to get their perspectives on how and if the department was addressing the factors. We also compared USDA's actions with its Strategic Plan and the Richard B. Russell National School Lunch Act.¹⁷

We also reviewed two USDA pilot projects, in which USDA tested methods of food distribution and procurement under the NSLP. One pilot tested the provision of perishable Greek-style yogurt and the other of unprocessed fruits and vegetables. We reviewed USDA documents and interviewed USDA officials about these programs and reviewed a March 2018 evaluation report on the pilot program for unprocessed fruits and

¹⁵"Domestic landings" are catches of fish landed in domestic ports.

¹⁶Responses reflect only those that volunteered the information and may not capture all in the sample that experienced each factor.

¹⁷Act of June 4, 1946, ch. 281, § 2, 60 Stat. 230 (codified as amended at 42 U.S.C. § 1751-1769j). U.S. Department of Agriculture, *USDA Strategic Plan FY 2018-2022* (May 2018). At the time of our analysis, this strategic plan was the most current; USDA subsequently issued a new strategic plan in March 2022.

vegetables.¹⁸ In addition, we interviewed USDA officials on the purpose, implementation, and results of these two pilot projects to determine if there were lessons learned that could be useful in addressing similar factors related to seafood.

We interviewed USDA and National Oceanic and Atmospheric Administration (NOAA) officials to determine the type of information that NOAA provided to USDA as part of the process that USDA used to purchase food products, including seafood, for the NSLP. NOAA is an agency of the Department of Commerce that assesses and predicts the status of fish stocks, sets catch limits, and ensures compliance with fisheries regulations. NOAA is also an important source of publicly available information on the quantities of seafood that could reasonably be expected to be available for purchasing in a given time frame. As part of our discussions with NOAA, we identified a list of domestic seafood processors, reviewed the information on the list, and discussed with USDA the value of having such a list as part of its purchasing process.¹⁹ For a detailed description of our scope and methodology, see appendix I.

We conducted this performance audit from April 2021 to November 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

This section describes (1) the NSLP, (2) participants in the program, (3) the general impact of COVID-19 on the NLSP, and (4) NOAA's interaction with the seafood industry and cooperation with USDA.

¹⁸U.S. Department of Agriculture, Food and Nutrition Service, Econometrica, Inc., *Final Report: Evaluation of the USDA Pilot Project for Procurement of Unprocessed Fruits and Vegetables*, Contract No.: AG-3198-C-15-0019, Project No.: 2414-000 (March 2018).

¹⁹For the purpose this report, we refer to these domestic seafood processors as "vendors."

The NSLP

The NSLP is authorized under the Richard B. Russell National School Lunch Act.²⁰ This was an act to provide assistance to the states in the establishment, maintenance, operation, and expansion of school lunch programs, and other purposes. Funding for the NSLP is mandatory and, therefore, does not require an annual congressional appropriation. This mandatory funding is for per-meal cash reimbursements, commodity assistance, and administrative funds. Under the law, states are entitled to a certain amount of commodity assistance, referred to as “entitlement commodity” assistance. In the NSLP, regulations provide a per-meal commodity reimbursement (an inflation-adjusted rate of 30 cents per meal in school year 2022–2023). School food authorities use entitlement commodity funds to select commodities from a catalog of USDA-purchased foods.²¹ According to statute, entitlement commodity assistance must equal at least 12 percent of the total funding provided for lunch reimbursements and special assistance payments.

USDA administers the NSLP, which provides two types of support for school meals: (1) USDA-purchased foods, which includes seafood; and (2) cash reimbursements for school meals.²² In 2019, USDA spent over \$14 billion on the NSLP—about \$1.3 billion on food commodities, including seafood, and about \$12.9 billion on cash reimbursements, described above. According to USDA documents, on an average day, USDA-purchased foods make up between 15 and 20 percent of the products served as part of the school lunch, while the remaining 80–85 percent of food products are directly purchased by SFAs from commercial markets.

According to USDA officials, USDA’s national office is responsible for providing regulatory guidance, policy materials, and monitoring tools to seven regional offices that deal with its nutritional programs; these offices are responsible for oversight of state agencies administering the NSLP.

²⁰Act of June 4, 1946, ch. 281, § 2, 60 Stat. 230 (codified as amended at 42 U.S.C. § 1751-1769j).

²¹The Richard B. Russell National School Lunch Act generally requires that SFAs purchase, to the maximum extent practicable, domestic commodities or products.

²²USDA also purchases food for other programs, including the Emergency Food Assistance Program, Commodity Supplemental Food Program, Food Distribution Program on Indian Reservations, and Nutrition Services Incentive Program.

At the state level, state agencies—generally, education or agriculture agencies—administer the NSLP and issue guidance to SFA nutrition programs and other local program operators.

USDA purchases of seafood for SFAs through the NSLP require many steps and partners.²³ Generally, the process begins when USDA distributes a list of food products, including seafood products, available for ordering. School food authorities generally place orders through state distributing agencies to USDA from this list. USDA issues solicitations for the ordered products, approves vendors that will supply the products, contracts with vendors to supply the products that states request, and pays the vendors for the delivered products. USDA generally provides help to the states for ordering the seafood products, ensures that the products are delivered to the states, and provides some assistance on the use of the food. USDA relies on some information from NOAA, such as seafood product specifications and quantities of seafood available for purchase, to inform its efforts.

NSLP Participants

Students who participate in the NSLP are eligible for free meals if their household income is less than, or equal to, 130 percent of the federal poverty guidelines. For the 2020–2021 school year, the annual income for a household of four had to be less than, or equal to, \$34,060. Reduced-price meals are available to students with household incomes above 130 percent and less than, or equal to, 185 percent of the federal poverty guidelines. For the 2020–2021 school year, the annual income for a household of four had to be greater than \$34,060 and less than, or equal to, \$48,470. In 2020, of the 22.5 million children who participated in the NSLP, about 76 percent received either free or reduced-priced meals. Specifically, about 71 percent received free meals, and about 5 percent received reduced-price meals. The other 24 percent of students paid full price for the meals.

²³In this report, we refer to USDA to encompass both USDA's Food and Nutrition Service and its Agricultural Marketing Service. We do not differentiate between the activities or responsibilities of these two agencies.

COVID-19 Impact on the NSLP

The COVID-19 pandemic has had devastating effects on public health and the economy.²⁴ The pandemic also greatly affected USDA's nutrition programs, including the NSLP.²⁵ School districts and other meal program operators served fewer meals during the first year of the pandemic than in the previous year because of school closures. This, in turn, affected the amount of seafood that schools ordered through USDA. The number of meals served in the spring of 2021 approached prepandemic levels. Various COVID-19 relief laws have provided funding or authority to USDA to support child nutrition programs during the pandemic. For example, the Families First Coronavirus Response Act granted USDA the authority to issue nationwide waivers in certain programs.²⁶ According to USDA, these waivers are intended to support access to nutritious meals, reduce the administrative burden associated with eligibility determinations, and minimize potential exposure to COVID-19. USDA allowed SFAs to offer free meals to all students for the duration of school years 2020–2021 and 2021–2022 because of COVID-19.

NOAA

NOAA's National Marine Fisheries Service has five regional offices, six science centers, and more than 20 laboratories around the country and U.S. territories. According to its mission statement, NOAA is responsible for the stewardship of the nation's ocean resources and habitat.

NOAA's Seafood Inspection Program provides fee-for-service inspection services, on request to the seafood industry—including domestic and foreign processors, distributors, and other firms. The purpose of these inspections is to, among other things, certify that these seafood firms comply with Hazard Analysis and Critical Control Point principles and

²⁴GAO, *COVID-19: Additional Actions Needed to Improve Accountability and Program Effectiveness of Federal Response*, [GAO-22-105051](#) (Washington, D.C.: Oct. 27, 2021).

²⁵Other child nutrition programs include the School Breakfast Program, Summer Food Service Program, and Child and Adult Care Food Program.

²⁶Pub. L. No. 116-127, § 2202(a), 134 Stat. 178, 185 (2020).

other federal food safety standards.²⁷ Some retailers require this certification as a condition for purchasing the seafood products.

NOAA provides some assistance to USDA in its efforts to provide seafood to students through the NSLP. For example, USDA requires that seafood processors and processing facilities used to fulfill USDA contracts be NOAA Seafood Inspection Approved Establishments.²⁸ To this end, NOAA inspects and grades the seafood that USDA purchases for the NSLP, except for catfish.²⁹ NOAA also serves as the subject matter expert for USDA by reviewing the specifications of seafood products that seafood vendors have proposed for sale to the government. For example, a vendor may inform USDA that it can only provide seafood in a certain weight, but NOAA may provide USDA with information that the seafood is also available in different product sizes. NOAA also provides confidential data and recommendations to USDA regarding the purchase of surplus fishery products.

USDA Purchased a Limited Quantity of Seafood for the NSLP from Fiscal Years 2014 through 2019, Compared to Other Animal Proteins

USDA purchased a limited quantity of seafood compared to other animal proteins for the NSLP from fiscal years 2014 through 2019. The quantity

²⁷According to NOAA documents, Hazard Analysis and Critical Control Point is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement, and handling, to manufacturing, distribution, and consumption of the finished product. In addition, it focuses on problem prevention and problem solving and relies heavily on proper monitoring and recordkeeping by the industry.

²⁸Approved establishments are processing facilities or vessels that have voluntarily contracted with the NOAA Seafood Inspection Program to be sanitarily inspected, approved, and certified as being capable of producing safe, wholesome products in accordance with specific quality regulations established by the U.S. Department of Commerce.

²⁹The Food and Drug Administration is responsible for ensuring the safety of all seafood, except catfish, in interstate commerce. Seafood processors are subject to this agency's inspections to determine compliance with Hazard Analysis and Critical Control Point regulations. NOAA's inspections are supplemental to the Food and Drug Administration's inspections. USDA's Food Safety and Inspection Service is responsible for inspecting catfish.

purchased is based on orders placed by states and SFAs. For example, for the period from fiscal years 2014 through 2019, USDA seafood purchases represented between 1 and 2 percent of all animal proteins purchased annually for the program (see table 1). USDA seafood purchases for this period ranged from a low of 3.7 million pounds in 2014 to a high of 8.8 million pounds in fiscal year 2017. Subsequently, the quantity of seafood purchased fell to about 6.4 million pounds in fiscal year 2019. (For more information about other programs for which USDA purchases seafood, see appendix II.)

