DEPARTMENT OF AGRICULTURE

Food and Nutrition Service

7 CFR Part 210, 215, 220, 225 and 226

[FNS–2022–0043]

RIN 0584–AE88

Child Nutrition Programs: Revisions to Meal Patterns Consistent With the 2020 Dietary Guidelines for Americans

AGENCY: Food and Nutrition Service (FNS), U.S. Department of Agriculture (USDA).

ACTION: Proposed rule with request for comments.

SUMMARY: This rulemaking proposes long-term school nutrition standards based on the *Dietary Guidelines for Americans, 2020–2025,* and feedback the U.S. Department of Agriculture received from child nutrition program stakeholders during a robust stakeholder engagement campaign. Notably, this rulemaking proposes new added sugars standards for the school lunch and breakfast programs. It also proposes gradually reducing school meal sodium limits, consistent with research recommending lower sodium intake beginning early in life to reduce children's risk of chronic disease. In addition to addressing nutrition standards, this proposes measures to strengthen the Buy American provision in the school meal programs. As described below, this document also addresses long-term milk and whole grain standards; proposes a variety of changes to school meal requirements; addresses proposals from a prior rulemaking; and makes several technical corrections to child nutrition program regulations. The U.S. Department of Agriculture expects to issue a final rule in time for schools to plan for school year 2024–2025.

DATES: Written comments on this proposed rule should be received on or before April 10, 2023 to receive consideration.

ADDRESSES: The Food and Nutrition Service, USDA, invites interested persons to submit written comments on the provisions of this proposed rule. Comments related to this proposed rule may be submitted in writing by one of the following methods:

- *Online (preferred):* Go to *https://www.regulations.gov* and follow the online instructions for submitting comments.
- *Mail:* Send comments to School Meals Policy Division, Food and Nutrition Service, P.O. Box 9233, Reston, Virginia 20195.

All written comments submitted in response to this proposed rule will be included in the record and will be made available to the public. Please be advised that the substance of the comments and the identity of the individuals or entities submitting the comments will be subject to public disclosure. The Food and Nutrition Service will make the written comments publicly available on the internet via *https://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: Tina Namian, Director, School Meals Policy Division—4th floor, Food and Nutrition Service, 1320 Braddock Place, Alexandria, VA 22314; telephone: 703–305–2590.

SUPPLEMENTARY INFORMATION:

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Table of Abbreviations

CACFP—Child and Adult Care Food Program
CNA—Child Nutrition Act
CN–OPS—Child Nutrition Operations Study
FDA—U.S. Food and Drug Administration
FNS—Food and Nutrition Service
HEI—Healthy Eating Index
ICN—Institute of Child Nutrition
NASEM—National Academies of Science, Engineering, and Medicine
NSLA—National School Lunch Act
NSLP—National School Lunch Program
RFI—Request for Information
SBP—School Breakfast Program
SFSP—Summer Food Service Program
SMP—Special Milk Program
SY—School Year
USDA—United States Department of Agriculture

Section 1: Background

On February 7, 2022, the U.S. Department of Agriculture (USDA) published *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium*[1] to support schools after more than two years of serving meals under pandemic conditions. Instead of making permanent changes, this rule, hereafter referred to as ''the transitional standards rule,'' began a multi-stage approach to strengthen the school meal nutrition standards. USDA intended for the transitional standards rule to apply for two school years, during which it would provide immediate relief as schools return to traditional school meal service following extended use of COVID–19 meal pattern flexibilities. This proposed rule begins the next stage, where USDA will further improve the school meal pattern requirements through this notice-and-comment rulemaking based on a comprehensive review of the *Dietary Guidelines for Americans, 2020–2025* (Dietary Guidelines), robust stakeholder input on school nutrition standards, and lessons learned from prior rulemakings.[2] With this rulemaking, USDA is integrating each of these important factors in a way that puts children's health at the forefront while also ensuring that the nutrition standards are achievable and set schools up for success.

The transitional standards rule finalized USDA's *Restoration of Milk, Whole Grains, and Sodium Flexibilities Proposed Rule* (85 FR 75241, November 25, 2020) with some modifications. Effective July 1, 2022, the transitional standards rule:

- Allowed local operators of the National School Lunch Program (NSLP) and School Breakfast Program (SBP) to offer flavored, low-fat milk (1 percent fat) for students in grades K through 12 and for sale as a competitive beverage. It also allowed flavored, low-fat milk in the Special Milk Program (SMP) and in the Child and Adult Care Food Program (CACFP) for participants ages 6 and older.
- Required at least 80 percent of the weekly grains in the school lunch and breakfast menus to be whole grain-rich.[3]
- Established Sodium Target 1 as the sodium limit for school lunch and

[1] *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (87 FR 6984, February 7, 2022). Available at: *https://www.federalregister.gov/documents/2022/02/07/2022-02327/child-nutrition-programs-transitional-standards-for-milk-whole-grains-and-sodium.*

[2] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition.* December 2020. Available at: *https://www.dietaryguidelines.gov/.*

[3] To meet USDA's whole grain-rich criteria, a product must contain at least 50 percent whole grains, and the remaining grain content of the product must be enriched.

breakfast in school year (SY) SY 2022–2023 and implemented a Sodium Interim Target 1A effective for school lunch beginning in SY 2023–2024.

The transitional standards represented a middle ground between the 2012 standards for milk, whole grains, and sodium, and the temporary meal pattern waivers that many schools relied on due to the COVID–19 pandemic.[4] The 2012 standards,[5] which were a key component of the Healthy, Hunger-Free Kids Act, improved school meal standards for the first time in 15 years by increasing the availability of fruits, vegetables, whole grains, and fat-free and low-fat milk in school meals; limiting sodium and saturated fat and eliminating *trans* fat in school meals; and establishing calorie ranges to support age-appropriate meals for school children. Regarding milk, whole grains, and sodium, the 2012 standards allowed flavoring only in fat-free milk in the NSLP and SBP; required all grains offered in the NSLP and SBP to be whole grain-rich, effective SY 2014–2015; and required schools participating in the NSLP and SBP to reduce the sodium content of meals offered on average over the school week by meeting progressively lower sodium targets over a 10-year period. With the transitional standards, USDA intended to balance the needs of schools as they recover from supply chain and other pandemic-related challenges, while taking measured steps towards improving nutritional quality.

USDA is embarking on the next stage of updating the school nutrition standards in this proposed rulemaking to further align school meal nutrition standards with the goals of the *Dietary Guidelines, 2020–2025.* As described throughout this preamble, USDA worked closely with stakeholders to gather input for this proposed rule. Informed by this extensive stakeholder engagement, which allowed USDA to listen and learn from schools, advocacy organizations, industry partners, and others, USDA intends to develop standards that improve the nutritional quality of school meals based on the latest nutrition science, that are durable and built to last, and that result in meals children will enjoy. USDA encourages further stakeholder input on all aspects of this proposed rule.

This preamble discusses alternatives to certain proposals. For example, for milk, USDA will consider two proposals: under one proposal, USDA would limit milk choices in elementary and middle schools (grades K–8) to a variety of unflavored milks only, while under the other proposal, USDA would maintain the current standard allowing all schools (grades K–12) to offer fat-free and low-fat milk, flavored and unflavored, in reimbursable school meals. For whole grains, USDA will consider maintaining the current requirement that at least 80 percent of the weekly grains offered are whole grain-rich, based on ounce equivalents of grains offered, and will also consider an alternative under which all grains offered must meet the whole grain-rich requirement, except that one day each school week, schools may offer enriched grains. For sodium, USDA proposes a gradual series of reductions but may adjust the frequency of the sodium reductions as well as the proposed levels for those reductions for the final rule based on public comment. As noted above, USDA encourages public input on all aspects of this proposed rule, including the alternatives provided for certain provisions.

This proposed rule also addresses the Buy American provision, which requires school food authorities to purchase, to the maximum extent practicable, domestic commodities or products for use in the NSLP and SBP. The Buy American provision supports the mission of the child nutrition programs, which is to serve children nutritious meals and support American agriculture. This requirement was first implemented in the school meal programs in 1998. However, USDA understands that school food authorities and other stakeholders find the Buy American provision to be ambiguous, due to the lack of specificity in the regulation. USDA is proposing to clarify and strengthen the Buy American provision in the school meal programs.

USDA expects to issue a final rule in time for schools to plan for SY 2024–2025. However, as noted throughout this preamble, not all of the standards outlined in this proposed rule would be fully implemented for SY 2024–2025. Based on stakeholder input and prior rulemaking experience, USDA intends to phase in certain requirements so that State agencies, schools, and the food industry have time to prepare for the changes (for example, see *Section 2: Added Sugars* and *Section 5: Sodium*). This additional time will also allow USDA to provide guidance and support to State agencies and schools, so that they are well equipped to meet the updated standards upon implementation. USDA welcomes public input on the proposed implementation dates, including if delayed implementation is warranted for any provisions where it is not already specified. Additionally, in prior rulemakings, USDA has included an effective date, as well as a delayed compliance date, for certain provisions. This approach allows State and local operators to focus on technical assistance, rather than on compliance, during the initial implementation period. USDA welcomes public input on whether a similar approach should be used for this rulemaking.

The remainder of *Section 1: Background* provides general information to explain the need for this rulemaking. Sections 2 through 15 provide specific information regarding each of the proposed changes, which includes an overview of the current standard and the proposed change. *Section 16: Summary of Changes* briefly summarizes all the provisions included in this proposed rule and the specific public comments requested throughout the preamble. Individuals and organizations may choose to use this summary section as an outline for submitting their public comments.

Dietary Guidelines

The *Dietary Guidelines for Americans* are the foundation of the school nutrition standards. First released in 1980, the *Dietary Guidelines* are jointly published by the USDA and the U.S. Department of Health and Human Services every five years. The *Dietary Guidelines* are required by law to be based on the preponderance of current scientific and medical knowledge.[6] They inform Federal nutrition requirements, consumer health messages, and other science-based nutrition and health education efforts. USDA is required to develop school nutrition standards that are consistent with the goals of the most recent *Dietary Guidelines* (National School Lunch Act, 42 U.S.C. 1758(f)) and that consider the nutrient needs of children who may be at risk for inadequate food intake and food insecurity. Following the recommendations in the *Dietary Guidelines* can help people lower their

[4] For example, in SY 2021–2022, USDA issued a nationwide waiver allowing schools to request targeted meal pattern waivers from their State agency. See: *Nationwide Waiver to Allow Specific School Meal Pattern Flexibility for SY 2021–2022.* Available at: *https://www.fns.usda.gov/cn/covid-19-child-nutrition-response-90.*

[5] *Nutrition Standards in the National School Lunch and School Breakfast Programs* (77 FR 4088, January 26, 2012). Available at: *https://www.federalregister.gov/documents/2012/01/26/2012-1010/* nutrition-standards-in-the-national-school-lunch-and-school-breakfast-programs.

[6] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *About.* Available at: *https://www.dietaryguidelines.gov/about-dietary-guidelines/process/monitoring-act.*

risk of heart disease, type 2 diabetes, and cancer.[7]

The *Dietary Guidelines, 2020–2025* provide four overarching recommendations:

- Follow a healthy dietary pattern [8] at every life stage.
- Customize and enjoy nutrient-dense food and beverage choices to reflect personal preferences, cultural traditions, and budgetary considerations.
- Focus on meeting food group needs with nutrient-dense foods and beverages and stay within calorie limits.
- Limit foods and beverages higher in added sugars, saturated fat, and sodium, and limit alcoholic beverages.

Through this rulemaking, USDA is exercising broad discretion authorized by Congress to administer the school lunch and breakfast programs and ensure meal pattern standards ''are consistent with the goals of the most recent'' *Dietary Guidelines.* See 42 U.S.C. 1752, 1758(a)(1)(B), 1758(k)(1)(B), 1758(f)(1)(A), and 1758(a)(4)(B). Consistent with its historical position, USDA interprets ''consistent with the goals of'' the *Dietary Guidelines* to be a broad, deferential phrase that requires consistency with the ultimate objectives of *Dietary Guidelines* but not necessarily the adoption of the specific consumption requirements or specific quantitative recommendations in the *Dietary Guidelines.* Accordingly, through this proposed rule, USDA is working to ensure an appropriate degree of consistency between school meal standards and the *Dietary Guidelines* by considering operational feasibility and the ongoing recovery from the impacts of COVID–19, while also ensuring schools can plan appealing meals that encourage consumption and intake of key nutrients that are essential for children's growth and development.

Through this rulemaking, USDA intends to further align school meal nutrition standards with the goals of the *Dietary Guidelines, 2020–2025.* This effort is described in greater detail throughout the preamble, and particularly in *Section 2: Added Sugars,* where USDA proposes to establish added sugars limits for the school meal programs and proposes to update the CACFP total sugars limits to align with the proposed NSLP and SBP added sugars limits for ease of operations.

Healthy Eating Index

The Healthy Eating Index (HEI) is a measure of diet quality used to assess how well a set of foods, such as foods provided through the school meal programs, align with the *Dietary Guidelines.* Overall, a higher total HEI score indicates a diet that aligns more closely with dietary recommendations. An ideal overall HEI score of 100 suggests that the set of foods is in line with the *Dietary Guidelines* recommendations.

USDA used the HEI to measure improvements in school meals following the 2012 final rule and found that the updated standards resulted in healthier meals offered to children.[9] For example, the school lunch average total HEI score increased by 24 points (57.9 to 81.5) from SY 2009–2010 to SY 2014–2015. For school breakfast, the average total HEI score increased by 21 points (49.6 to 71.3) over the same time.[10] USDA also looked at the impact of the 2012 rule on specific meal components. The HEI component score for fruits at lunch jumped from 77 percent to 95 percent of the maximum score following the 2012 final rule, and the score for vegetables at lunch jumped from 75 percent to 82 percent. Of all the school lunch components, the score for whole grains increased the most, moving from 25 percent to 95 percent of the maximum score. At the same time, USDA recognizes that there is room for improvement in certain areas, such as sodium. While the score for sodium improved, it remains well below the maximum score, at 27 percent for lunch. With this proposed rule, USDA intends to maintain the already significant improvements in school meals, while continuing steady progress in other areas; for example, by continuing to gradually reduce sodium.

Nutrition Security

In addition to requiring that USDA develop school nutrition standards that are consistent with the goals of the most recent *Dietary Guidelines,* as described above, the National School Lunch Act also requires USDA to ''consider the nutrient needs of children who may be at risk for inadequate food intake and food insecurity'' (42 U.S.C. 1758(f)(1)(B)). Along with addressing food insecurity, [11] USDA has made addressing nutrition security a key policy priority. ''Nutrition security'' [12] means consistent access to the safe, healthy, affordable foods essential to health and well-being. It builds on food security by focusing on how diet quality can help reduce diet-related diseases. Nutrition security also emphasizes equity and the importance of addressing long-standing health disparities. Though poor nutrition affects every demographic, diet-related diseases disproportionately impact historically underserved communities, largely due to long-standing structural and institutional racism in the United States.[13] Promoting food and nutrition security is critical to addressing health disparities and improving health outcomes. To that end, USDA is evaluating its nutrition assistance programs to ensure that they serve all Americans equitably, removing systemic barriers that may hinder participation.[14] USDA research suggests that Black and

[7] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *The Dietary Guidelines for Americans Can Help You Eat Healthy to Be Healthy.* December 2020. Available at: *https://www.dietaryguidelines.gov/sites/default/files/2020-12/Infographic_Eat_Healthy_Be_Healthy.pdf.*

[8] A dietary pattern is the combination of foods and beverages that constitutes an individual's complete dietary intake over time. This may be a description of a customary way of eating or a description of a combination of foods recommended for consumption. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020–2025.* 9th Edition. December 2020. Available at: *https://www.dietaryguidelines.gov/.*

[9] U.S. Department of Agriculture. *School Meals Are More Nutritious After Updated Nutrition Standards.* Available at: *https://fns-prod.azureedge.us/sites/default/files/resource-files/SNMCS_infographic2_NutritionalQualityofSchool%20Meals.pdf.*

[10] *School Nutrition and Meal Cost Study* findings suggest that the updated nutrition standards have had a positive and significant influence on the nutritional quality of school meals. Between SY 2009–2010 and SY 2014–2015, ''Healthy Eating Index—2010'' (HEI) scores for NSLP and SBP increased significantly, suggesting that the updated standards significantly improved the nutritional quality of school meals. Over this period, the mean HEI score for NSLP lunches increased from 57.9 to 81.5, and the mean HEI score for SBP breakfasts increased from 49.6 to 71.3. The study is available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.* (OMB Control Number 0584–0596, expiration date 07/31/2017.) To see the impact of the 2012 final rule on school breakfast meal component scores, see Figure ES.17. *Comparison of Healthy Eating Index—2010 Component Scores, as a Percentage of Maximum Scores, for SBP Breakfasts Served in SY 2009–2010 and SY 2014–2015: All Schools.*

[11] Food insecurity is the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways. See: U.S. Department of Agriculture. *Measurement.* Available at: *https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/measurement/.*

[12] U.S. Department of Agriculture. *What is Nutrition Security?* Available at: *https://www.usda.gov/nutrition-security.*

[13] U.S. Department of Agriculture. *USDA Actions on Nutrition Security.* Available at: *https://www.usda.gov/sites/default/files/documents/usda-actions-nutrition-security.pdf.*

[14] U.S. Department of Agriculture. *U.S. Agriculture Secretary Tom Vilsack Highlights Key Work in 2021 to Promote Food and Nutrition Security.* Available at: *https://www.fns.usda.gov/news-item/usda-0024.22.* See also: U.S. Department of Agriculture, *USDA Equity Action Plan in Support of Executive Order (E.O.) 13985 Advancing Racial Equity and Support for Underserved Communities through the Federal Government,* February 10, 2022. Available at: *https://www.usda.gov/equity/action-plan.*

Hispanic children participate in the school meal programs at higher rates than white children,[15] making improving the school meal nutrition standards an important part of USDA's efforts to improve access to healthy foods that promote well-being in an equitable way.[16]

USDA's work to advance nutrition security focuses on four pillars:

- Meaningful support
- Healthy food
- Collaborative action
- Equitable systems

This proposed rule touches on all four pillars. It supports USDA's efforts to foster healthy eating across all life stages, with a special focus on young children, by proposing to update school meal standards to reflect the latest nutrition science. This, in turn, is expected to expand access to and increase consumption of healthy and nutritious food among school children. As discussed below, to develop this proposed rule, USDA collaborated with a variety of stakeholders, including nutrition and health advocacy groups, the education community, Tribal stakeholders, and many others. Finally, regarding the fourth pillar, USDA is taking steps to improve school meal nutrition standards for all children, including to better serve American Indian and Alaska Native children as part of its effort to prioritize equity in the school meal programs (see *Section 6: Menu Planning Options for American Indian and Alaska Native Students*).

Practical and Durable Standards

USDA intends to develop nutrition standards that are durable and built to last. For this rulemaking, USDA recognizes that continued, meaningful improvement in the nutritional quality of meals consumed by students is best achieved by standards that are both ambitious and can be implemented successfully. USDA has incorporated lessons learned from prior rulemakings and stakeholder input (described below) by proposing ambitious changes that occur over time and in clear and predictable increments. USDA's proposed approach also reflects an understanding that changes in school meals must occur in the context of broader efforts to achieve improvements in diet quality for all Americans. School nutrition standards cannot be so far out of step with U.S. diets that they are not achievable. This is particularly important regarding standards for sodium levels, where current consumption levels far exceed dietary recommendations. In this proposal, USDA seeks to align reductions in school meal sodium levels with broader efforts to reduce sodium in the U.S. food supply being led by the Food and Drug Administration (FDA).

This approach also reflects USDA's recognition that the food industry must be engaged in and support schools' efforts to meet nutrition standards by developing, marketing, and supplying products that support them. USDA is supporting this goal with the Healthy Meals Incentives initiative, which will include support for collaborative and innovative efforts by school districts, food producers, suppliers, distributors, and community partners to develop creative solutions for increasing the availability of and access to nutritious foods for school meals.

Based on stakeholder input and experience with the 2012 standards, USDA also recognizes the importance of encouraging meals that meet local and cultural preferences and ensuring the nutrition standards allow them. This priority is reflected in the proposed standards. For example, the whole grain-rich proposal would allow schools to occasionally serve white rice or non-whole grain-rich tortillas, while still promoting whole grain-rich foods throughout the school week. This approach is expected to promote nutritious meals while increasing the variety of foods available for students to enjoy.

Finally, USDA also acknowledges that there are unforeseeable events, such as the recent supply chain challenges, that can make it difficult for schools to fully comply with the nutrition standards in all circumstances. In response to recent challenges, USDA has provided waivers to the requirement for State agencies to apply fiscal action for missing food components, for missing production records, and for repeated violations involving milk type and vegetable subgroups due to supply chain disruptions.[17] State agencies also have discretion regarding fiscal action for repeat violations of the requirements for food quantities, whole grain-rich foods, and the dietary specifications for calories, saturated fat, sodium, and *trans* fat through current program regulations, and USDA has encouraged States to use this flexibility in appropriate circumstances.[18] Emergency procurement flexibilities at 2 CFR 200.320(c) may also be a resource for State agencies and schools facing challenges meeting the meal pattern requirements due to supply chain challenges or other emergencies. These flexibilities, when used appropriately, can provide relief in those circumstances when it is not feasible for schools to meet all aspects of strong nutrition standards in every instance.

Stakeholder Engagement: Listening Sessions

To develop these proposed standards, USDA relied on input from key child nutrition program stakeholders. Throughout 2022, USDA held over 50 listening sessions with State agencies, school food authorities, advocacy organizations (including a parent organization), Tribal stakeholders, professional associations, food manufacturers, and other Federal agencies. During these conversations, participants shared their insights and perspectives on developing ambitious, achievable, and durable standards to improve children's health. These conversations were part of USDA's effort to build consensus on long-term solutions for healthier school meals through collaborative action. Stakeholders also provided important insight into the successes and challenges that schools experience implementing the nutrition standards, including input on the support, guidance, and resources needed from USDA to improve school meals for children.

Several themes emerged from these discussions. For example, USDA heard that uncertainty around school meal nutrition standards makes product development and planning difficult and that clear expectations and consistent standards are needed. Having time to plan for updated standards, in advance of implementation, is important to many stakeholders. Listening session participants also offered specific input

[15] Overall, 70 percent of Hispanic and non-Hispanic Black students participated in the NSLP on the study's target day in SY 2014–2015, compared with about half of non-Hispanic white students. See: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, *School Nutrition and Meal Cost Study, Final Report Volume 4: Student Participation, Satisfaction, Plate Waste, and Dietary Intakes,* by Mary Kay Fox, Elizabeth Gearan, Charlotte Cabili, Dallas Dotter, Katherine Niland, Liana Washburn, Nora Paxton, Lauren Olsho, Lindsay LeClair, and Vinh Tran. Project Officer: John Endahl. Alexandria, VA: April 2019. Available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.* (OMB Control Number 0584–0596, expiration date 07/31/2017.)

[16] Indeed, a study published in 2021 concluded that from 2003 to 2018, the quality of foods consumed from school improved significantly without population disparities. These findings suggest that improvements to the school meal nutrition standards following the 2010 Healthy, Hunger-Free Kids Act produced significant, specific, and equitable changes in dietary quality of school foods. See: Liu J, Micha R, Li Y, Mozaffarian D. *Trends in Food Sources and Diet Quality Among US Children and Adults,* 2003–2018. JAMA Netw Open. 2021;4(4):e215262. doi:10.1001/jamanetworkopen.2021.5262.

[17] See: 7 CFR 210.18(l)(2)(i) and (ii).

[18] See: 7 CFR 210.18(l)(2)(iii) and (iv).

on the types of standards they prefer. For example, regarding sodium limits, many stakeholders preferred continuing with weekly limits rather than moving to per-product limits. Participants suggested that weekly limits give schools more flexibility to craft weekly menus that may include some higher sodium foods, provided they are balanced out with lower sodium foods on other days.

A number of listening sessions included a discussion about the financial challenges facing school meal operations. Several participants raised concerns about the standard meal reimbursement rates, which in their view are too low. Participants also expressed concerns about their inability to pay competitive salaries to their staff, who are stretched thin and do not always have the financial support they need to be successful. Cost constraints limit school food service professionals' ability to offer the types of meals and variety of foods that children enjoy, which participants argued negatively impacts student participation. These challenges are exacerbated by current supply chain issues and inflation, which listening session participants emphasized significantly impact school meal operations.

Many participants urged USDA to work with the food industry to make sure products that meet the standards are available to schools at reasonable prices. Listening sessions with the food industry focused largely on the time and cost associated with reformulating food products to meet updated standards. Participants representing the food industry and schools emphasized the importance of reformulating products or recipes in a way that maintains palatability and children's participation; some were concerned that too much change in the formulation of products will negatively impact the taste of foods that children enjoy. These challenges are discussed in greater detail throughout the preamble.

Some participants suggested that USDA do more to communicate the value of school meals to families and communities. For example, participants recommended USDA develop education campaigns to share the value of improved nutrition standards. Others suggested highlighting other benefits of school meal participation, such as the time families can save by not having to pack a lunch from home. Several participants expressed general support for the school meal nutrition standards and encouraged USDA to go further, for example, by adopting a nutrition standard for added sugars.

USDA greatly appreciates the individuals and organizations that participated in the listening sessions throughout 2022. Through these listening sessions, USDA gained valuable insights into the successes and challenges that schools experience implementing the school meal standards. By hearing the on-the-ground perspective of individuals who work in schools every day, USDA better understands the support that schools will need to be successful in implementing updated standards. As part of its effort to support schools working to meet updated nutrition standards, in June 2022, USDA announced the Healthy Meals Incentives initiative,[19] which represents a $100 million investment in nutritious school meals. The Healthy Meals Incentives initiative will improve the nutritional quality of school meals through food systems transformation, school food authority recognition and technical assistance, the generation and sharing of innovative ideas and tested practices, and grants. The recognition program includes a specific focus on celebrating schools that exceed nutrition requirements for sodium and whole grains, reduce added sugars in school breakfasts, implement innovative practices in scratch cooking and nutrition education, and provide meals that reflect the cultures of their students.

It is also important to recognize that at the time of these listening sessions, in spring and summer 2022, school meal stakeholders at all levels were facing significant challenges related to the COVID–19 pandemic and associated supply chain issues. They were also preparing to transition off of nationwide child nutrition program waivers for the first time in over two years due to the expiration of USDA's statutory nationwide waiver authority. USDA recognizes that these issues present immediate challenges for schools, but also appreciates the importance of looking to the future and prioritizing children's health in the long-term. This rulemaking will allow a phase-in period, during which USDA will provide implementation support to State agencies and schools. As discussed further in the section-by-section analysis, USDA also intends to work with the food industry and other partners to ensure schools have adequate products to meet the standards, particularly for sodium and added sugars. USDA welcomes public input on other steps the Department can take to ensure schools successfully meet the proposed standards.

[19] U.S. Department of Agriculture. *Healthy Meals Incentives.* Available at: *https://www.fns.usda.gov/cnp/healthy-meals-incentives.*

Stakeholder Engagement: Public Comments on Transitional Standards Rule

Unlike most final rules, USDA requested public comment on the transitional standards rule. In addition to accepting comments on the provisions in the rule, interested persons were invited to comment on ''considerations for future rulemaking related to the school nutrition requirements.''

USDA appreciates public interest in the transitional standards rule. During the 45-day comment period (February 7, 2022, through March 24, 2022), USDA received over 8,000 comments. Of the total, about 7,000 comments were form letter copies from 12 form letter campaigns and about 1,100 were unique submissions.

USDA worked in collaboration with a data analysis company to code and analyze the public comments using a commercial web-based software product. The Summary of Public Comments report is available under the Supporting Documentation tab in docket FNS–2020–0038. All comments are posted online at *https://www.regulations.gov*. See docket FNS–2020–0038–2936, *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium.*

The following paragraphs describe general themes from the public comments. Many respondents specifically addressed added sugars, milk, whole grains, and sodium; feedback from these comments is included in the specific sections of the preamble, as applicable.

Public Comments: Need for Transitional Standards

Many respondents cited the benefits of the transitional standards rule, which they suggested will help schools get back on track following COVID–19 operations. An industry respondent asserted that the transitional standards rule balanced the need for near-term flexibility while still providing nutritious foods to school children. They expressed support for USDA's efforts to work towards achievable and durable school meal nutrition standards that align with the current *Dietary Guidelines.* Other respondents agreed, noting that the pandemic has impacted schools extensively and that fully returning to the 2012 standards for milk, whole grains, and sodium may not be feasible for schools and children. An advocacy organization focused on

nutrition science argued that the unprecedented supply chain disruptions have placed immense challenges on schools, and that the temporary relief provided by the transitional standards rule is warranted.

Public Comments: Nutrition and Health

Many respondents noted the benefits of strong nutrition standards and the important role that schools play in providing access to nutritious foods. Respondents emphasized that developing healthy habits in childhood is important for lifelong health and noted the value of adopting science-based standards that align with the goals of the *Dietary Guidelines* in the long-term. They also mentioned the importance of nutritious meals in helping children succeed academically and noted that many children consume a substantial portion of their dietary intake during the school day. Respondents cited concerns about diet-related chronic diseases, such as diabetes and high blood pressure. They emphasized the role that excess sodium and added sugars play in increasing children's risk of developing these diseases and noted that improving the long-term nutrition standards could help to address these serious health concerns.

One respondent stated that they understood that, during the pandemic, the focus was on maintaining meal access, but that transitioning back to more nutritious meals is crucial for children's long-term health. Another respondent agreed, noting the importance of providing flexibility and a ''ramp'' to stronger nutrition standards following the pandemic. Other respondents described the transitional standards as a step in the right direction but emphasized the need to do more to improve the healthfulness of school meals. For example, for the long-term standards, respondents recommended including a limit on added sugars, significantly reducing sodium in school foods, and increasing whole grains. One respondent cited the importance of ensuring school meal standards encourage long-term healthy habits. Another respondent suggested that reducing sodium and added sugars in foods marketed to children outside of the school meal programs, across the U.S. food supply, would improve overall health outcomes for children.

Public Comments: Product Availability

Several respondents noted the importance of ensuring products that meet school meal standards are widely available. For example, one respondent questioned whether manufacturers would be willing to reformulate their products to meet USDA standards and expressed concern about price points. They claimed that school nutrition programs are a very ''hard customer'' already. Similarly, another respondent asserted that the food industry is no longer making specialty products for schools, making it difficult for schools to find compliant products. A school food service respondent in a rural community also expressed concern about their ability to find products, stating that manufacturers have discontinued their school food lines due to decreased staff and raw material availability. This respondent also asserted that some vendors have stopped providing foods to schools because the school food market is not profitable enough. A trade association noted that school meal programs are facing higher costs, including food and transportation costs, and that supply chain challenges could continue. They suggested that USDA establish realistic standards and phase in any new standards over time.

Public Comments: Staffing Challenges

A few respondents cited challenges in the school food labor force, noting that funding and low pay for staff at their school make it difficult to serve fresh and homemade foods. Respondents expressed a strong commitment to nutritious school meals but faced difficulty due to staffing challenges and rising food costs. Another respondent agreed, asserting that they would like to see more fresh food offered at their school, but they simply do not have the time or the staff to cook fresh meals daily. Citing concerns about funding, one school food service respondent asserted that budget constraints lead to staffing reductions, lower quality meals from less scratch cooking, and lower wages compared to other sectors. This respondent noted that school food service employees are overworked and underappreciated.

Several respondents argued that now is not the time to place more burden on schools still recovering from the pandemic. For example, one school food service respondent opposed the transitional standards, suggesting the standards are too restrictive and make the jobs of school food professionals difficult. They expressed concerns about USDA issuing the standards at a time when schools are still struggling with supply chain and staffing challenges.

Miscellaneous Comments

Several school food service respondents cited concerns about food waste, encouraging USDA to develop regulations that result in meals that students will enjoy eating. They also emphasized the importance of quality and taste in maintaining student participation in the programs. One respondent suggested that USDA should measure program success based on student participation, not based on compliance with improved meal standards.