Table 1: Quantity of Seafood and Other Animal Proteins That USDA Purchased for the National School Lunch Program (NSLP) per Fiscal Year, 2014–2019

Fiscal year	Seafood purchases (pounds)	All animal protein purchases (pounds)	Seafood purchases as percentage of all animal protein
2014	3,675,008	379,613,755	1.0
2015	3,834,400	396,490,195	1.0
2016	7,698,653	422,557,193	1.8
2017	8,750,129	463,168,824	1.9
2018	7,296,327	382,055,417	1.9
2019	6,435,098	434,961,178	1.5
Total	37,689,615	2,478,846,562	1.5

Source: GAO analysis of U.S. Department of Agriculture (USDA) information. | GAO-23-105179

Notes:






USDA only purchases the food that states order on behalf of school food authorities. Other animal proteins beside seafood include beef, eggs, pork, and poultry. For this report, we define “poultry” as chicken and turkey.

We excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation, since schools closed and student participation in the NSLP declined.

Accounting for the number of students participating in the program (which averaged about 30 million per year) from fiscal years 2014 through 2019,³⁰ USDA purchased, on average, 3.4 ounces of seafood per student per fiscal year. This amount compares with almost 14 pounds total of beef, eggs, pork, and poultry. In terms of common lunch items, this equates to approximately three fish sticks or one can of tuna annually per student, compared with approximately 43 chicken drumsticks, 21 beef patties, 12 slices of ham, and four eggs (see fig. 1).

³⁰The number of students participating in the NSLP from fiscal years 2014 through 2019 are as follows, according to USDA data: 30,090,062 (fiscal year 2014); 30,121,464 (fiscal year 2015); 29,998,288 (fiscal year 2016); 29,635,547 (fiscal year 2017); 29,391,752 (fiscal year 2018); and 29,207,293 (fiscal year 2019).

Figure 1: Average Quantity of Animal Proteins That USDA Purchased by Type per Student Participating in the National School Lunch Program (NSLP) per Fiscal Year, 2014–2019

Type of protein	Average ounces per fiscal year per student	Equivalent quantity of common food item	
Poultry	137.8	43.1 chicken drumsticks (based on 3.2 ounces per drumstick)	
Beef	59.0	21.1 beef patties (based on 2.8 ounces per patty)	
Pork	14.5	12.1 slices of ham (based on 1.2 ounces per slice)	
Eggs	7.5	4.2 large eggs (based on 1.8 ounces per egg)	
Seafood	3.4	3.4 fish sticks (based on 1.0 ounce per fish stick) or 1.1 cans of tuna (based on 3.0 ounces per can)	

Source: GAO analysis of U.S. Department of Agriculture (USDA) information. | GAO-23-105179

Notes:

USDA purchased a total of 37,689,615 pounds of seafood from fiscal years 2014 through 2019, and a total of 2,441,156,947 pounds of beef, eggs, pork, and poultry during the same period, according to USDA data. Also, the number of students participating in the NSLP from fiscal years 2014 through 2019 are as follows, according to USDA data: 30,090,062 (fiscal year 2014); 30,121,464 (fiscal year 2015); 29,998,288 (fiscal year 2016); 29,635,547 (fiscal year 2017); 29,391,752 (fiscal year 2018); and 29,207,293 (fiscal year 2019).

Collectively, USDA purchased 218.9 ounces of beef, eggs, pork, and poultry, on average, per student from fiscal years 2014 through 2019.

We excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation, since schools closed and student participation in the NSLP declined.

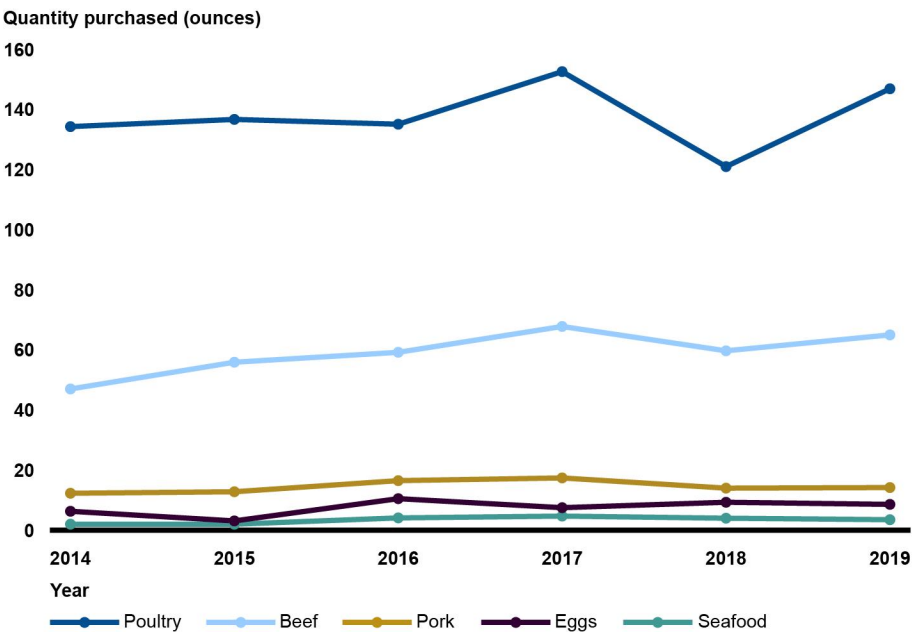
USDA only purchases the food that states order on behalf of school food authorities.

For the purpose of this report, we define "poultry" as chicken and turkey.

The average quantity of seafood purchased per student NSLP participant ranged from 2 ounces to about 5 ounces per fiscal year for the period from 2014 to 2019, which is less than other types of animal proteins that USDA purchased for the NSLP. For example, in comparison, USDA purchased between 121 ounces and 153 ounces of poultry, and between 47 ounces and 68 ounces of beef, during the same period.³¹ (see fig. 2).

³¹There are limited data on purchases for the NSLP outside of USDA-purchased foods. According to USDA officials and officials from our sample of 10 states, the types and amounts of these commercial purchases are not tracked nationally or by the states, except for USDA's periodic Farm to School censuses, which ask about local purchases of food, and the School Food Purchase Study, which was last published in 2012. According to these sources of data, SFAs do not purchase sufficient seafood on their own to meet DGA recommendations. For example, we found that for the 2015 Farm to School Census, only 64 SFAs across 15 states listed seafood in their top five "local" items purchased; these numbers decreased to only 22 SFAs across eight states for the 2019 Farm to School Census, which included items purchased during the 2018-2019 school year. According to our analysis of the 2012 School Food Purchase Study, when seafood purchases for NSLP are analyzed with respect to levels of consumption recommended by the DGA, seafood purchases per NSLP student participant fell short of recommendations, whether or not commercial purchases were included in the analysis. In comparison, purchases of meat, poultry, and eggs per NSLP student participant met, or almost met, the levels recommended by the DGA when only USDA-purchased foods were considered and exceeded these recommendations when commercial purchases were included in the analysis.

Figure 2: Average Quantity of Animal Proteins That USDA Purchased by Type per Student Participating in the National School Lunch Program (NSLP) per Fiscal Year, 2014–2019



Source: GAO analysis of U.S. Department of Agriculture (USDA) information. | GAO-23-105179

Accessible Data for Figure 2: Average Quantity of Animal Proteins That USDA Purchased by Type per Student Participating in the National School Lunch Program (NSLP) per Fiscal Year, 2014–2019

Category	2014 (ounces)	2015 (ounces)	2016 (ounces)	2017 (ounces)	2018 (ounces)	2019 (ounces)
Poultry	134.3	136.7	135.1	152.6	121.0	146.9
Beef	47.0	55.9	59.2	67.8	59.7	65.0
Pork	12.3	12.8	16.5	17.4	14.0	14.2
Eggs	6.3	3.1	10.5	7.5	9.3	8.6
Seafood	2.0	2.0	4.1	4.7	4.0	3.5

Notes: We excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation, since schools closed and student participation in the NSLP declined.