A few respondents identified their priorities for this proposed rule, including meeting children's dietary needs and preferences.[20] For example, some respondents suggested USDA encourage more vegan, vegetarian, or plant-based meals in the school meal programs. Others recommended that USDA make changes to increase fiber intake, to exclude processed meats, or to better account for specific diets, such as those of student athletes, who one respondent argued require more calories than the current meal patterns allow.

Several respondents requested technical assistance and training to implement the transitional standards. One advocacy organization said that technical assistance will help school nutrition professionals prepare and serve meals that will encourage meal participation and reduce waste. Some respondents encouraged USDA to provide support to schools facing difficulty implementing new standards, instead of penalizing non-compliance.

Stakeholder Engagement: Public Comments on Buy American Request for Information

In August 2021, USDA published *Request for Information: Buy American in the National School Lunch Program and School Breakfast Program.* Through this request for information (RFI), USDA asked for public feedback on the Buy American provision, exceptions to the requirement, and other related USDA policy guidance. USDA included 13 questions for consideration but was open to any comments or feedback that stakeholders wanted to share. USDA received 154 comments in response to the RFI. A wide variety of respondents submitted comments. The majority of comments came from local entities, such as school food authorities, but other interested parties, such as State agencies, national and regional industry members, Tribal stakeholders, and members of the U.S. House of

[20] Existing regulations at 7 CFR 210.10(m)(1), 215.7a(b), 220.8(m), and 226.20(h) require Program operators to make appropriate substitutions or modifications for milks and foods served under the NSLP, SBP, SMP, and CACFP for children with a disability which restricts their diet. This proposed rule makes no change in these requirements.

Representatives, also submitted comments.

Many respondents voiced support for the Buy American provision. Respondents mentioned the importance of the Buy American provision and its role in encouraging the consumption of domestic food. They emphasized that the Buy American provision supports American agriculture and the domestic economy. However, even while expressing support, many respondents made it clear that challenges exist in implementation of the Buy American provision. The most frequently mentioned themes in these comments included difficulties managing exceptions to the regulation and the time-consuming paperwork required to document exceptions. State agencies and school food authorities cited challenges with managing the documentation and monitoring use of exceptions during reviews. Overall, respondents suggested that the Buy American provision plays a critical role in providing children with nutritious meals that support American agriculture but emphasized that USDA must do more to support implementation. In this proposed rule, USDA aims to respond to this feedback by providing clarification to the requirements and supporting State agency and school efforts to successfully implement the provision.

Section 2: Added Sugars

Current Requirement

Currently, there is no added sugars limit in the school meal programs. Under the current regulations, schools may choose to serve some menu items and meals that are high in added sugars, provided they meet weekly calorie limits (7 CFR 210.10(f)(1) and 220.8(f)(1)). However, USDA has determined that the calorie limits alone are not enough to meet recommendations for limiting children's intake of added sugars. USDA expects that a targeted limit would better support reducing added sugars in school meals, especially school breakfast.

The *Dietary Guidelines for Americans, 2020–2025* recommends limiting intake of added sugars to less than 10 percent of calories per day. According to the *Dietary Guidelines,* when a person's intake of added sugars exceeds this recommended limit, a healthy dietary pattern within calorie limits is very difficult to achieve. This is because added sugars contribute calories without contributing essential nutrients to the diet. The *Dietary Guidelines* indicates that about 70 to 80 percent of school-aged children exceed the recommended limit for added sugars.[21] In 2016, FDA issued a final rule updating the Nutrition Facts label, which requires in part, a declaration of the amount of added sugars in a serving of a product as well as the percent Daily Value (% DV) for added sugars.[22] Manufacturers with $10 million or more in annual sales were required to update their labels by January 1, 2020; manufacturers with less than $10 million in annual food sales were required to update their labels by January 1, 2021.[23]

According to the most recent research available using USDA school meal data from SY 2014–2015, the average percentage of calories from added sugars is approximately 11 percent at school lunch and 17 percent at school breakfast.[24] Consuming too many added sugars can lead to health problems, such as type 2 diabetes and heart disease.[25] Additionally, schools that serve meals that are high in added sugars have less room within the established calorie limits to offer nutrient-rich foods and beverages that are essential to establishing healthy dietary patterns.

Stakeholder Engagement on Added Sugars Standards: Public Comments and Listening Sessions

USDA received extensive stakeholder input to develop the proposed added sugars standards through public comments and through listening sessions held in spring and summer 2022. This section provides an overview of input received through public comments, followed by input shared during the listening sessions.

Although the transitional standards rule did not establish added sugars limits, USDA received public comments about added sugars in school meals. Over 4,000 comments addressed sugars or added sugars in school meals. The majority of these were form letters, but over 100 unique comments were submitted about sugars or added sugars.

Many respondents recommended that USDA implement an added sugars limit to better align school meal standards with the *Dietary Guidelines.* Several advocacy organizations stated that the *Dietary Guidelines* recommend that added sugars contribute less than 10 percent of total calories, and suggested USDA establish a standard that aligns with this recommendation. One advocacy organization representing children's health noted that in the U.S., children consume 17 percent of their calories from added sugars. They stated that excess consumption of added sugars increases the risk for dental decay, cardiovascular disease, hypertension, type 2 diabetes, and a variety of other health conditions. Another advocacy organization focused on public health asserted that most school meals exceed the *Dietary Guidelines* recommendations for added sugars. They also noted that flavored milk is the leading source of added sugars in school breakfast and lunch.

One respondent who identified as a pediatric cardiologist stated that added sugars are a significant source of excess calories and have no nutritional value. They also noted that cases of diabetes among children are significantly increasing and suggested that limiting added sugars in school meals could help reverse this trend. A school food service respondent also expressed concern about added sugars in school meals, arguing that children do not need so much sugar in their diets. A respondent who identified as a nurse educator agreed, asserting that added sugars have no nutritional value and increase the risk of heart disease. An advocacy organization focused on public health noted that excess added sugars consumption is linked to several metabolic abnormalities, a shortfall of essential nutrients, and increased risk of high blood pressure, high cholesterol, diabetes, and inflammation in the body.

Several respondents were especially concerned about added sugars in school breakfasts. A few advocacy organizations asserted that at current levels, a typical school breakfast can easily exceed the recommended maximum added sugars for an entire day for a young child. Respondents were concerned about added sugars in a variety of foods commonly offered at breakfast, including flavored milks, sweetened cereals, muffins, and condiments and toppings. Two State agencies suggested limiting grain-based desserts at breakfast to 2 ounce equivalents per week (which is the current limit at lunch) to reduce added

[21] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition.* December 2020. Available at: *https://www.dietaryguidelines.gov/.*

[22] *Food Labeling: Revision of the Nutrition and Supplement Facts Labels* (81 FR 33741, May 27, 2016). Available at: *https://www.federalregister.gov/documents/2016/05/27/2016-11867/food-labeling-revision-of-the-nutrition-and-supplement-facts-labels.* See also: 21 CFR 101.9(c)(6)(iii).

[23] U.S. Food and Drug Administration. *Changes to the Nutrition Facts Label.* Available at: *https://www.fda.gov/food/food-labeling-nutrition/changes-nutrition-facts-label.*

[24] Fox MK, Gearan EC, Schwartz C. *Added Sugars in School Meals and the Diets of School-Age Children.* Nutrients. 2021; 13(2):471. Available at: *https://doi.org/10.3390/nu13020471.*

[25] Centers for Disease Control and Prevention, *Know Your Limit for Added Sugars.* Available at: *https://www.cdc.gov/healthyweight/healthy_eating/sugar.html.*

sugars. Regarding flavored milk, one advocacy organization argued that numerous studies suggest that sugar can be reduced in flavored milk over time without impacting consumption.

One advocacy organization focused on nutrition and science argued that product-specific targets alone would not be sufficient to reduce added sugars in school meals; they asserted that a weekly limit would also be needed for meals to meet the *Dietary Guidelines* recommendations. A few industry respondents opposed product-specific limits, asserting that individual food products, such as flavored milk and yogurt, can fit into a healthy diet. At the same time, one industry respondent described its success in reducing added sugars in its products, including a 20 percent reduction in breakfast cereals. However, this respondent encouraged USDA to develop a ''realistic'' standard that includes adequate time for industry to develop products and integrate them into the food system for student acceptance.

An advocacy organization affirmed that product reformulation to reduce added sugars is achievable, and if done gradually, does not change consumer preferences. Another advocacy organization stated that consumer demand for low-sugar products has grown in recent years, and that due to mounting scientific evidence of the harmful effects of added sugars, it is urgent to establish an added sugars standard for school meals. Another advocacy organization agreed, stating that consumer preferences have already spurred industry to innovate and reformulate foods.

Listening session participants raised many similar themes. Most participants supported the idea of a new added sugars standard for school meals. They emphasized that sugary school breakfasts are seen as an issue by parents, guardians, and teachers and expected that the public would support an added sugars standard. Some recommended following a similar model to the current total sugar limits for breakfast cereals and yogurts in CACFP but noted that more may be needed to meet the recommendations in the *Dietary Guidelines.* Several participants emphasized that added sugars are more of an issue in school breakfast and suggested that encouraging more protein-rich breakfasts could help to address this problem. Listening session participants recommended limiting added sugars in specific products, such as flavored milk, yogurt, and certain grain products, as well as establishing a weekly limit for added sugars. However, some participants noted that certain products that are high in added sugars, such as grain-based desserts, are also very popular with students.

Proposed Standard

This rulemaking proposes the following added sugars limits in the school lunch and breakfast programs:

- *Product-based limits:* Beginning in SY 2025–2026, this rulemaking proposes to implement quantitative limits for leading sources of added sugars in school meals, including grain-based desserts, breakfast cereals, yogurts, and flavored milks.
- *Weekly dietary limit:* Beginning in SY 2027–2028, this rulemaking proposes to implement a dietary specification limiting added sugars to less than 10 percent of calories per week in the school lunch and breakfast programs; this weekly limit would be in addition to the product-based limits described above.

The proposed product-based limits are as follows:

- *Grain-based desserts:* would be limited to no more than 2 ounce equivalents per week in school breakfast, consistent with the current limit for school lunch. Grain-based desserts include cereal bars, doughnuts, sweet rolls, toaster pastries, coffee cakes, and fruit turnovers.[26]
- *Breakfast cereals:* would be limited to no more than 6 grams of added sugars per dry ounce.
- *Yogurt:* would be limited to no more than 12 grams of added sugars per 6 ounces.
- *Flavored milk:* would be limited to no more than 10 grams of added sugars per 8 fluid ounces or, for flavored milk sold as a competitive food for middle and high schools, 15 grams of added sugars per 12 fluid ounces.[27]

As described in more detail below, under *Product-based Limits,* these proposed product-based limits address several leading sources of added sugars in school breakfast. More information and rationale for the specific added sugars limits proposed in this rulemaking may be found in the Regulatory Impact Analysis in *Section 18: Procedural Matters.*

The gradual, phased-in approach proposed in this rulemaking is expected to make implementation of the added sugars standards achievable for schools. USDA expects that the proposed product-based limits would incentivize the food industry to develop products with less added sugars. This would in turn help schools to develop lunch and breakfast menus that are lower in added sugars, which would better position schools to successfully meet the weekly dietary limit for added sugars upon implementation.

For consistency, USDA also proposes to apply the product-based added sugars limits for breakfast cereals and yogurts to the CACFP; the *added* sugars limits would replace the current *total* sugar limits for breakfast cereal and yogurt in CACFP. Total sugars include both added sugars and sugars naturally present in many nutritious foods and beverages, such as sugar in milk and fruit, while added sugars include sugars that are added during the processing of foods, foods packaged as sweeteners (such as table sugar), sugars from syrups and honey, and sugars from concentrated fruit or vegetable juices.[28] Since 2015, the *Dietary Guidelines* have recommended limiting calories from *added* sugars to less than 10 percent of calories per day. Current CACFP regulations state that breakfast cereals must contain no more than 6 grams of total sugar per dry ounce (7 CFR 226.20(a)(4)(ii)) and that yogurt must contain no more than 23 grams of total sugars per 6 ounces (7 CFR 226.20(a)(5)(iii)(B)). Proposing to change the CACFP total sugar limits for breakfast cereals and yogurt to added sugar limits, consistent with the proposed requirements for school lunch and breakfast, aligns program requirements, reflects current dietary recommendations, and is expected to simplify operations for schools that participate both in school meals and CACFP. Because most sugars included in breakfast cereals are added sugars, USDA does not expect this change to significantly impact the types of

[26] U.S. Department of Agriculture, *Food Buying Guide for Child Nutrition Programs.* Available at: *https://foodbuyingguide.fns.usda.gov/Appendix/DownLoadFBG.* See: Section 4—Grains, Exhibit A: Grain Requirements for Child Nutrition Programs, for a list of grain-based desserts.

[27] For clarification, USDA is proposing a higher added sugars limit for flavored milk sold as a competitive food in middle and high schools due to the larger serving size. The serving size for milk offered as part of a reimbursable meal is 8 fluid ounces. Milks sold to middle and high school students as a competitive food may be up to 12 fluid ounces. One alternative proposed by USDA in *Section 3: Milk* would allow flavored milk (fat-free and low-fat) at school lunch and breakfast for high school children only, effective SY 2025–2026. Under this alternative, USDA is proposing that children in grades K–8 would be limited to a variety of unflavored milk. The proposed regulatory text for Alternative A would allow flavored milk for high school children only (grades 9–12). USDA also requests public input on whether to allow flavored milk for children in grades 6–8 as well as high school children (grades 9–12). If in the final rule, based on public input, USDA finalizes the option allowing flavored milk only in high schools (grades 9–12), flavored milk would only be allowed as a competitive food in high schools.

[28] See: ''Total Sugars'' at 21 CFR 101.9(c)(6)(ii) and ''Added Sugars'' at 21 CFR 101.9(c)(6)(iii).

breakfast cereals allowed in CACFP. Yogurt contains sugars found naturally in milk and fruit, making it more difficult to directly compare the current total sugars limit in CACFP to the proposed added sugars limit. However, USDA has confirmed that a variety of yogurt products that meet the current CACFP total sugars limit would also meet the proposed added sugars standard.[29]

USDA seeks comments on these proposed changes, found at 7 CFR 210.10(b)(2)(iv), 210.10(c), 210.10(d)(1)(i), 210.10(f)(4), 210.10(h), 220.8(b)(2)(iv), 220.8(c), 220.8(f)(4), 226.20(a)(4)(ii), 226.20(a)(5)(iii)(B), and 226.20(c) of the proposed rule.

In developing these proposed changes, USDA considered several important factors, outlined below.

Product-Based Limits

A study published in January 2021 provided valuable information in the development of this proposal. The study, *Added Sugars in School Meals and the Diets of School-Age Children,*[30] found that a majority of schools exceeded the *Dietary Guidelines* recommended limit for added sugars at lunch (69 percent) and breakfast (92 percent). The study also identified the leading sources of added sugars within the programs. Flavored milk was the leading source of added sugars in both programs, contributing half of the added sugars at lunch and about 30 percent of the added sugars at breakfast.

In addition to flavored milk, this proposed rule also addresses several other leading sources of added sugars in school breakfasts, where added sugars are more of an issue compared to school lunch. This proposal covers the following food items, which the study found to be among the top ten sources of added sugars in the SBP:

- Breakfast cereals
- Granola bars and breakfast bars
- Toaster pastries
- Cinnamon buns
- Yogurt

Under this proposed rule, breakfast cereals would be limited to 6 grams of added sugars per ounce and yogurts would be limited to 12 grams of added sugars per 6 ounces. The other items listed above would be covered by the weekly limits for grain-based desserts. Granola bars, breakfast bars, toaster pastries, and cinnamon buns (a type of sweet roll) are all grain-based desserts, according to USDA guidance.[31]

As noted above, USDA has already successfully implemented product-based limits for breakfast cereals, yogurt, and grain-based desserts in its child nutrition programs. For example, NSLP regulations currently limit how often grain-based desserts may be served in reimbursable meals to encourage more nutrient-dense choices; [32] this proposed rule would apply the same limit to the SBP. Further, CACFP currently has total sugar limits for breakfast cereals and yogurt. This proposed rule would build on these successes by also applying product-based limits for breakfast cereals and yogurt to the NSLP and SBP. The proposed limits in this rulemaking are based on added sugars for consistency with the *Dietary Guidelines.* USDA is also proposing to update the CACFP total sugars limits for breakfast cereals and yogurts to align with the proposed NSLP and SBP added sugars limits for ease of operations. The new added sugars limit for flavored milks served in the school meal programs will follow a similar framework. The products covered by this proposal are commonly served in the programs, are popular with children, and have room to reduce added sugars while maintaining palatability.

The WIC Program has also successfully implemented product-based specifications for certain foods in the WIC food packages. Recently, USDA proposed revisions to the WIC food packages to incorporate recommendations from the National Academies of Science, Engineering, and Medicine (NASEM) in its 2017 scientific report, ''Review of WIC Food Packages: Improving Balance and Choice,'' and to align the food packages with the *Dietary Guidelines for Americans, 2020–2025.* The WIC rule, *Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Revisions in the WIC Food Packages,*[33] proposes to revise limits on total sugars for yogurt and soy beverage, consistent with recommendations in the NASEM report. The Department is seeking comments on the provisions related to sugar in the WIC proposed rule with specific interest in comments on an added versus total sugars limit for foods that currently have total sugar limits: yogurt, soy beverage, and breakfast cereal. Both the WIC proposed rule and this proposed rule share the common goal of limiting sugar intake and promoting healthy dietary patterns among program participants.

USDA expects that the product-specific limits in this proposed rule would incentivize the school food industry to develop products with less added sugars. This would in turn help schools to develop lunch and breakfast menus that are lower in added sugars. As noted, some food manufacturers have already begun reducing added sugars in their products; USDA commends and would like to see these efforts continued. USDA also encourages other food companies to follow this lead, with a particular focus on the products included in this proposal and other products that are popular with school-age children and that are commonly served in school meals. With the product-specific standards in place, USDA expects that schools would be better positioned to successfully meet the weekly dietary limit for added sugars, described further below.

Weekly Dietary Limit

USDA expects the product-based limits to have a meaningful impact on the added sugars offered in school meals but recognizes that a weekly limit is also helpful to achieve consistency with the *Dietary Guidelines* recommendation. While the proposed product-based limits target leading sources of added sugars in school meals, other foods also contribute to children's overall added sugars intake in the NSLP and SBP. Therefore, this rulemaking also proposes a weekly dietary limit, or dietary specification, for added sugars, to be implemented in SY 2027–2028. The dietary specification would require that less than 10 percent of calories per meal come from added sugars, averaged over one school week by program.[34] USDA expects that the product-based limits will help with initial added

[29] USDA reviewed nutrition label data for yogurt and breakfast cereal products in May 2022 using K–12 school and food service product catalogs directly from food company websites.

[30] Fox MK, Gearan EC, Schwartz C. *Added Sugars in School Meals and the Diets of School-Age Children.* Nutrients. 2021; 13(2):471. Available at: *https://doi.org/10.3390/nu13020471.*

[31] U.S. Department of Agriculture, *Food Buying Guide for Child Nutrition Programs.* Available at: *https://foodbuyingguide.fns.usda.gov/Appendix/DownLoadFBG.* See: Section 4—Grains, Exhibit A: Grain Requirements for Child Nutrition Programs, for a list of grain-based desserts.

[32] See: 7 CFR 210.10(c)(2)(iv)(C).

[33] *Special Supplemental Nutrition Program for Women, Infants, and Children (WIC): Revisions in the WIC Food Packages* (87 FR 71090, November 21, 2022). Available at: *https://www.federalregister.gov/documents/2022/11/21/2022-24705/special-supplemental-nutrition-program-for-women-infants-and-children-wic-revisions-in-the-wic-food.* USDA is accepting comments on this proposed rule through February 21, 2023.

[34] For comparison, as noted, according to the most recent research available using USDA school meal data from SY 2014–2015, the average percentage of calories from added sugars is approximately 11 percent at school lunch and 17 percent at school breakfast. See: Fox MK, Gearan EC, Schwartz C. *Added Sugars in School Meals and the Diets of School-Age Children.* Nutrients. 2021; 13(2):471. Available at: *https://doi.org/10.3390/nu13020471.*

sugars reductions in school meals by targeting leading sources of added sugars; the subsequent weekly limit will further support USDA's efforts to help school children meet dietary recommendations. USDA expects that the weekly limit will encourage schools to plan overall menus with less added sugars. For example, schools may opt to remove foods that are high in added sugars from their menus, choose to offer those foods less often, and/or select similar products with less added sugars than the products they are serving today.

Phasing in this requirement will give schools time to adjust menus and help children adapt to meals with less added sugars. For example, schools might consider serving more protein-rich foods at breakfast in place of grain-based foods, which tend to have more added sugars (see *Section 17: Proposals from Prior USDA Rulemaking).* The phase-in period will also allow USDA to update its nutrient analysis software to include a dietary specification for added sugars, and to provide additional technical assistance to schools on reducing added sugars in school meals.

Public Comments Requested

USDA will consider public input on the following questions when developing the final rule and may incorporate changes to the added sugars proposals based on public input. USDA invites public input on these proposals in general, and requests specific input on the following questions:

- USDA is proposing product-specific limits on the following foods to improve the nutritional quality of meals served to children: grain-based desserts, breakfast cereals, yogurt, and flavored milk. Do stakeholders have input on the products and specific limits included in this proposal?
- Do the proposed implementation timeframes provide appropriate lead time for food manufacturers and schools to successfully implement the new added sugars standards? Why or why not?
- What impact will the proposed added sugars standards have on school meal menu planning and the foods schools serve at breakfast and lunch, including the overall nutrition of meals served to children?

Section 3: Milk

Current Requirement

The National School Lunch Act (NSLA, 42 U.S.C. 1758(a)(2)(i) and (ii)) requires schools to offer students a variety of fluid milk at lunch; such milk must be consistent with the most recent *Dietary Guidelines.* The Child Nutrition Act (CNA, 42 U.S.C. 1773(e)(1)(A)) requires school breakfasts to meet the same terms and conditions set forth for school lunches in the National School Lunch Act (NSLA, 42 U.S.C. 1758), including the requirements for fluid milk. Current regulations at 7 CFR 210.10(d)(1)(i), 220.8(d), and 210.11(m)(1)(ii), (m)(2)(ii) and (m)(3)(ii) allow schools to offer fat-free and low-fat (1 percent fat) milk, flavored and unflavored, in reimbursable school lunches and breakfasts, and for sale as a competitive beverage. The current regulations also require that unflavored milk be offered at each school meal service. Fat-free and low-fat milk, flavored and unflavored, may also be offered to participants ages 6 and older in the SMP and CACFP (7 CFR 215.7a(a) and 226.20(a)(1)(iii)). Lactose-free and reduced-lactose milk meet the meal pattern requirements for fluid milk (7 CFR 210.10(d)(1)(i), 215.7a(a), 220.8(d), and 226.20(a)(1)). The current milk requirement took effect on July 1, 2022.

For comparison, the 2012 final rule permitted flavoring in fat-free milk only and required low-fat milk to be unflavored in school lunch and breakfast. This requirement went into effect in SY 2014–2015. However, Congressional and administrative actions beginning in SY 2017–2018 allowed schools to offer low-fat, flavored milk.[35] Prior to the COVID–19 pandemic, in SY 2019–2020, schools were allowed to offer fat-free and low-fat milk, flavored and unflavored, in reimbursable school meals.

Stakeholder Engagement on Milk Standards: Public Comments and Listening Sessions

USDA received extensive stakeholder input on the milk standards through public comments and listening sessions held in spring and summer 2022. This section provides an overview of input received through public comments, followed by input shared during the listening sessions.

Several public comments supported the transitional standard allowing low-fat, flavored milk, arguing that, in their view, children prefer flavored milk. One respondent asserted that the nutritional difference between low-fat, flavored milk and fat-free, flavored milk is insignificant. A few State agencies that supported allowing low-fat flavored milk argued that more children select and consume milk when flavored milk is offered, helping them receive important nutrients.

Some respondents cited concerns about the amount of added sugars in flavored milk, suggesting that USDA address this concern. A few respondents recommended that USDA disallow all flavored milks in the programs; one advocacy organization was concerned that offering flavored milk every day would train a child's palate to prefer sugar-sweetened foods. Another advocacy organization focused on public health suggested that if USDA continues to allow flavored, low-fat milk, it should establish a limit to prevent schools from serving flavored milks that are high in added sugars. An industry respondent noted that milk processors have already significantly reduced the added sugars content of flavored milk. They stated that between SY 2006–2007 and SY 2019–2020 the average added sugars level in flavored milk declined by 57 percent.[36]

A few respondents suggested that USDA allow whole milk to be served in the school meal programs, arguing that whole milk would help reduce food waste and provide children with important vitamins and nutrients. One industry respondent stated that dairy products at all fat levels, including reduced-fat and whole milk, should be permitted as options in school meals. The same respondent pointed out that reduced-fat and whole milk make up most retail sales of milk and asserted that many parents in the U.S. believe that these milk types are the healthiest options for their children. A few respondents argued that it is better for children to drink whole, flavored milk than to not drink milk at all.

Several respondents shared input on lactose-free milk and non-dairy fluid milk substitutes. One respondent noted that lactose-free milk provides children who are lactose intolerant the protein and calcium they need without gastro-intestinal distress, but cited cost as a barrier, noting that lactose-free milk costs about twice as much as milk with lactose. The respondent, who stated that a significant portion of their student population is lactose intolerant, suggested additional funding would help schools to offer lactose-free milk. An advocacy organization focused on animal rights urged USDA to allow plant-based milks and other non-dairy beverages for all children. They argued

[35] See page 6991–6992 of *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (87 FR 6984, February 7, 2022). Available at: *https://www.federalregister.gov/documents/2022/02/07/2022-02327/child-nutrition-programs-transitional-standards-for-milk-whole-grains-and-sodium#footnote-29-p6991.*

[36] According to this comment, the average added sugars level for flavored milk declined by 57 percent, going from 16.7 grams to 7.1 grams in an 8 fluid ounce serving of flavored milk.

that this change would support children who are lactose intolerant and reduce the environmental harms caused by concentrated animal feeding operations. Another respondent suggested almond or other nut milks as an alternative to cow's milk. An advocacy organization recommended that USDA better communicate its policy allowing fluid milk substitutes for children with medical or special dietary needs.

Listening session participants raised many similar themes. Several participants suggested that overall milk consumption increases when low-fat, flavored milk is an option and recommended USDA continue to allow low-fat, flavored milk. Some listening session participants noted that fat-free, flavored milk is not widely available in the retail market, and that, in their view, children are not familiar with and do not like the way it tastes. Listening session participants representing the food industry emphasized the importance of considering palatability and acceptability when establishing milk standards and suggested that added sugars and sodium standards could impact milk options available to schools. Participants also raised cost constraints as a limitation to offering lactose-free milk and milk alternatives for children who cannot consume cow's milk.

Proposed Standard

This rulemaking proposes two alternatives for the milk standard:

- *Alternative A:* Proposes to allow flavored milk (fat-free and low-fat) at school lunch and breakfast for high school children only, effective SY 2025–2026. Under this alternative, USDA is proposing that children in grades K–8 would be limited to a variety of unflavored milk. The proposed regulatory text for Alternative A would allow flavored milk for high school children only (grades 9–12). USDA also requests public input on whether to allow flavored milk for children in grades 6–8 as well as high school children (grades 9–12). Children in grades K–5 would again be limited to a variety of unflavored milk. Under both Alternative A scenarios, flavored milk would be subject to the new proposed added sugars limit.
- *Alternative B:* Proposes to maintain the current standard allowing all schools to offer fat-free and low-fat milk, flavored and unflavored, with the new proposed added sugars limit for flavored milk.

Several additional proposals would apply under either alternative. As discussed in *Section 2: Added Sugars,* this rulemaking will limit the amount of added sugars in flavored milk to no more than 10 grams per 8 fluid ounces, effective SY 2025–2026. This proposed added sugars standard would apply to milk served in reimbursable school lunches and breakfasts, and for sale as a competitive beverage. Consistent with current requirements, this rulemaking would require that unflavored milk be offered at each school meal service. This rulemaking also proposes to continue to allow fat-free and low-fat milk, flavored and unflavored, to be offered to participants ages 6 and older in the SMP and CACFP. However, as noted below, USDA requests public input on allowing unflavored milks only for children in grades K–8 or K–5, as applicable, in SMP and CACFP, if Alternative A is finalized with restrictions on flavored milk for grades K–8 or K–5 in NSLP and SBP. While USDA appreciates comments on whole milk, allowing whole milk in the school meal programs would make it harder for children to meet nutrient needs while staying within calorie and saturated fat limits. Additionally, the *Dietary Guidelines, 2020–2025 recommends unsweetened fat-free or low-fat milk for school-aged children.* Therefore, USDA does not propose allowing whole milk in the school meal programs.

USDA also proposes to reorganize the regulatory text related to fluid milk substitutes for non-disability reasons. This rulemaking would move the regulatory text explaining the fluid milk substitute requirements from paragraph (m) of 7 CFR 210.10—which currently discusses exceptions and variations allowed in reimbursable meals—to paragraph (d) of 7 CFR 210.10—which discusses the fluid milk requirements. These changes are expected to help clarify the requirements for fluid milk substitutions. Fluid milk substitutions are addressed further below.

Under Alternative A, USDA is proposing to allow flavored milk for high school children only (grades 9–12). This approach would reduce exposure to added sugars and would promote the more nutrient-dense choice of unflavored milk for young children when their tastes are being formed. The proposed regulatory text for this alternative would allow flavored milk only for high schools (grades 9–12); however, regarding this alternative, USDA requests public input on whether to allow flavored milk only in high schools (grades 9–12) or in middle schools and high schools (grades 6–12). USDA aims to balance the importance of reducing young children's exposure to added sugars with the importance of providing older children the autonomy to choose among a greater variety of milk beverages that they enjoy; respondents are encouraged to provide input on how to balance these important priorities. Respondents are also invited to provide input on any operational considerations that USDA should keep in mind regarding school configurations; for example, how such a standard should apply to schools that serve children in grades K–12. While not proposed in this rulemaking, should Alternative A be finalized with restrictions on flavored milk for grades K–8 or K–5 in NSLP and SBP, USDA also requests public input on whether to pursue a similar change in SMP and CACFP.

As noted in *Section 2: Added Sugars,* flavored milk is the leading source of added sugars in the school lunch and breakfast programs, contributing half of the added sugars at lunch and about 30 percent of the added sugars at breakfast. While USDA expects the proposed product-based added sugars limit for flavored milk would support reducing added sugars for schoolchildren of all ages, this additional measure would further reduce elementary and middle schoolchildren's exposure to added sugars. According to the *Dietary Guidelines* ''consuming beverages with no added sugars is particularly important for young children.'' The *Dietary Guidelines* also recommend young children make healthier, more nutrient-dense food choices, including choosing unsweetened beverages instead of beverages with added sugars. As noted below, USDA invites public input on both proposed alternatives. Respondents that support Alternative A are encouraged to provide specific input on whether USDA should limit flavored milk to high schools (grades 9–12) or to middle schools and high schools (grades 6–12). After considering public input, USDA will determine which alternative to finalize.

USDA seeks comments on these proposals, which are both found at 7 CFR 210.10(d), 210.11(m), and 220.8(d) of the proposed rule.

Below, USDA addresses important topics raised by comments.