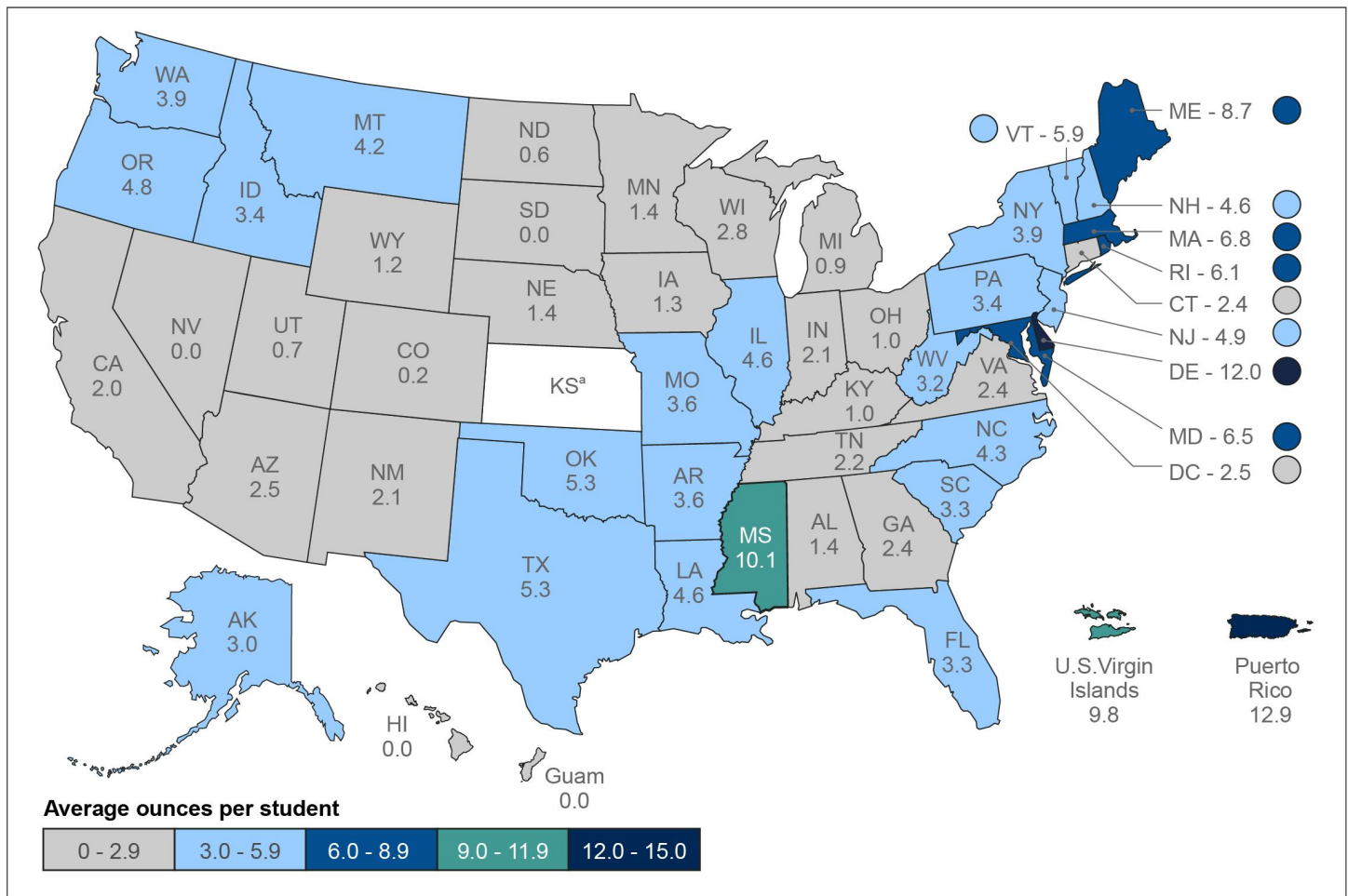
USDA only purchases the food that states order on behalf of school food authorities.

For the purpose of this report, we define “poultry” as chicken and turkey.

The average quantity of seafood that USDA purchased per student participant per fiscal year for the NSLP varied by state from fiscal years 2014 through 2019. For example, Hawaii, Nevada, and Guam ordered the

least (none), and Puerto Rico ordered the most (13 ounces) (see fig. 3). (For more information about the quantity of seafood that USDA purchased per state, see appendix III.)

Figure 3: Average Quantity of Seafood That USDA Purchased per Student Participating in the National School Lunch Program (NSLP) by State per Fiscal Year, 2014–2019



Sources: GAO analysis of U.S. Department of Agriculture (USDA) information; Map Resources (map). | GAO-23-105179

Notes: USDA only purchases the food that states order on behalf of school food authorities.

We excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation, since schools closed and student participation in the NSLP declined.

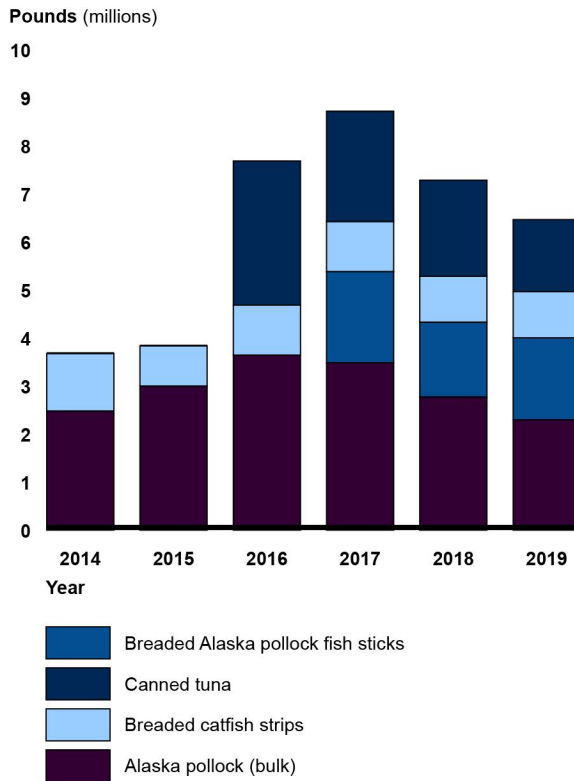
^aKansas receives cash payments in lieu of USDA-purchased foods as a result of the National School Lunch Act and Child Nutrition Act of 1966 Amendments of 1975. See Pub. L. No. 94-105, § 12, 89 Stat. 511, 515 (codified as amended at 7 U.S.C. § 1765). Because Kansas does not order USDA-purchased food, Kansas is not represented in the seafood data reported for this program.

USDA purchased three varieties of seafood for the NSLP from fiscal years 2014 through 2019: (1) Alaska pollock, (2) canned tuna, and (3) catfish. In fiscal years 2014 and 2015, USDA purchased two seafood products for the NSLP: bulk Alaska pollock and breaded catfish strips.³² USDA officials stated that, in response to requests from SFAs, USDA added canned tuna to its list of available food commodities, which USDA began purchasing in fiscal year 2016.³³ Also, USDA officials stated that they added breaded Alaska pollock fish sticks in response to requests from states and, in fiscal year 2017, USDA began purchasing the fish sticks. As shown in figure 4, the overall quantity of seafood decreased in fiscal years 2018 and 2019. According to USDA officials, this decline was primarily due to students' preferences for other types of proteins. Later in this report, we discuss the factors that affect selected states' and SFAs' efforts to provide seafood to students, which may further explain factors that influence purchasing levels.

³²"Bulk" refers to large quantities not divided into smaller parts or packaged in separate units. USDA purchases bulk foods, such as seafood and chicken, which may be converted into a variety of end products. According to a USDA document, purchasing bulk foods provides the opportunity for school food authorities to receive a wider variety of end products and at a lower cost.

³³In 2016, USDA also changed the quantity of bulk Alaska pollock per unit from 49 pounds to 49.5 pounds. Each of these two products had unique product codes, but we combined these two products for our analysis because they both represented bulk Alaska pollock.

Figure 4: Seafood Products and Quantity That USDA Purchased per Fiscal Year for the National School Lunch Program (NSLP), 2014–2019



Source: GAO analysis of U.S. Department of Agriculture (USDA) information. | GAO-23-105179

Accessible Data for Figure 4: Seafood Products and Quantity That USDA Purchased per Fiscal Year for the National School Lunch Program (NSLP), 2014–2019

	FISH AK PLCK FRZ BULK CTN-49 LBS (100892)	FISH AK PLCK FRZ BULK CTN-49.5 LB (110601)	FISH AK POLLOCK STICKS BRD FRZ CTN-40 LB (110851)	CATFISH STRIPS BRD OVN RDY PKG-4/10 LB (100201)	TUNA CHUNK LIGHT CAN- 6/66.5 OZ (100195)	K TUNA CHUNK LIGHT CAN 6/66.5 OZ (111021)	Canned tuna (combined)
Generic name of food item	Alaska pollock (bulk)	Alaska pollock (bulk)	Breaded Alaska Pollock fishsticks	Breaded catfish strips	Canned tuna	Canned tuna (Kosher)	Canned tuna
2014 (fiscal year)	2,479,008			1,196,000			0
2015 (fiscal year)	2,998,800			835,600			0
2016 (fiscal year)		3,643,200		1,040,000	3,015,453		3,015,453

	FISH AK PLCK FRZ BULK CTN-49 LBS (100892)	FISH AK PLCK FRZ BULK CTN-49.5 LB (110601)	FISH AK POLLOCK STICKS BRD FRZ CTN-40 LB (110851)	CATFISH STRIPS BRD OVN RDY PKG-4/10 LB (100201)	TUNA CHUNK LIGHT CAN- 6/66.5 OZ (100195)	K TUNA CHUNK LIGHT CAN 6/66.5 OZ (111021)	Canned tuna (combined)
2017 (fiscal year)		3,484,800	1,896,000	1,039,920	2,329,409		2,329,409
2018 (fiscal year)		2,772,000	1,554,280	959,920	1,722,842	287,286	2,010,128
2019 (fiscal year)		2,296,800	1,709,200	960,000	1,469,098		1,469,098

Notes: USDA only purchases the food that states order on behalf of school food authorities.

We excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation, since schools closed and student participation in the NSLP declined.

USDA purchased seafood through the NSLP, using a limited number of vendors from fiscal years 2014 through 2019, ranging from four to six vendors per fiscal year. In total, 11 vendors were providing seafood at any point during this period, but three provided nearly 75 percent of the seafood by quantity. The 11 vendors were located across five states (Alabama, Mississippi, New Hampshire, Pennsylvania, and Washington), with six of the 11 located in Washington State. The vendor plants—the locations in which the end product is packaged or otherwise processed into the finished product that is to be provided to the government—of these 11 vendors were also located across five states and one territory (Alaska, Alabama, Mississippi, New Hampshire, Washington, and American Samoa). (For more information about vendors that provided seafood or other animal proteins for the NSLP, see appendix IV.)

Several Factors Affect Selected States' and SFAs' Efforts to Provide Seafood to Students through the NSLP

State and SFA officials we spoke with in 10 states said that certain factors affect their efforts to provide seafood to students through the NSLP.³⁴ Officials from the majority of SFAs (six) expressed interest in serving more seafood, including some citing it as an option that is healthy for

³⁴We interviewed officials from 10 state agencies and one SFA in each state, for a total of 20 stakeholders.

students.³⁵ All factors below apply to purchasing and providing seafood, either through USDA or from commercial vendors through direct SFA purchases. These factors, starting with the most frequently cited, include:³⁶

- **Concerns about seafood safety.** Fifteen of the 20 stakeholders (seven states and eight SFAs) we interviewed described parental and staff concerns about allergens as a factor affecting their efforts to provide seafood through the NSLP.³⁷ In addition, stakeholders we interviewed said that parental and staff concerns about mercury in seafood were also a factor.³⁸
- **Preferences for other animal proteins.** Fourteen of the 20 stakeholders (seven states and seven SFAs) we interviewed noted that students often prefer to consume meals prepared with other animal proteins, such as beef or poultry, over seafood. Stakeholders explained that, given students' preferences, schools typically serve meals with these proteins because they are more likely to be consumed and not wasted.
- **Availability of seafood.** Twelve of the 20 stakeholders (six states and six SFAs) we interviewed reported the availability of sufficient quantities and varieties of seafood as a factor affecting their efforts to provide seafood to students. As previously mentioned, there are three types of seafood available through USDA-purchased foods for the

³⁵As noted earlier, states administer the NSLP at the schools in their respective states. This includes distributing the USDA-purchased foods to the SFAs. The SFAs operate the NSLP at the schools and, thus, are responsible for serving food, including seafood, to students.

³⁶The list of factors that we identified as affecting USDA's and selected states' and SFAs' efforts to provide seafood to students through the NSLP is not intended to be exhaustive. However, the list provides examples of key factors that affect selected states' and SFAs' efforts to provide seafood to students through the NSLP. Responses reflect only those that volunteered the information and may not capture all in the sample that experienced each factor.

³⁷According to the Centers for Disease Control and Prevention, food allergies affect an estimated 8 percent of U.S. children.

³⁸Mercury is a naturally occurring chemical element but can be harmful to a person's health, according to the U.S. Environmental Protection Agency. Some seafood may contain mercury at sufficiently high levels to be a concern. The Environmental Protection Agency and the Food and Drug Administration consider catfish, pollock, and canned tuna to be among the best choices of fish to eat in terms of mercury levels. These agencies include advice on eating fish and shellfish—see <https://www.epa.gov/fish-tech/epa-fda-advice-about-eating-fish-and-shellfish>.

NSLP—Alaska pollock, catfish, and canned tuna. According to these stakeholders, a greater variety of available seafood could help schools serve to students, meals that they would enjoy and more likely consume.

- **Cost of seafood.** Nine of the 20 stakeholders (five states and four SFAs) we interviewed described the cost of seafood as a factor in purchasing and providing seafood to students. One stakeholder classified seafood as one of the most expensive food commodity types offered through USDA and that school food service staff may, therefore, choose to spend their resources on less expensive protein options, such as poultry.³⁹
- **Buying in large quantities.** Six of the 20 stakeholders (three states and three SFAs) we interviewed identified the USDA policy for ordering food commodities, including seafood, in full truckload quantities as a factor affecting their efforts to provide seafood to students.⁴⁰ According to USDA policy, state distributing agencies must coordinate to split shipments of USDA-purchased commodities, either between multiple SFAs or multiple states, in order to receive less than a full truckload quantity at any delivery location. School food authorities may request smaller quantities of USDA-purchased commodities from the state warehouse or distributor. Still, according to these stakeholders, if a state cannot order the required large quantity of USDA-purchased commodities, then individual SFAs that may have wanted the seafood product will not be able to order and serve it.
- **Preparing and serving seafood.** Five of the 20 stakeholders (one state and four SFAs) we interviewed described a school's lack of knowledge and experience with preparing and serving seafood as a factor affecting their efforts to provide seafood to students. Stakeholders added that additional training and information, such as recipes, would be beneficial in helping school food service staff prepare seafood meals that students would find appealing and, therefore, consume.

³⁹The average price of the seafood that USDA purchased for the NSLP for fiscal years 2014 through 2019 was \$2.19 per pound, compared with \$1.17 per pound for poultry, and \$2.60 per pound for beef, according to USDA data.

⁴⁰For example, a full truckload of Alaska pollock fish sticks included 950 cases, or 38,000 pounds, at an estimated cost of \$100,692.40 in school year 2021–2022. According to USDA policy, truckloads may be split between up to three destinations within the state or neighboring states. As a general guideline, the minimum split drop-off is one-quarter truck.

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- **Kitchen equipment.** Two of the 20 stakeholders (one state and one SFA) we interviewed cited the lack of kitchen equipment as a factor affecting their efforts to provide seafood to students. For example, one stakeholder described a shortage of freezer space needed to store frozen seafood products, such as catfish strips.

Representatives from the School Nutrition Association involved in the NSLP corroborated some of the factors that the states and SFAs we spoke with cited above. In addition, some of the stakeholders we interviewed told us that these factors limited their own orders of seafood through the program. USDA officials have acknowledged the role that some of these factors play in limiting seafood orders and that assistance could help address them. For example, in interviews, USDA officials attributed the decline in seafood orders in part to some of the factors, including student preference and cost, as prohibitive factors in seafood orders. We discuss USDA's efforts to help address these factors in the next section.

USDA Offers Assistance to Implement the NSLP, but Assistance for Seafood Is Limited

USDA offers assistance, such as webinars, to implement the NSLP. However, USDA offers limited assistance to states and SFAs to help provide seafood to students through the NSLP. USDA has not developed a plan to enhance its assistance by addressing factors that affect states' and SFAs' efforts to provide seafood to students. In addition, USDA has not fully leveraged its relationship with NOAA to obtain key seafood industry information that could enhance USDA's assistance to states and SFAs.

USDA Offers Assistance to Implement the NSLP

To help it comply with relevant provisions of the Richard B. Russell National School Lunch Act, USDA provides online resources on training regarding safe handling of food commodities. It also provides recipes, webinars, and newsletters on best practices for child nutrition programs, and dedicated staff to respond to email and phone inquiries. According to USDA officials, the department prioritizes its assistance to states and SFAs on the more commonly offered products. According to USDA data, the more commonly offered animal protein products include beef and poultry.

According to USDA documents, USDA's webinars and newsletters have provided information about locally grown produce, school gardens, and strategies for special diets and allergens. However, we found that these webinars and newsletters generally did not contain information about seafood. In addition, we reviewed 344 recipes provided on the USDA website and found that 18 recipes included seafood, and none of the recipes included Alaska pollock or catfish, the primary seafood products that USDA purchased for the NSLP from fiscal years 2014 through 2019.

USDA Offers Limited Assistance to States and SFAs in Providing Seafood to Students

Compared with more commonly offered products, USDA offers limited assistance to states and SFAs in providing seafood to students through the NSLP.⁴¹ USDA officials said that they can offer commodity-specific assistance if states and SFAs request help. For example, USDA officials told us that they began purchasing canned tuna for the NSLP when SFAs reported difficulty obtaining the product domestically, as is generally required by the National School Lunch Act.⁴² In addition, USDA officials told us that much of the recent assistance that states and SFAs requested on seafood, and that USDA offered, was focused on assisting SFAs with reimbursement for seafood products in school meals.⁴³

⁴¹To help it comply with relevant provisions of the Richard B. Russell National School Lunch Act, USDA provides online resources on training on safe handling of food commodities; webinars and newsletters on best practices for child nutrition programs; and dedicated staff to respond to email and phone inquiries. See 42 U.S.C. §1769b-1.

⁴²42 U.S.C. § 1760(n)(2). The statute directs USDA to require that SFAs purchase, to the maximum extent practicable, domestic commodities or products. This requirement applies only to SFAs in the contiguous United States.

⁴³USDA administers the NSLP nationally; USDA also provides regulatory guidance and policy materials to schools and coordinates commodity distribution. USDA's regional offices conduct oversight of state agencies, which administer the NSLP at the state level and ensure school district nutrition program compliance with NSLP requirements.

USDA Has Not Developed a Plan to Address Factors Affecting States' and SFAs' Efforts to Provide Seafood to Students through the NSLP

USDA's Strategic Plan states that USDA is to support and encourage healthy dietary choices.⁴⁴ USDA intends to achieve this objective, in part, by working with schools to improve access to nutritious and appealing meals. USDA has not developed a plan to enhance its assistance by addressing factors that affect states' and SFAs' efforts to provide seafood to students through the NSLP. USDA officials acknowledged that the department could enhance its assistance to states and SFAs in providing seafood to students. USDA officials stated that some of the assistance that USDA provides could better address one or more of these factors. For example, officials said that some factors could be addressed by enhancing nutrition education and by helping with seafood preparation and recipes. Some stakeholders also stated that additional assistance, such as training, could help SFAs deal with allergen concerns or student preferences. Such a plan could specify how USDA might enhance nutrition education, recipes, and training related to seafood.

A USDA plan could also draw on previous USDA efforts that enhanced the availability of certain foods to students through the NSLP, such as lessons learned from the two USDA pilot projects that we identified. Specifically, these pilots added Greek-style yogurt to the list of available dairy products under the NSLP and provided select states with an additional means to obtain unprocessed fruits and vegetables. According to our discussions with USDA officials and our review of documents about the pilots, the lessons learned through these two projects may be helpful in informing USDA's efforts to address similar factors related to seafood. For instance, the pilots necessitated USDA officials working with states and SFAs to help manage outreach to vendors and other procurement details.

The pilots resulted in solutions that addressed factors similar to those that we identified in our work, such as the requirement to order products in large quantities. Through its yogurt pilot, USDA began allowing states and

⁴⁴U.S. Department of Agriculture, *USDA Strategic Plan FY 2018–2022*. *USDA Strategic Plan FY 2022–2026* also states that USDA is to encourage healthy dietary choices through data-driven, flexible, customer-focused approaches. Further, USDA shapes programs and policies and develops knowledge resources to promote healthy eating.

SFAs more flexibility to order Greek-style yogurt in less than full truckload quantities.⁴⁵ Such flexibility enabled certain states and SFAs to participate in the pilot because they were able to order smaller amounts more suited to their needs, according to USDA officials. Officials told us that they could work with vendors to assess the potential for purchasing less than full truckload quantities for other commodities as well. In addition, through its pilot on fruits and vegetables, USDA worked with states and SFAs to allow additional flexibility in procuring such items from local vendors directly. This allowed SFAs to deal directly with vendors and purchase a greater variety of products and at a lower cost, according to officials from states that participated in the pilot.