Added Sugars in Milk

The *Dietary Guidelines, 2020–2025* recommend consumption of beverages that contain no added sugars, such as water and unsweetened fat-free or low-fat milk, as the primary choice for children and adolescents. They also note that early food preferences influence later food choices and assert that decreasing the consumption of sugar-sweetened beverages will help reduce added sugars intake and will allow children to achieve a healthy

dietary pattern. According to the *Dietary Guidelines,* sugar-sweetened beverages—a top contributor of added sugars—make up 15 to 25 percent of total added sugars intake in childhood, and 32 percent in adolescence.[37]

Flavored milks are the top contributor of added sugars in the school meal programs. USDA expects that the proposed added sugars limit for flavored milk, discussed in *Section 2: Added Sugars,* will help to address this issue in the near-term and may support children's consumption of nutrient-dense foods later in life.[38] Additionally, USDA understands that dairy, including fluid milk and fluid milk substitutes, provide protein and a variety of nutrients that are underconsumed during childhood and adolescence. According to *Dietary Guidelines,* average intake of dairy foods, which provide potassium, calcium, and vitamin D, is typically below recommended intake levels for adolescents.[39] USDA recognizes that for some children, flavored milk is a palatable option that improves consumption of these important nutrients, which support the accrual of bone mass. The National School Lunch Act currently requires a variety of fluid milk to be offered with every school lunch and breakfast. USDA appreciates the benefit of allowing flavored milk—a fluid milk option that many children enjoy and may be less likely to waste. For example, USDA research from SY 2014–2015 found that about 18 percent of low-fat, flavored milk offered with school lunch was wasted, compared to 35 percent of low-fat, unflavored milk.[40] However, schools are not required to offer flavored milk, and may consider offering unflavored milk options only at certain meals or on certain days to promote more nutrient-dense choices.

Fluid Milk Substitutes

As noted, many commenters raised concerns on behalf of children who cannot consume, or have difficulty consuming, cow's milk. USDA appreciates the public's concern about children's access to fluid milk substitutes, particularly given the disproportionate rates of lactose intolerance among communities of color. For example, according to the National Institutes of Health, in the United States, African Americans, American Indians, Asian Americans, and Hispanics/Latinos are more likely to have lactose malabsorption, and ''lactose intolerance is least common among people who are from, or whose families are from, Europe.''[41] Global estimates find that about 5 to 15 percent of Europeans are lactose intolerant, compared to 65 to 90 percent of adults in Africa and East Asia.[42]

In addition to fluid milk, yogurt, and cheese, the *Dietary Guidelines* include ''fortified soy beverages'' as part of the dairy group because they are similar to milk and yogurt based on nutrient composition and in their use in meals. However, as noted, the National School Lunch Act requires fluid milk (cow's milk) to be offered with every school breakfast and lunch. The statute is also very specific about allowable fluid milk substitutes for non-disability reasons. To provide a substitute for cow's milk, the statute requires:

- That the non-dairy beverage is nutritionally equivalent to fluid milk and meets nutritional standards established by the Secretary, which must include fortification of calcium, protein, vitamin A, and vitamin D to levels found in cow's milk (42 U.S.C. 1758(a)(2)(B)(i)).
- That the substitution is requested in writing by a medical authority or the student's parent or legal guardian (42 U.S.C. 1758(a)(2)(B)(ii)).
- That the school notify the State agency if it is providing fluid milk substitutes for non-disability reasons (42 U.S.C. 1758(a)(2)(B)(ii)).
- That the school cover any expenses related to providing fluid milk substitutes in excess of program reimbursements (42 U.S.C. 1758(a)(2)(B)(iii)).

USDA recognizes that the specific nutrition and paperwork requirements and cost burden associated with fluid milk substitutes present barriers for schools and families. Additionally, USDA recognizes that under the statute, schools are allowed—but not required—to provide fluid milk substitutes for non-disability reasons; this means that, due to budget constraints, some schools may opt not to provide a fluid milk substitute requested for non-disability reasons on behalf of a child. As noted below, USDA requests public input on the current fluid milk substitute process. While USDA does not have the authority to change the statutory requirements outlined above, better understanding challenges associated with the current process may help USDA address the concerns raised by commenters.

As a point of clarification, the statute and regulation require schools to provide meal modifications for children with a disability that restricts their diet. Lactose intolerance may be considered a disability; for example, a child whose digestion is impaired due to lactose intolerance may be considered a person with a disability that requires a menu substitution for fluid milk. In 2020, USDA proposed changes to align regulatory requirements for disability-related meal modifications with the Americans with Disabilities Act of 1990 (ADA), as amended. The ADA Amendments Act of 2008 (Pub. L. 110–235) clarified the meaning and interpretation of the ADA definition of ''disability'' to ensure that the definition of disability would be broadly construed and applied without extensive analysis. These proposed changes to meal modifications for disability reasons will be further addressed in the forthcoming final rule, as discussed in *Section 17: Proposals from Prior USDA Rulemaking.* For up-to-date information about meal modifications for disability reasons, see USDA policy guidance: *Modifications to Accommodate Disabilities in the School Meal Programs.*[43]

Public Comments Requested

For the final rule, USDA is considering two different milk

[37] See page 87. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition*. December 2020. Available at: *https://www.dietaryguidelines.gov/*.

[38] See Figure 2–1: ''Science shows that early food preferences influence later food choices. Make the first choice the healthiest choices . . .'' U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition*. December 2020. Available at: *https://www.dietaryguidelines.gov/*.

[39] See page 76 and page 88. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition*. December 2020. Available at: *https://www.dietaryguidelines.gov/*.

[40] See Table 5.1: *Mean Percentage of Observed Trays including Specific Foods and Mean Percentage of Observed Foods Wasted in NSLP Lunches*. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, *School Nutrition and Meal Cost Study, Final Report Volume 4: Student Participation, Satisfaction, Plate Waste, and Dietary Intakes,* by Mary Kay Fox, Elizabeth Gearan, Charlotte Cabili, Dallas Dotter, Katherine Niland, Liana Washburn, Nora Paxton, Lauren Olsho, Lindsay LeClair, and Vinh Tran. Project Officer: John Endahl. Alexandria, VA: April 2019. Available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study*. (OMB Control Number 0584–0596, expiration date 07/31/2017.)

[41] National Institute of Diabetes and Digestive and Kidney Diseases. *Definition & Facts for Lactose Intolerance*. Available at: *https://www.niddk.nih.gov/health-information/digestive-diseases/lactose-intolerance/definition-facts*.

[42] InformedHealth.org [internet]. Cologne, Germany: Institute for Quality and Efficiency in Health Care (IQWiG); 2006-. *Lactose intolerance: Overview*. 2010 Sep 15 [Updated 2018 Nov 29]. Available at: *https://www.ncbi.nlm.nih.gov/books/NBK310267/*.

[43] U.S. Department of Agriculture, *Modifications to Accommodate Disabilities in the School Meal Programs,* September 27, 2016. Available at: *https://www.fns.usda.gov/cn/modifications-accommodate-disabilities-school-meal-programs*.

proposals and invites comments on both. These two proposals are included in the regulatory text as Alternative A and Alternative B:

- *Alternative A:* Proposes to allow flavored milk (fat-free and low-fat) at school lunch and breakfast for high school children only, effective SY 2025–2026. Under this alternative, USDA is proposing that children in grades K–8 would be limited to a variety of unflavored milk. The proposed regulatory text for Alternative A would allow flavored milk for high school children only (grades 9–12). USDA also requests public input on whether to allow flavored milk for children in grades 6–8 as well as high school children (grades 9–12). Children in grades K–5 would again be limited to a variety of unflavored milk. Under both Alternative A scenarios, flavored milk would be subject to the new proposed added sugars limit.
- *Alternative B:* Proposes to maintain the current standard allowing all schools to offer fat-free and low-fat milk, flavored and unflavored, with the new proposed added sugars limit for flavored milk.

USDA will consider the following questions when developing the final rule and may incorporate changes to the milk proposals based on public input. USDA invites public input on these proposals in general, and requests specific input on the following questions:

- The *Dietary Guidelines* state that ''consuming beverages with no added sugars is particularly important for young children.'' As discussed above, one of the two proposals USDA is considering would limit milk choices in elementary and middle schools (grades K–8) to unflavored milk varieties only at school lunch and breakfast. To reduce young children's exposure to added sugars and promote the more nutrient-dense choice of unflavored milk, should USDA finalize this proposal? Why or why not?
  - Respondents that support Alternative A are encouraged to provide specific input on whether USDA should limit flavored milk to high schools only (grades 9–12) or to middle schools and high schools only (grades 6–12).
- If Alternative A is finalized with restrictions on flavored milk for grades K–8 or K–5 in NSLP and SBP, should USDA also pursue a similar change in SMP and CACFP? Are there any special considerations USDA should keep in mind for SMP and CACFP operators, given the differences in these programs compared to school meal program operators?
- What feedback do stakeholders have about the current fluid milk substitute process? USDA is especially interested in feedback from parents and guardians and program operators with firsthand experience requesting and processing a fluid milk substitute request.

Section 4: Whole Grains

Current Requirement

Current regulations at 7 CFR 210.10(c)(2)(iv) and 220.8(c)(2)(iv) require at least 80 percent of the weekly grains offered in the school lunch and breakfast programs to be whole grain-rich. The remaining grain items offered must be enriched. To meet USDA's whole grain-rich criteria, a product must contain at least 50 percent whole grains; any grain ingredients that are not whole grain must be enriched, bran, or germ. In other words, whole grain-rich products are at least half whole grain. Products that exceed the 50 percent whole grain threshold, such as products that are 100 percent whole grain, also meet the whole grain-rich criteria. The current whole grain-rich requirement took effect on July 1, 2022.

For comparison, the 2012 final rule required all grains offered in the school lunch and breakfast programs to meet the whole grain-rich criteria. However, successive legislative and administrative action beginning in 2012 prevented full implementation of the whole grain-rich requirement.[44] Prior to the COVID–19 pandemic, in SY 2019–2020, at least 50 percent of the weekly grains offered in the school lunch and breakfast programs were required to be whole grain-rich.

Stakeholder Engagement on Grains Standards: Public Comments and Listening Sessions

USDA received extensive stakeholder input on the grains standards through public comments and listening sessions held in spring and summer 2022. This section provides an overview of input received through public comments, followed by input shared during the listening sessions.

Many public comments cited the importance of increasing whole grains in children's diets. For example, respondents stated that whole grains provide important nutrients and fiber and improve diet quality. A few advocacy organizations noted that diets high in whole grains and fiber are associated with decreased risk of cardiovascular disease, stroke, and diabetes. Advocacy organizations also expressed concern that children ages 4 to 18 do not currently meet the recommended intake for whole grains and exceed the recommended limit for refined grains.

Several respondents offered specific suggestions for USDA to consider when developing this proposed rule. A school food service respondent suggested that the school meal standards follow MyPlate guidelines: make half of your grains whole grain.[45] This respondent noted that they use MyPlate to teach students and families about healthy eating. An advocacy organization focused on public health noted that schools have made significant progress in offering whole grain-rich foods and argued that it is possible to offer all grains as whole grain-rich. One respondent stated that whole grain-rich foods are accepted by students at their school, while another asserted that school districts have been able to create healthy, delicious meals with entirely whole grain-rich foods. An advocacy organization representing food and nutrition professionals supported the 80 percent whole grain-rich requirement in the transitional standards rule as a ''steppingstone'' towards stronger requirements. Other respondents suggested maintaining the 80 percent whole grain-rich standard in the long-term, arguing it is strict enough. For example, one respondent noted that the 80 percent standard allows for some enriched grains, which they argued improves palatability. This respondent asserted that children would appreciate the inclusion of some enriched grains at breakfast and lunch. Similarly, one industry respondent suggested allowing some flexibility for schools to offer fortified and enriched grains, stating that this would help schools provide more menu options that kids enjoy. Several respondents recommended that USDA ease back on the requirement and require half of the grains offered to meet the whole grain-rich criteria.

Many respondents noted the importance of working with the food industry to ensure that whole grain-rich items are readily available and affordable for schools. For example, one school district respondent emphasized that school meals ''do not exist in a vacuum'' and are a part of the broader commercialized food system. Some respondents expressed concerns with

[44] See page 6994 of *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (87 FR 6984, February 7, 2022). Available at: *https://www.federalregister.gov/documents/2022/02/07/2022-02327/child-nutrition-programs-transitional-standards-for-milk-whole-grains-and-sodium#footnote-29-p6991.*

[45] U.S. Department of Agriculture. *Grains.* Available at: *https://www.myplate.gov/eat-healthy/grains.*

the availability or acceptability of specific products, including whole grain-rich tortillas, pastas, and biscuits; for example, one school nutrition director suggested that whole grain-rich tortillas and pastas ''crumble'' and are not accepted by students. Conversely, some industry respondents shared their success developing a wide array of whole grain-rich products. One industry respondent successfully developed whole grain-rich breakfast entrées, ready-to-eat breakfast cereals, and biscuits; this respondent supported stronger whole grain-rich standards. Another industry respondent stated its intent to continue innovating and expanding whole grain-rich options, even though its core K–12 grain portfolio already meets USDA's whole grain-rich criteria. A different industry respondent stated that they have 25 entrée items containing whole grain-rich pasta or breading that are accepted by students; however, this respondent indicated that development of these products required heavy collaboration and several changes in formulations over time.

Listening session participants raised many similar themes. Many participants generally supported increasing whole grains in the programs, noting that schools have been successful in meeting the whole grain-rich standards. Participants also stated that many products that children enjoy are available in the market. However, some participants noted that certain menu items, such as pasta and tortillas, are still not available or acceptable in whole grain-rich form, while others cited concerns about supply chain issues impacting the availability of certain products. Some listening session participants supported a 100 percent whole grain-rich requirement for consistency with the *Dietary Guidelines,* while others argued a 100 percent whole grain-rich standard is not realistic. Listening session participants also recommended a 50 percent whole grain-rich standard or an 80 percent whole grain-rich standard.

Proposed Standard

For the whole grains requirement in the school lunch and breakfast programs, USDA is considering two different options and invites comments on both. This rulemaking:

- Proposes to maintain the current whole grains requirement that at least 80 percent of the weekly grains offered are whole grain-rich, based on ounce equivalents of grains offered.
- Requests public input on an alternative whole grains option, which would require that all grains offered must meet the whole grain-rich requirement, except that one day each school week, schools may offer enriched grains.

The alternative approach is described in greater detail below. USDA will consider public input when developing the final rule and may incorporate changes to the whole grains proposal based on public input. Either approach would promote whole grain-rich foods while allowing schools to occasionally serve non-whole grain-rich products that stakeholders and public comments have suggested are popular with students. USDA expects that both standards would be achievable for schools and would result in meals that students enjoy.

In addition, USDA also proposes to add a regulatory definition of ''whole grain-rich'' for clarity. The definition would read as follows: *Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.* This proposed definition would not change the meaning of whole grain-rich, which has previously been communicated in USDA guidance; USDA is instead proposing to define the term in regulation for clarity. This definition would be included in NSLP, SBP, and CACFP regulations.

As noted above, as an alternative to the proposal to maintain the current whole grains requirement that at least 80 percent of the weekly grains offered are whole grain-rich, USDA is considering a days-per-week model. This alternative would require that all grains offered in the school lunch and breakfast programs must meet the whole grain-rich requirement, except that one day each school week, schools may offer enriched grains. For most school weeks, this would result in four days of whole grain-rich grains, with enriched grains allowed on one day. On the day enriched grains are permitted, schools may choose to offer enriched grains, whole grain-rich grains, 100 percent whole grains, or a combination of these. This alternative proposal would prevent enriched grains from being offered in competition with whole grain-rich grains on a daily basis, since it would limit enriched grains to one day per week in each program. As such, under this alternative, all students that participate in NSLP or SBP would be offered only whole grain-rich grains on most school days. Based on public input, USDA may choose to finalize this alternative in the final rule. As noted below, USDA seeks public input on both approaches.

Finally, USDA proposes a corresponding change to the definition of ''entrée'' in the competitive food, or ''Smart Snack'' regulations.[46] The competitive food regulations allow entrée items to be sold à la carte on the day they are served and the day after, even if the entrée does not comply with the competitive food standards. This exemption helps school food professionals to better manage their programs and prevent food waste. It also helps to reduce potential confusion about whether an entrée served to some students as part of a meal can be purchased à la carte by other students. The current definition of ''entrée'' in the competitive food regulations specifies that grain entrées must be whole grain-rich; however, under the proposed standard, enriched grains may be served as part of a reimbursable meal entrée. USDA proposes to remove the whole grain-rich criteria from the definition of ''entrée,'' which would allow any reimbursable meal entrée that includes enriched grains to also be sold as a Smart Snack on the day it is served in the school lunch or breakfast program, and the day after. This proposal would not impact the general standards for competitive foods, which would continue to require all other grain items sold as Smart Snacks to meet USDA's whole grain-rich criteria.

USDA seeks comments on this proposal, found at 7 CFR 210.2, 210.10(c)(2)(iv), 210.11(a)(3), 220.2, 220.8(c)(2)(iv), and 226.2 of the proposed rule.

In developing this proposal, USDA considered several important factors, outlined below.

Dietary Recommendations

Whole grains are an important source of dietary fiber, which is considered a dietary component of public health concern for the general U.S. population.[47] The *Dietary Guidelines, 2020–2025* recommend that at least half of total grains consumed should be whole grains. The *Dietary Guidelines* also note that while school-age children, on average, meet the recommended intake of total grains, they do not meet the recommendation to make half of their grains whole grains. Although the *Dietary Guidelines* do not use the term

[46] For more information on Smart Snacks in Schools, see: *Tools for Schools—Focusing on Smart Snacks.* Available at: *https://www.fns.usda.gov/cn/tools-schools-focusing-smart-snacks.*

[47] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Current Dietary Guidelines—Food Sources of Select Nutrients.* Available at: *https://www.dietaryguidelines.gov/resources/2020-2025-dietary-guidelines-online-materials/food-sources-select-nutrients.*

''whole grain-rich,'' it states that one way to meet the recommendation is to choose products with at least 50 percent of the total weight made up of whole grain ingredients, which is consistent with USDA's whole grain-rich criteria.

Consuming whole grains may provide many health benefits, such as reducing the risk of heart disease and supporting healthy digestion.[48] Studies have found a connection between whole grains consumption and better health. For example, according to the Harvard T.H. Chan School of Public Health, a meta-analysis of seven major studies found that cardiovascular disease was 21 percent less likely in people who ate two and a half or more servings of whole grain foods each day compared with people who ate less than two servings each week.[49] Another study found that women who averaged two to three servings of whole grains each day were 30 percent less likely to have developed type 2 diabetes compared to those who rarely ate whole grains.[50]

Research also demonstrates that USDA standards make a difference in children's consumption of whole grain foods. For example, a USDA study found that the ratio of whole grain to total grain consumption in children's total diets nearly doubled from SY 2003–2004 to SY 2013–2014. This study suggested an association between school meal standards and higher whole grain consumption by school children, and noted that repeated exposure to a food, such as through school meals, increases an individual's preference for it. In the case of whole grains, the study suggested repeated exposure in school may encourage children's whole grain consumption outside of school and in later years.[51] Additionally, USDA research found that in SY 2014–2015, the Healthy Eating Index (HEI) component score for whole grains was 95 percent of the maximum score at breakfast and at lunch. This represents a significant increase compared to SY 2009–2010, when the average score at breakfast was 38 percent and the average score at lunch was 25 percent of the maximum score.[52]

Although the 80 percent whole grain-rich standard does not fully meet the *Dietary Guidelines* recommendation that at least half of total grains should be whole grains, it does encourage increased consumption of whole grain-rich foods while allowing menu planners some flexibility to provide regional and cultural favorites that are not whole grain-rich. This limited flexibility responds to public comments and points made during USDA's listening sessions with child nutrition program stakeholders, who emphasized the importance of ensuring that school meal standards meet cultural preferences. For example, white rice and non-whole grain-rich tortillas were cited as foods that schools would like to continue to occasionally serve as part of school lunch. The 80 percent threshold is a minimum standard, not a maximum; schools that are able to offer all grains as whole grain-rich are encouraged to exceed the proposed standard. USDA encourages schools to incorporate more whole grain-rich products in the breakfast and lunch menus in a way that children will enjoy.

Many corn-based products commonly served in schools (including certain breakfast cereals, tortillas, and grits) are whole grain-rich and count towards the whole grain-rich requirements in the school meal programs. For example, ingredients labeled hominy, corn masa, and masa harina are considered whole grain-rich. For more information about crediting these foods and other products made from cornmeal, corn flour, etc. in the school meal programs, please see the policy memorandum *Crediting Coconut, Hominy, Corn Masa and Masa Harina in the Child Nutrition Programs.*[53] Additionally, all fortified, ready-to-eat breakfast cereal, including corn-based cereal, can contribute to school meal requirements if the ingredient statement of a corn-based, ready-to-eat breakfast–s the total grains component, in the amount of up to 20 percent of the weekly grains requirement in this proposed rule. All ready-to-eat breakfast cereals with at least 50 percent whole grain ingredients (whole grain as the primary grain ingredient) contribute to the whole grain-rich requirements.

Product Availability

USDA recognizes that many stakeholders are concerned about product availability, particularly in relation to recent supply chain challenges. The past several years have been incredibly difficult for school food service professionals, and USDA acknowledges that some of these challenges will continue for some time. However, USDA also appreciates the importance of maintaining strong nutrition standards for the long term and encouraging schools to provide children with the most nutritious meals possible.

As noted, manufacturers are working to increase whole grain-rich options. In public comments submitted on the transitional standards rule, food industry respondents emphasized progress made toward expanding whole grain-rich offerings. For example, one respondent described recent efforts to enhance its K–12 portfolio to provide whole grain-rich items that are good sources of protein and low in sodium. Another described a significant initiative in the early 2000s to increase the whole grain content in its products based on dietary recommendations, as well as further innovations following USDA's 2012 school nutrition rule. Industry respondents also described success in developing whole grain-rich products that children enjoy. USDA encourages other food manufacturers to expand their whole grain-rich offerings and invites public comment regarding any specific challenges in this area. Additionally, USDA reminds stakeholders that a variety of whole-grain rich products are available through the USDA Foods program. In SY 2022–2023, the following whole grain-rich products were available through USDA Foods: cereal, flour, oats,

[48] U.S. Department of Agriculture. *Grains.* Available at: *https://www.myplate.gov/eat-healthy/grains.*

[49] Harvard T.H. Chan School of Public Health, *The Nutrition Source—Whole Grains.* Available at: *https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/whole-grains/.* See footnote 7: Mellen PB, Walsh TF, Herrington DM. *Whole grain intake and cardiovascular disease: a meta-analysis.* Nutr Metab Cardiovasc Dis. 2008;18:283–90.

[50] Harvard T.H. Chan School of Public Health, *The Nutrition Source—Whole Grains.* Available at: *https://www.hsph.harvard.edu/nutritionsource/what-should-you-eat/whole-grains/.* See footnote 9: de Munter JS, Hu FB, Spiegelman D, Franz M, van Dam RM. *Whole grain, bran, and germ intake and risk of type 2 diabetes: a prospective cohort study and systematic review.* PLoS Med. 2007;4:e261.

[51] U.S. Department of Agriculture. *Schoolchildren Consumed More Whole Grains Following Change in School Meal Standards.* February 3, 2020. Available at: *https://www.ers.usda.gov/amber-waves/2020/february/schoolchildren-consumed-more-whole-grains-following-change-in-school-meal-standards/.* Drawn from: ''Dietary Guidance and New School Meal Standards: Schoolchildren's Whole Grain Consumption Over 1994–2014,'' by Biing-Hwan Lin, Joanne F. Guthrie, and Travis A. Smith, American Journal of Preventive Medicine, (doi:10.1016/j.amepre.2019.01.010), January 2019.

[52] In SY 2014–2015, all grains offered in the NSLP and SBP were required to be whole grain-rich; however school food authorities that demonstrated a hardship in meeting this requirement could seek an exemption that allowed for meeting a relaxed requirement that at least 50 percent of all grains must be whole grain-rich. See Figure ES.14. And Figure ES.17. *School Nutrition and Meal Cost Study, Final Report Volume 2: Nutritional Characteristics of School Meals* by Elizabeth Gearan, Mary Kay Fox, Katherine Niland, Dallas Dotter, Liana Washburn, Patricia Connor, Lauren Olsho, and Tara Wommak. Project Officer: John Endahl. Alexandria, VA: April 2019. Available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.* (OMB Control Number 0584–0596, expiration date 07/31/2017.)

[53] U.S. Department of Agriculture. *Crediting Coconut, Hominy, Corn Masa and Masa Harina in the Child Nutrition Programs.* August 22, 2019. Available at: *https://www.fns.usda.gov/cn/crediting-coconut-hominy-corn-masa-and-masa-harina-child-nutrition-programs.*

pancakes, pasta (including macaroni, penne, rotini, and spaghetti), rice, and tortillas. USDA Foods also provided fish with whole grain-rich breading.[54]

Public Comments Requested

For the final rule, USDA is considering two different options and invites comments on both:

- Maintaining the current requirement that at least 80 percent of the weekly grains offered are whole grain-rich, based on ounce equivalents of grains offered; or
- Requiring that all grains offered must meet the whole grain-rich requirement, except that one day each school week, schools may offer enriched grains.

USDA will consider the following questions when developing the final rule and may incorporate changes to the whole grains proposal based on public input. USDA invites public input on both these options in general, and requests specific input on the following questions:

- Which option would be simplest for menu planners to implement, and why?
- Which option would be simplest to monitor, and why?

Section 5: Sodium

Current Requirement

Current regulations at 7 CFR 210.10(f)(3) and 220.8(f) require schools to meet Sodium Target 1 for school lunch and breakfast, effective SY 2022–2023. For school lunch only, schools are required to meet Sodium Target 1A beginning in SY 2023–2024. These standards are shown in the tables below:

NATIONAL SCHOOL LUNCH PROGRAM TRANSITIONAL SODIUM LIMITS

Age/grade group	Target 1: effective July 1, 2022	Interim Target 1A: effective July 1, 2023
Grades K–5	≤1,230 mg	≤1,110 mg.
Grades 6–8	≤1,360 mg	≤1,225 mg.
Grades 9–12	≤1,420 mg	≤1,280 mg.

SCHOOL BREAKFAST PROGRAM TRANSITIONAL SODIUM LIMITS

Age/grade group	Target 1: effective July 1, 2022
Grades K–5	≤540 mg.
Grades 6–8	≤600 mg.
Grades 9–12	≤640 mg.

The current sodium limits apply to the average lunch and breakfast offered during the school week; they do not apply per day, per meal, or per menu item. This means that specific products are not held to specific sodium limits, but rather, meals must fit in to the overall weekly limit. Menu planners may occasionally offer higher sodium meals, menu items, or products if they are balanced out with lower sodium meals, menu items, or products throughout the school week.

For comparison, the 2012 final rule [55] included three transitional targets (Target 1, Target 2, and the Final Target) to reduce sodium intake over a 10-year period. However, successive legislative and administrative action prevented implementation of sodium targets beyond Target 1 from occurring.[56] Prior to the COVID–19 pandemic, in SY 2019–2020, schools were required to meet Sodium Target 1. According to a USDA study, in SY 2014–2015, on average, 72 percent of weekly lunch menus met Sodium Target 1 and another 13 percent were within 10 percent of the target. For breakfast, 67 percent of weekly menus met Sodium Target 1, and another 10 percent of weekly menus were within 10 percent of the target.[57]

USDA is applying lessons learned from implementation of the 2012 sodium standards to this rulemaking. The transitional standards rule removed Sodium Target 2 and the Final Target from the regulations and noted that this forthcoming proposed rule would address longer-term sodium standards. USDA has determined that a more gradual approach to sodium reduction, when compared to the original schedule outlined in the 2012 rule, is more likely to be achieved and thus would better meet the needs of schools and students. Studies have noted that implementation of sodium reductions take time and effort. For example, one study noted several considerations, such as environmental context, potential barriers to implementation, the importance of technical assistance, and the need for buy-in from partners to successfully reduce sodium.[58] Another study focused on community-wide sodium reduction efforts recommended designing programs ''to reduce sodium gradually to take into account consumer preferences and taste transitions.'' [59] As detailed in the following *Stakeholder Engagement* section, USDA acknowledges that some stakeholders would prefer a more rapid approach to sodium reduction in schools, including a return to the 2012 sodium standards. USDA appreciates the strong commitment these individuals and organizations have to children's dietary health. However, as explained under *Proposed Standard,* USDA expects this proposed approach to be a more viable option, based in part on its alignment with FDA's voluntary sodium reduction targets. USDA expects further sodium reductions in school meals to be achievable as even more new and reformulated food products that align with FDA's voluntary targets become available over time. USDA expects that FDA's voluntary sodium reduction goals will support children's acceptance of school lunches and breakfasts with less sodium, as the incremental school meal reductions will occur alongside sodium

[54] U.S. Department of Agriculture. *USDA Foods Available List for SY 2023.* Available at: *https://www.fns.usda.gov/usda-fis/usda-foods-available.*

[55] *Nutrition Standards in the National School Lunch and School Breakfast Programs* (77 FR 4088, January 26, 2012). Available at: *https://www.federalregister.gov/documents/2012/01/26/2012-1010/nutrition-standards-in-the-national-school-lunch-and-school-breakfast-programs.*

[56] See page 6997 of *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (87 FR 6984, February 7, 2022). Available at: *https://www.federalregister.gov/documents/2022/02/07/2022-02327/child-nutrition-programs-transitional-standards-for-milk-whole-grains-and-sodium#footnote-29-p6991.*

[57] See Table C.14 and Table E.14. *School Nutrition and Meal Cost Study, Final Report Volume 2: Nutritional Characteristics of School Meals* by Elizabeth Gearan, Mary Kay Fox, Katherine Niland, Dallas Dotter, Liana Washburn, Patricia Connor, Lauren Olsho, and Tara Wommak. Project Officer: John Endahl. Alexandria, VA: April 2019. Available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.* (OMB Control Number 0584–0596, expiration date 07/31/2017.)

[58] Cummings PL, Kuo T, Gase LN, Mugavero K. *Integrating sodium reduction strategies in the procurement process and contracting of food venues in the County of Los Angeles government, 2010–2012.* J Public Health Manag Pract. 2014 Jan–Feb;20(1 Suppl 1):S16–22. doi: 10.1097/PHH.0b013e31829d7f63. PMID: 24322811; PMCID: PMC4450096. Available at: *https://pubmed.ncbi.nlm.nih.gov/24322811/.*

[59] Kane H, Strazza K, Losby JL, Lane R, Mugavero K, Anater AS, Frost C, Margolis M, Hersey J. *Lessons learned from community-based approaches to sodium reduction.* Am J Health Promot. 2015 Mar–Apr;29(4):255–8. doi: 10.4278/ajhp.121012–ARB–501. Epub 2014 Feb 27. PMID: 24575726; PMCID: PMC5379176. Available at: *https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5379176/.*

reductions in the broader U.S. food supply. As explained below, the average American's sodium daily intake is about 48 percent higher than the daily recommended limit for those 14 years and older. Taken together, efforts by FDA and USDA support a broad, government-wide effort to improve dietary patterns and reduce average sodium intake across the U.S. population, including among school children.

Stakeholder Engagement on Sodium Standards: Public Comments and Listening Sessions

USDA received extensive stakeholder input on the sodium standards through public comments and listening sessions held in spring and summer 2022. This section provides an overview of input received through public comments, followed by input shared during the listening sessions.

Public comments on the transitional standards rule provided feedback on the transitional sodium standards, and in many cases, provided USDA with suggestions to develop the standards proposed in this rulemaking. Several respondents noted the importance of reducing sodium in school meals to limit children's risk of chronic disease. An advocacy organization focused on public health noted that most Americans—including 9 out of 10 children—consume sodium at levels far above the recommended limits, putting them at increased risk for developing elevated blood pressure at an early age. An advocacy organization focused on nutrition and science agreed, noting that studies show a link between high blood pressure in childhood and high blood pressure in adulthood. They also asserted that high blood pressure in childhood is linked to early development of heart disease and risk for premature death. One respondent who identified as a pediatric cardiologist underscored these concerns and suggested limiting sodium would benefit children's health.