USDA officials acknowledged the lessons learned during implementation of these pilots. Specifically, for the Greek-style yogurt pilot, USDA initiated the pilot in a limited number of states, received feedback on the distribution process, and made adjustments to the program to resolve limiting factors based on feedback received from states, SFAs, and vendors. (See appendix V for more information on these pilot projects.) The knowledge and experience that USDA gained from the pilot projects could assist USDA in developing a plan to enhance its assistance in providing seafood to students through the NSLP.

Developing a plan is a critical step to achieving objectives, as we have previously reported.⁴⁶ Plans identify actions needed to achieve goals and the resources needed to execute the actions, among other things. According to the Richard B. Russell National School Lunch Act,⁴⁷ USDA is required to maintain and continue to improve the overall nutritional quality of entitlement commodities. Further, the act requires the Secretary

⁴⁵A USDA official told us that the minimum order for Greek-style yogurt for this pilot was about 10 percent of a full truckload.

⁴⁶GAO, *Managing For Results, Critical Issues for Improving Federal Agencies' Strategic Plans*, [GGD-97-180](#) (Washington, D.C.: Sept. 16, 1997). For an example of how developing a plan could be critical to achieving objectives, see GAO, *Earthquakes: Opportunities Exist to Further Assess Risk, Build Resilience, and Communicate Research*, [GAO-22-105016](#) (Washington, D.C.: May 4, 2022).

⁴⁷42 U.S.C. §§ 1758(a)(1)(B), 1762a(b)(1).

of Agriculture to make available technical assistance on the use of commodities available under this act and the Child Nutrition Act of 1966.⁴⁸

Through USDA's Strategic Plan, the department describes its efforts to make this technical assistance available and, as mentioned above, USDA does provide such assistance but has acknowledged that its assistance with seafood could be improved. Having a plan could help USDA enhance this technical assistance by identifying steps, activities, and time frames necessary to achieve the goal of making this enhanced assistance available. Without a plan to address factors that affect states' and SFAs' efforts to provide seafood to students, USDA may be missing an opportunity to continue to improve the overall nutritional quality of entitlement commodities by enhancing its seafood-related assistance to states and SFAs. Solutions that address factors affecting states' and SFAs' seafood orders may also apply to seafood that SFAs purchase directly through commercial vendors (i.e., non-USDA-purchased foods).

USDA Has Not Fully Leveraged Its Relationship with NOAA to Enhance USDA's Assistance to States and SFAs

As previously mentioned, NOAA provides some assistance to USDA in its efforts to provide seafood to students through the NSLP. For example, NOAA serves as the subject matter expert for USDA by reviewing the specifications of seafood products that seafood vendors have proposed for sale to the government. However, USDA has not fully leveraged its relationship with NOAA to obtain key seafood industry information that could enhance USDA's assistance to states and SFAs in providing seafood to students through the NSLP.

NOAA officials told us that, through its Annual Survey of U.S. Seafood Processors, it collects and maintains what is likely the most complete list of seafood processors (vendors) in the United States but that it does not

⁴⁸The Child Nutrition Act of 1966, as amended, includes a number of nutrition programs, such as the School Breakfast Program and the Special Supplemental Nutrition Program for Women, Infants, and Children. Pub. L. No. 89-642, 80 Stat. 885 (codified as amended at 42 U.S.C. §§ 1771-1793).

share this list with USDA.⁴⁹ According to NOAA officials, USDA has not requested the list of seafood vendors. NOAA officials said they would be willing to share this list but noted that a formal interagency agreement documenting what information and data are to be shared would facilitate this process.

Such an agreement could also spell out protections for information that could be considered confidential business information, such as the quantity and value of the vendors' seafood production.⁵⁰ USDA officials told us that obtaining this information would help it enhance its outreach to seafood vendors who could participate in the NSLP. By increasing the number of vendors and encouraging competition, USDA could also potentially increase the variety and decrease the cost of USDA-purchased seafood offered through the NSLP. These benefits would help address at least one of the factors we identified that affect selected states' and SFAs' efforts to provide seafood to students: the high cost of seafood.

Information on NOAA's domestic seafood vendor list would also allow states and SFA officials to identify local vendors on their own, which would also enable them to more easily purchase seafood directly, in addition to what USDA purchases every year. USDA officials said that

⁴⁹NOAA develops its list of seafood processors (vendors) through the Annual Survey of U.S. Seafood Processors, which is the only national survey of seafood processors. Processors in the Northeast must complete the survey as part of their permitting requirements, but it is voluntary in other regions. NOAA officials visit industry conferences, conduct market research, and rely on existing relationships with processors to identify new companies and include them in the survey. The survey collects information, such as mailing and plant addresses, business type, contact information, number of employees, and products processed by species and type. NOAA officials told us that NOAA fisheries staff have long-standing relationships with seafood processors on the basis of their regulatory and inspection functions and are well positioned to collect such information.

⁵⁰In 2009, USDA and NOAA established a memorandum of understanding that specifies the responsibilities of each for the Child Nutrition Labeling Program, which is a voluntary federal program offered as a service to school food authorities. In the program, food manufacturers provide a certain label on food products as a guarantee to school food authorities and others that the product contributes to certain meal pattern requirements as printed on the label. It also requires that food manufacturers develop and maintain an approved quality control program prior to producing these food products. USDA's roles and responsibilities include providing training and technical support related to reviewing labels, collaborating with NOAA in implementing criteria for manufacturers' quality control programs, and reviewing and approving these quality control programs. NOAA's responsibilities include reviewing and approving food manufacturers' label applications and quality control programs, independently from USDA.

through the 2019 Farm to School Census,⁵¹ USDA learned that SFAs have limited information about local vendors, including seafood vendors, and the department has a long-term initiative to help states train producers to sell directly to SFAs. USDA officials said that they could use the list to enhance technical assistance to states and SFAs by, for example, sharing the information with them, as appropriate.

We have previously reported that a leading collaboration practice is for agencies to document how they are collaborating through written guidance and agreements, such as a memorandum of understanding that should be continually updated and monitored.⁵² Without NOAA's list of seafood vendors, USDA may miss an opportunity to further assist states and SFAs in providing seafood to students through the NSLP.

Conclusions

Through the NSLP, USDA ensures that millions of school children, many of whom come from families that experience food insecurity, receive healthy meals as part of their school day. School meal programs like the NSLP are important because they can provide nearly two-thirds of a participating student's daily calories during the school year and, therefore, play an important role in the development of a healthy diet. However, some children who participate in NSLP may miss the benefits of a diet that includes seafood.

USDA's Strategic Plan describes USDA's intentions to improve access to nutritious and appealing meals. However, USDA does not have a plan to address factors, such as parents' concerns about seafood safety, that affect states' and SFAs' efforts to provide seafood to students. Without such a plan, USDA may be missing an important opportunity to enhance its seafood-related assistance to states and SFAs.

⁵¹The USDA Farm to School Census features nationwide survey data from all school food authorities participating in the National School Lunch Program. According to USDA, the census helps it understand participation in the Farm to School Program from SFAs across all 50 states, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands, and the District of Columbia. USDA has conducted these efforts in 2013, 2015, and 2019. For more information, see <https://www.fns.usda.gov/cfs/farm-school-census>.

⁵²GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, [GAO-12-1022](#) (Washington, D.C.: September 2012).

USDA has also not fully leveraged its relationship with NOAA to enhance the seafood-related assistance that it offers to states and SFAs. For example, USDA does not possess information about seafood vendors that NOAA has available and that could be shared with states and SFAs to assist them in identifying readily available and cost-effective sources of seafood. Obtaining and sharing such information could provide another opportunity for USDA to assist states and SFAs in providing seafood to students through the NSLP.

Recommendations for Executive Action

We are making a total of three recommendations, including two to USDA and one to NOAA. Specifically:

The Secretary of Agriculture should develop a plan to enhance its assistance to states and school food authorities in providing seafood to students through the National School Lunch Program. Actions described in such a plan could build upon information that GAO collected regarding factors that selected states and school food authorities said have affected their efforts to provide more seafood to students through the program. The plan could also incorporate USDA's experience and lessons learned from previous efforts aimed at enhancing the variety and availability of other food products, such as dairy products and unprocessed fruits and vegetables. (Recommendation 1)

The Administrator of the National Oceanic and Atmospheric Administration should work with the Secretary of Agriculture to develop a collaborative mechanism, such as a memorandum of understanding that establishes the sharing of NOAA's list of domestic seafood vendors with USDA. (Recommendation 2)

The Secretary of Agriculture should work with the Administrator of the National Oceanic and Atmospheric Administration to develop a collaborative mechanism, such as a memorandum of understanding that establishes the sharing of NOAA's list of domestic seafood vendors with USDA. (Recommendation 3)

Agency Comments

We provided a draft of this report to the U.S. Department of Commerce and the U.S. Department of Agriculture for their review and comment.

Both the Department of Commerce and USDA agreed with our recommendations. In its comments, reproduced in appendix VI, the Department of Commerce, representing NOAA, said that NOAA supports the efforts to encourage consumption of sustainable U.S. seafood. Seafood is a healthy food choice, providing key nutrients and healthy protein essential for strong bones, brain development, and healthy immune and cardiovascular systems. USDA stated that it will consider the information GAO collected as part of this report in developing a plan. USDA also provided technical comments, which we incorporated as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretaries of Commerce and Agriculture, and other interested parties. In addition, the report will be available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact Steve D. Morris at (202) 512-3841 or morris@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be

found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix VII.

A handwritten signature in black ink that reads "Steve D. Morris". The signature is written in a cursive, flowing style.

Steve D. Morris
Director, Natural Resources and Environment

Appendix I: Objectives, Scope, and Methodology

You asked us to review the U.S. Department of Agriculture's (USDA) purchases of seafood for the National School Lunch Program (NSLP). This report (1) examines USDA's purchases of seafood for its National School Lunch Program, (2) identifies factors affecting selected states' and school food authorities' efforts to provide seafood to students, and (3) assesses the extent to which USDA has helped address these factors.

To examine USDA purchases of seafood for the NSLP, we analyzed USDA data on its purchases of seafood and other animal proteins, including beef, eggs, pork, and poultry, as well as student participation for the NSLP from fiscal years 2014 through 2019. USDA supplied purchase data from its Web-Based Supply Chain Management database.¹ USDA made these purchases based on orders from states and school food authorities (SFAs).² We selected data from fiscal years 2014 through 2019 to get sufficient information about the trends in animal proteins purchased for the NSLP. We excluded data for fiscal years 2020 and 2021 because of the impact of COVID-19 on NSLP participation. We discussed general trends in seafood purchases with USDA officials to get their perspectives on these trends.

We calculated USDA's average purchases of seafood and other animal proteins per student for the NSLP for fiscal years 2014 through 2019 by dividing the total amount of these food products that states and SFAs ordered by national NSLP student participation data. We also calculated USDA's purchases per student by state for seafood for fiscal years 2014 through 2019. We identified the recommended intake levels of seafood

¹USDA's supply chain management database includes information about the food product type, vendor, state that ordered and received food products, delivery date, quantity, and value. The data we analyzed from USDA's supply chain management database match the purchase data available on USDA's public website. USDA officials told us that these data represent the quantities in the contracts awarded to vendors, which are the maximum amounts for which USDA would have paid vendors to supply to the states. These data, however, do not always reflect the quantity that was actually delivered and invoiced by the vendor and paid for by USDA.

²In many cases, school food authorities are school districts that are responsible for operating the NSLP in schools.

and other animal proteins for children and adolescents from our review of the *2020–2025 Dietary Guidelines for Americans* (DGA).³

We analyzed data from the USDA 2012 School Food Purchase Study and from USDA’s 2015 and 2019 Farm to School Census that asked SFAs to identify the top five food commodities that are purchased locally.⁴ We sought to determine the extent that SFAs may be purchasing seafood and other animal proteins outside of the USDA food purchasing program for the NSLP. Even though the School Food Purchase Study is about 10 years old, USDA officials recommended that we review it to get a general understanding of the types and amounts of food commodities that SFAs purchase.⁵ This information was the most complete and current information available on SFA food purchases because neither USDA nor the states track SFAs’ purchases outside of USDA-purchased foods.

To assess the reliability of USDA’s data, we reviewed documentation for USDA’s supply chain management database, reviewed regulations for the collection of the participation data and assessment of those data collection systems, and interviewed USDA officials regarding controls, among other things. We conducted electronic testing of the data for any obvious errors. We determined that the data were sufficiently reliable for the purposes of reporting the quantity and types of seafood and other animal proteins states and SFAs ordered and USDA purchased, per-

³See U.S. Department of Agriculture and U.S. Department of Health and Human Services, *Dietary Guidelines for Americans, 2020-2025*, 9th ed. (December 2020). In accordance with statute, the DGA is based on the preponderance of current scientific and medical knowledge. 7 U.S.C. § 5341 It is an evidence-based and authoritative policy document that serves as the basis for nutrition policies and programs in the United States, including the National School Lunch Program. All federal dietary guidance must be reviewed by the secretaries of Agriculture and of Health and Human Services for consistency with the DGA. The levels recommended in the *2020-2025 Dietary Guidelines* are generally the same as those that were recommended in the *2015-2020 Dietary Guidelines*.

⁴Nick Young et al., U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, *School Food Purchase Study-III* (Alexandria, VA: March 2012). The USDA Farm to School Census features nationwide survey data from all school food authorities participating in the National School Lunch Program. According to USDA, the census helps it understand participation in the Farm to School Program from SFAs across all 50 states, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands, and the District of Columbia. USDA has conducted these efforts in 2013, 2015, and 2019. For more information, see <https://www.fns.usda.gov/cfs/farm-school-census>.

⁵According to USDA officials, a 2020 update to this study was delayed because of COVID-19.

student purchases of seafood and other animal proteins in the NSLP, vendor information on seafood purchases, and student participation data.

To identify factors affecting selected states' and SFAs' efforts to provide seafood through the NSLP, we interviewed state officials responsible for administering the NSLP at the state level and SFA officials responsible for operating the NSLP at the schools. We selected a non-generalizable sample of 10 states. The states in our sample included Alabama, Alaska, California, Florida, Louisiana, Maine, Massachusetts, Mississippi, Texas, and Washington. We selected these states because they were more likely to have experience with seafood and, thus, may be affected by these factors to a lesser extent than other states, as indicated by the presence of seafood processing facilities and catfish production sites and a high volume of domestic landings of seafood in the state.⁶ They also represent a range of NSLP funding levels. Each state provided us with the name of one SFA that was generally representative of the ordering patterns of the state in terms of seafood products requested through USDA.⁷ We included these 10 SFAs in our interviews. We asked representatives from these states and SFAs to identify the primary factors that affect these states' and SFAs' efforts to provide seafood, including ordering, receiving, and serving seafood, through USDA or directly by the SFA from a commercial vendor for the NSLP. We refer to these representatives of state agencies and SFAs as "stakeholders" throughout this report.

We analyzed the information obtained on the factors to identify common themes. On the basis of this analysis, we developed a list of factors and definitions for each. Because we relied on a non-generalizable sample of 10 states, the views of the entities that we interviewed do not represent the views of all NSLP providers. In addition, the list of factors that we identified that affect selected states' and SFAs' efforts to provide seafood to students through the NSLP is not intended to be exhaustive. However, according to our work and the input of stakeholders, the list provides examples of key factors that affect selected states' and SFAs' efforts to provide seafood to students through the NSLP.⁸ To obtain additional

⁶"Domestic landings" are catches of fish landed in domestic ports.

⁷These SFAs included Madison City Schools, Matanuska-Susitna Borough School District, San Diego Unified School District, Miami-Dade County School Board, Plaquemines Parish School District, Regional School Unit 12, Walpole Public Schools, Rankin County School District, Beaumont Independent School District, and Spokane Public Schools, respectively.

⁸Responses reflect only those that volunteered the information and may not capture all in the sample that experienced each factor.

information on the factors, we interviewed representatives from the School Nutrition Association.

To assess the extent to which USDA has helped address these factors that affect selected states' and SFAs' efforts to provide seafood to students, we interviewed USDA officials to identify the types of assistance the department provided to SFAs on the use of USDA-purchased foods, including seafood. We discussed these factors that affect selected states' and SFAs' efforts to provide seafood through the NSLP with USDA officials to get their perspectives on how and if these factors were being addressed by USDA. On the basis of the information provided by USDA officials, we reviewed publicly available USDA websites that included newsletters, webinars, and recipes available to SFAs. We reviewed 26 newsletters, dated from October 2020 through March 2022; 60 webinars dated May 1, 2013, through April 21, 2022; and 344 recipes available as of April 4, 2022. We reviewed USDA's Strategic Plan FY 2018–2022 and the Richard B. Russell National School Lunch Act that created the NSLP to identify USDA's requirements, strategies, and approaches for delivering its services and compared them with USDA's activities. We also compared USDA's actions with the department's Strategic Plan goal to provide all Americans access to a safe, nutritious, and secure food supply and the objective to support and encourage healthy dietary choices through data-driven, flexible, customer-focused approaches; and with the Richard B. Russell National School Lunch Act.

We also examined two pilot projects—one that tested the provision of perishable Greek-style yogurt and the other of unprocessed fruits and vegetables. We reviewed USDA documents and interviewed USDA officials to determine if the department had addressed through these pilots any of the same factors that states and SFAs had expressed about ordering, receiving, and serving seafood through the NSLP. We reviewed a March 2018 evaluation report on the pilot program for unprocessed fruits and vegetables.⁹ In addition, we interviewed USDA officials on the purpose, implementation, and results of these two pilot projects to determine if there were lessons learned that could be useful in addressing similar factors related to seafood.

We interviewed USDA and National Oceanic and Atmospheric Administration (NOAA) officials to determine the type of assistance that

⁹U.S. Department of Agriculture, Food and Nutrition Service, Econometrica, Inc., *Final Report: Evaluation of the USDA Pilot Project for Procurement of Unprocessed Fruits and Vegetables*, Contract No.: AG-3198-C-15-0019, Project No.: 2414-000 (March 2018).

NOAA provided USDA as part of the process that USDA used to purchase food products, including seafood, for the NSLP. NOAA is an agency of the Department of Commerce. NOAA is a good source of information on the quantities and availability of various types of seafood, according to USDA officials. As part of discussions with NOAA, we identified a list of domestic seafood processors, reviewed the information on the list, and discussed with USDA the value of having such a list as part of its purchasing process.¹⁰

We conducted this performance audit from April 2021 to November 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹⁰For the purpose of this report, we refer to these domestic seafood processors as “vendors.”

Appendix II: Programs That Received Seafood from USDA

The U. S. Department of Agriculture (USDA) purchased and distributed seafood to other programs, in addition to the National School Lunch Program (see table 2).

Table 2: Quantity and Value of Seafood That USDA Purchased per Program, Fiscal Years 2014 Through 2019

Program	Pounds	Dollars
The Emergency Food Assistance Program (TEFAP)	120,214,193	305,396,784
Commodity Supplemental Food Program	23,366,316	50,671,483
Food Distribution Program on Indian Reservations	3,283,460	20,832,114
Disaster Assistance	974,460	2,412,310
Nutrition Services Incentive Program	328,217	428,697

Source: GAO analysis of U.S Department of Agriculture (USDA) data. I GAO-23-105179

Notes: Over 75 percent of the seafood purchased for TEFAP (91,122,680 pounds and \$241,016,153) came from bonus commodities. Bonus seafood commodities result when the seafood industry makes a request to the Secretary of Agriculture to purchase a commodity that the industry considers to be in oversupply. After USDA verifies that there is, in fact, an oversupply of a specific product, the department offers the product to states and, if the product is accepted, proceeds with the purchasing. USDA will distribute the bonus commodities to the states based on a set formula and will not charge them for the commodities.

USDA purchased 37,746,618 pounds of seafood, with a value of \$82,754,268, for the National School Lunch Program from fiscal years 2014 through 2019.