An advocacy organization representing food and nutrition professionals supported the transitional sodium standards and urged USDA to continue reducing sodium in its future rulemaking. This organization recognized the challenges of further reductions but emphasized the importance of limiting sodium to reduce children's risk of chronic disease. Another advocacy organization focused on public health agreed that USDA made important progress with the transitional sodium standards but must go further with its long-term standards.

Several respondents commented on the sodium targets from the 2012 rule. A few advocacy organizations recommended that USDA reestablish Sodium Target 2 and the Final Target, and some respondents suggested USDA establish an additional target below the Final Target. Conversely, a school food service respondent expressed uncertainty about schools' ability to further reduce sodium, arguing that levels below Target 1A would result in ''bland'' food and reduced student participation. An industry respondent suggested that USDA extend the transition to Target 2 for several years and advised against returning to the Final Target. A school nutrition director opposed sodium reductions in school meals, noting that schools struggle to meet the current standard and claiming that further reductions would negatively impact the taste of the meals. Another opponent suggested that sodium reductions are not needed and would decrease student acceptance.

Respondents also acknowledged the importance of product reformulation, taste testing, and recipe adjustments in achieving sodium reductions. Several respondents suggested that successful product reformulation is the most significant challenge to sodium reduction in school meals. A trade association asserted that it takes over a year to develop or reformulate products, and that some companies do not have the resources for research and development; other respondents also mentioned the cost of reformulation. An industry respondent asserted that many companies view USDA's sodium limits as ''overly restrictive''; they claimed that further reductions would result in manufacturers leaving the school market. Some industry respondents, however, supported gradual sodium reductions in school meals. For example, one respondent stated its commitment to reducing sodium while maintaining quality and taste. Another industry respondent suggested that all products in their K–12 portfolio could be included in school meals within the weekly sodium standards; this respondent intends to further reduce sodium in their products.

A few respondents commented on the timeframe for future sodium reductions. One advocacy organization recognized that schools would experience challenges achieving the sodium standards for multiple reasons and suggested that USDA create a reasonable, practical timeline to implement sodium standards. They stated that the timeline should allow schools to plan, source, and test meals that are nutritious and palatable. An industry respondent asserted that sodium reductions should be phased in slowly over 15 years or more.

Listening session participants raised many similar themes. Many participants, including State agencies and schools, acknowledged that sodium reductions are a challenge, with some suggesting that they are a greater challenge at lunch. Participants generally supported maintaining weekly sodium limits, as opposed to transitioning to a different sort of limit (such as per-product limits) because weekly limits allow for more flexibility with menu planning. Listening session participants also generally emphasized that gradual decreases are preferable, as they allow children's taste preferences to adapt to lower-sodium foods over time. However, listening session participants representing the food industry emphasized the importance of knowing what end point they are working towards, as this helps with product reformulation efforts. Others, including participants representing schools, also noted the importance of clear expectations for the long term, so that they have adequate time to prepare for sodium reductions.

Proposed Standard

USDA proposes to establish weekly sodium limits, informed by FDA's voluntary sodium reduction goals, with further reductions to support closer alignment with the goals of the *Dietary Guidelines.* For school lunch, this proposed rule would set forth three reductions, to be phased in as follows and as shown in the chart below:

- *SY 2025–2026:* Schools will implement a 10 percent reduction from SY 2024–2025 school lunch sodium limits.
- *SY 2027–2028:* Schools will implement a 10 percent reduction from SY 2026–2027 school lunch sodium limits.
- *SY 2029–2030:* Schools will implement a 10 percent reduction from SY 2028–2029 school lunch sodium limits.

PROPOSED NATIONAL SCHOOL LUNCH PROGRAM SODIUM LIMITS

Age/grade group	Sodium limit: effective July 1, 2025	Sodium limit: effective July 1, 2027	Sodium limit: effective July 1, 2029
Grades K–5	≤1000 mg	≤900 mg	≤810 mg.
Grades 6–8	≤1105 mg	≤990 mg	≤895 mg.
Grades 9–12	≤1150 mg	≤1035 mg	≤935 mg.

Because school breakfasts are closer to meeting dietary recommendations for sodium than school lunches, this proposed rule would set forth two reductions for school breakfasts, to be phased in as follows and as shown in the chart below:

- SY 2025–2026: Schools will implement a 10 percent reduction from SY 2024–2025 school breakfast sodium limits.
- SY 2027–2028: Schools will implement a 10 percent reduction from SY 2026–2027 school breakfast sodium limits.

PROPOSED SCHOOL BREAKFAST PROGRAM SODIUM LIMITS

Age/grade group	Sodium limit: effective July 1, 2025	Sodium limit: effective July 1, 2027
Grades K–5	≤485 mg	≤435 mg.
Grades 6–8	≤540 mg	≤485 mg.
Grades 9–12	≤575 mg	≤520 mg.

As a best practice, USDA will also recommend sodium limits for certain products, such as condiments and sandwiches, which are top contributors of sodium in school lunch.[60] This will support schools' efforts to procure lower sodium products and meet the weekly limits. USDA expects that FDA's voluntary sodium reduction targets will be helpful in developing these best practice limits. USDA also invites input from the public on which products it should develop best practice sodium limits for, including what specific limits would be achievable for schools and industry while still making a difference for children. Meeting these best practice limits would be recommended, but not required.

USDA expects that the implementation timeframes and the gradual approach to sodium reductions outlined above will support manufacturers' efforts to develop and reformulate food products, making implementation more achievable for schools. It will also give schools time to plan menus that gradually reduce sodium and maintain palatability. In the years between now and SY 2025–2026, USDA encourages schools to work towards lower sodium meals, and if possible, to meet the proposed limits early. USDA invites public input on the sodium proposals for school lunch and breakfast and is specifically interested in input on the frequency of sodium reductions and the proposed schedule for those reductions.

USDA recognizes that sodium reduction is challenging for schools and that it involves many stakeholders, including nutrition and health experts, the food industry, and other Federal partners. Successful implementation of sodium reduction in school meals will require commitment and support from each of these partners. USDA will evaluate progress towards reducing sodium in school meals, as well as in the broader marketplace, on an ongoing basis. USDA is also committed to providing technical assistance and support to schools working to implement the sodium reductions proposed in this rulemaking.

When determining the sodium limits for school lunch and breakfast, it is important to remember that the limits established by USDA apply to the meals as offered, and children's actual sodium intake is dependent on the meals as consumed. When accounting for children's consumption of meals, these proposed sodium reductions either approach or meet dietary recommendations for sodium intake among school-aged children. Most schools participate in offer versus serve, which allows students to decline some components of a reimbursable meal as a way of providing choice and reducing waste. Offer versus serve is mandatory at lunch and optional at breakfast for high schools. For elementary and middle schools, offer versus serve is optional in both programs. During SY 2014–2015 over 80 percent of all elementary and middle schools used offer versus serve at lunch.[61] This means that most students participating in the school lunch program have the option to decline some food components and will therefore consume less sodium compared to the complete lunch as menued. However, USDA also appreciates the importance of gradually reducing the amount of sodium offered in meals to support reducing children's sodium consumption over time; this proposed rule works towards that goal. (See the Regulatory Impact Analysis in *Section 18: Procedural Matters,* for more information.)

USDA seeks comment on this proposed change, found in 7 CFR 210.10(c) and (f)(3) and 7 CFR 220.8(c) and (f)(3) of the proposed regulatory text. Respondents are encouraged to comment on the limits proposed, as well as the implementation timeframe.

In developing this proposal, USDA considered several important factors, outlined below.

[60] According to the *School Nutrition and Meal Cost Study,* in SY 2014–2015 in the NSLP, ''Overall, the top contributor of sodium was condiments and toppings, followed by sandwiches with plain meat, poultry, or fish; flavored fat-free milk; sandwiches with breaded meat, poultry, or fish; and salad dressings.'' *School Nutrition and Meal Cost Study, Final Report Volume 2: Nutritional Characteristics of School Meals* by Elizabeth Gearan, Mary Kay Fox, Katherine Niland, Dallas Dotter, Liana Washburn, Patricia Connor, Lauren Olsho, and Tara Wommak. Project Officer: John Endahl. Alexandria, VA: April 2019. Available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.* (OMB Control Number 0584–0596, expiration date 07/31/2017.)

[61] See page 127 (A.25). U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, *School Nutrition and Meal Cost Study, Final Report Volume 1: School Meal Program Operations and School Nutrition Environments,* by Sarah Forrestal, Charlotte Cabili, Dallas Dotter, Christopher W. Logan, Patricia Connor, Maria Boyle, Ayseha Enver, and Hiren Nissar. Project Officer: John Endahl. Alexandria, VA: April 2019. Available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.* (OMB Control Number 0584–0596, expiration date 07/31/2017.)

Impact of Sodium on Children's Health

The *Dietary Guidelines* recommend limiting foods and beverages high in sodium, noting that ''there is very little room for food choices that are high in sodium'' at most ages.[62] However, average intakes of sodium are currently high compared to recommendations. For example, a USDA study found that during SY 2014–2015, over 80 percent of school-aged children consumed more sodium than recommended.[63] Another study using 2011–2016 National Health and Nutrition Examination Survey data found that most children (94 percent) had usual sodium intakes that exceeded recommended intakes; this study found that there were no differences based on participation in the school meal programs.[64] Overall, average U.S. sodium intake is 3,400 mg per day. For comparison, the *Dietary Guidelines* recommend adults and children 14 years and older limit sodium intake to less than 2,300 mg per day; the recommendations for children 13 years and younger are even lower.[65] When comparing the average American's sodium intake to recommendations, the average American's daily intake is about 48 percent higher than the recommended level.

According to the American Heart Association,[66] excess sodium intake is associated with higher blood pressure in children, and children with high-sodium diets are almost 40 percent more likely to have elevated blood pressure compared to children with lower-sodium diets. About one in six children ages 8–17 years has raised blood pressure.[67] Further, high blood pressure in childhood is linked to early development of heart disease. Conversely, lowering sodium intake during childhood can reduce the risk for high blood pressure in adulthood. High blood pressure is currently all too common in adults: more than 4 in 10 adults in the U.S. have high blood pressure and that number increases to almost 6 in 10 for non-Hispanic Black adults.[68] As noted in a study published in 2015, ''available data are sufficiently strong to recommend a lower sodium intake beginning early in life,'' including through sodium reductions in school meals. This study also noted that eating patterns, including preferences for foods higher in sodium, are developed at a young age, concluding that ''the most appropriate approach to halt [the hypertension] epidemic should include prevention strategies that target children.'' [69] Given the potential long-term impact on children's health, as demonstrated through numerous scientific studies, it is critical to reduce sodium levels in school meals.

Food and Drug Administration Voluntary Sodium Reduction Goals

In October 2021, FDA issued short-term (2.5-year) voluntary sodium reduction for 163 categories of processed, packaged, and prepared foods. FDA's targets take into consideration the many functions of sodium in food, including taste, texture, microbial safety, and stability; the targets are intended to support increased food choice for consumers seeking a diverse diet that is consistent with recommendations of the *Dietary Guidelines* by encouraging food reformulation and new product development for Americans. The targets in FDA's guidance seek to support decreasing average U.S. population sodium intake from approximately 3,400 mg to 3,000 mg per day, about a 12 percent reduction by encouraging food manufacturers, restaurants, and food service operations to gradually reduce sodium in foods over time. FDA's voluntary sodium reduction goals are expected to support school efforts to procure lower-sodium products for use in school meals.

The sodium limits in this proposed rule are informed by FDA's voluntary sodium reduction goals. FDA's goals are not intended to focus on foods (*e.g.,* milk) that contain only naturally occurring sodium, and were developed to reflect reformulation in targeted foods, where an actionable reduction could occur, while still allowing for naturally occurring sodium in items such as milk, fresh fruit, and fresh vegetables. To develop the proposed school meal sodium limits, USDA used the average short-term FDA targets for foods commonly served in school lunch and breakfast to calculate a baseline menu goal for weekly sodium limits for each meal; this calculation resulted in an initial 10 percent reduction from the transitional sodium limits. However, USDA recognized that further incremental sodium reductions are needed to support children's long-term health, particularly at lunch. USDA also recognized that FDA expects to issue revised subsequent targets in the next few years to facilitate a gradual, iterative process to reduce sodium intake.[70] Therefore, in addition to the initial 10 percent reduction to the weekly sodium limits in SY 2025–2026, this rulemaking proposes a second 10 percent reduction in SY 2027–2028 for both programs. For school lunch only, this rulemaking proposes another 10 percent reduction for SY 2029–2030. When accounting for children's consumption of meals, these proposed limits either approach or meet dietary recommendations for sodium intake among school-aged children. (See the Regulatory Impact Analysis in *Section 18: Procedural Matters,* for more information). Further, USDA expects that this gradual approach to sodium reduction would set schools and students up for success, as research indicates gradual sodium reductions are less noticeable to consumers.[71] While the limits proposed in this rulemaking represent significant progress towards reducing children's sodium intake, USDA is committed to continually evaluating the sodium limits and how they compare to dietary recommendations.

Taken together, efforts by FDA and USDA support a broad, government-wide effort to improve dietary patterns and reduce average sodium intake

[62] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition.* December 2020. Available at: *https://www.dietaryguidelines.gov/.*

[63] See Table I.43. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, *School Nutrition and Meal Cost Study Volume 4: Student Participation, Satisfaction, Plate Waste, and Dietary Intakes Appendix I–P.* Available at: *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.* (OMB Control Number 0584–0596, expiration date 07/31/2017.)

[64] Gleason, S., Hansen, D., Kline, N., Zvavitch, P., & Wakar, B. (2022). *Indicators of diet quality, nutrition, and health for Americans by program participation status, 2011–2016: NSLP final report.* Prepared by Insight Policy Research. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. Available at: *https://www.fns.usda.gov/cn/diet-health-indicators-program-participation-status-2011-2016.*

[65] See page 46. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition.* December 2020. Available at: *https://www.dietaryguidelines.gov/.*

[66] American Heart Association, *Sodium and Kids.* Available at: *https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/sodium/sodium-and-kids.*

[67] The Centers for Disease Control and Prevention, *Reducing Sodium in Children's Diets.* Available at: *https://www.cdc.gov/vitalsigns/children-sodium/index.html.*

[68] Ostchega Y, Fryar CD, Nwankwo T, Nguyen DT. *Hypertension prevalence among adults aged 18 and over: United States, 2017–2018.* NCHS Data Brief, no 364. Hyattsville, MD: National Center for Health Statistics. 2020. Available at: *https://pubmed.ncbi.nlm.nih.gov/32487290/.*

[69] Appel, L.J., Lichtenstein, A.H., Callahan, E.A., Sinaiko, A., Van Horn, L., & Whitsel, L. (2015). *Reducing Sodium Intake in Children: A Public Health Investment.* Journal of clinical hypertension (Greenwich, Conn.), 17(9), 657–662. Available at: *https://doi.org/10.1111/jch.12615.*

[70] U.S. Food and Drug Administration. *Sodium Reduction.* Available at:*www.fda.gov/SodiumReduction.*

[71] Institute of Medicine 2010. *Strategies to Reduce Sodium Intake in the United States.* Washington, DC: The National Academies Press. *https://doi.org/10.17226/12818.*

across the U.S. population, including among school children. USDA expects further sodium reductions to be achievable as even more new and reformulated food products that align with FDA's voluntary targets become available. Aligning school meal sodium limits with FDA's voluntary sodium reduction goals may help support children's acceptance of school lunches and breakfasts with less sodium, as the school meal reductions will occur alongside sodium reductions in the broader U.S. food supply.

Public Comments Requested

USDA will consider the following questions when developing the final rule and may incorporate changes to the sodium proposal based on public input. USDA invites public input on this proposal in general, and requests specific input on the following questions:

- USDA plans to recommend (but not require) sodium limits for certain products, such as condiments and sandwiches, to further support schools' efforts to procure lower sodium products and meet the weekly limits.
  - For which products should USDA develop best practice sodium limits?
  - What limits would be achievable for schools and industry, while still supporting lower-sodium meals for children?
- Does the proposed implementation timeframe provide appropriate lead time for manufacturers and schools to successfully implement the new sodium limits?
- Do commenters agree with USDA's proposed schedule for incremental sodium reductions, including both the number and level of sodium reductions and the timeline, or suggest an alternative? Why?

Section 6: Menu Planning Options for American Indian and Alaska Native Students

Current Requirement

Current regulations at 7 CFR 210.10(m)(3) encourage schools to ''consider ethnic and religious preferences when planning and preparing meals.'' The meal pattern standards allow a wide variety of foods to be served to meet the meal component requirements, including foods traditional to Native American and Alaska Native communities (See *Section 7: Traditional Foods*). However, any efforts to meet student preferences must follow the meal pattern standards outlined in regulation. At the same time, USDA currently allows schools in American Samoa, Puerto Rico, and the U.S. Virgin Islands to serve vegetables such as yams, plantains, or sweet potatoes to meet the grains component. The option is intended to accommodate cultural food preferences and to address product availability and cost concerns in these areas.

On February 10, 2022, USDA released its Equity Action Plan,[72] which details action the Department will take to advance equity, including a focus on increasing Tribal trust. The Equity Action Plan highlights the importance of considering policy design and implementation to ensure Tribal communities have equitable access to Federal programs and services, including incorporating indigenous values and perspectives in program design and delivery. In this plan, USDA also committed to reviewing ''current statutory authorities, regulations, and policies that can be used to promote tribal sovereignty and self-determination throughout USDA, with an eye towards expansion.''

Stakeholder Engagement: Public Comments and Listening Sessions

Several comments on the transitional standards rule addressed the importance of meeting dietary needs and preferences of students, including those of American Indian and Alaska Native students. For example, several respondents submitted written comments noting that the *Dietary Guidelines*[73] recognize the importance of personal, cultural, and traditional dietary preferences, and these respondents suggested that USDA's meal patterns do the same. One advocacy organization emphasized that all children should be able to consume a school meal that supports their culture and health needs. Another advocacy organization encouraged USDA to obtain feedback from schools that serve a high proportion of students of color or indigenous students when developing the proposed rule. This organization suggested that USDA elevate strategies to meet nutritional goals, develop meal patterns that celebrate students' cultural heritage, and encourage culturally relevant foods. Similarly, an industry association suggested that the school meal programs need to do more to promote equity and expand culturally appropriate meal options for children.

Oral comments were submitted in listening sessions that USDA conducted with Tribal stakeholders in spring 2022. During these sessions, participants suggested that USDA provide some latitude so that schools can offer meals that better align with student's food traditions. For example, many participants expressed concern about milk requirements, considering the high percentage of children with lactose intolerance in indigenous communities. Many Tribal stakeholders, including indigenous nutritionists, expressed concern about the grains requirements as a poor nutritional match for indigenous children and a contributory factor to the high diabetes rates in indigenous communities. These stakeholders requested indigenous starchy vegetables be allowed as a grain substitute, and for USDA to invest in more research into how the *Dietary Guidelines* work or do not work for indigenous communities.

Proposed Standard

USDA proposes to add tribally operated schools, schools operated by the Bureau of Indian Education, and schools serving primarily American Indian or Alaska Native children to the list of schools[74] that may serve vegetables to meet the grains requirement, and requests public input on additional menu planning options that would improve the child nutrition programs for American Indian and Alaska Native children. USDA also proposes to revise the current regulatory text at 7 CFR 210.10(c)(3) and 220.8(c)(3) to clarify that this provision also allows the substitution of traditional vegetables such as prairie turnips. While the proposed list of specific vegetables is not exclusive, USDA welcomes public input on any other vegetables that should be listed in the regulatory text. This proposal is also extended to the CACFP and SFSP: USDA proposes to revise 7 CFR 225.16(f)(3) and 226.20(f) to allow institutions and facilities, or sponsors, as applicable, that serve primarily American Indian or Alaska Native children to substitute vegetables for grains or breads. Additionally, USDA proposes to include schools in Guam and Hawaii in this provision for all programs, to reflect cultural food preferences. Schools, institutions,

[72] U.S. Department of Agriculture, *USDA Equity Action Plan in Support of Executive Order (E.O.) 13985 Advancing Racial Equity and Support for Underserved Communities through the Federal Government,* February 10, 2022. Available at: *https://www.usda.gov/equity/action-plan.*

[73] The *Dietary Guidelines* are described as a framework that may be customized to fit cultural traditions. See page 27. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition.* December 2020. Available at: *https://www.dietaryguidelines.gov/.*

[74] As noted above, USDA currently allows schools in American Samoa, Puerto Rico, and the U.S. Virgin Islands to serve vegetables such as yams, plantains, or sweet potatoes to meet the grains component. See 7 CFR 210.10(c)(3) and 220.8(c)(3).

facilities, and sponsors would not be required to submit a request for approval to use this option; it would be automatically available to any qualifying school, institution, facility, or sponsor.

For the NSLP and SBP, the school food authority would be responsible for maintaining documentation to demonstrate that the schools using this option are tribally operated, are operated by the Bureau of Indian Education, or serve primarily American Indian or Alaska Native students. This documentation would be maintained for program reviews. For example, this documentation could be a certifying statement indicating that the school is tribally operated or operated by the Bureau of Indian Education. By ''schools serving primarily American Indian or Alaska Native children,'' USDA intends to include schools where American Indian or Alaska Native children represent the largest demographic group of enrolled children. This could be based on participant self-reporting, school data, or census data; to meet the documentation requirement, these schools could, for example, maintain aggregate data regarding their student demographics.

For the CACFP and SFSP, the institution, facility, or sponsor would also be required to maintain documentation demonstrating that the site qualifies for this menu planning option. For CACFP and SFSP, the determination that an institution, facility, or sponsor serves primarily American Indian or Alaska Native children would be made in one of two ways:

- For enrolled sites, the institution, facility, or sponsor determines, based on participant self-reporting, that American Indian or Alaska Native children represent the largest demographic group of enrolled children.
- For non-enrolled sites, the institution, facility, or sponsor determines that American Indian or Alaska Native children represent the largest demographic group of children served by the site, based on school or census data.

This action builds on the commitment USDA made in its Equity Action Plan [75] to adapt its programs to include Tribal values and indigenous perspectives, including supporting traditional food ways. At the same time, USDA acknowledges that for decades, the United States government actively sought to eliminate traditional American Indian and Alaska Native ways of life—for example, by forcing indigenous families to send their children to boarding schools. This separated indigenous children from their families and heritage, and disrupted access to traditional foods, altering indigenous children's relationship to food.[76]

USDA recognizes that this rulemaking is just one small step in a larger effort towards improving the child nutrition programs for American Indian and Alaska Native children and encourages input on other steps the Department can take to improve the programs for American Indian and Alaska Native children. For example, USDA is interested in other specific areas of the school meal pattern that present challenges to serving culturally appropriate meals, specifically regarding any regulatory requirements in 7 CFR 210.10 and 220.8. This could include, for example, meal component requirements that present barriers to serving culturally appropriate meals. Individuals and organizations are encouraged to provide feedback on specific regulatory requirements outlined at:

- 7 CFR 210.10(c), (d), (e), and (f)
- 7 CFR 220.8(c), (d), (e), and (f)

Based on public input, in the final rule, USDA may incorporate additional menu planning options for schools that are tribally operated, are operated by the Bureau of Indian Education, or serve primarily American Indian or Alaska Native students. Alternatively, USDA may also consider finalizing a process by which these schools could request, on a case-by-case basis, menu planning options for USDA approval, provided the requests reasonably align with meal pattern requirements. If finalized, either of these options would be in addition to the proposal included in this rulemaking. These potential options, if finalized, would not relax the nutrition standards, but instead would allow schools to use an alternative approach to achieve the goal of providing healthy meals for their students. USDA greatly appreciates public input on this topic, particularly from members of American Indian or Alaska Native communities.

These proposed changes are found in 7 CFR 210.10(c)(3), 220.8(c)(3), 225.16(f)(3), and 226.20(f) of the proposed regulatory text.

Public Comments Requested

USDA will consider the following questions when developing the final rule and may incorporate changes to this proposal based on public input. Additionally, in the final rule, USDA may consider additional menu planning options for schools that are tribally operated, are operated by the Bureau of Indian Education, or serve primarily American Indian or Alaska Native children, based on public input. USDA invites public input on this proposal and the alternatives in general, and requests specific input on the following question:

- USDA requests public input on additional menu planning options that would improve the school meal programs for American Indian and Alaska Native children. Are there other specific areas of the school meal pattern that present challenges to serving culturally appropriate meals for American Indian and Alaska Native children, specifically regarding any regulatory requirements in 7 CFR 210.10 and 220.8?

Section 7: Traditional Foods

Current Requirement

Information about crediting foods in the school meal programs is primarily communicated through USDA guidance, rather than regulation. As such, while traditional foods are not explicitly mentioned in the school lunch and breakfast program regulations, they may be served in reimbursable school meals in accordance with USDA guidance.

USDA does not define the term ''traditional foods;'' however, the Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)) defines traditional food as ''food that has traditionally been prepared and consumed by an [American] Indian tribe'' and includes the following foods in its definition: wild game meat; fish; seafood; marine mammals; plants; and berries. USDA acknowledges that there are 574 federally recognized tribes in the United States and appreciates the importance of recognizing the diversity of American Indian and Alaska Native cultures and traditions, including food traditions.

The *Food Buying Guide* [77] is the USDA's main resource for determining how specific foods credit towards the meal pattern requirements. While the *Food Buying Guide* provides a broad list of products commonly served in the child nutrition programs, it does not

[75] U.S. Department of Agriculture, *USDA Equity Action Plan in Support of Executive Order (E.O.) 13985 Advancing Racial Equity and Support for Underserved Communities through the Federal Government,* February 10, 2022. Available at: *https://www.usda.gov/equity/action-plan.*

[76] National Museum of the American Indian, *Struggling with Cultural Repression, Chapter 3: Boarding Schools.* Available at: *https://americanindian.si.edu/nk360/code-talkers/boarding-schools/*.

[77] U.S. Department of Agriculture, *Food Buying Guide for Child Nutrition Programs.* Available at: *https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs.*

provide yield information on every possible food served in a reimbursable meal; for example, some traditional foods are not listed in the *Food Buying Guide.*

In 2015, USDA issued policy guidance [78] about serving traditional foods in the child nutrition programs. In this guidance, USDA explained that if a food is served as part of a reimbursable meal, but not listed in the *Food Buying Guide,* the yield information of a similar food or in-house yield [79] may be used to determine the contribution towards the meal pattern requirements. The 2015 guidance also explained how to credit certain traditional foods, such as wild rice, blue cornmeal, and ground buffalo. Other resources, such as USDA's fact sheet *Bringing Tribal Foods and Traditions Into Cafeterias, Classrooms, and Gardens,*[80] encourage schools to incorporate traditional foods onto their menus. USDA will work to incorporate the 2015 policy guidance into the *Food Buying Guide* and will work on a multi-year initiative with tribes to identify more traditional foods to provide yield information and incorporate into the guide.

Stakeholder Engagement: Public Comments and Listening Sessions

Although the transitional standards rule did not include a traditional foods provision, a handful of written comments and dozens of oral comments provided by Tribal stakeholders addressed this topic. For example, one advocacy organization asserted that many Tribal communities would like to serve traditional foods in the school meal programs and suggested that promoting the service of such foods is an important part of an equitable school meal program.

During USDA's listening sessions with Tribal stakeholders, participants highlighted the importance of serving traditional foods in the school meal programs, as well as local and traditional fruits, starchy vegetables, meats, and fish. Participants also discussed the financial and regulatory challenges of fuller incorporation of such traditional foods into school meals and expressed their position that traditional foods are nutritionally a better match for indigenous children. Tribal stakeholders emphasized that what constitutes ''traditional foods'' varies by Tribal community.

Proposed Change

USDA proposes to explicitly state in regulation that traditional foods may be served in reimbursable school meals. The intent of this change is to emphasize USDA's support for integrating traditional foods into the school meal programs. While many traditional foods may already be served in the programs under existing USDA regulations and guidance, USDA expects that this regulatory change to explicitly mention traditional foods will help to address the perception that traditional foods are not creditable, draw attention to the option to serve traditional foods, and support local efforts to incorporate traditional foods into school meals. Within its authority, USDA will work with State agencies and schools to overcome any food safety, crediting, or other barriers to serving traditional foods in school meals to fully realize the intent of the change.

As noted, USDA does not define the term ''traditional food.'' By ''traditional food,'' USDA means the definition included in the Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)), which defines traditional food as ''food that has traditionally been prepared and consumed by an [American] Indian tribe,'' including wild game meat; fish; seafood; marine mammals; plants; and berries. USDA intends for this term to be used broadly, to cover the diversity of food traditions among American Indian and Alaska Native communities. However, as noted below, USDA welcomes stakeholder input on use of this term, and may adjust the term in the final rule based on this input.

This proposed change is found in 7 CFR 210.10(c)(7) and 220.8(c)(4) of the proposed regulatory text.

Public Comments Requested

USDA recognizes that this change is just one part of a larger effort to support the service of traditional foods in school meals. USDA will consider the following questions when developing the final rule and may incorporate changes to the traditional foods proposal based on public input. USDA invites public input on this proposal in general, and requests specific input on the following questions:

- USDA has provided guidance [81] on crediting certain traditional foods. Are there any other traditional foods that schools would like to serve, but are having difficulty serving? If so, what specific challenges are preventing schools from serving these foods?
- Which traditional foods should USDA provide yield information for and incorporate into the *Food Buying Guide*?
- Is ''traditional foods,'' as described in the Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)), an appropriate term to use, or do stakeholders recommend a different term?

USDA greatly appreciates public input on this topic, particularly from members of American Indian or Alaska Native communities.

Section 8: Afterschool Snacks

Current Requirement

According to the National School Lunch Act (NSLA, 42 U.S.C. 1766a(d)), the nutritional requirements for snacks served through the CACFP [82] also apply to afterschool snacks served by schools. USDA updated the CACFP meal pattern standards in 2017 but did not make corresponding updates to the standards in 7 CFR part 210 for afterschool snacks served to school-aged children, which are also referred to as ''meal supplements.'' As such, current regulations at 7 CFR 210.10(o)(2) outlining the standards for afterschool snacks served under 7 CFR part 210 for school-aged children are outdated and do not reflect statutory requirements. As outlined at 7 CFR 210.10(o)(3), afterschool snacks served to preschool-aged children already follow the CACFP meal pattern standards. To avoid confusion with afterschool snacks served through the CACFP, the remainder of this preamble will refer to afterschool snacks served by schools under 7 CFR part 210 as ''NSLP snacks.''

Proposed Standard

USDA proposes to align NSLP snack standards for school-aged children at 7 CFR 210.10(o) with the CACFP snack requirements, as required by statute. The existing requirements for NSLP snacks served to preschool-aged children and infants will remain in effect.

Under the proposed NSLP snack requirements for school-aged children, reimbursable snacks would include two of the following five components, as is currently required for CACFP snacks:

- Milk
- Vegetables

[78] U.S. Department of Agriculture, *Child Nutrition Programs and Traditional Foods,* July 15, 2015. Available at: *https://www.fns.usda.gov/cn/child-nutrition-programs-and-traditional-foods.*

[79] Information on calculating in-house yield data may be found on page I–5 of the *Food Buying Guide.*

[80] U.S. Department of Agriculture, *Bringing Tribal Foods and Traditions Into Cafeterias, Classrooms, and Gardens,* August 2017. Available at: *https://www.fns.usda.gov/cfs/bringing-tribal-foods-and-traditions-cafeterias-classrooms-and-gardens.*

[81] U.S. Department of Agriculture, *Child Nutrition Programs and Traditional Foods,* July 15, 2015. Available at: *https://www.fns.usda.gov/cn/child-nutrition-programs-and-traditional-foods.*

[82] The nutrition standards for snacks served through the CACFP are found at 7 CFR 226.20(c)(3).