The Emergency Food Assistance Program (TEFAP) is a federal program that helps supplement the diets of low-income Americans by providing them with emergency food assistance. USDA purchases a variety of food commodities and makes those foods available to state distributing agencies. The amount of food that each state receives out of the total amount of food provided is based on the number of unemployed persons and the number of households with incomes below the poverty level in the state. States provide the food to local agencies that they have selected, usually food banks, which, in turn, distribute the food to local organizations, such as soup kitchens and food pantries. Although it had begun several years earlier, the Temporary Emergency Food Assistance Program was expressly authorized in the Temporary Emergency Food

Assistance Act of 1983 to distribute surplus commodities.¹ Subsequently, in response to the depletion of some of the surplus foods used by the program, the Hunger Prevention Act of 1988 authorized funding for the purchase of commodity foods for TEFAP.²

The Commodity Supplemental Food Program (CSFP) works to improve the health of low-income persons at least 60 years of age by supplementing their diets with USDA-purchased foods. USDA distributes both food and administrative funds to participating states and tribal organizations. The program is authorized under Section 4(a) of the Agriculture and Consumer Protection Act of 1973.³ State agencies that administer CSFP are typically departments of health, social services, education, or agriculture. States establish household income limits for the elderly that are at or below 130 percent of the Federal Poverty Income Guidelines. State agencies store CSFP food and distribute it to public and nonprofit private local agencies. Local agencies determine the eligibility of applicants, distribute the foods, and provide nutrition education. CSFP is administered in all 50 states, as well as the District of Columbia and Puerto Rico.

The Food Distribution Program on Indian Reservations (FDPIR) provides USDA-purchased food to income-eligible households living on Indian reservations, and to American Indian households residing in approved areas near reservations and in Oklahoma. Many households participate in FDPIR as an alternative to the Supplemental Nutrition Assistance Program (SNAP) because they do not have easy access to SNAP offices or authorized food stores.⁴ FDPIR is administered locally by either tribal organizations or an agency of a state government. FDPIR is authorized

¹Pub. L. No. 98-8, tit. II, 97 Stat. 13 (codified as amended at 7 U.S.C. §§ 7501-7516). The Temporary Emergency Food Assistance Act of 1983 was later renamed the Emergency Food Assistance Act of 1983. Pub. L. No. 101-624, § 1772(a), 104 Stat. 3359, 3808 (1990).

²Pub. L. No. 100-435, § 104, 102 Stat. 1645, 1649 (codified at 7 U.S.C. § 7514).

³Pub. L. No. 93-86, § 4(a), 87 Stat. 221, 249 (codified as amended at 7 USC 612c (note)).

⁴The Supplemental Nutrition Assistance Program is a federal nutrition assistance program administered by USDA that provides low-income individuals and households with benefits to purchase allowed food items and achieve a more nutritious diet.

under section 4(b) of the Food and Nutrition Act of 2008.⁵ Households are certified based on income standards set by the federal government.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act provides the statutory authority for the federal government to provide assistance during major disasters. The act authorizes the President, acting through the Secretary of Agriculture, to distribute supplemental nutrition assistance benefits and make surplus commodities available to low-income households who, as a result of a declared major disaster, are unable to purchase adequate amounts of nutritious food.⁶ In addition, the Secretary may use appropriated funds to purchase foods necessary to provide adequate supplies of food for use in any area of the United States in the event of a major disaster or emergency.⁷

The Nutrition Services Incentive Program provides cash and commodities to agencies or organizations that sponsor Elderly Nutrition Program sites. The program provides meals in both group and home settings. Although any person over the age of 60 is eligible to participate, local programs try to target elders with the greatest nutritional and social needs. The Elderly Nutrition Program is administered by a network of agencies devoted to the aging population, including state and tribal organizations on aging, within-state area agencies on aging, and local delivery sites. The program also has a home-delivered meals component. The program, which began as the Nutrition Program for the Elderly, started as a 3-year pilot program in 1968 and was first authorized in statute in 1972, as a new title of the Older Americans Act of 1965.⁸ The Older Americans Act of 1965 was later amended, placing similar authorization in another title of the act.⁹

⁵Pub. L. No. 110-246, § 4211(a), 122 Stat. 1651, 1884, *amending* Pub. L. No. 88-525, § 4(b), 78 Stat. 703, 704 as amended (codified as amended at 7 U.S.C. § 2013(b)).

⁶42 U.S.C. § 5179(a).

⁷42 U.S.C. § 5180(b).

⁸Pub. L. No. 92-258, § 2, 86 Stat. 88, 89, *amending* Pub. L. No. 89-73, 79 Stat. 218.

⁹Pub L No. 95-478, § 103(b), 92 Stat. 1513, 1533 (codified as amended at 42 U.S.C. § 3030a); Pub. L. No. 95-478, § 501(a), 92 Stat. 1513, 1558 (1978) (repealing prior provision).

Appendix III: Information about the Quantity of Seafood That USDA Purchased per Fiscal Year for the National School Lunch Program

The quantity of seafood that the U.S. Department of Agriculture (USDA) purchased per state for the National School Lunch Program (NSLP) varied by fiscal year, according to data from USDA's supply chain management database. Some states increased the average quantity of seafood they ordered from USDA per student for the program, in general, from fiscal years 2014 through 2019. Other states decreased the average quantity of seafood ordered from USDA per student in the program (see table 3). As previously mentioned, USDA added canned tuna to its list of available food commodities, which USDA began purchasing in fiscal year 2016.¹ Also, in fiscal year 2017, USDA began purchasing Alaska pollock fish sticks. Both of these products resulted in an overall increase in the quantity of seafood that USDA purchased in those fiscal years.

¹In 2016, USDA also changed the quantity of bulk Alaska pollock per unit from 49 pounds to 49.5 pounds. Each of these two products had unique product codes, but we combined these two products for our analysis because they both represented bulk Alaska pollock.

**Appendix III: Information about the Quantity of
Seafood That USDA Purchased per Fiscal Year
for the National School Lunch Program**

Table 3: Average Ounces of Seafood That USDA Purchased per Student Participating in the National School Lunch Program (NSLP) per Fiscal Year by State, 2014–2019

State	2014	2015	2016	2017	2018	2019	Average (2014–2019)
AK	0.5	3.0	0.7	7.2	3.4	3.1	3.0
AL	3.6	0.0	4.9	0.0	0.0	0.0	1.4
AR	2.0	8.0	2.1	9.7	0.0	0.0	3.6
AZ	0.5	1.4	3.9	4.3	2.9	1.9	2.5
CA	0.9	0.6	2.9	2.4	2.7	2.4	2.0
CO	0.0	0.6	0.5	0.1	0.1	0.0	0.2
CT	0.6	0.9	5.1	4.0	2.1	1.6	2.4
DC	0.0	12.1	0.0	0.0	2.8	0.0	2.5
DE	6.7	6.5	12.3	18.3	12.4	15.2	12.0
FL	2.3	2.8	1.8	4.0	2.2	6.6	3.3
GA	2.6	2.1	3.9	3.0	1.6	1.1	2.4
GU	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HI	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IA	1.5	1.2	0.0	1.6	1.6	1.6	1.3
ID	4.0	2.9	0.0	6.8	2.8	3.9	3.4
IL	1.7	4.6	5.2	5.0	5.4	5.6	4.6
IN	2.5	1.2	2.1	3.4	2.6	0.9	2.1
KY	0.6	1.8	1.2	1.2	0.0	1.4	1.0
LA	5.8	5.8	5.0	4.5	3.9	2.3	4.6
MA	2.5	1.2	7.6	14.0	8.8	6.7	6.8
MD	3.0	5.9	6.9	8.0	9.6	5.6	6.5
ME	1.6	1.6	3.5	21.2	12.9	12.2	8.7
MI	0.7	0.0	2.3	1.6	0.8	0.0	0.9
MN	2.1	1.0	2.1	1.0	1.0	1.0	1.4
MO	1.2	1.4	6.0	6.0	4.3	2.9	3.6
MS	1.6	3.3	7.9	21.5	13.6	13.8	10.1
MT	0.0	0.0	5.7	4.3	7.5	7.7	4.2
NC	4.7	4.2	4.2	3.8	4.4	4.5	4.3
ND	0.0	0.0	1.1	2.8	0.0	0.0	0.6
NE	2.6	0.0	0.5	0.6	2.4	2.4	1.4
NH	0.0	0.0	13.4	6.4	0.0	8.1	4.6
NJ	0.0	2.8	11.2	4.6	4.8	6.2	4.9
NM	0.0	0.0	8.4	1.1	2.8	0.0	2.1
NV	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Appendix III: Information about the Quantity of
Seafood That USDA Purchased per Fiscal Year
for the National School Lunch Program**

State	2014	2015	2016	2017	2018	2019	Average (2014– 2019)
NY	0.4	0.4	5.0	6.4	8.1	3.0	3.9
OH	0.0	0.6	2.5	1.9	0.6	0.6	1.0
OK	6.4	6.0	2.8	9.2	4.8	2.5	5.3
OR	1.1	3.3	4.5	6.5	7.3	5.7	4.8
PA	0.0	0.7	5.7	5.2	3.7	5.2	3.4
PR	0.0	0.0	12.5	31.3	36.1	8.7	12.9
RI	0.0	4.2	15.0	7.5	6.5	3.3	6.1
SC	0.7	1.6	2.0	7.8	8.0	0.0	3.3
SD	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TN	3.4	4.0	2.3	1.0	0.4	2.0	2.2
TX	4.3	3.5	6.2	5.7	5.8	6.4	5.3
UT	1.0	1.5	0.0	1.6	0.2	0.0	0.7
VA	2.3	1.8	4.0	2.7	2.1	2.0	2.4
VI	0.0	0.0	0.0	0.0	114.9	0.0	9.8
VT	0.0	0.0	4.0	11.5	9.9	11.2	5.9
WA	3.7	0.4	5.8	6.3	3.6	3.5	3.9
WI	2.3	1.2	1.2	4.8	3.7	3.7	2.8
WV	0.0	0.0	0.0	6.3	3.1	10.3	3.2
WY	2.7	3.9	0.0	0.0	0.0	0.0	1.2

Legend:

GU - Guam

PR – Puerto Rico

VI – U.S. Virgin Islands

Source: GAO analysis of U.S. Department of Agriculture (USDA) information. | GAO-23-105179

Note: USDA only purchases the food that states order on behalf of school food authorities.