- Fruits
- Grains
- Meats/meat alternates (or ''protein sources,'' as proposed; see *Section 15: Miscellaneous Changes*)

USDA also proposes applying the following CACFP snack requirements to NSLP snacks served to school-aged children:

- Only one of the two components served at snack may be a beverage.
- Milk must be unflavored or flavored fat-free (skim) or low-fat (1 percent fat or less) milk for children 6 years old and older.
- At least one serving of grains per day, across all eating occasions, must be whole grain-rich.
- Grain-based desserts do not count towards meeting the grains requirement.
- As proposed in *Section 2: Added Sugars,* breakfast cereals must contain no more than 6 grams of added sugars per dry ounce.
- As proposed in *Section 2: Added Sugars,* yogurt must contain no more than 12 grams of added sugars per 6 ounces.

For simplicity, USDA proposes to create one NSLP snack meal pattern chart in 7 CFR 210.10(o) by adding a column for children ages 6 and over to the existing meal pattern chart for NSLP snacks served to preschoolers. Additionally, USDA proposes to change all regulatory references in 7 CFR part 210 from ''meal supplements'' to ''afterschool snacks.''

USDA seeks comment on this proposed change, found in 7 CFR 210.10(o) of the proposed regulatory text.

Section 9: Substituting Vegetables for Fruits at Breakfast

Current Requirement

Current regulations at 7 CFR 220.8(c) and (c)(2)(ii) allow schools to substitute vegetables for fruits at breakfast, provided that the first two cups per week are from the dark green, red/orange, beans and peas (legumes) or other vegetable subgroups. However, in recent years, through Federal appropriations, Congress has provided school food authorities the option to substitute any vegetable—including starchy vegetables—for fruits at breakfast, with no vegetable subgroup requirements.

USDA recognizes that it is confusing for State agencies and schools to have a requirement in regulation and policy that is repeatedly changed through Congressional action. As noted in *Section 1: Background,* child nutrition stakeholders have requested stability in program requirements. To better meet these expectations and support schools, USDA intends to establish a durable standard that continues to encourage vegetable variety at breakfast.

Proposed Change

USDA proposes to continue to allow schools to substitute vegetables for fruits at breakfast, but changes the vegetable variety requirement. Under this proposal, schools that substitute vegetables for fruits at breakfast more than one day per school week would be required to offer a variety of vegetable subgroups. In other words, schools that substitute vegetables more than one day per school week would be required to offer vegetables from at least two subgroups.

According to the *Dietary Guidelines,* healthy dietary patterns include a variety of vegetables from all five vegetable subgroups. The *Dietary Guidelines* also note that for most individuals, following a healthy eating pattern will require an increase in total vegetable intake and an increase from all vegetable subgroups.[83] While the *Dietary Guidelines* recommend increasing consumption of vegetables in general, they note that starchy vegetables are more frequently consumed by children and adolescents than the red and orange; dark green; or beans, peas, and lentils vegetable subgroups, underscoring the need for variety. This proposal continues to encourage schools opting to serve vegetables at breakfast to offer a variety of subgroups, but in a way that is less restrictive compared to the current regulatory standard.

Under this proposal, schools choosing to offer vegetables at breakfast one day per school week would have the option to offer any vegetable, including a starchy vegetable. The requirement to offer a second vegetable subgroup would apply in cases where schools choose to substitute vegetables for fruits at breakfast more than one day per school week. For example, a school could substitute a starchy vegetable for fruit at breakfast on Monday, then substitute a dark green vegetable for fruit at breakfast on Tuesday. The rest of the week the school could choose to substitute any vegetable, including a starchy vegetable, for fruit at breakfast, since it would have met the variety requirement by Tuesday. Consistent with current regulations, schools are not required to offer vegetables at breakfast, and may choose to offer only fruits at breakfast to meet this component requirement.

USDA seeks comment on this proposed change, found in 7 CFR 220.8(c)(2)(ii) of the proposed regulatory text.

Section 10: Nuts and Seeds

Current Requirement

Current regulations allow nuts and seeds and nut and seed butters to be served as a meat/meat alternate in the child nutrition programs. In all child nutrition programs, nut and seed butters may credit for the full meat/meat alternate requirement. However, there is some variation for crediting of actual nuts and seeds in the programs. Lunch and supper regulations limit nut and seed crediting to 50 percent of the meat/meat alternate component (7 CFR 210.10(c)(2)(i)(B), 225.16(d)(2), 225.16(e)(5), and 226.20(a)(5)(ii)). SBP regulations include the same limit (7 CFR 220.8(c)(2)(i)(B)). CACFP regulations for breakfast do not explicitly include the 50 percent limit for nuts and seeds, but refer to USDA guidance, which includes the 50 percent limit (7 CFR 226.20(a)(5)(ii)). Snack regulations and USDA guidance on snacks do not include the 50 percent limit; nuts and seeds may credit for the full meat/meat alternate component when offered as part of a snack (7 CFR 210.10(o)(2)(ii)(B), 7 CFR 225.16(e)(5), and 226.20(a)(5)(ii)). For programs where nut and seed crediting is limited to 50 percent of the meat/meat alternate component, program operators choosing to serve nuts and seeds must serve them alongside another meat/meat alternate in order to meet the component requirement.

Stakeholder Engagement: Public Comments

Although the transitional standards rule did not address nuts and seeds, one respondent commented on nuts and seeds crediting. An advocacy organization acknowledged the discrepancy between nut and seed butter crediting compared to nut and seed crediting. They asserted that the nutritional content of nuts and seeds does not change when these foods are blended or pureed into butter form and stated that nuts and seeds and their butters are nutritionally comparable to meat or other meat alternates based on available nutritional data. This advocacy organization supported allowing nuts and seeds to meet the full meat/meat alternate component requirement.

[83] See ''Vegetables,'' page 31. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition.* December 2020. Available at: *https://www.dietaryguidelines.gov/.*

Proposed Change

USDA proposes to allow nuts and seeds to credit for the full meat/meat alternate (or protein source) component in all child nutrition programs and meals. This proposal would remove the 50 percent crediting limit for nuts and seeds at breakfast, lunch, and supper. This change is intended to reduce complexity in the requirements by making the requirements consistent across programs and by removing the discrepancy between nut and seed crediting and nut and seed butter crediting. It also provides more menu planning flexibility for program operators. As noted in *Section 15: Miscellaneous Changes,* in this rulemaking, USDA is also proposing to change the name of the meat/meat alternate meal component in the NSLP, SBP, and CACFP regulations to ''protein sources.'' However, current guidance for all programs still uses the term ''meat/meat alternate.'' USDA is using both the current and proposed component name in this section.

USDA expects that nuts and seeds will most often continue to be offered in snacks, or in small amounts at breakfast, lunch, or supper alongside other meat/meat alternates (or protein sources). However, USDA is aware that nuts and seeds may also be used in larger quantities in plant-based meals. For example, walnuts may be used as a substitute for ground beef in tacos, and a variety of nuts may be used as a meat replacement in burgers. While USDA does not necessarily think these menu items will be common due to cost constraints, the Department does not want to limit operators' ability to serve them.

There are several considerations program operators should keep in mind when choosing to serve nuts and seeds. Nuts and seeds are generally not recommended to be served to children ages 1–3 since they present a choking hazard. If served to very young children, nuts and seeds should be finely minced. As always, program operators should also be aware of food allergies among their participants and take the necessary steps to prevent exposure. Finally, USDA encourages program operators to serve nuts in their most nutrient-dense form, without added sugars and salt. Program operators are also encouraged to choose nutrient-dense nut and seed butters, and schools must consider the contribution of these foods to the weekly limits for calories, saturated fat, and sodium.

USDA seeks comment on this proposed change, found in 7 CFR 210.10(c)(2)(i)(B), 220.8(c)(2)(i)(B), 225.16(d)(2), 225.16(e)(5), 226.20(a)(5)(ii), and 226.20(c)(2) of the proposed regulatory text.

Section 11: Competitive Foods—Hummus Exemption

Current Requirement

The Child Nutrition Act, 42 U.S.C. 1778(b), requires USDA to establish science-based nutrition standards for all foods sold in schools outside of the school meal programs. Current regulations at 7 CFR 210.11 establish the competitive foods, or ''Smart Snack'' standards. These standards help to promote healthy food choices and are important to providing children with nutritious food options throughout the school day.

To qualify as a Smart Snack, foods must meet nutrient standards for calories, sodium, fats, and total sugars. The standards for total fat and saturated fat are included at 7 CFR 210.11(f) and are as follows:

- The total fat content of a competitive food must be not more than 35 percent of total calories from fat per item as packaged or served.
- The saturated fat content of a competitive food must be less than 10 percent of total calories per item as packaged or served.

At 7 CFR 210.11(f)(3), USDA has established exemptions to the total fat and saturated fat standards for the following foods:

- Reduced fat cheese and part skim mozzarella cheese,
- Nuts and seeds and nut and seed butters,
- Products that consist only of dried fruit with nuts and/or seeds with no added nutritive sweeteners, and
- Whole eggs with no added fat.

Additionally, according to 7 CFR 210.11(f)(2), seafood with no added fat is exempt from the total fat standard, but subject to the saturated fat standard. Other foods must meet the total fat and saturated fat standards described at 7 CFR 210.11(f) to be sold as a Smart Snack.

Stakeholder Engagement: Public Comments

Although the transitional standards rule did not address the total fat and saturated fat standards for Smart Snacks, one food industry respondent commented on this topic. This respondent stated that hummus, which currently does not meet the fat standards, is primarily made with wholesome ingredients recommended in the *Dietary Guidelines.* They also suggested that hummus helps to promote the consumption of other nutrient dense foods, like vegetables and whole grains. This respondent suggested that USDA remove the total fat requirement from Smart Snack regulations, but also provided some alternative suggestions to allow hummus to be sold as a Smart Snack.

Proposed Change

USDA proposes to add hummus to the list of foods exempt from the total fat standard in the competitive food, or Smart Snack, regulations. Hummus would continue to be subject to the saturated fat standard for Smart Snacks. This change would allow hummus, which is already permitted as part of a reimbursable school meal, to also be sold as a Smart Snack. It also aligns with other proposals in this rulemaking by expanding schools' ability to provide vegetarian and culturally appropriate foods to children. This narrow approach allows schools to provide hummus, a nutrient-dense food option, for sale to children while still maintaining the overall Smart Snack standards. These standards are important to ensuring the food and beverage options available to children during the school day support healthy eating.

Currently, there is no standard of identity for hummus. Therefore, as part of this change, USDA will add the following definition for hummus to the Smart Snack regulations: *Hummus means, for the purpose of competitive food standards implementation, a spread made from ground pulses (beans, peas, and lentils), and ground nut/seed butter (such as tahini [ground sesame], peanut butter, etc.) mixed with a vegetable oil (such as olive oil, canola oil, soybean oil, etc.), seasoning (such as salt, citric acid, etc.), vegetables and juice for flavor (such as olives, roasted pepper, garlic, lemon juice, etc.). Manufactured hummus may also contain certain ingredients necessary as preservatives and/or to maintain freshness.*

This change would apply to hummus as a standalone product; it would not apply to combination products that include hummus, such as hummus packaged for sale with pretzels, pita, or other snack-type foods. Applying this exemption only to hummus would ensure that the other foods children consume alongside hummus would still be subject to the total fat standard. Children would have the option to purchase the standalone hummus and a second standalone product that also meets the Smart Snack standards, such as fresh carrots or whole grain-rich pita bread.

USDA seeks comment on this proposed change, found in 7 CFR

210.11(a)(7) and 210.11(f)(2) of the proposed regulatory text.

Section 12: Professional Standards

Current Requirement

The Child Nutrition Act (42 U.S.C. 1776 (g)(1)(A)) requires the Secretary to establish a program of education, training, and certification for all school food service directors responsible for the management of a school food authority, including minimum educational requirements. In March 2015, USDA published a final rule implementing this requirement, *Professional Standards for State and Local School Nutrition Programs Personnel as Required by the Healthy, Hunger-Free Kids Act of 2010.*[84] Then, in March 2019, USDA published *Hiring Flexibility Under Professional Standards,*[85] a final rule that provided flexibility to the hiring standards for new school nutrition program directors in small local educational agencies. Current regulations at 7 CFR 210.30(b)(1) outline the hiring standards for school nutrition program directors; the standards vary for directors in small, medium, and large local educational agencies.

This rulemaking is focused on the hiring standards for school nutrition program directors in medium (2,500 to 9,999 students) and large (10,000 or more students) local educational agencies. Currently, the hiring requirements for school nutrition program directors in medium or large local educational agencies are as follows:

- According to 7 CFR 210.30(b)(1)(ii), school nutrition program directors with local educational agency enrollment of 2,500 to 9,999 students must have:
  - A bachelor's degree, or equivalent educational experience, with an academic major or concentration in food and nutrition, food service management, dietetics, family and consumer sciences, nutrition education, culinary arts, business, or a related field;
  - A bachelor's degree, or equivalent educational experience, with any academic major or area of concentration, and a State-recognized certificate for school nutrition directors;
  - A bachelor's degree in any academic major and at least two years of relevant experience in school nutrition programs; or
  - An associate's degree, or equivalent educational experience, with an academic major or area of concentration in food and nutrition, food service management, dietetics, family and consumer sciences, nutrition education, culinary arts, business, or a related field and at least two years of relevant school nutrition program experience.
- According to 7 CFR 210.30(b)(1)(iii), school nutrition program directors with local educational agency enrollment of 10,000 or more students must have:
  - A bachelor's degree, or equivalent educational experience, with an academic major or area of concentration in food and nutrition, food service management, dietetics, family and consumer sciences, nutrition education, culinary arts, business, or a related field;
  - A bachelor's degree, or equivalent educational experience, with any academic major or area of concentration, and a State-recognized certificate for school nutrition directors; or
  - A bachelor's degree in any major and at least five years of experience in management of school nutrition programs.

The professional standards are intended to ensure that school nutrition professionals who manage and operate the school meal programs have adequate knowledge and training to meet program requirements. Requiring set qualifications to operate the programs ensures individuals have the knowledge and skills necessary to successfully operate the programs, including serving meals that meet the food component requirements and dietary specifications. The current education requirements are one important way of ensuring school nutrition program directors are prepared to manage the programs; however, USDA also recognizes the value of direct experience working on the programs. USDA understands that some individuals who may be well-positioned to manage the programs based on extensive firsthand experience may not currently qualify for the director position in their local educational agency due to the education requirements.

Proposed Change

USDA proposes to allow State agency discretion to approve the hiring of an individual to serve as a school nutrition program director in a medium or large local educational agency, for individuals who have 10 years or more of school nutrition program experience but who do not hold a bachelor's or associate's degree. Directors would still need to have a high school diploma or GED. USDA expects this change would ease hiring challenges which USDA understands have been experienced by some medium and large local educational agencies. In addition, this proposal would allow highly experienced individuals to advance their careers in school food service. Directors hired under this provision would be encouraged, but not required, to work towards a degree in food and nutrition, food service management, dietetics, family and consumer sciences, nutrition education, culinary arts, business, or a related field.

As noted below, USDA is requesting public input on whether it is reasonable for medium and large local educational agencies to substitute 10 years of school nutrition program experience for a bachelor's or associate's degree. Based on public input, USDA may adjust the number of years of school nutrition program experience required to substitute for a degree. For example, USDA may reduce the number of years of school nutrition program experience required for candidates to qualify for this exception.

Additionally, USDA proposes to clarify in regulation that State agencies may determine what counts as ''equivalent educational experience'' for the hiring standards. For example, if a candidate for a director position in a medium local educational agency does not have an associate's degree, but has over 60 college credits in a relevant field, the State agency would have the discretion to approve the hiring of that candidate. Similarly, if a candidate for a director position in a large local educational agency does not have a bachelor's degree, but has an associate's degree, has a School Nutrition Specialist certification from the School Nutrition Association, and is an NDTR[86] certified

[84] *Professional Standards for State and Local School Nutrition Programs Personnel as Required by the Healthy, Hunger-Free Kids Act of 2010* (80 FR 11077, March 2, 2015). Available at: *https://www.federalregister.gov/documents/2015/03/02/2015-04234/professional-standards-for-state-and-local-school-nutrition-programs-personnel-as-required-by-the.*

[85] To address hiring challenges faced by small local educational agencies, this rule required relevant food service experience rather than school nutrition program experience for new school nutrition program directors. It also provided State agencies with discretion to consider documented volunteer or unpaid work as relevant experience for new school nutrition program directors in small local educational agencies. Finally, it gave State agencies discretion to accept less than the required years of food service experience when an applicant for a new director position in a local educational agency with fewer than 500 students has the minimum required education. See: *Hiring Flexibility Under Professional Standards* (84 FR 6953, March 1, 2019). Available at: *https://www.federalregister.gov/documents/2019/03/01/2019-03524/hiring-flexibility-under-professional-standards.*

[86] Nutrition and dietetics technicians, registered (NDTRs) are educated and trained at the technical level of nutrition and dietetics practice for the delivery of safe, culturally competent, quality food and nutrition services. See: Academy of Nutrition and Dietetics, *What is a Nutrition and Dietetics Technician Registered?* Available at: *https://*

by the Academy of Nutrition and Dietetics, the State agency would have the discretion to approve the hiring of that candidate. These are just two examples; in general, this proposal would clarify in regulation that the State agency has discretion to determine if other substantial education, school nutrition training, credentialing, and/or certifications, would qualify as equivalent educational experience and to approve hiring of candidates with that experience.

As part of this rulemaking, USDA proposes to remove the existing table at 7 CFR 210.30(b)(2). Due to the amount of information in the table, USDA has determined that instead of updating the table to include the proposed exception, a better approach would be to provide a more user-friendly table (or tables) summarizing the hiring standards on the FNS public website. Because the existing table at 7 CFR 210.30(b)(2) restates requirements that are included in 7 CFR 210.30(b)(1), this change is not substantive.

USDA seeks comments on this proposal, found at 7 CFR 210.30(b)(1) of the proposed rule.

Public Comments Requested

USDA will consider the following questions when developing the final rule and may incorporate changes to the professional standards proposals based on public input. USDA invites public input on these proposals in general, and requests specific input on the following questions:

- Is it reasonable to allow medium and large local educational agencies to substitute 10 years of school nutrition program experience for a bachelor's or associate's degree when hiring a school nutrition program director? USDA requests that commenters explain their response. Based on public input, USDA may adjust the number of years of school nutrition program experience required to substitute for a degree.
- Should USDA also consider allowing medium and large local educational agencies to substitute other types of experience, such as experience in other food service sectors, for a bachelor's or associate's degree when hiring a school nutrition program director? USDA requests that commenters explain their response. Based on public input, USDA may adjust the type of experience allowed to substitute for a degree.
- How often do State agencies and schools anticipate using the hiring flexibility proposed in this rulemaking?
- What strategies do local educational agencies currently use to recruit qualified school nutrition program directors? USDA requests input on successes and challenges local educational agencies of any size have experienced in their recruitment efforts.

Section 13: Buy American

13A: Limited Exceptions to the Buy American Requirement

Current Requirement

The National School Lunch Act (NSLA, 42 U.S.C. 1760(n)) and program regulations at 7 CFR 210.21(d)(2)(i) and 220.16(d)(2)(i), require school food authorities to purchase domestic commodities or products ''to the maximum extent practicable.'' This provision, known as the Buy American provision, supports the mission of the child nutrition programs, which is to serve children nutritious meals and support American agriculture. The Buy American provision is applicable to school food authorities located in the 48 contiguous United States. Although Alaska, Hawaii, and the U.S. territories are exempt from the Buy American provision, school food authorities in Hawaii are required to purchase food products produced in Hawaii in sufficient quantities and school food authorities in Puerto Rico are required to purchase food products produced in Puerto Rico in sufficient quantities. USDA provided guidance [87] on limited circumstances in which the purchase of domestic foods is not practicable and therefore excepted to the Buy American provision:

- The product is not produced or manufactured in the U.S. in sufficient and reasonably available quantities of a satisfactory quality; or
- Competitive bids reveal the costs of a U.S. product are significantly higher than the non-domestic product.

USDA has not established a dollar amount or a percentage threshold to permit a school food authority to use the ''significantly higher'' exception to the Buy American provision during procurement. Under current requirements, a school food authority is responsible for determining the dollar amount or percentage which constitutes a significantly higher cost for a domestic product, thus permitting the use of an exception.

The FNS Year 3 Program Operations Study (not yet published) found that 26 percent of school food authorities reported using an exception to the Buy American provision during SY 2017–2018. Among these school food authorities, the reasons cited for using an exception included: limited supply of the commodity or product (88 percent), increased costs of domestic commodities or products (43 percent), and quality issues with available domestic commodities or products (21 percent).

The study also revealed that nearly all school food authorities that used an exception (or exceptions) to the Buy American provision during SY 2017–2018 used an exception to purchase non-domestic fruits, while approximately half used an exception to purchase non-domestic vegetables. On average, products purchased under exceptions made up 8.5 percent of total food purchase expenditures among school food authorities that used an exception to the Buy American provision in SY 2017–2018.

Proposed Change

This proposed rule seeks to strengthen the Buy American requirement while recognizing that purchasing domestic food products is not always practicable for schools. This rulemaking proposes to strengthen the Buy American requirements, by maintaining the current limited exemptions and adding a limit to the resources that can be used for non-domestic purchases. This new limit is lower than the reported expenditures that are currently used for non-domestic products; therefore, this cap will encourage schools that utilize an exemption to reduce the amount of non-domestic purchases currently made by substituting domestic product in situations where the school may be purchasing non-domestic items. To do this, USDA proposes to codify the circumstances described by guidance which are excepted from the Buy American provision as well as create a new threshold limit for school food authorities that use these exceptions. The two exceptions USDA proposes to codify will continue to apply when:

- The product is not produced or manufactured in the U.S. in sufficient and reasonably available quantities of a satisfactory quality; or
- Competitive bids reveal the costs of a U.S. product are significantly higher than the non-domestic product.

In order to strengthen the Buy American provision and in line with

www.eatrightpro.org/about-us/what-is-an-rdn-and-dtr/what-is-a-nutrition-and-dietetics-technician-registered.

[87] U.S. Department of Agriculture, *Compliance with and Enforcement of the Buy American Provision in the National School Lunch Program,* June 30, 2017. Available at: *https://www.fns.usda.gov/nslp/compliance-enforcement-buy-american.*

priorities outlined in *Executive Order 14005, Ensuring the Future Is Made in All of America by All of America's Workers,* USDA also proposes to institute a 5 percent ceiling on the non-domestic commercial foods a school food authority may purchase per school year. This cap is based on a USDA study which found that on average, among school food authorities that used one of the limited exceptions to the Buy American provision in SY 2017–2018, products purchased under exceptions made up 8.5 percent of their total food purchase expenditures. In this study only 26 percent of school food authorities used an exception which means a majority of school food authorities are able to fully make domestic purchases and therefore do not need to utilize either of the limited exception. Since the purchase of domestic products are practicable for the majority of school food authorities and to support the intent of *Executive Order 14005,* USDA intends to limit the use of exceptions to this 5 percent threshold. By instituting a 5 percent cap, USDA is balancing the intent of the Buy American provision to support American farmers and ranchers while also recognizing that there are times when purchasing domestic foods is not practicable for schools. Finally, consistent with current USDA guidance, this proposed rule would clarify in regulation that it is the responsibility of the school food authority to determine whether an exception applies.

USDA seeks comments on this proposal, found at 7 CFR 210.21(d)(5) and 220.16(d)(5) of the proposed rule.

Public Comments Requested

USDA's intention is to ensure that the Buy American provision continues to support the mission of the child nutrition programs, which is to serve children nutritious meals and support American agriculture, through school food authority purchases of domestic commodities or products ''to the maximum extent practicable.'' Using available data, USDA proposes to set a 5 percent limit on non-domestic foods that can be purchased.

USDA will consider the following questions when developing the final rule and may incorporate changes to the proposal based on public input. USDA invites public input on this proposal in general, and requests specific input on the following questions:

- Is the proposed 5 percent ceiling on the non-domestic commercial foods a school food authority may purchase per school year a reasonable ceiling, or should a different percentage be used? Would the 5 percent cap encourage those school food authorities using exceptions to reduce the amount of non-domestic products they purchase? USDA requests that respondents include justification and reasons behind their response.
- How feasible would tracking and documenting the total amount of non-domestic food purchases be? Would purchasing and record keeping processes need to be altered? Does the documentation of total non-domestic purchases alleviate burden associated with documenting each limited exception that is used? And any additional information about how school food authorities would document the total amount of non-domestic food purchases versus total annual food purchases.

13B: Exception Documentation and Reporting Requirements

Current Requirement

Currently, the primary mechanism for collecting information on the Buy American provision is via the Child Nutrition Operations (CN–OPS) study. The CN–OPS study is a multi-year study that provides USDA with current information on various aspects of the operation of the school meal programs. USDA uses results from this study to help inform the agency about program management practices and for policy development purposes.

School food authorities document each use of an exception to the Buy American requirement.[88] However there is no requirement to request a waiver from the State agency or USDA in order to purchase a non-domestic product.

Proposed Change

USDA proposes to require school food authorities to maintain documentation supporting utilization of one of the two limited exceptions and that no more than 5 percent of their total annual commercial food costs were for non-domestic foods. To supplement this documentation, USDA would continue to collect information and data on the Buy American provision and school food authority procurement through the annual CN–OPS study.

USDA seeks comments on this proposal, found at 7 CFR 210.21(d)(5)(iii) and 220.16(d)(5)(iii) of the proposed rule.

[88] U.S. Department of Agriculture, *Compliance with and Enforcement of the Buy American Provision in the National School Lunch Program,* June 30, 2017. Available at: *https://www.fns.usda.gov/nslp/compliance-enforcement-buy-american.*

Public Comments Requested

Since school food authorities will only maintain documentation showing that no more than 5 percent of their total annual commercial food costs were for non-domestic food purchases using one of the two limited exceptions, rather than documenting each use of an exception and given that school food authorities will have flexibility in how they maintain documentation, USDA invites public input on this proposal in general, and requests specific input on the following question. USDA will consider this question when developing the final rule and may incorporate changes to the proposals based on public input:

- Is the proposal to require school food authorities to maintain documentation showing that no more than 5 percent of their total annual commercial food costs were for non-domestic foods feasible and is the regulatory language clear enough for school food authorities and State agencies to implement and follow?
- For oversight purposes, USDA is considering requiring school food authorities maintain an attestation statement to attest that any nondomestic food item purchased under the 5 percent cap met one of the two limited exceptions. Would this approach assist school food authorities with the burden associated with documentation requirements? Does it help ensure that any non-domestic food purchase under the 5 percent cap was only a result of utilizing one of the current limited exceptions that USDA proposes to codify through this rulemaking?

13C: Procurement Procedures

Current Requirement

School lunch and breakfast program regulations do not currently require school food authorities to include any Buy American provisions in required documented procurement procedures,[89] solicitations, or contracts. However, USDA guidance has strongly advised school food authorities to include safeguards in solicitation and contract language to ensure Buy American requirements are followed.[90] Additionally, school food authorities are required to monitor solicitation and contract language to ensure that

[89] School food authorities are required to have documented procurement procedures, as per 2 CFR 200.318(a).

[90] U.S. Department of Agriculture, *Compliance with and Enforcement of the Buy American Provision in the National School Lunch Program,* June 30, 2017. Available at: *https://www.fns.usda.gov/nslp/compliance-enforcement-buy-american.*

contractors perform in accordance with the terms, conditions, and specifications of their contracts or purchase orders (2 CFR 200.318(b)).[91]

Proposed Change

This proposed rule would require school food authorities to include the Buy American provision in documented procurement procedures, solicitations, and contracts for foods and food products procured using informal and formal procurement methods, and in awarded contracts. State agencies would verify the inclusion of this language when conducting reviews. USDA expects that this proposal would ensure vendors are aware of expectations at all stages of the procurement process, in addition to providing contractual protection for school food authorities if vendors fail to meet Buy American obligations.

USDA seeks comments on this proposal, found at 7 CFR 210.21(d)(3) and 220.16(d)(3) of the proposed rule.

13D: Definition of ''Substantially''

Current Requirement

The National School Lunch Act (NSLA, 42 U.S.C. 1760(n)(1)(B)) defines a domestic product as ''[a] food product that is processed in the United States substantially using agricultural commodities that are produced in the United States.'' The current regulatory language at 7 CFR 210.21(d)(1) and 220.16(d)(1) is identical to the statutory language. To satisfy the statutory and regulatory requirements, it is clear that the food product must be processed in the United States.[92] However, USDA understands that the meaning of the term ''substantially'' is less clear.

Congressional report language accompanying the original legislation noted that ''substantially means over 51% from American products.'' [93] Accordingly, USDA has stated in guidance that ''substantially'' means over 51 percent of the final processed product (by weight or volume) consists of agriculture commodities that were grown domestically, as determined by the school food authority.[94] The guidance also states that products ''from Guam, American Samoa, Virgin Islands, Puerto Rico, and the Northern Mariana Islands are considered domestic products under this provision as these products are from the territories of the U.S.''

Proposed Change

This proposed rule would codify a definition of the statutory phrase ''substantially using agriculture commodities.'' The definition, which USDA proposes to codify at 7 CFR 210.21(d)(1)(ii) and 220.16(d)(1)(ii), would read as follows: is: *Substantially using agriculture commodities that are produced in the United States means over 51 percent of a food product must consist of agricultural commodities that were grown domestically.* This proposed definition reflects the Congressional report language cited above and existing USDA guidance.

USDA expects that codifying the existing definition of ''substantially using agriculture commodities that are produced in the United States'' in regulation would provide clarity and improve awareness of program requirements.

USDA seeks comments on this proposal, found at 7 CFR 210.21(d)(1)(ii) and 220.16(d)(1)(ii) of the proposed rule.

Public Comments Requested

USDA will consider the following question when developing the final rule and may incorporate changes to the proposal based on public input. USDA invites public input on this proposal in general, and requests specific input on the following question:

- Does the proposed definition of ''substantially using agriculture commodities that are produced in the United States'' meet the intent of the Buy American requirements? If not, what other suggestions do stakeholders have for the definition?

13E: Clarification of Requirements for Harvested Farmed and Wild Caught Fish

Current Requirement

Current regulations do not include language regarding the applicability of Buy American to fish or fish products. However, in 2019, Section 4207 of the Agriculture Improvement Act of 2018 (Pub. L. 115–334) clarified the Buy American provision applies to fish harvested ''within the Exclusive Economic Zone of the United States, as described in Presidential Proclamation 5030 (48 FR 10605; March 10, 1983), or . . . by a United States flagged vessel.'' USDA published *Buy American and the Agricultural Improvement Act of 2018* [95] and explained how to treat harvested fish under the Buy American requirement. The guidance stated that, ''[i]n order to be compliant:

- Farmed fish must be harvested within the United States or any territory or possession of the United States.
- Wild caught fish must be harvested within the Exclusive Economic Zone of the United States or by a United States flagged vessel.''

Prior to the publication of the 2019 guidance, the Buy American provision applied to fish as it would to any other food.

Proposed Change

USDA proposes adding language to the regulations to codify how Buy American applies to fish and fish products in the school lunch and breakfast programs. The proposed change would be consistent with current statutory requirements and existing USDA policy guidance. USDA expects that codifying these existing requirements in regulation will improve awareness of program requirements.

USDA seeks comments on this proposal, found at 7 CFR 210.21(d)(6) and 220.16(d)(6) of the proposed rule.

Section 14: Geographic Preference Expansion

Current Requirement

Section 4302 of the Food, Conservation, and Energy Act of 2008 (P.L. 110–246) [96] amended the National School Lunch Act to direct that the Secretary of Agriculture encourage institutions operating child nutrition

[91] ''Monitoring is also accomplished by reviewing products and delivery invoices or receipts to ensure the domestic food that was solicited and awarded is the food that is received. SFAs also need to conduct a periodic review of storage facilities, freezers, refrigerators, dry storage, and warehouses to ensure the products received are the ones solicited, and awarded, and comply with the Buy American provision.'' U.S. Department of Agriculture, *Compliance with and Enforcement of the Buy American Provision in the National School Lunch Program,* June 30, 2017. Available at: *https://www.fns.usda.gov/nslp/compliance-enforcement-buy-american.*

[92] See also Section 4207(b) of the Agriculture Improvement Act of 2018, Public Law 115–334 (42 U.S.C. 1760).