Appendix IV: Information on Vendors from Which USDA Purchased Animal Proteins for the National School Lunch Program

The U.S. Department of Agriculture (USDA) purchased animal proteins for the National School Lunch Program (NSLP) from 77 vendors at some point from fiscal years 2014 through 2019.¹ The number of vendors varied by type of animal protein—from 11 that provided seafood to 32 that provided poultry (see table 4).²

Table 4: Number of Vendors and Quantity of Animal Protein That USDA Purchased, by Type, for the National School Lunch Program (NSLP), Fiscal Years 2014–2019

Type of animal protein	Number of vendors	Quantity purchased (pounds)
Poultry ^a	32	1,536,546,295
Beef	25	658,529,907
Pork	13	162,008,690
Eggs	11	84,072,055
Seafood	11	37,689,615
Total	77^b	2,478,846,562

Source: GAO analysis of U.S. Department of Agriculture (USDA) information. | GAO-23-105179

Note: USDA only purchases the food that states order on behalf of school food authorities.

^aFor the purpose of this report, we define “poultry” as chicken and turkey.

^bThe number of vendors for each animal protein does not sum to the total because some vendors provided multiple types of animal proteins.

For seafood from fiscal years 2014 through 2019, three vendors provided nearly 75 percent of the quantity that USDA purchased for the NSLP, and each of those three vendors provided at least 65 percent of a specific type of seafood. Specifically, one vendor provided 77 percent of Alaska pollock, another provided 65 percent of catfish, and another provided 75

¹USDA only purchases the food that states order on behalf of school food authorities.

²For the purpose of this report, we define “poultry” as chicken and turkey.

**Appendix IV: Information on Vendors from
Which USDA Purchased Animal Proteins for
the National School Lunch Program**

percent of canned tuna. The remaining vendors provided relatively small amounts of seafood to the NSLP.

Similarly, for other types of animal proteins, a few vendors provided most of the quantity that USDA purchased for the NSLP. For example, three vendors provided over 80 percent of the eggs, four vendors provided over 75 percent of the pork, and three vendors provided 80 percent of the poultry.

Appendix V: Information on USDA Pilot Projects

The U.S. Department of Agriculture (USDA) previously helped states and school food authorities (SFA) enhance the availability of Greek-style yogurt and unprocessed fruits and vegetables. Specifically, USDA implemented two pilot projects that have resulted in benefits that helped states and SFAs that may be relevant to addressing factors that affect selected states' and SFA efforts to provide seafood to students through the National School Lunch Program.

- **Pilot program for Greek-style yogurt.** USDA initiated a pilot project for Greek-style yogurt that added a new protein product to the list of available dairy products and allowed USDA to determine whether it was feasible to distribute—in coordination with state and local partners—small amounts of a short shelf-life product. USDA established this pilot in 2013 with four states (Arizona, Idaho, New York, and Tennessee) and expanded to 12 states in the 2014-2015 school year. USDA found that it was able to successfully work with Greek-style yogurt producers to allow states and SFAs to order small amounts of a highly perishable product and deliver that product efficiently. Greek-style yogurt, or high-protein yogurt, has been offered as a regular USDA-purchased product to all states since 2015.
- **Pilot project for unprocessed fruits and vegetables.** The pilot project for unprocessed fruits and vegetables—authorized by the Agriculture Act of 2014—provided select states with an additional means to obtain unprocessed fruits and vegetables.¹ The pilot was intended to provide SFAs in eight states (California, Connecticut, Michigan, New York, Oregon, Virginia, Washington, and Wisconsin) with additional flexibility to procure unprocessed fruits and vegetables from any USDA-authorized vendor using entitlement funds. In its 2018 review of the pilot, USDA found that the pilot (1) provided additional opportunities to obtain local produce, (2) expanded the variety of produce that SFAs obtained with USDA funds, and (3) increased autonomy over purchasing decisions. The pilot is ongoing.

¹Pub. L. No. 113-79, § 4214, 128 Stat. 649.

Appendix VI: Comments from the Department of Commerce

**Appendix VI: Comments from the Department
of Commerce**



UNITED STATES DEPARTMENT OF COMMERCE
Office of the Acting Chief Financial Officer and
Assistant Secretary for Administration
Washington, D.C. 20230

November 3, 2022

Mr. Steve Morris
Director
Natural Resources and Environment
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Dear Mr. Morris:

Thank you for the opportunity to review and comment on the Government Accountability Office's (GAO) draft report, *National School Lunch Program: USDA Could Enhance Assistance to States and Schools in Providing Seafood to Students* (GAO-23-105179).

The Department of Commerce agrees with GAO's recommendation directed to the National Oceanic and Atmospheric Administration. Enclosed is our response to the draft report.

Should you have any questions, please contact MaryAnn Mausser, GAO Liaison, at (202) 482-8120 or mmausser@doc.gov.

Sincerely,

**JEREMY
Pelter** Digitally signed by
JEREMY PELTER
Date: 2022.11.03
17:07:19 -04'00'

Jeremy Pelter
Acting Chief Financial Officer
and Assistant Secretary for Administration

Enclosure

Department of Commerce
National Oceanic and Atmospheric Administration
Response to the GAO Draft Report Entitled
*National School Lunch Program: USDA Could Enhance
Assistance to States and Schools in Providing Seafood to Students*
(GAO-23-105179, November 2022)

General Comments

The Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) appreciates the opportunity to review the Government Accountability Office's (GAO) report on the U.S. Department of Agriculture's (USDA) enhancement of assistance to states and schools in providing seafood to students.

NOAA's National Marine Fisheries Service (NMFS) supports the efforts to encourage consumption of sustainable U.S. seafood. Seafood is a healthy food choice, providing key nutrients and healthy protein essential for strong bones, brain development, and healthy immune and cardiovascular systems. The USDA's dietary guidelines for Americans recommend that people eat two 4-ounce servings of seafood each week, a goal that on average Americans do not meet. In addition, promoting the inclusion of seafood in the school lunch program is consistent with the Department of Commerce's Strategic Objectives to stimulate business investment in fisheries and aquaculture.

NOAA Response to GAO Recommendations

The draft report made one recommendation pertaining to NOAA:

Recommendation 2: "The Administrator of the National Oceanic and Atmospheric Administration should work with the Secretary of Agriculture to develop a collaborative mechanism, such as a Memorandum of Understanding, that establishes the sharing of NOAA's list of domestic seafood vendors with the USDA."

NOAA Response: NOAA agrees with this recommendation and will explore the feasibility of a Memorandum of Understanding (MOU), consistent with applicable legal requirements. NMFS conducts an Annual Survey of U.S. Seafood Processors as part of our efforts to report on the status of the seafood industry as part of our annual Fisheries of the United States publication. Some information about individual seafood processors who respond to our survey could potentially be helpful to USDA to assist them in finding seafood vendors that are able to provide food for the school lunch program. However, much of the information from the survey constitutes confidential business information. As such, any MOU would need to set out specifically what information USDA would need from the Survey of Seafood Processors and what steps USDA and NOAA would take to ensure that confidential data is not released.

Accessible Text for Appendix VI: Comments from the Department of Commerce

November 3, 2022

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Director
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441 G Street, NW
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Should you have any questions, please contact MaryAnn Mausser, GAO Liaison, at (202) 482-8120 or mmausser@doc.gov.

Sincerely,

Jeremy Pelter
Acting Chief Financial Officer
and Assistant Secretary for Administration

Enclosure

Department of Commerce
National Oceanic and Atmospheric Administration
Response to the GAO Draft Report Entitled
National School Lunch Program: USDA Could Enhance

Assistance to States and Schools in Providing Seafood to Students
(GAO-23-105179, November 2022)

General Comments

The Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) appreciates the opportunity to review the Government Accountability Office's (GAO) report on the U.S. Department of Agriculture's (USDA) enhancement of assistance to states and schools in providing seafood to students.

NOAA's National Marine Fisheries Service (NMFS) supports the efforts to encourage consumption of sustainable U.S. seafood. Seafood is a healthy food choice, providing key nutrients and healthy protein essential for strong bones, brain development, and healthy immune and cardiovascular systems. The USDA's dietary guidelines for Americans recommend that people eat two 4-ounce servings of seafood each week, a goal that on average Americans do not meet. In addition, promoting the inclusion of seafood in the school lunch program is consistent with the Department of Commerce's Strategic Objectives to stimulate business investment in fisheries and aquaculture.

NOAA Response to GAO Recommendations

The draft report made one recommendation pertaining to NOAA:

Recommendation 2: "The Administrator of the National Oceanic and Atmospheric Administration should work with the Secretary of Agriculture to develop a collaborative mechanism, such as a Memorandum of Understanding, that establishes the sharing of NOAA's list of domestic seafood vendors with the USDA."

NOAA Response: NOAA agrees with this recommendation and will explore the feasibility of a Memorandum of Understanding (MOU), consistent with applicable legal requirements. NMFS conducts an Annual Survey of U.S. Seafood Processors as part of our efforts to report on the status of the seafood industry as part of our annual Fisheries of the United States publication. Some information about individual seafood processors who respond to our survey could potentially be helpful to USDA to assist them in finding seafood vendors that are able to provide food for the school lunch program. However, much of the information from the survey constitutes confidential business information. As such, any MOU would need to set out specifically what information USDA would need from the Survey of Seafood Processors and what steps USDA and NOAA would take to ensure that confidential data is not released.

Appendix VII: GAO Contact and Staff Acknowledgments

GAO Contact

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Staff Acknowledgments

In addition to the contact named above, Anne K. Johnson (Assistant Director), David Moreno (Analyst in Charge), Adrian Apodaca, John Barrett, Xiang Bi, Kevin Bray, Michele Fejfar, Corinna Nicolaou, Catherine Paxton, and John Yee made key contributions to this report.

Peter Del Toro, Janay Sam, Scott Spicer, Sarah Veale, and David Watsula also made important contributions.

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[GAO-22-105291](#). Washington, D.C.: January 27, 2022.

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Washington, D.C.: October 27, 2021.

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