[93] U.S. House of Representatives. *Child Nutrition and WIC Reauthorization Amendments of 1998—House Report 105–633.* July 20, 1998. Available at: *https://www.govinfo.gov/content/pkg/CRPT-105hrpt633/html/CRPT-105hrpt633.htm.*

[94] U.S. Department of Agriculture, *Compliance with and Enforcement of the Buy American Provision in the National School Lunch Program,* June 30, 2017. Available at: *https://www.fns.usda.gov/nslp/compliance-enforcement-buy-american.*

[95] U.S. Department of Agriculture. *Buy American and the Agriculture Improvement Act of 2018.* August 15, 2019. Available at: *https://www.fns.usda.gov/cn/buy-american-and-agriculture-improvement-act.*

[96] *The Food, Conservation, and Energy Act of 2008* (P.L. 110–246). June 18, 2008. Available at: *https://www.congress.gov/110/plaws/publ246/PLAW-110publ246.pdf.*

programs to purchase unprocessed locally grown and locally raised agricultural products. Effective October 1, 2008, institutions receiving funds through the child nutrition programs could apply an optional geographic preference in the procurement of unprocessed locally grown or locally raised agricultural products. This provision applies to institutions in all of the child nutrition programs, including the NSLP, SBP, Fresh Fruit and Vegetable Program, SMP, CACFP, and SFSP, as well as to purchases made for these programs by the USDA Department of Defense Fresh Fruit and Vegetable Program. The provision also applies to State agencies making purchases on behalf of any of the aforementioned child nutrition programs.

The *Geographic Preference Option for the Procurement of Unprocessed Agricultural Products in Child Nutrition Programs* final rule (75 FR 20316, April 4, 2011) [97] went into effect on May 23, 2011, in order to incorporate this procurement option in the programs' regulations and to define the term ''unprocessed locally grown or locally raised agricultural products'' to facilitate implementation by institutions operating the child nutrition programs. Language included in the final rule indicates that local cannot be used as a specification (a written description of the product or service that the vendor must meet to be considered responsive and responsible).[97]

Currently, Federal regulations do not prescribe the precise way that geographic preference should be applied, or how much preference can be given to local products. Bidders located in a specified geographic area can be provided additional points or credit calculated during the evaluation of the proposals or bids received in response to a solicitation.[98]

Proposed Standard

USDA is proposing a change in this rulemaking to expand geographic preference options by allowing locally grown, raised, or caught as procurement specifications (a written description of the product or service that the vendor must meet to be considered responsive and responsible) for unprocessed or minimally processed food items in the child nutrition programs, in order to increase the procurement of local foods and ease procurement challenges for operators interested in sourcing food from local producers.

Local purchasing power not only supports increasing economic opportunities for local farmers, but also helps schools and other institutions incorporate wholesome local foods into program meals and encourages children to make healthy food choices. State agencies and schools have reported challenges to USDA related to the current points or credit systems, as they often are not weighted enough to make the local product the winning bid. Smaller-scale producers have also reported that they may be deterred from bidding, as they assume they will not be selected.

Results from the USDA 2019 Farm to School Census [99] found that the 8,393 responding school food authorities participating in farm to school activities in SY 2018–2019 reported spending a total of $1.26 billion on local foods, excluding foods purchased through the USDA Foods in Schools Program (USDA Foods) and the USDA Department of Defense Fresh Fruit and Vegetable Program (USDA DoD Fresh). This local spending accounted for one-fifth of their total food purchases on average. Of these respondents, only 25 percent reported purchasing directly from producers, while 43 percent purchased local through USDA DoD Fresh and distributors.

Feedback from participating institutions indicates that removing the specification barrier, thus allowing locally grown, raised, or caught as procurement specifications for unprocessed or minimally processed food items in the child nutrition program, could increase and streamline local food procurement and maintain fair and open competition. Expanding the geographic preference option to allow local as a specification, making locally grown, raised, or caught a requirement for bidding, will broaden opportunities for school food authorities to connect directly with local farmers, reinforcing the fundamental and critical relationship between producers and consumers. After more than a decade of experience in promoting the procurement and use of local foods in child nutrition program meals, USDA believes an expanded capability to apply geographic preference as a specification can be accomplished without unduly limiting free and open competition [100] and will better meet Congressional intent to explicitly allow geographic preference as a means to connecting local producers to the child nutrition program market.

Public Comments Requested

USDA is proposing to expand geographic preference to allow locally grown, raised, or caught as procurement specifications for unprocessed or minimally processed food items. USDA will consider the following questions when developing the final rule and may incorporate changes to the geographic preference proposal based on public input. USDA invites public input on this proposal in general, and requests specific input on the following questions:

- Do respondents agree that this approach would ease procurement challenges for child nutrition program operators interested in sourcing food from local producers?
- Do respondents agree that this approach would encourage smaller-scale producers to submit bids to sell local foods to child nutrition programs?

Section 15: Miscellaneous Changes

In addition to the major provisions of this rulemaking, USDA is proposing a variety of miscellaneous changes to the child nutrition program regulations as well as a severability clause for changes to the meal pattern standards made by this rulemaking. In the event any changes made by this rulemaking to the meal pattern standard regulatory sections were to be held invalid or unenforceable, USDA intends that the other changes would remain. USDA has further proposed to specify what standard would replace the invalidated change. The proposals for miscellaneous changes update language used in the regulations, remove outdated information, and correct cross references. These changes are reflected in the proposed amendatory language.

As noted in *Section 17: Proposals from Prior USDA Rulemaking,* USDA also intends to finalize the technical corrections from the 2020 rule [101] in the forthcoming final rule. Because those

[97] *Geographic Preference Option for the Procurement of Unprocessed Agricultural Products in Child Nutrition Programs* (75 FR 20316, April 4, 2011). Available at: *https://www.federalregister.gov/documents/2011/04/22/2011-9843/geographic-preference-option-for-the-procurement-of-unprocessed-agricultural-products-in-child.*

[98] U.S. Department of Agriculture. *Procurement Geographic Preference Q&As.* February 1, 2011. Available at: *https://www.fns.usda.gov/cn/procurement-geographic-preference-qas.*

[99] U.S. Department of Agriculture. *2019 Farm to School Census Report.* Abt Associates, July 2021. Available at: *https://www.fns.usda.gov/cfs/farm-school-census-and-comprehensive-review.*

[100] Procurement must comply with applicable requirements at 7 CFR 210.21 (NSLP), 220.16 (SBP), 226.22 (CACFP), 215.14a (SMP), 225.17 (SFSP), and 2 CFR parts 200, 400 and 415.

[101] See page 4110 of *Simplifying Meal Service and Monitoring Requirements in the National School Lunch and School Breakfast Programs,* (85 FR 4094, January 23, 2020). Available at: *https://www.federalregister.gov/documents/2020/01/23/2020-00926/simplifying-meal-service-and-monitoring-requirements-in-the-national-school-lunch-and-school.*

changes were already proposed and available for public comment, they are not described again here, and are not included in the proposed amendatory language.

Terminology Change: Protein Sources Component

Current child nutrition program regulations use the term ''meat/meat alternate'' for the meal component that includes dry beans and peas, whole eggs, tofu, tempeh, meat, poultry, fish, cheese, yogurt, soy yogurt, peanut butter and other nut or seed butters, and nuts and seeds. USDA proposes to change the name of the meat/meat alternate meal component in the NSLP, SBP, and CACFP regulations to ''protein sources.'' Under this proposal, all references in 7 CFR parts 210, 220, and 226 to ''meats/meat alternates'' would change to ''protein sources''. The foods within this meal component would remain unchanged. This change better reflects the variety of foods that may be credited under this meal component. As a point of clarification, the proposed terminology change would not change current guidelines regarding foods that may be credited under this component.[102] The guidelines regarding creditable food being recognizable or served alongside a recognizable protein source would also remain in place.[103]

USDA is not including SFSP regulations (7 CFR part 225) with this change. USDA recognizes that using a different component name in the SFSP could cause confusion for State and local program operators. For example, schools operating both the school meal programs and the SFSP would need to be familiar with the term ''protein sources'' for school meals, as well as the term ''meat/meat alternate'' for the SFSP. SFSP. However, there are other inconsistencies between the meal component terms in the SFSP and other child nutrition programs. For example, the SFSP has a ''bread and bread alternatives'' component instead of a ''grains'' component, and has a single ''vegetable and fruits'' component instead of separate ''vegetable'' and ''fruit'' components. USDA intends to comprehensively address the SFSP meal pattern in a future rulemaking, which may include updating the terminology used for the SFSP meal components.

USDA invites public input on this terminology change for NSLP, SBP, and CACFP. Commenters are invited to provide feedback on the proposed change in general and to share their ideas for alternative options for USDA to consider.

Terminology Change: Beans, Peas, and Lentils

The *Dietary Guidelines, 2020–2025,* changed the terminology for the ''legumes (beans and peas)'' vegetable subgroup to ''beans, peas, and lentils.''[104] The foods within this vegetable subgroup did not change. USDA proposes to change the name of the ''legumes (beans and peas)'' vegetable subgroup in the school meal pattern regulations to align with the *Dietary Guidelines*. Under this proposal, all references in 7 CFR parts 210 and 220 to ''legumes (beans and peas)'' would change to ''beans, peas, and lentils'' for consistency with the terminology used in the *Dietary Guidelines*. The foods within this subgroup would remain unchanged. USDA is also proposing to change references to ''dry beans and peas (legumes)'' in 7 CFR part 226 to ''beans, peas, and lentils''.)''

Meal Pattern Table Revisions

USDA also proposes several changes to the child nutrition program meal pattern tables:

- Add minimum creditable amounts to all meal components in the school lunch and breakfast meal pattern tables.
- Change references to ''food components'' to ''meal components''.
- Revise table footnotes so that related footnotes are grouped together.
- Change references from ''grains'' to ''grain items'' in footnotes to meal pattern tables.
- Update protein sources rows in CACFP meal pattern tables, to use ounce equivalents and refer to protein sources generally, instead of listing specific foods within this category.

These changes are not substantive but are intended to make USDA regulations more user-friendly and easier to understand. Regarding the last point, USDA reminds State agencies and program operators that crediting information for the protein sources component and all other meal components may be found in the Food Buying Guide. Please note that current program guidance uses the term ''meats/meat alternates'' for the proposed protein sources component.[105]

Technical Corrections

USDA proposes several technical corrections to the regulations, which are outlined by regulatory section below. These proposed technical corrections would not make substantive changes to the child nutrition programs. Instead, the proposed corrections, which are reflected in the proposed amendatory language, generally fall into the following categories:

- Removing outdated terminology or updating terminology and definitions for consistency across regulations.
- Removing outdated implementation dates.
- Removing requirements that are no longer in effect.
- Correcting erroneous cross-references.

7 CFR part 210: National School Lunch Program

7 CFR 210.2 Definitions.

- Remove definition of *CND,* which is no longer in use.
- Remove the definition of *Food component* and instead add the definition of *Meal component.*
- Redesignate paragraphs to use numbers instead of letters (*e.g.,* (1) and (2) instead of (a) and (b)) in the definitions of *Reduced price lunch, School, State agency,* and *State educational agency*.
- Remove outdated language in the definition of *Residential child care institution*.
- Revise the definition of *Yogurt* to reflect changes to the standard of identity of yogurt.

7 CFR 210.3 Administration.

- 7 CFR 210.3(a): Remove sentence referring to ''the CND,'' a term no longer in use.

7 CFR 210.4 Cash and donated food assistance to States.

- 7 CFR 210.4(b)(3): Remove incorrect cross-reference afterschool snacks section of regulations (§ 210.10(n)) and add the correct cross-reference (§ 210.10(o)).

[102] For information on crediting the meat/meat alternate component, see the *Food Buying Guide for Child Nutrition Programs,* available at: *https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs*.

[103] Exceptions include certain smoothie ingredients and pasta products made from vegetable flours. See Question 104: U.S. Department of Agriculture, *Meal Requirements Under the NSLP & SBP: Q&A for Program Operators Updated to Support the Transitional Standards Effective July 1, 2022,* March 2, 2022. Available at: *https://www.fns.usda.gov/cn/sp052022-questions-answers-program-operators*.

[104] See ''About Beans, Peas, and Lentils,'' page 31. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *2020–2025 Dietary Guidelines for Americans. 9th Edition.* December 2020. Available at: *https://www.dietaryguidelines.gov/*.

[105] U.S Department of Agriculture. *Food Buying Guide for Child Nutrition Programs*. Available at: *https://www.fns.usda.gov/tn/food-buying-guide-for-child-nutrition-programs*.

7 CFR 210.7 Reimbursement for school food authorities.

- 7 CFR 210.7(d)(1)(iii) and (e): Remove erroneous cross-references to § 220.23, which is no longer in effect.
- 7 CFR 210.7(d)(1)(iv) and (vii) and 7 CFR 210.7(d)(2): Remove outdated requirements.
- 7 CFR 210.7(e): Correct erroneous cross-reference afterschool snacks section of regulation (from § 210.10(n)(1) to § 210.10(o)(1)).

7 CFR 210.9 Agreement with State agency.

- 7 CFR 210.9(b)(21): Remove outdated implementation date.
- 7 CFR 210.9(c): Remove incorrect cross-reference afterschool snacks section of regulations (§ 210.10(n)(1)) and add the correct cross-reference (§ 210.10(o)(1)).

7 CFR 210.10 Meal requirements for lunches and requirements for afterschool snacks.

- Change all references from ''food components'' to ''meal components''.
- 7 CFR 210.10(c): Add minimum creditable amount for all meal components in meal pattern table endnotes.
- In meal pattern tables, add or make revisions to titles for clarity.
- In meal pattern tables, change endnotes to use numbers instead of letters and combine related footnotes to improve readability.

7 CFR 210.11 Competitive food service and standards.

- 7 CFR 210.11(m): Combine fluid milk and milk alternatives sub-paragraphs and cross-reference § 210.10(d)(1) and (2) instead of repeating milk standards in § 210.11.
- 7 CFR 210.11(m): Make adjustments to punctuation to improve readability.
- 7 CFR 210.11(i) and (n): Remove outdated implementation dates.

7 CFR 210.12 Student, parent, and community involvement.

- 7 CFR 210.12(e): Correct erroneous cross-reference to local school wellness policies by replacing § 210.30(d) with § 210.31(d).

7 CFR 210.14 Resource management.

- 7 CFR 210.14(e): Remove outdated implementation date.
- 7 CFR 210.14(e)(5)(ii)(D): Remove outdated implementation date.
- 7 CFR 210.14(e)(6)(iii): Remove outdated language.
- 7 CFR 210.14(f): Remove outdated implementation date.

7 CFR 210.15 Reporting and recordkeeping.

- 7 CFR 210.15(b)(9): Correct erroneous cross-reference to local school wellness policies by replacing § 210.30(f) with § 210.31(f).

7 CFR 210.18 Administrative reviews.

- 7 CFR 210.18(h)(2)(x): Correct erroneous cross-reference to local school wellness policies by replacing § 210.30 with § 210.31.

7 CFR 210.19 Additional responsibilities.

- 7 CFR 210.19(f): Remove outdated implementation date.

7 CFR 210.20 Reporting and recordkeeping.

- 7 CFR 210.20(a)(6) and (7): Remove requirements that are no longer in effect.
- 7 CFR 210.20(b)(10): Remove requirement that is no longer in effect.

7 CFR 210.29 Management evaluations.

- 7 CFR 210.29(d)(3): Remove incorrect physical address for the Food and Nutrition Service.

7 CFR part 220: School Breakfast Program

7 CFR 220.2 Definitions.

- Remove erroneous cross-references to § 220.23, which is no longer in effect.
- Remove definitions of *CND, OA,* and *OI,* which are no longer in use.
- Revise definitions of *Department, Distributing agency, Fiscal year, FNS, FNSRO, Free breakfast, Reduced price breakfast, Reimbursement, School Food Authority,* and *State agency* for consistency with definitions in 7 CFR 210.2.
- Remove the definition of *Food component* and instead add the definition of *Meal component.*
- Remove the definitions of *Menu item* and *Nutrient Standard Menu Planning/Assisted Nutrient Standard Menu Planning,* which are no longer in use under food based menu planning.
- Remove the second definition of *Non-profit,* which is duplicative and outdated.
- Remove outdated language in the definition of *Residential child care institution.*
- Revise the definition of *Yogurt* to reflect changes to the standard of identity of yogurt.

7 CFR 220.3 Administration.

- 7 CFR 220.3(a): Remove sentence referring to ''the CND,'' a term no longer in use.

7 CFR 220.7 Requirements for participation.

- 7 CFR 220.7(e)(2), (4), (5), (9), and (13): Revise language for clarity and remove outdated references.
- 7 CFR 220.7(h): Correct erroneous cross-reference to local school wellness policies by replacing § 210.30 with § 210.31.

7 CFR 220.8 Meal requirements for breakfasts.

- Change all references from ''food components'' to ''meal components''.
- 7 CFR 220.8(a)(2): Change reference from ''reimbursable lunch'' to ''reimbursable breakfast.''
- 7 CFR 210.10(c): Add minimum creditable amount for all meal components in meal pattern table endnotes.
- In meal pattern tables, add or make revisions to titles for clarity.
- In meal pattern tables, change endnotes to use numbers instead of letters and combine related footnotes to improve readability.
- 7 CFR 210.10(c)(2)(i)(A): Remove reference to crediting enriched macaroni at lunch.
- 7 CFR 210.10(c)(2)(v): Add fluid milk at a listed meal component in paragraph (c)(2).

7 CFR 220.13 Special responsibilities of State agencies.

- 7 CFR 220.13(b)(3): Remove requirements that are no longer in effect.
- 7 CFR 220.13(c): Remove outdated references to ''OI''.
- 7 CFR 220.13(f)(3): Remove erroneous cross-reference to § 220.23, which is no longer in effect.
- 7 CFR 220.13(l): Remove requirement that is no longer in effect.

7 CFR 220.14 Claims against school food authorities.

- Remove references to the term *CND,* which is no longer in use.

7 CFR part 225: Summer Food Service Program

7 CFR 225.16 Meal service requirements.

- Change all references from ''food components'' to ''meal components''.

7 CFR part 226: Child and Adult Care Food Program

7 CFR 226.20 Requirements for meals.

- Change all references from ''food components'' to ''meal components''.
- 7 CFR 226.20(a)(5)(i)(E): Remove ''Peanut butter'' from paragraph (i), as peanut butter is covered by paragraph (ii).

• In meal pattern tables, revise certain endnotes for clarity and combine related footnotes to improve readability.

Severability

USDA is proposing a severability clause for changes to the meal pattern standards made by this rulemaking. In the event any changes made by this rulemaking to the meal pattern standard regulatory sections were to be held invalid or unenforceable, USDA intends the remainder of the changes to survive. USDA's proposal further specifics what standard would replace the invalidated change. USDA proposes adding a new paragraph (r) to 7 CFR 210.10 (NSLP meal pattern standards) providing that if any provision of such section finalized through this rulemaking is held to be invalid or unenforceable by its terms, or as applied to any person or circumstances, it shall be severable from that section and not affect the remainder thereof. In the event of such holding of invalidity or unenforceability of a provision, the meal pattern standard covered by that provision would revert to the version that immediately preceded the changes promulgated through this rulemaking. USDA proposes to add similar paragraphs to 7 CFR 220.8 (SBP meal pattern standards) and 7 CFR 226.20 (CACFP meal pattern standards).

Section 16: Summary of Changes

This section briefly summarizes the provisions included in this proposed rule and the specific public comments requested throughout the preamble. Individuals and organizations may choose to use this summary section as an outline for submitting their public comments. When submitting comments, individuals and organizations may choose to respond to all questions or select the questions that are relevant to them. Individuals and organizations may provide additional input on any provisions of this rulemaking, if desired.

USDA also welcomes public input on the proposed implementation dates, including if delayed implementation is warranted for any provisions where it is not already specified. Additionally, in prior rulemakings, USDA has included an effective date, as well as a delayed compliance date, for certain provisions. This approach allows State agencies and local operators to focus on technical assistance, rather than on compliance, during the initial implementation period. USDA welcomes public input on whether a similar approach should be used for this rulemaking.

Section 2: Added Sugars

This rulemaking proposes the following added sugars limits in the school lunch and breakfast programs:

• *Product-based limits:* Beginning in SY 2025–2026, this rulemaking proposes to implement quantitative limits for leading sources of added sugars in school meals, including grain-based desserts, breakfast cereals, yogurts, and flavored milks.

• *Weekly dietary limit:* Beginning in SY 2027–2028, this rulemaking proposes to implement a dietary specification limiting added sugars to less than 10 percent of calories per week in the school lunch and breakfast programs; this weekly limit would be in addition to the product-based limits described above.

Specific public input requested, in addition to any other comments on the proposals:

• USDA is proposing product-specific limits on the following foods to improve the nutritional quality of meals served to children: grain-based desserts, breakfast cereals, yogurt, and flavored milk. Do stakeholders have input on the products and specific limits included in this proposal?

• Do the proposed implementation timeframes provide appropriate lead time for food manufacturers and schools to successfully implement the new added sugars standards? Why or why not?

• What impact will the proposed added sugars standards have on school meal menu planning and the foods schools serve at breakfast and lunch, including the overall nutrition of meals served to children?

Section 3: Milk

For the final rule, USDA is considering two different milk proposals and invites comments on both. These two proposals are included in the regulatory text as Alternative A and Alternative B:

• Alternative A: Proposes to allow flavored milk (fat-free and low-fat) at school lunch and breakfast for high school children only, effective SY 2025–2026. Under this alternative, USDA is proposing that children in grades K–8 would be limited to a variety of unflavored milk. The proposed regulatory text for Alternative A would allow flavored milk for high school children only (grades 9–12). USDA also requests public input on whether to allow flavored milk for children in grades 6–8 as well as high school children (grades 9–12). Children in grades K–5 would again be limited to a variety of unflavored milk. Under both Alternative A scenarios, flavored milk would be subject to the new proposed added sugars limit.

• Alternative B: Proposes to maintain the current standard allowing all schools to offer fat-free and low-fat milk, flavored and unflavored, with the new proposed added sugars limit for flavored milk.

Specific public input requested, in addition to any other comments on the proposals:

• The *Dietary Guidelines* state that ''consuming beverages with no added sugars is particularly important for young children.'' As discussed above, one of the two proposals USDA is considering would limit milk choices in elementary and middle schools (grades K–8) to unflavored milk varieties only at school lunch and breakfast. To reduce young children's exposure to added sugars and promote the more nutrient-dense choice of unflavored milk, should USDA finalize this proposal? Why or why not?

○ Respondents that support Alternative A are encouraged to provide specific input on whether USDA should limit flavored milk to high schools only (grades 9–12) or to middle schools and high schools only (grades 6–12).

• If Alternative A is finalized with restrictions on flavored milk for grades K–8 or K–5 in NSLP and SBP, should USDA also pursue a similar change in SMP and CACFP? Are there any special considerations USDA should keep in mind for SMP and CACFP operators, given the differences in these programs compared to school meal program operators?

• What feedback do stakeholders have about the current fluid milk substitute process? USDA is especially interested in feedback from parents and guardians and program operators with firsthand experience requesting and processing a fluid milk substitute request.

Section 4: Whole Grains

For the final rule, USDA will consider two options:

• Proposed option: Maintaining the current requirement that at least 80 percent of the weekly grains offered are whole grain-rich, based on ounce equivalents of grains offered.

• Alternative option: Requiring that all grains offered must meet the whole grain-rich requirement, except that one day each school week, schools may offer enriched grains.

Specific public input requested, in addition to any other comments on the options:

• Which option would be simplest for menu planners to implement, and why?

• Which option would be simplest to monitor, and why?

Section 5: Sodium

This rulemaking proposes gradually phasing sodium reductions at lunch and breakfast as follows:

• SY 2025–2026: Schools will implement a 10 percent reduction from SY 2024–2025 school lunch and school breakfast sodium limits.

• SY 2027–2028: Schools will implement a 10 percent reduction from SY 2026–2027 school lunch and school breakfast sodium limits.

• SY 2029–2030: Schools will implement a 10 percent reduction from SY 2028–2029 school lunch sodium limits. School breakfast sodium limits would not be reduced in SY 2029–2030.

Specific public input requested, in addition to any other comments on the proposal:

• USDA plans to recommend (but not require) sodium limits for certain products, such as condiments and sandwiches, to further support schools' efforts to procure lower sodium products and meet the weekly limits.

○ For which products should USDA develop best practice sodium limits?

○ What limits would be achievable for schools and industry, while still supporting lower-sodium meals for children?

• Does the proposed implementation timeframe provide appropriate lead time for manufacturers and schools to successfully implement the new sodium limits?

• Do commenters agree with USDA's proposed schedule for incremental sodium reductions, including both the number and level of sodium reductions and the timeline, or suggest an alternative? Why?

Section 6: Menu Planning Options for American Indian and Alaska Native Students

USDA proposes to add tribally operated schools, schools operated by the Bureau of Indian Education, and schools serving primarily American Indian or Alaska Native children to the list of schools that may serve vegetables to meet the grains requirement. Additionally, in the final rule, USDA may consider additional menu planning options for schools that are tribally operated, are operated by the Bureau of Indian Education, or serve primarily American Indian or Alaska Native children, based on public input.

Specific public input requested, in addition to any other comments on the proposal:

• USDA requests public input on additional menu planning options that would improve the school meal programs for American Indian and Alaska Native children. Are there other specific areas of the school meal patterns that present challenges to serving culturally appropriate meals for American Indian and Alaska Native children, specifically regarding any regulatory requirements in 7 CFR 210.10 and 220.8?

Section 7: Traditional Foods

This rulemaking proposes to explicitly state in regulation that traditional foods may be served in reimbursable school meals. By ''traditional food,'' USDA means the definition included in the Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)), which defines traditional food as ''food that has traditionally been prepared and consumed by an [American] Indian tribe,'' including wild game meat; fish; seafood; marine mammals; plants; and berries.

Specific public input requested, in addition to any other comments on the proposal:

• USDA has provided guidance [106] on crediting certain traditional foods. Are there any other traditional foods that schools would like to serve, but are having difficulty serving? If so, what specific challenges are preventing schools from serving these foods?

• Which traditional foods should USDA provide yield information for and incorporate into the *Food Buying Guide*?

• Is ''traditional foods,'' as described in the Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)), an appropriate term to use, or do stakeholders recommend a different term?

Section 8: Afterschool Snacks

This rulemaking proposes to align NSLP snack standards for school-aged children at 7 CFR 210.10(o) with the CACFP snack requirements, as required by statute. The existing requirements for NSLP snacks served to preschool-aged children and infants will remain in effect.

USDA invites public input on this proposal in general but is not including any specific questions for commenter consideration.

Section 9: Substituting Vegetables for Fruits at Breakfast

This rulemaking proposes to continue to allow schools to substitute vegetables for fruits at breakfast, but to change the vegetable variety requirement. Under this proposal, schools that substitute vegetables for fruits at breakfast more than one day per school week would be required to offer a variety of vegetable subgroups.

USDA invites public input on this proposal in general but is not including any specific questions for commenter consideration.

Section 10: Nuts and Seeds

This rulemaking proposes to allow nuts and seeds to credit for the full meat/meat alternate (or protein source) component in all child nutrition programs and meals. This proposal would remove the 50 percent crediting limit for nuts and seeds at breakfast, lunch, and supper.

USDA invites public input on this proposal in general but is not including any specific questions for commenter consideration.

Section 11: Competitive Foods—Hummus Exemption

This rulemaking proposes to add hummus to the list of foods exempt from the total fat standard in the competitive food, or Smart Snack, regulations. This change would allow hummus, which is already permitted as part of a reimbursable school meal, to also be sold as a Smart Snack.

USDA invites public input on this proposal in general but is not including any specific questions for commenter consideration.

Section 12: Professional Standards

This rulemaking proposes to allow State agency discretion to approve the hiring of an individual to serve as a school nutrition program director in a medium or large local educational agency, for individuals who have 10 years or more of school nutrition program experience but who do not hold a bachelor's or associate's degree.

Specific public input requested, in addition to any other comments on the proposal:

• Is it reasonable to allow medium and large local educational agencies to substitute 10 years of school nutrition program experience for a bachelor's or associate's degree when hiring a school nutrition program director? USDA requests that commenters explain their response. Based on public input, USDA may adjust the number of years of school nutrition program experience required to substitute for a degree.

• Should USDA also consider allowing medium and large local educational agencies to substitute other types of experience, such as experience in other food service sectors, for a

[106] U.S. Department of Agriculture, *Child Nutrition Programs and Traditional Foods,* July 15, 2015. Available at: *https://www.fns.usda.gov/cn/child-nutrition-programs-and-traditional-foods.*

bachelor's or associate's degree when hiring a school nutrition program director? USDA requests that commenters explain their response. Based on public input, USDA may adjust the type of experience allowed to substitute for a degree.

- How often do State agencies and schools anticipate using the hiring flexibility proposed in this rulemaking?
- What strategies do local educational agencies currently use to recruit qualified school nutrition program directors? USDA requests input on successes and challenges local educational agencies of any size have experienced in their recruitment efforts.

Section 13: Buy American

13A: Limited Exceptions to the Buy American Requirement

This rulemaking proposes to set a 5 percent limit on non-domestic food purchases.

Specific public input requested, in addition to any other comments on the proposal:

- Is the proposed 5 percent ceiling on the non-domestic commercial foods a school food authority may purchase per school year a reasonable ceiling, or should a different percentage be used? Would the 5 percent cap encourage those school food authorities using exceptions to reduce the amount of non-domestic products they purchase? USDA requests that respondents include justification and reasons behind their response.
- How feasible would tracking and documenting the total amount of non-domestic food purchases be? Would purchasing and record keeping processes need to be altered? Does the documentation of total non-domestic purchases alleviate burden associated with documenting each limited exception that is used? And any additional information about how school food authorities would document the total amount of non-domestic food purchases versus total annual food purchases.

13B: Exception Documentation and Reporting Requirements

This rulemaking proposes to require school food authorities to maintain documentation showing that no more than 5 percent of their total annual commercial food costs were for non-domestic foods.

Specific public input requested, in addition to any other comments on the proposal:

- Is the proposal to require school food authorities to maintain documentation showing that no more than 5 percent of their total annual commercial food costs were for non-domestic foods feasible and is the regulatory language clear enough for school food authorities and States to implement and follow?
- For oversight purposes, USDA is considering requiring school food authorities maintain an attestation statement to attest that any nondomestic food item purchased under the 5 percent cap met one of the two limited exceptions. Would this approach assist school food authorities with the burden associated with documentation requirements? Does it help ensure that any non-domestic food purchase under the 5 percent cap was only a result of utilizing one of the current limited exceptions that USDA proposes to codify through this rulemaking?

13C: Procurement Procedures

This rulemaking proposes to require school food authorities to include the Buy American provision in documented procurement procedures, solicitations, and contracts for foods and food products procured using informal and formal procurement methods, and in awarded contracts.

USDA invites public input on this proposal in general but is not including any specific questions for commenter consideration.

13D: Definition of ''Substantially''

This rulemaking proposes to codify a definition of the term ''substantially using agriculture commodities.'' The definition would read as follows: *Substantially using agriculture commodities that are produced in the United States means over 51 percent of a food product must consist of agricultural commodities that were grown domestically.*

Specific public input requested, in addition to any other comments on the proposal:

- Does the proposed definition of ''substantially using agriculture commodities that are produced in the United States'' meet the intent of the Buy American requirements? If not, what other suggestions do stakeholders have for the definition?

13E: Clarification of Requirements for Harvested Farmed and Wild Caught Fish

This rulemaking proposes to add language to the regulations to specifically explain how Buy American applies to fish and fish products in the school lunch and breakfast programs. The proposed change would be consistent with current statutory requirements and existing USDA policy guidance.

USDA invites public input on this proposal in general but is not including any specific questions for commenter consideration.

Section 14: Geographic Preference

Currently, Federal regulations do not prescribe the precise way that geographic preference should be applied, or how much preference can be given to local products. This rulemaking proposes to expand geographic preference options by allowing locally grown, raised, or caught as procurement specifications (criteria the product or service must meet for the vendor's bid to be considered responsive and responsible) for unprocessed or minimally processed food items in the child nutrition programs, in order to increase the procurement of local foods and ease procurement challenges for operators interested in sourcing food from local producers.

Specific public input requested, in addition to any other comments on the proposal:

- Do respondents agree that this approach would ease procurement challenges for child nutrition program operators interested in sourcing food from local producers?
- Do respondents agree that this approach would encourage smaller-scale producers to submit bids to sell local foods to child nutrition programs?

Section 15: Miscellaneous Changes

This rulemaking proposes a variety of miscellaneous changes, including proposing to change the name of the meat/meat alternate meal component in NSLP, SBP, and CACFP regulations to the protein source component.

Specific public input requested, in addition to any other comments on the proposals:

- USDA invites public input on this terminology change for NSLP, SBP, and CACFP. Commenters are invited to provide feedback on the proposed change and to share their ideas for alternative options.

Section 17: Proposals From Prior USDA Rulemaking

In January 2020, USDA published a proposed rule, *Simplifying Meal Service and Monitoring Requirements in the National School Lunch and School Breakfast Programs.*[107] The rulemaking

[107] *Simplifying Meal Service and Monitoring Requirements in the National School Lunch and School Breakfast Programs,* (85 FR 4094, January 23, 2020). Available at: *https://www.federalregister.gov/documents/2020/01/23/*

Continued

has not been finalized; however, USDA intends to finalize the following provisions from the 2020 rule in the forthcoming final rule. For ease of reference, USDA has used the headings from the 2020 rule in this list. However, please note that the terminology changes described elsewhere in this rulemaking would also apply to these provisions (see *Section 15: Miscellaneous Changes*):

- Increase flexibility to offer meats/meat alternates at breakfast
- Allow legumes offered as a meat alternate to count toward weekly legume vegetable requirement
- Update meal modifications for disability and non-disability reasons
- Expand potable water requirement to include calorie-free, noncarbonated, naturally flavored water
- Change vitamin A and vitamin D units for fluid milk substitutions
- Remove Synthetic Trans Fat Limit as a Dietary Specification
- Change the performance-based reimbursement quarterly report to an annual report
- Correct NSLP afterschool snack erroneous citations and definition

In 2020, USDA received public comment on these proposals and intends to incorporate public input when finalizing these provisions, and therefore is not requesting public input on these provisions but is rather providing the public with a status update on that separate rulemaking.

Some of these provisions are expected to support implementation of the proposals in this rulemaking, or to address other stakeholder priorities. For example, allowing meat/meat alternates (or protein sources) to be served at breakfast, without a minimum grains requirement, is expected to support schools' efforts to reduce added sugars at breakfast. In addition, allowing beans offered as a meat alternate (or protein source) to count toward weekly beans, peas, and lentils vegetable requirement may encourage schools to offer more vegetarian or vegan entrées.

Because these provisions were proposed in the 2020 rule, they are not included in the amendatory language of this rulemaking.

Section 18: Procedural Matters

Executive Orders 12866 and 13563

Executive Orders 12866 and 13563 direct agencies to assess all costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. This proposed rule has been determined to be economically significant and has been reviewed by the Office of Management and Budget in accordance with Executive Order 12866.

Regulatory Impact Analysis

As required for all rules that have been designated as Significant by the Office of Management and Budget, a Regulatory Impact Analysis (RIA) was developed for this proposed rule. It follows this rulemaking as an Appendix. The following summarizes the conclusions of the Regulatory Impact Analysis:

Need for Action: The proposed rule is meant to layout standards that align school meals with the goals of the *Dietary Guidelines for Americans, 2020–2025,* and that support the continued provision of nutritious school meals. To develop this proposed rule, USDA considered broad stakeholder input, including written comments received in response to the 2022 transitional standards rule, oral comments submitted during listening sessions, and a comprehensive review of the *Dietary Guidelines for Americans, 2020–2025*. The transitional standards rule included updated standards and allowed operators to reset school meals after several years of Congressional, regulatory, and administrative interventions, followed by two years of meal pattern flexibilities provided in response to the COVID–19 public health emergency. The proposed rule represents the next stage of the rulemaking process to permanently update and improve school meal pattern requirements. As with the transitional standards rule, this proposed rule includes a focus on sodium, whole grains, and milk; however, this proposed rule also includes a new focus on added sugars. Further, in addition to addressing these and other nutrition standards, this rulemaking proposes measures to strengthen the Buy American provision in the school meal programs and proposes a variety of other changes to school meal requirements. Updates for the Child and Adult Care Food Program (CACFP) and Summer Food Service Program (SFSP) are also detailed within certain provisions of this proposed rule.

Benefits: This proposed rule builds on the progress schools have already made in improving school meals to support healthy diets for school children. Proposals in this rulemaking include gradual reduction of sodium and added sugars content in school meals over several school years. Added sugars proposed regulations include product-specific limits and an overall added sugars limit of 10 percent of calories per week at school lunch and breakfast. This rulemaking proposes two alternatives for milk. Alternative A would allow flavored milk at school lunch and breakfast for high school children only, effective SY 2025–2026, and Alternative B would maintain the milk standard from the transitional standards rule, allowing all schools to serve flavored or unflavored milks. USDA proposes to maintain required whole grain-rich offerings at 80 percent of total grain offerings. Minor shifts have also been proposed in other provisions, and USDA has also proposed several technical corrections, such as updating definitions and terminology in the regulations. The Regulatory Impact Analysis details potential health benefits for students if this proposed rule is finalized, as well as information regarding the methodology for selecting specific limits for added sugars, sodium, and whole grains.

Costs: USDA estimates this proposed rule would cost schools between $0.03 and $0.04 per breakfast and lunch served or between $220 and $274 million annually including both the SBP and NSLP starting in SY 2024–2025, accounting for the fact that standards are going to be implemented gradually and adjusting for annual inflation.[108] The costs to schools are mainly due to a shift in purchasing patterns to products with reduced levels of added sugars and sodium, as well as increases in labor costs for continued sodium reduction over time. The two proposed milk alternatives include a no-cost option and an option with expected cost increases due to a shift in purchasing patterns for elementary and middle schools. Updating afterschool snack standards to reflect the proposed added sugars standards would result in some savings due to a reduction of grain-based desserts being served. Simplifying vegetable variety requirements for schools opting to substitute vegetables for fruits at breakfast also results in some savings, because on average, vegetables are less expensive than fruits, per serving. An increase in cost due to the Buy American provision is a result

2020-00926/simplifying-meal-service-and-monitoring-requirements-in-the-national-school-lunch-and-school.

[108] In 2022 dollars.

of additional labor and food costs. The changes proposed in this rulemaking are gradual, achievable, and realistic for schools and recognize the need for strong nutrition standards in school meals.

Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601–612) requires Agencies to analyze the impact of rulemaking on small entities and consider alternatives that would minimize any significant impacts on a substantial number of small entities.

This rulemaking has been reviewed with regard to the requirements of the Regulatory Flexibility Act of 1980 (5 U.S.C. 601–612). This rulemaking will have a significant economic impact on a substantial number of small entities.

The requirements established by this proposed rule will apply to school districts, which meet the definitions of ''small governmental jurisdiction'' and ''small entity'' in the Regulatory Flexibility Act. Under the National School Lunch Act (NSLA, 42 U.S.C. 1758(f)), schools participating in the school lunch or school breakfast program are required to serve lunches and breakfasts that are consistent with the goals of the most recent *Dietary Guidelines* and that consider the nutrient needs of children who may be at risk for inadequate food intake and food insecurity. This proposed rule amends 7 CFR parts 210 and 220 that govern school lunch and breakfast program requirements, including the nutrition standards that school districts are required to meet to receive reimbursement for program meals. The changes proposed in this rulemaking would further align school nutrition requirements with the goals of the *Dietary Guidelines for Americans, 2020–2025,* consistent with statute. USDA recognizes that small school food authorities, like all school food authorities, will face increased costs and potential challenges in implementing the proposed rule. These costs are not significantly greater for small school food authorities than for larger ones, as implementation costs are driven primarily by factors other than school food authority size. Nevertheless, USDA does not discount the special challenges that some smaller school food authorities may face. As a group, small school food authorities may have less flexibility to adjust resources in response to immediate budgetary needs. The time between publication of the proposed and final rules, as well as the phased-in implementation period, would provide these school food authorities opportunity for advance planning.

Significant Alternatives

As discussed in *Section 3: Milk* and *Section 4: Whole Grains,* USDA is considering two proposals for the milk provision and a proposal and alternative for the whole grains provision.

For milk, this rulemaking proposes two alternatives:

- *Alternative A:* Proposes to allow flavored milk (fat-free and low-fat) at school lunch and breakfast for high school children only, effective SY 2025–2026. Under this alternative, USDA is proposing that children in grades K–8 would be limited to a variety of unflavored milk. The proposed regulatory text for Alternative A would allow flavored milk for high school children only (grades 9–12). USDA also requests public input on whether to allow flavored milk for children in grades 6–8 as well as high school children (grades 9–12). Children in grades K–5 would again be limited to a variety of unflavored milk. Under both Alternative A scenarios, flavored milk would be subject to the new proposed added sugars limit.
- *Alternative B:* Proposes to maintain the current standard allowing all schools to offer fat-free and low-fat milk, flavored and unflavored, with the new proposed added sugars limit for flavored milk.

For whole grains, the rulemaking:

- Proposes to maintain the current requirement that at least 80 percent of the weekly grains offered are whole grain-rich, based on ounce equivalents of grains served in the school lunch and breakfast programs.
- Requests public input on an alternative that would require that all grains offered in the school lunch and breakfast programs must meet the whole grain-rich requirement, except that one day each school week, schools may offer enriched grains.

USDA is encouraging public input on all aspects of this proposed rule, including the alternatives provided for these provisions. Though USDA is not aware of any evidentiary basis to distinguish groups of schools that may find it more difficult to meet one alternative over the other for either of these provisions, USDA welcomes public input on this topic. As discussed throughout the preamble, this rulemaking is based on a comprehensive review of the *Dietary Guidelines,* robust stakeholder input on school nutrition standards, and lessons learned from prior rulemakings. USDA's intent is to integrate each of these factors in a way that prioritizes children's health while also ensuring that the nutrition standards are achievable for all schools.

In particular, when developing the milk proposals, USDA considered the importance of reducing young children's exposure to added sugars and promoting nutrient-dense choices, while also encouraging children's consumption of dairy foods, which provide potassium, calcium, and vitamin D. When developing the whole grains proposal and alternative, USDA considered the importance of encouraging children's consumption of whole grains, which are an important source of dietary fiber, and considered the availability of products that children enjoy. For both provisions, USDA considered stakeholder input provided through listening sessions and in public comments, such as requests for USDA to ensure that nutrition standards meet cultural preferences. For example, during USDA listening sessions, stakeholders noted that schools would like to have the option to serve non-whole grain-rich tortillas and rice on occasion as part of their school lunch menu. USDA encourages further input on the milk and whole grains provision, and the proposed rule in its entirety, through public comments.

More detailed information about the costs associated with the milk and whole grains alternatives, as well as other provisions of the rulemaking, may be found in the Regulatory Impact Analysis in *Section 18: Procedural Matters.*

Unfunded Mandates Reform Act

Title II of the Unfunded Mandate Reform Act of 1995 (UMRA) established requirements for Federal agencies to assess the effects of their regulatory actions on State, local and Tribal governments, and the private sector. Under Section 202 of UMRA, USDA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with ''Federal mandates'' that may result in expenditures to State, local, or tribal governments in the aggregate, or to the private sector, of $146 million or more (when adjusted for inflation; GDP deflator source: Table 1.1.9 at *http://www.bea.gov/iTable*) in any one year. When such a statement is needed for a rule, section 205 of UMRA generally requires USDA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, more cost-effective or least burdensome alternative that achieves the objectives of the rulemaking. The Regulatory Impact Analysis conducted by USDA in connection with this proposed rule includes a cost/benefit analysis and

explains the options considered to update the school meal patterns based on the *Dietary Guidelines for Americans, 2020–2025* (See the *Regulatory Impact Analysis,* within *Section 18: Procedural Matters*).

Executive Order 12372

The NSLP, SMP, SBP, SFSP, and CACFP are listed in the Catalog of Federal Domestic Assistance under NSLP No. 10.555, SMP No. 10.556, SBP No. 10.553, SFSP No. 10.559, and CACFP No. 10.558, respectively, and are subject to Executive Order 12372, which requires intergovernmental consultation with State and local officials (see 2 CFR chapter IV). Since the child nutrition programs are State-administered, USDA's FNS Regional Offices have formal and informal discussions with State and local officials, including representatives of Indian Tribal Organizations, on an ongoing basis regarding program requirements and operations. This provides USDA with the opportunity to receive regular input from program administrators and contributes to the development of feasible program requirements.

Federalism Summary Impact Statement

Executive Order 13132 requires Federal agencies to consider the impact of their regulatory actions on State and local governments. Where such actions have federalism implications, agencies are directed to provide a statement for inclusion in the preamble to the regulations describing the agency's considerations in terms of the three categories called for under section (6)(b)(2)(B) of Executive Order 13132.

Prior Consultation With State Officials

Prior to drafting this proposed rule, USDA received input from various stakeholders through listening sessions and public comments. For example, USDA held listening sessions with stakeholder groups that represent national, State, and local interests, including the Academy of Nutrition and Dietetics, American Beverage Association, American Commodity Distribution Association, American Heart Association, Center for Science in the Public Interest, Education Trust, FoodCorps, Friends of the Earth, International Dairy Foods Association, National Congress of American Indians, National Indian Education Association, School Nutrition Association, State agencies, Urban School Food Alliance, Whole Grains Council members, and local school districts, including tribally-run schools, and others. As described in detail in *Section 1: Background,* USDA also received over 8,000 public comments on the transitional standards final rule. These comments, from State agencies, advocacy organizations, local school districts, and other stakeholders, helped to inform this proposed rule.

Nature of Concerns and the Need To Issue This Rule

As noted in *Section 1: Background,* listening session participants and public comments cited concerns about the financial viability of the school meal programs, particularly following unprecedented challenges related to the COVID–19 pandemic and associated supply chain issues, as well as transitioning from certain nationwide child nutrition program waivers. While USDA is aware of these concerns and recognizes that they present immediate challenges for schools, USDA also appreciates the importance of looking to the future and prioritizing children's health in the long-term. Further, according to the National School Lunch Act (NSLA, 42 U.S.C. 1758(f)), schools participating in the school lunch or school breakfast program are required to serve lunches and breakfasts that are consistent with the goals of the most recent *Dietary Guidelines* and that consider the nutrient needs of children who may be at risk for inadequate food intake and food insecurity. The proposed rule also advances the mission of USDA, which includes a focus on providing effective, science-based public policy leadership in food and nutrition.[109]

Extent To Which We Meet Those Concerns

Through this rulemaking, USDA intends to update the school meals in a practical and durable manner for the long-term. USDA has considered the impact of this proposed rule on State agencies and schools and has attempted to develop a proposal that would update the school meal standards to align with the goals of the *Dietary Guidelines for Americans, 2020–2025* in the most effective and least burdensome manner. This rulemaking also includes proposals that would simplify program operations, for example, by easing restrictions around substituting vegetables for fruits at breakfast; aligning crediting for nuts and seeds, and nut and seed butters, across child nutrition programs; making nutrition standards consistent for afterschool snack programs; and providing an additional exception to the professional standards hiring requirements for medium and large local educational agencies. This rulemaking would also retain other existing regulatory provisions to the extent possible.

Executive Order 12988, Civil Justice Reform

This rulemaking has been reviewed under Executive Order 12988, Civil Justice Reform. This rulemaking is intended to have preemptive effect with respect to any State or local laws, regulations or policies which conflict with its provisions or which would otherwise impede its full implementation. As proposed, the rulemaking would permit State or local agencies operating the school lunch or breakfast programs to establish more rigorous nutrition requirements or additional requirements for school meals that are not inconsistent with the nutritional provisions of the rulemaking. Such additional requirements would be permissible as part of an effort by a State or local agency to enhance school meals or the school nutrition environment. To illustrate, State or local agencies would be permitted to establish more restrictive sodium limits. The sodium limits are stated as maximums (*e.g.,* ≤) and could not be exceeded; however, lesser amounts than the maximum could be served. Likewise, State or local agencies could accelerate implementation of the dietary specification for added sugars stated in this proposed rule in an effort to reduce added sugars in school meals at an earlier date. However, State or local agencies would not, for example, be permitted to allow schools to exceed the added sugars limits in this rulemaking as that would be inconsistent with the rulemaking's provisions. This rulemaking is not intended to have retroactive effect. Prior to any judicial challenge to the provisions of this rulemaking or the application of its provisions, all applicable administrative procedures must be exhausted.

Civil Rights Impact Analysis

FNS has reviewed the proposed rule, in accordance with Departmental Regulation 4300–004, ''Civil Rights Impact Analysis,'' to identify and address any major civil rights impacts the proposed rule might have on participants on the basis of age, race, color, national origin, sex, or disability.

[109] USDA's mission is: ''To serve all Americans by providing effective, innovative, science-based public policy leadership in agriculture, food and nutrition, natural resource protection and management, rural development, and related issues with a commitment to deliverable equitable and climate-smart opportunities that inspire and help America thrive.'' See: U.S. Department of Agriculture. *Strategic Plan Fiscal Years 2022–2026.* Available at: *https://www.usda.gov/sites/default/files/documents/usda-fy-2022-2026-strategic-plan.pdf.*

Due to the unavailability of data, FNS is unable to determine whether this proposed rule will have an adverse or disproportionate impact on protected classes among entities that administer and participate in Child Nutrition Programs. However, the FNS Civil Rights Division finds that the current mitigation and outreach strategies outlined in the regulations and this Civil Rights Impact Analysis (CRIA) provide ample consideration to applicants' and participants' ability to participate in the NSLP, SBP, SMP, and CACFP. The promulgation of this proposed rule will impact school food authorities and CACFP institutions and facilities by updating the school nutrition standards. Participants in the NSLP, SBP, SMP, and CACFP may be impacted if the standards under the proposed rule are implemented by school food authorities and CACFP institutions and facilities. The changes are expected to provide participants in NSLP, SBP, SMP, and CACFP wholesome and appealing meals that reflect the goals of the *Dietary Guidelines* and meet their needs and preferences.

Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175 requires Federal agencies to consult and coordinate with Tribes on a government-to-government basis on policies that have Tribal implications, including regulations, legislative comments, or proposed legislation, other policy statements or actions that have substantial direct effects on one or more Indian Tribes, the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes.

This regulation has Tribal implications. FNS has held listening sessions related to this topic already and taken that feedback into account in this rulemaking; however, FNS will have consultation(s) before the final rule. If a tribe requests additional consultation in the future, FNS will work with the Office of Tribal Relations to ensure meaningful consultation is provided.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. Chap. 35; 5 CFR 1320) requires that the Office of Management and Budget (OMB) approve all collection of information requirements by a Federal agency before they can be implemented. Respondents are not required to respond to any collection of information unless it displays a current, valid OMB Control Number.

In accordance with the Paperwork Reduction Act of 1995, this proposed rule contains information collection requirements, which are subject to review and approval by OMB. This rulemaking proposes new reporting and recordkeeping requirements for State agencies and school food authorities administering the National School Lunch Program and School Breakfast Program. This rulemaking also proposes one recordkeeping requirement on Child and Adult Care Food Program and Summer Food Service Program operators. The proposed rule contains existing information collections in the form of recordkeeping requirements that have been approved by OMB under OMB Control Number 0584–0006 7 CFR part 210 National School Lunch Program (expiration date July 31, 2023) and OMB Control Number 0584–0012 7 CFR part 220 School Breakfast Program (expiration date August 31, 2025); however, the proposals in this rulemaking do not impact these requirements or their associated burden. Therefore, they are not included in the discussion concerning the burden impact resulting from the proposals in this rulemaking. FNS is requesting a new OMB Control Number for only the new information collections proposed via this document in an effort to separate and clearly depict the new information collection requirements introduced in this proposed rule and their associated burden. This rulemaking does not impact existing and approved information collection requirements.

FNS is submitting for public comment the information collection burden that will result from adoption of the new recordkeeping and reporting requirements proposed in the rulemaking. The establishment of the proposed collection of information requirements are contingent upon OMB approval. After OMB has approved the information collection requirements submitted in conjunction with the final rule, FNS will merge the requirements and their burden into the existing program information collection requests to which they pertain: OMB Control Number 0584–0006 7 CFR part 210 National School Lunch Program (expiration date July 31, 2023), OMB Control Number 0584–0055 Child and Adult Care Food Program (expiration date August 31, 2025), and OMB Control Number 0584–0280 7 CFR part 225, Summer Food Service Program (expiration date September 30, 2025).

Comments on this proposed rule and changes in the information collection burden must be received by April 10, 2023.

Comments may be sent to: Tina Namian, Director, School Meals Policy Division—4th floor, Child Nutrition Programs, Food and Nutrition Service, 1320 Braddock Place, Alexandria, VA 22314. Comments will also be accepted through the Federal eRulemaking Portal. Go to *https://www.regulations.gov*, and follow the online instructions for submitting comments electronically.

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

All responses to this notice will be summarized and included in the request for OMB approval. All comments will also become a matter of public record.

Title: Child Nutrition Programs: Revisions to Meal Patterns Consistent with the 2020 Dietary Guidelines for Americans.

OMB Control Number: 0584–NEW.

Expiration Date: N/A.

Type of Request: New collection.

Abstract: This is a new information collection. The proposed rule introduces new information collection requirements. Below is summary of the changes proposed by the rulemaking and the accompanying reporting and recordkeeping requirements.

Buy American

The National School Lunch Act (NSLA, 42 U.S.C. 1760(n)) and program regulations at 7 CFR 210.21(d)(2)(i) and 220.16(d)(2)(i), require school food authorities to purchase domestic commodities or products ''to the maximum extent practicable.'' This provision, known as the Buy American provision, was initially implemented in 1998 and supports the mission of the child nutrition programs, which is to serve children nutritious meals and support American agriculture. There are two limited exceptions to the Buy American provision that school food authorities may implement when purchasing domestic foods is not feasible. The exceptions apply when a

product is not produced or manufactured in the U.S. in sufficient and reasonably available quantities of a satisfactory quality, or when competitive bids reveal the costs of a U.S. product are significantly higher than the non-domestic product.

The rulemaking proposes to maintain the current two limited exceptions to the Buy American provision and clarify in regulation that it is the responsibility of the school food authority to determine whether an exception applies. In addition, USDA is proposing to institute a 5 percent ceiling on the non-domestic commercial foods a school food authority may purchase per school year. For oversight purposes, the proposed rule would codify a new recordkeeping requirement for school food authorities to maintain documentation to demonstrate that their non-domestic food purchases do not exceed the 5 percent annual threshold. This recordkeeping requirement would codify a requirement to maintain documentation for use of exceptions to the Buy American provision. While school food authorities may already maintain documentation to demonstrate compliance with the Buy American provision in accordance with guidance made available by FNS, there is not a legally binding recordkeeping requirement for respondents to maintain documentation specifically for the use of exceptions to the Buy American provision. Therefore, the proposal to codify recordkeeping requirements to document compliance with the Buy American provision, including the use of exceptions to the provision, and their associated burden are addressed as new in the information collection request for the proposed rule.

Lastly, the proposed rule would require school food authorities to include the Buy American provision in procurement procedures, solicitations, and contracts for foods and food products procured using informal and formal procurement methods, and in awarded contracts. These new recordkeeping requirements are being added to the new information collection associated with the proposed rule.

FNS estimates the proposed recordkeeping requirement for school food authorities to maintain documentation to demonstrate that their non-domestic food purchases do not exceed the proposed 5 percent annual threshold will impact approximately 19,019 school food authorities, or respondents. FNS estimates these 19,019 respondents will develop and maintain 10 records each year, and that it takes approximately 15 minutes (.25 hours) each month to complete the recordkeeping requirement for each record. The proposed recordkeeping requirement adds a total of 47,547.5 annual burden hours and 190,190 responses into the new information collection request.

In addition, FNS estimates the proposed recordkeeping requirement to include the Buy American provision in procurement procedures, solicitations, and contracts would impact approximately 19,019 school food authorities. FNS estimates these 19,019 respondents will revise their procurement procedures, solicitations, and contracts and maintain these records, and estimates respondents would spend approximately 20 hours each year meeting this recordkeeping requirement. This recordkeeping requirement would add a total of 380,380 annual burden hours and 19,019 responses into the new information collection request.

Menu Planning Options for American Indian and Alaska Native Students

The rulemaking proposes to allow menu planning options for American Indian and Alaska Native students by adding tribally operated schools, schools operated by the Bureau of Indian Education, and schools serving primarily American Indian or Alaska Native children to the list of schools that may serve vegetables to meet the grains requirement. In addition, the rulemaking proposes to extend this menu planning option to institutions and sponsors participating in the Child and Adult Care Food Program and Summer Food Service Program that serve primarily American Indian or Alaska Native children. The menu planning option aims to improve the child nutrition programs for American Indian and Alaska Native children and build on USDA's commitment to support traditional food ways.

Alongside the proposed provision is a requirement for school food authorities participating in the National School Lunch Program or School Breakfast Program to maintain documentation to demonstrate that the schools using this option are tribally operated, are operated by the Bureau of Indian Education, or serve primarily American Indian or Alaska Native students. This documentation would be maintained for program reviews. This proposed recordkeeping requirement would establish a collection of information for school food authorities that participate in the school meals programs and elect to implement the operational flexibility to serve vegetables in place of grains for American Indian and Alaska Native children. FNS estimates 315 school food authorities operating the National School Lunch Program and School Breakfast Program would maintain documentation each year to demonstrate schools using the menu planning option meet the criteria, and that it would take approximately 1 hour to collect and maintain such documentation annually. This recordkeeping for school food authorities would add an estimated 315 annual burden hours and 315 responses into the information collection request associated with the proposed rule.

This provision would also establish a recordkeeping requirement for Child and Adult Care Food Program and Summer Food Service Program operators serving primarily American Indian or Alaska Native participants and electing to implement this menu planning option. Child and Adult Care Food Program and Summer Food Service Program operators electing to serve vegetables to meet the grains requirement under this provision would also be required to maintain documentation demonstrating that the site qualifies for the menu planning option. FNS estimates the proposed recordkeeping requirement would require approximately 610 Child and Adult Care Food Program and 20 Summer Food Service Program operators to collect and maintain documentation each year to demonstrate that the site serves primarily American Indian or Alaska Native children, and that it takes approximately 1 hour to collect and maintain such documentation. FNS estimates this collection of information would add an estimated 610 annual burden hours and 610 responses for Child and Adult Care Food Program operators and 20 annual burden hours and 20 responses for Summer Food Service Program operators into the information collection request associated with the proposed provision.

Professional Standards

This rulemaking introduces a proposed hiring exception to allow State agencies to approve the hiring of an individual to serve as a school nutrition program director in medium (2,500 to 9,999 students) or large (10,000 or more students) local educational agencies, for individuals who have 10 years or more of school nutrition program experience but who do not hold a bachelor's or associate's degree. School food authorities would be required to submit requests to their State agency to implement the hiring flexibility; State agencies and school food authorities would also maintain records of requests for oversight purposes.

The proposed hiring exception to allow State agency discretion to approve the hiring of an individual who has 10 years or more of school nutrition program experience but who does not hold a bachelor's or associate's degree to serve as a school nutrition program director will introduce a local level reporting requirement for school food authorities. With respect to the proposed hiring exception, FNS estimates 951 school food authorities would submit 1 request to their respective State agencies to hire an individual to serve as the school nutrition program director in medium or large local educational agencies each year, and that the proposed reporting requirement to develop and submit a request would take each respondent approximately 30 minutes (.5 hours). The proposed hiring flexibility would add an estimated 475.5 burden hours and 951 responses into the new information collection request for the proposed rule.

The proposed hiring exception will also introduce a reporting requirement for State agencies, who would be required to review and respond to each request submitted on behalf of school food authorities. FNS estimates 56 State agencies would review and either approve or deny each request received, and that it takes approximately 30 minutes (.5 hours) to review and respond to each request. The proposed State level reporting requirement would add an estimated 475.5 burden hours and 951 responses into the new information collection request associated with the proposed rule.

Lastly, in addition to the reporting requirements associated with the hiring exception to allow State agencies to approve the hiring of individuals who do not meet the educational criteria but have 10 years or more of school nutrition program experience to serve as the school nutrition program director, State agencies and school food authorities would be required to maintain documentation. State agencies and school food authorities would maintain and document information regarding requests that were developed at the school food authority level and submitted to State agencies. The proposed recordkeeping would impact an estimated 56 State agencies and 951 school food authorities. FNS estimates it takes both State agencies and school food authorities 15 minutes (.25 hours) to maintain each record annually. The State agency level burden for the maintenance of records regarding requests to hire individuals who do not meet professional standards educational criteria adds an estimated 237.5 burden hours and 951 responses into the new information collection associated with the proposed rule. The school food authority level burden for the maintenance of records regarding requests to hire individuals adds an estimated 237.5 burden hours and 951 responses into the collection.

Nutrition Standards

This rulemaking proposes a variety of changes to school meal nutrition requirements, including to implement quantitative limits for leading sources of added sugars in food items served as part of school meals, including grain-based desserts, breakfast cereals, yogurts, and flavored milks. The rulemaking also proposes to implement a dietary specification limiting added sugars to less than 10 percent of calories per week in the school lunch and breakfast programs. FNS acknowledges these proposed changes would be reflected in schools' production and menu records that show how meals offered at school contribute to the required food components and food quantities for each age/grade group every day. Longstanding recordkeeping requirements established at 7 CFR 210.10(a)(3) and 7 CFR 220.8(a)(3) require schools to develop and maintain menu records for the meals produced and served in schools participating in the National School Lunch Program and School Breakfast Program. Because these recordkeeping requirements are accounted for and approved under OMB Control Number 0584–0006 7 CFR part 210 National School Lunch Program and OMB Control Number 0584–0012 7 CFR part 220 School Breakfast Program, USDA does not expect the proposals to limit sugars in the National School Lunch Program and School Breakfast Program or any other school meal nutrition standard proposals included in this rulemaking to impact the burden associated with the collection of information. OMB has already approved 6,270,883.2 burden hours under the currently approved information collection requests for the National School Lunch Program and School Breakfast Program to cover the requirement for schools to develop and keep production and menu records for meals served.

Summary

As a result of the proposals outlined in this rulemaking, FNS estimates that this new information collection will have 19,705 respondents, 213,958 responses, and 430,299 burden hours. The average burden per response and the annual burden hours are explained below and summarized in the charts which follow. Once the ICR for the final rule is approved and the requirements and associated burden for this new information collection are merged into their existing collections, FNS estimates that the burden for OMB Control Number 0584–0006 will increase by 213,328 responses and 429,669 burden hours, OMB Control Number 0584–0055 will increase by 610 responses and 610 burden hours, and OMB Control Number 0584–0280 will increase by 20 responses and 20 burden hours.

Respondents (Affected Public): State Agencies (State governments), School Food Authorities (local governments), and Child and Adult Care Food Program and Summer Food Service Program operators (businesses).

Reporting

Estimated Number of Respondents: 1,007.

Estimated Number of Responses per Respondent: 1.89.

Estimated Total Annual Responses: 1,902.

Estimated Time per Response: 30 minutes (.50 hours).

Estimate Total Annual Burden on Respondents: 951 hours.

Recordkeeping

Estimated Number of Respondents: 19,705.

Estimated Number of Responses per Respondent: 10.76.

Estimated Total Annual Responses: 212,056.

Estimated Time per Response: Approximately 2 hours and 1.5 minutes (2.025 hours).

Estimate Total Annual Burden on Respondents: 429,348.

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Reporting							
Description of Activities	**Regulation Citation**	**Estimated # of Respondents**	**Frequency of Response**	**Total Annual Responses**	**Average Burden Hours per Response**	**Estimated Total Annual Burden Hours**	**Estimated Change in Burden Hours Due to Rulemaking**
State agencies review and approve/deny each request to hire a school nutrition program director in a medium or large local educational agency who does not meet professional standards educational criteria	210.30(b)(1)(iv)	56	16.98	951	.5	475.5	475.5
Total State Agency Reporting		**56**		**951**		**475.5**	**475.5**
School food authorities develop and submit requests to hire a school nutrition program director in a medium or large local educational agency who does not meet professional standards educational criteria	210.30(b)(1)(iv)	951	1	951	.5	475.5	475.5
Total School Food Authority Reporting		**951**		**951**		**475.5**	**475.5**
Total Reporting		**1,007**		**1,902**		**951**	**951**

Recordkeeping							
Description of Activities	**Regulation Citation**	**Estimated # of Respondents**	**Frequency of Response**	**Total Annual Responses**	**Average Burden Hours per Response**	**Estimated Total Annual Burden Hours**	**Estimated Change in Burden Hours Due to Rulemaking**
State agencies maintain school food authorities requests to hire individuals in medium or large local educational agencies who do not meet professional standards educational criteria	210.30(b)(1)(iv)	56	16.98	951	.25	237.75	237.75
Total State Agency Recordkeeping		**56**		**951**		**237.75**	**237.75**
School food authorities maintain documentation demonstrating compliance with the Buy American provision	210.21(d)(5) and 220.16(d)	19,019	10	190,190	.25	47,547.5	47,547.5
School food authorities include language requiring Buy American in all procurement procedures, solicitations, and contracts and maintain such documentation	210.21(d)(3) and 220.16(d)(3)	19,019	1	19,019	20	380,380	380,380
School food authorities maintain documentation of requests to hire individuals in medium or large local educational agencies who do not meet professional standards educational criteria	210.30(b)(1)(iv)	951	1	951	.25	237.75	237.75
School food authorities maintain records to	210.10(c)(3) and 220.8(c)(3)	315	1	315	1	315	315

demonstrate that schools are tribally operated, are operated by the Bureau of Indian Education, or serve primarily American Indian or Alaska Native students							
Total School Food Authority Recordkeeping		**19,019**		**210,475**		**428,480.25**	**428,480.25**
Child and Adult Care Food Program facilities and institutions maintain documentation demonstrating that service sites qualify for the menu planning option to serve vegetables to meet the grains requirement by serving primarily American Indian and Alaska Native children	226.20(f)	610	1	610	1	610	610
Total Child and Adult Care Food Program Operators (business level) Recordkeeping		**610**		**610**		**610**	**610**
Summer Food Service Program sponsors maintain documentation demonstrating that service sites qualify for the menu planning option to serve vegetables to meet the bread requirement by serving primarily American Indian and Alaska Native children	225.16(f)(3)	20	1	20	1	20	20
Total Summer Food Service Program Operators (business level) Recordkeeping		**20**		**20**		**20**	**20**
Total Recordkeeping		**19,705**		**212,056**		**429,348**	**429,348**

TOTAL NO. RESPONDENTS	19,705
AVERAGE NO. RESPONSES PER RESPONDENT	10.858
TOTAL ANNUAL RESPONSES	213,958
AVERAGE HOURS PER RESPONSE	2.011
TOTAL BURDEN HOURS	430,299

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E-Government Act Compliance

The Department is committed to complying with the E-Government Act, to promote the use of the internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes.

List of Subjects

7 CFR Part 210

Grant programs-education, Grant programs—health, Infants and children, Nutrition, Penalties, Reporting and recordkeeping requirements, School breakfast and lunch programs, Surplus agricultural commodities.

7 CFR Part 215

Food assistance programs, Grant programs—education, Grant program—health, Infants and children, Milk, Reporting and recordkeeping requirements.

7 CFR Part 220

Grant programs-education, Grant programs—health, Infants and children, Nutrition, Reporting and recordkeeping requirements, School breakfast and lunch programs.

7 CFR 225

Food assistance programs, Grant programs—health, Infants and children, Labeling, Reporting and recordkeeping requirements.

7 CFR Part 226

Accounting, Aged, Day care, Food assistance programs, Grant programs, Grant programs—health, Individuals with disabilities, Infants and children, Intergovernmental relations, Loan programs, Reporting and recordkeeping requirements, Surplus agricultural commodities.

Accordingly, 7 CFR parts 210, 215, 220, 225, and 226 are proposed to be amended as follows:

PART 210—NATIONAL SCHOOL LUNCH PROGRAM

■ 1. The authority citation for part 210 continues to read as follows:

Authority: 42 U.S.C. 1751–1760, 1779.

■ 2. In § 210.2:
■ a. Remove the definitions of ''CND'' and ''Food component'';
■ b. In the definition of ''Food item'', remove the words ''food component'' and add in its place the words ''meal component'';
■ c. Add in alphabetical order a definition for ''Meal component'';
■ d. In the definition of ''Reduced price lunch'', redesignate paragraphs (a), (b), and (c) as paragraphs (1), (2), and (3), respectively;
■ e. In the definition of ''School'', redesignate paragraphs (a), (b), and (c) as paragraphs (1), (2), and (3), respectively, and remove the last two sentences in newly redesignated paragraph (3);
■ f. In the definition of ''State agency'', redesignate paragraphs (a), (b), and (c) as paragraphs (1), (2), and (3), respectively;
■ g. In the definition of ''State educational agency'', redesignate paragraphs (a) and (b) as paragraphs (1) and (2), respectively;
■ h. In the definition of ''Tofu'', remove the term ''meats/meat alternates'' and add in its place the words ''protein sources'';
■ i. Add in alphabetical order a definition for ''Whole grain-rich'';
■ j. In the definition of ''Whole grains'', remove the last sentence; and
■ k. Revise the definition of ''Yogurt''.

The additions and revision read as follows:

§ 210.2 Definitions.

* * * * *

Meal component means one of the food groups which comprise reimbursable meals. The meal components are: protein sources, grains, vegetables, fruits, and fluid milk.

* * * * *

Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.

* * * * *

Yogurt means commercially prepared coagulated milk products obtained by the fermentation of specific bacteria, that meet milk fat or milk solid requirements and to which flavoring foods or ingredients may be added. These products are covered by the Food and Drug Administration's Definition and Standard of Identity for yogurt, 21 CFR 131.200, and low-fat yogurt and non-fat yogurt covered as a standardized food under 21 CFR 130.10.

§ 210.3 [Amended]

■ 3. In § 210.3, paragraph (a), remove the last sentence.

§ 210.4 [Amended]

■ 4. In § 210.4:
■ a. In the first sentence of paragraph (a), remove the words ''meal supplements'' and add in their place the words ''afterschool snacks'';
■ b. In paragraph (b)(3) introductory text, remove ''§ 210.10(n)(1)'' and add in its place ''§ 210.10(o)(1)''; and
■ c. In paragraphs (b)(3) and (4), wherever they appear, remove the words ''meal supplements'' and add in their place the words ''afterschool snacks'';

§ 210.7 [Amended]

■ 5. In § 210.7:
■ a. In paragraphs (a), (c) introductory text, (c)(1) introductory text, and (c)(1)(i) and (ii), wherever they appear, remove the words ''meal supplements'' and add in their place the words ''afterschool snacks'';
■ b. In paragraph (c)(1)(iv), remove the word ''supplement'' and add in its place the words ''afterschool snack'';
■ c. In paragraph (c)(1)(v), remove the words ''meal supplement'' and add in their place the words ''afterschool snack'';
■ d. In paragraphs (d) introductory text and (d)(1)(ii), remove ''or § 220.23'';
■ e. In paragraph (d)(1)(iii) introductory text, remove ''§ 210.10, § 220.8, or § 220.23'' and add in its place ''§§ 210.10 and 220.8'';

■ f. In paragraph (d)(1)(iii)(A), remove the term ''meat/meat alternates'' and add in its place the words ''protein sources'';
■ g. Remove paragraphs (d)(1)(iv) and (vii), and redesignate paragraphs (d)(1)(v) and (vi) as paragraphs (d)(1)(iv) and (v), respectively;
■ h. At the end of newly redesignated paragraph (d)(1)(iv), add the word ''and'';
■ i. At the end of newly redesignated paragraph (d)(1)(v), remove ''; and'' and add a period in its place;
■ j. In paragraph (d)(2), remove the fourth sentence; and
■ k. In paragraph (e), remove the words ''meal supplements'' and add in their place the words ''afterschool snacks'' and remove ''§ 210.10(n)(1)'' and add in its place ''§ 210.10(o)(1)''.

§ 210.8 [Amended]

■ 6. In § 210.8, in paragraphs (c) and (d), wherever they appear, remove the words ''meal supplements'' and add in their place the words ''afterschool snacks''.

§ 210.9 [Amended]

■ 7. In § 210.9:
■ a. In the first sentence of paragraph (b)(21), remove the phrase ''March 1, 1997, and no later than December 31 of each year thereafter'' and add in its place the phrase ''December 31 of each year''; and
■ b. In paragraph (c) introductory text, remove ''§ 210.10(n)(1)'' and add in its place ''§ 210.10(o)(1)'' and remove the words ''meal supplements'' and add in their place the words ''afterschool snacks'' and remove the words ''meal supplement'' and add in their place the word ''afterschool snack''.
■ 8. In § 210.10:
■ a. In paragraphs (a)(3) and (b)(1)(i) and (iii), remove the words ''food components'' and add in their place the words ''meal components'';
■ b. Revise paragraphs (b)(2) and (c) through (f);
■ c. In paragraph (g), remove the phrase ''calorie, saturated fat, sodium, and *trans* fat'' and add in its place the word ''dietary'';
■ d. Revise paragraph (h)(1);
■ e. In paragraphs (i)(1), (i)(3)(ii), and (i)(4), remove the words ''saturated fat'' and add in their place the phrase ''saturated fat, added sugars'';
■ f. In paragraph (j), remove the phrase ''dietary specifications for calories, saturated fat, sodium and *trans* fat'' and add in its place the words ''the dietary specifications'';
■ g. In paragraph (k)(2), remove the words ''food components'' and add in their place the words ''meal components'';
■ h. Remove paragraphs (m)(2)(i) through (iii);
■ i. Revise paragraphs (o), (p), and (q); and
■ j. Add paragraph (r).

The revisions and addition read as follows:

§ 210.10 [Amended]

* * * * *

(b) * * *

(2) Over a 5-day school week:

(i) Average calorie content of meals offered to each age/grade group must be within the minimum and maximum calorie levels specified in paragraph (f) of this section;

(ii) Average saturated fat content of the meals offered to each age/grade group must be less than 10 percent of total calories;

(iii) Effective SY 2027–2028, average added sugars content of the meals offered to each age/grade group must be less than 10 percent of total calories; and

(iv) Average sodium content of the meals offered to each age/grade group must not exceed the maximum level specified in paragraph (f) of this section.

(c) *Meal pattern for school lunches.* Schools must offer the meal components and quantities required in the lunch meal pattern established in the following table:

TABLE 1 TO PARAGRAPH (C) INTRODUCTORY TEXT—NATIONAL SCHOOL LUNCH PROGRAM MEAL PATTERN

Meal components	Grades K–5	Grades 6–8	Grades 9–12
			Amount of food [1] per week (minimum per day)
Fruits (cups) [2]	2½ (½)	2½ (½)	5 (1)
Vegetables (cups) [2]	3¾ (¾)	3¾ (¾)	5 (1)
Dark Green Subgroup [3]	½	½	½
Red/Orange Subgroup [3]	¾	¾	1¾
Beans, Peas, and Lentils Subgroup [3]	½	½	½
Starchy Subgroup [3]	½	½	½
Other Vegetables Subgroup [3 4]	½	½	¾
Additional Vegetables from Any Subgroup to Reach Total	1	1	1½
Grains (oz. eq.) [5]	8–9 (1)	8–10 (1)	10–12 (2)
Protein Sources (oz. eq.) [6]	8–10 (1)	9–10 (1)	10–12 (2)
Fluid Milk (cups) [7]	5 (1)	5 (1)	5 (1)
Dietary Specifications: Daily Amount Based on the Average for a 5-Day Week [8]			
Minimum-Maximum Calories (kcal)	550–650	600–700	750–850
Saturated Fat (% of total calories)	<10	<10	<10
Added Sugars (% of total calories)	<10	<10	<10
Sodium Limit: Effective July 1, 2025 (mg)	≤1,000	≤1,105	≤1,150
Sodium Limit: Effective July 1, 2027 (mg)	≤900	≤990	≤1,035
Sodium Limit: Effective July 1, 2029 (mg)	≤810	≤895	≤935
Trans Fat	Nutrition label or manufacturer specifications must indicate zero grams of *trans* fat per serving.		

[1] Food items included in each group and subgroup and amount equivalents.
[2] Minimum creditable serving is ⅛ cup. One quarter-cup of dried fruit counts as ½ cup of fruit; 1 cup of leafy greens counts as ½ cup of vegetables. No more than half of the fruit or vegetable offerings may be in the form of juice. All juice must be 100 percent full-strength.
[3] Larger amounts of these vegetables may be served.
[4] This subgroup consists of ''Other vegetables'' as defined in paragraph (c)(2)(iii)(E) of this section. For the purposes of the NSLP, the ''Other vegetables'' requirement may be met with any additional amounts from the dark green, red/orange, and bean, peas, and lentils vegetable subgroups as defined in paragraph (c)(2)(iii) of this section.

[5] Minimum creditable serving is 0.25 oz. eq. At least 80 percent of grains offered weekly (by ounce equivalents) must meet the whole grain-rich criteria specified in FNS guidance, and the remaining grain items offered must be enriched.
[6] Minimum creditable serving is 0.25 oz. eq.
[7] Minimum creditable serving is 8 fluid ounces. All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less) and must meet the requirements in paragraph (d) of this section.
[8] Effective SY 2027–2028, schools must meet the dietary specification for added sugars. Schools must meet the sodium limits by the dates specified in this chart. Discretionary sources of calories may be added to the meal pattern if within the dietary specifications.

(1) *Age/grade groups.* Schools must plan menus for students using the following age/grade groups: Grades K–5 (ages 5–10), grades 6–8 (ages 11–13), and grades 9–12 (ages 14–18). If an unusual grade configuration in a school prevents the use of these established age/grade groups, students in grades K–5 and grades 6–8 may be offered the same food quantities at lunch provided that the calorie and sodium standards for each age/grade group are met. No customization of the established age/grade groups is allowed.

(2) *Meal components.* Schools must offer students in each age/grade group the meal components specified in paragraph (c) of this section.

(i) *Protein sources component.* Schools must offer protein sources daily as part of the lunch meal pattern. The quantity of the protein source must be the edible portion as served. This component must be served in a main dish or in a main dish and only one other food item. Schools without daily choices in this component should not serve any one protein source or form of protein source (for example, ground, diced, pieces) more than three times in the same week. If a portion size of this component does not meet the daily requirement for a particular age/grade group, schools may supplement it with another protein source to meet the full requirement. Schools may adjust the daily quantities of this component provided that a minimum of one ounce is offered daily to students in grades K–8 and a minimum of two ounces is offered daily to students in grades 9–12, and the total weekly requirement is met over a 5-day period.

(A) *Enriched macaroni.* Enriched macaroni with fortified protein as defined in appendix A to this part may be used to meet part of the protein sources requirement when used as specified in appendix A to this part. An enriched macaroni product with fortified protein as defined in appendix A to this part may be used to meet part of the protein sources component or the grains component but may not meet both food components in the same lunch.

(B) *Nuts and seeds.* Nuts and seeds and their butters are allowed as a protein source in accordance with FNS guidance. Acorns, chestnuts, and coconuts may not be used because of their low protein and iron content. Nut and seed meals or flours may be used only if they meet the requirements for Alternate Protein Products established in appendix A to this part.

(C) *Yogurt.* Yogurt may be used to meet all or part of the protein sources component. Yogurt may be plain or flavored, unsweetened or sweetened. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). Noncommercial and/or non-standardized yogurt products, such as frozen yogurt, drinkable yogurt products, homemade yogurt, yogurt flavored products, yogurt bars, yogurt covered fruits and/or nuts or similar products are not creditable. Four ounces (weight) or ½ cup (volume) of yogurt equals one ounce of the protein sources requirement.

(D) *Tofu and soy products.* Commercial tofu and soy products may be used to meet all or part of the protein sources component in accordance with FNS guidance. Noncommercial and/or non-standardized tofu and soy products are not creditable.

(E) *Beans, peas, and lentils.* Cooked dry beans, peas, and lentils may be used to meet all or part of the protein sources component. Beans, peas, and lentils are identified in this section and include foods such as black beans, garbanzo beans, lentils, kidney beans, mature lima beans, navy beans, pinto beans, and split peas.

(F) *Other protein sources.* Other protein sources, such as cheese and eggs, may be used to meet all or part of the protein sources component in accordance with FNS guidance.

(ii) *Fruits component.* Schools must offer fruits daily as part of the lunch menu. Fruits that are fresh; frozen without added sugar; canned in light syrup, water or fruit juice; or dried may be offered to meet the requirements of this paragraph. All fruits are credited based on their volume as served, except that ¼ cup of dried fruit counts as ½ cup of fruit. Only pasteurized, full-strength fruit juice may be used, and may be credited to meet no more than one-half of the fruits component.

(iii) *Vegetables component.* Schools must offer vegetables daily as part of the lunch menu. Fresh, frozen, or canned vegetables and dry beans, peas, and lentils may be offered to meet this requirement. All vegetables are credited based on their volume as served, except that 1 cup of leafy greens counts as ½ cup of vegetables and tomato paste and puree are credited based on calculated volume of the whole food equivalency. Pasteurized, full-strength vegetable juice may be used to meet no more than one-half of the vegetables component. Cooked dry beans, peas, and lentils may be counted as either a vegetable or as a protein source but not as both in the same meal. Vegetable offerings at lunch over the course of the week must include the following vegetable subgroups, as defined in this section in the quantities specified in the meal pattern in paragraph (c) of this section:

(A) *Dark green vegetables subgroup.* This subgroup includes vegetables such as bok choy, broccoli, collard greens, dark green leafy lettuce, kale, mesclun, mustard greens, romaine lettuce, spinach, turnip greens, and watercress;

(B) *Red/orange vegetables subgroup.* This subgroup includes vegetables such as acorn squash, butternut squash, carrots, pumpkin, tomatoes, tomato juice, and sweet potatoes;

(C) *Beans, peas, and lentils vegetable subgroup.* This subgroup includes vegetables such as black beans, black-eyed peas (mature, dry), garbanzo beans (chickpeas), kidney beans, lentils, navy beans pinto beans, soy beans, split peas, and white beans;

(D) *Starchy vegetables subgroup.* This subgroup includes vegetables such as black-eyed peas (not dry), corn, cassava, green bananas, green peas, green lima beans, plantains, taro, water chestnuts, and white potatoes; and

(E) *Other vegetables subgroup.* This subgroup includes all other fresh, frozen, and canned vegetables, cooked or raw, such as artichokes, asparagus, avocado, bean sprouts, beets, Brussels sprouts, cabbage, cauliflower, celery, cucumbers, eggplant, green beans, green peppers, iceberg lettuce, mushrooms, okra, onions, parsnips, turnips, wax beans, and zucchini.

(iv) *Grains component.* Schools must offer grains daily as part of the lunch menu.

(A) *Whole grain-rich requirement.* Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched. At least 80

percent of grains offered at lunch weekly must meet the whole grain-rich criteria specified in FNS guidance, and the remaining grain items offered must be enriched.

(B) *Daily and weekly servings.* The grains component is based on minimum daily servings plus total servings over a 5-day school week. Schools serving lunch 6 or 7 days per week must increase the weekly grains quantity by approximately 20 percent (⅕) for each additional day. When schools operate less than 5 days per week, they may decrease the weekly quantity by approximately 20 percent (⅕) for each day less than 5. The servings for biscuits, rolls, muffins, and other grain/bread varieties are specified in FNS guidance.

(C) *Desserts.* Schools may count up to two grain-based desserts per week towards meeting the grains requirement at lunch as specified in FNS guidance.

(D) *Breakfast cereals.* Effective SY 2025–2026, breakfast cereals must contain no more than 6 grams of added sugars per dry ounce.

(v) *Fluid milk component.* Fluid milk must be offered daily in accordance with paragraph (d) of this section.

(3) *Grain substitutions.* Schools in American Samoa, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands, and tribally operated schools, schools operated by the Bureau of Indian Education, and schools serving primarily American Indian or Alaska Native children, may serve vegetables such as breadfruit, prairie turnips, plantains, sweet potatoes, and yams to meet the grains component.

(4) *Adjustments to the school menus.* Schools must adjust future menu cycles to reflect production and how often the food items are offered. Schools may need to change the foods offerings given students' selections and may need to modify recipes and other specifications to make sure that meal requirements are met.

(5) *Standardized recipes.* All schools must develop and follow standardized recipes. A standardized recipe is a recipe that was tested to provide an established yield and quantity using the same ingredients for both measurement and preparation methods. Standardized recipes developed by USDA/FNS are in the Child Nutrition Database. If a school has its own recipes, they may seek assistance from the State agency or school food authority to standardize the recipes. Schools must add any local recipes to their local database as outlined in FNS guidance.

(6) *Processed foods.* The Child Nutrition Database includes a number of processed foods. Schools may use purchased processed foods that are not in the Child Nutrition Database. Schools or the State agency must add any locally purchased processed foods to their local database as outlined in FNS guidance. The State agencies must obtain the levels of calories, saturated fat, added sugars, and sodium in the processed foods.

(7) *Traditional foods.* Traditional foods may credit towards the required meal components in accordance with FNS guidance. Schools are encouraged to serve traditional foods as part of their lunch and afterschool snack service. Per the Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)) traditional foods means ''food that has traditionally been prepared and consumed by an [American] Indian tribe,'' including wild game meat; fish; seafood; marine mammals; plants; and berries.

(d) *Fluid milk requirements*—(1) *Types of fluid milk.* (i) Schools must offer students a variety (at least two different options) of fluid milk. All milk must be fat-free (skim) or low-fat (1 percent fat or less). Milk with higher fat content is not allowed. Low-fat or fat-free lactose-free and reduced-lactose fluid milk may also be offered.

(ii) All fluid milk served in the Program must be pasteurized fluid milk which meets State and local standards for such milk. All fluid milk must have vitamins A and D at levels specified by the Food and Drug Administration and must be consistent with State and local standards for such milk.

Alternative A for Paragraph (d)(1)(iii)

(iii) For grades K–8, milk varieties must be unflavored, effective SY 2025–2026. For grades 9–12, milk varieties may be unflavored or flavored, provided that unflavored milk is offered at each meal service. Effective SY 2025–2026, flavored milk must contain no more than 10 grams of added sugars per 8 fluid ounces, or for flavored milk sold as competitive food for high schools, 15 grams of added sugars per 12 fluid ounces.

Alternative B for Paragraph (d)(1)(iii)

(iii) Milk varieties may be unflavored or flavored, provided that unflavored milk is offered at each meal service. Effective SY 2025–2026, flavored milk must contain no more than 10 grams of added sugars per 8 fluid ounces, or for flavored milk sold as competitive food for middle and high schools, 15 grams of added sugars per 12 fluid ounces.

(2) *Fluid milk substitutes in non-disability situations.* Schools may make substitutions for fluid milk for students who cannot consume fluid milk due to a medical or other special dietary need that is not a disability. A school that selects this option may offer the non-dairy beverage(s) of its choice, provided the beverage(s) meet the nutritional standards established in paragraph (d)(2)(ii) of this section. For disability-related meal modifications, see paragraph (m) of this section.

(i) Prior to providing a fluid milk substitute for a non-disability reason, a school must obtain a written request from the student's parent or guardian, or from a medical authority, identifying the reason for the substitution. A school food authority must inform the State agency if any schools choose to offer fluid milk substitutes for non-disability reasons.

(ii) If a school chooses to offer one or more fluid milk substitutes for non-disability reasons, the non-dairy beverage(s) must provide the nutrients listed in the following table. Fluid milk substitutes must be fortified in accordance with fortification guidelines issued by the Food and Drug Administration. A school need only offer the non-dairy beverage(s) that it has identified as allowable fluid milk substitutes according to the following chart.

TABLE 2 TO PARAGRAPH (d)(2)(ii)—NUTRIENT REQUIREMENTS FOR FLUID MILK SUBSTITUTES

Nutrient	Per cup (8 fl. oz.)
Calcium	276 mg.
Protein	8 g.
Vitamin A	500 IU.
Vitamin D	100 IU.
Magnesium	24 mg.
Phosphorus	222 mg.
Potassium	349 mg.
Riboflavin	0.44 mg.
Vitamin B–12	1.1 mcg.

(iii) Any expenses that exceed program reimbursements incurred when providing fluid milk substitutes must be paid by the school food authority.

(iv) The fluid milk substitute approval must remain in effect until the student's parent or guardian, or medical authority, revokes the request in writing, or until the school changes its fluid milk substitute policy.

(3) *Inadequate fluid milk supply.* If a school cannot get a supply of fluid milk, it can still participate in the Program under the following conditions:

(i) If emergency conditions temporarily prevent a school that normally has a supply of fluid milk from obtaining delivery of such milk, the State agency may allow the school to serve meals during the emergency

period with an alternate form of fluid milk or without fluid milk.

(ii) If a school is unable to obtain a supply of any type of fluid milk on a continuing basis, the State agency may approve the service of meals without fluid milk if the school uses an equivalent amount of canned milk or dry milk in the preparation of the meals. In Alaska, American Samoa, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands, if a sufficient supply of fluid milk cannot be obtained, ''fluid milk'' includes reconstituted or recombined fluid milk, or as otherwise allowed by FNS through a written exception.

(4) *Restrictions on the sale of fluid milk.* A school participating in the Program, or a person approved by a school participating in the Program, must not directly or indirectly restrict the sale or marketing of fluid milk (as identified in paragraph (d)(1) of this section) at any time or in any place on school premises or at any school-sponsored event.

(e) *Offer versus serve for grades K through 12.* School lunches must offer daily the five meal components specified in the meal pattern in paragraph (c) of this section. Under offer versus serve, students must be allowed to decline two components at lunch, *except that* the students must select at least ½ cup of either the fruit or vegetable component. Senior high schools (as defined by the State educational agency) must participate in offer versus serve. Schools below the senior high level may participate in offer versus serve at the discretion of the school food authority.

(f) *Dietary specifications*—(1) *Calories.* School lunches offered to each age/grade group must meet, on average over the school week, the minimum and maximum calorie levels specified in the following table:

TABLE 3 TO PARAGRAPH (f)(1)—NATIONAL SCHOOL LUNCH PROGRAM CALORIE RANGES

	Grades K–5	Grades 6–8	Grades 9–12
Minimum-Maximum Calories (kcal) [1]	550–650	600–700	750–850

[1] The average daily amount for a 5-day school week must fall within the minimum and maximum levels. Discretionary sources of calories may be added to the meal pattern if within the dietary specifications.

(2) *Saturated fat.* School lunches offered to all age/grade groups must, on average over the school week, provide less than 10 percent of total calories from saturated fat.

(3) *Added sugars.* Effective SY 2027–2028, school lunches offered to all age/grade groups must, on average over the school week, provide less than 10 percent of total calories from added sugars.

(4) *Sodium.* School lunches offered to each age/grade group must meet, on average over the school week, the levels of sodium specified in the following table within the established deadlines:

TABLE 4 TO PARAGRAPH (f)(4)—NATIONAL SCHOOL LUNCH PROGRAM SODIUM LIMITS

Age/grade group	Sodium limit: effective July 1, 2025 (mg)	Sodium limit: effective July 1, 2027 (mg)	Sodium limit: effective July 1, 2029 (mg)
Grades K–5	≤1,000	≤900	≤810
Grades 6–8	≤1,105	≤990	≤895
Grades 9–12	≤1,150	≤1,035	≤935

(5) *Trans fat.* Food products and ingredients used to prepare school meals must contain zero grams of *trans* fat (less than 0.5 grams) per serving. Schools must add the *trans* fat specification and request the required documentation (nutrition label or manufacturer specifications) in their procurement contracts. Documentation for food products and food ingredients must indicate zero grams of trans fat per serving. Meats that contain a minimal amount of naturally occurring *trans* fats are allowed in the school meal programs.

* * * * *

(h) * * *

(1) *Calories, saturated fat, added sugars, and sodium.* When required by the administrative review process set forth in § 210.18, the State agency must conduct a weighted nutrient analysis to evaluate the average levels of calories, saturated fat, added sugars, and sodium of the lunches offered to students in grades K–12 during one week of the review period. The nutrient analysis must be conducted in accordance with the procedures established in paragraph (i)(3) of this section. If the results of the nutrient analysis indicate that the school lunches are not meeting the specifications for calories, saturated fat, added sugars, and sodium specified in paragraph (f) of this section, the State agency or school food authority must provide technical assistance and require the reviewed school to take corrective action to meet the requirements.

* * * * *

(o) *Afterschool snacks.* Eligible schools operating afterschool care programs may be reimbursed for one afterschool snack served to a child (as defined in § 210.2) per day.

(1) *Eligible schools* means schools that:

(i) Operate the National School Lunch Program; and

(ii) Sponsor afterschool care programs as defined in § 210.2.

(2) *Afterschool snack requirements for preschool and school-aged children.* Schools serving afterschool snacks to preschool and school-aged children must offer the meal components and quantities required in the snack meal pattern established for the Child and Adult Care Food Program for preschool or school-aged children, as applicable, under § 226.20(a), (c)(3), and (d) of this chapter. In addition, schools serving afterschool snacks must comply with the requirements set forth in paragraphs (a), (c)(3), (4), and (7), (d)(2) through (4), (g), and (m) of this section.

TABLE 5 TO PARAGRAPH (o)(2)—AFTERSCHOOL SNACK MEAL PATTERN FOR PRESCHOOL AND SCHOOL-AGED CHILDREN

[Select two of the five components for a reimbursable snack]

Meal components and food items [1]	Minimum quantities			
	Ages 1–2	Ages 3–5	Ages 6–12	Ages 13–18 [2]
Fluid milk	4 fluid ounces [3]	4 fluid ounces [4]	8 fluid ounces [5]	8 fluid ounces.[5]
Protein sources [6]	½ ounce equivalent	½ ounce equivalent	1 ounce equivalent	1 ounce equivalent.
Vegetables [7]	½ cup	½ cup	¾ cup	¾ cup.
Fruits [7]	½ cup	½ cup	¾ cup	¾ cup.
Grains [8]	½ ounce equivalent	½ ounce equivalent	1 ounce equivalent	1 ounce equivalent.

[1] Must serve two of the five components for a reimbursable afterschool snack. Milk and juice may not be served as the only two items in a reimbursable snack.
[2] May need to serve larger portions to children ages 13 through 18 to meet their nutritional needs.
[3] Must serve unflavored whole milk to children age 1.
[4] Must serve unflavored milk to children ages 5 and younger. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.
[5] May serve unflavored or flavored milk to children ages 6 and older. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.
[6] Alternate protein products must meet the requirements in Appendix A to Part 226 of this Chapter. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). Refer to FNS guidance for crediting different types of protein source items.
[7] Juice must be pasteurized. Full-strength juice may only be used to meet the vegetable or fruit requirement at one meal or snack, per day.
[8] Must serve at least one whole grain-rich serving, across all eating occasions, per day. Grain-based desserts may not be used to meet the grains requirement. Breakfast cereal must have no more than 6 grams of added sugars per dry ounce. Refer to FNS guidance for crediting different types of grain items.

(3) *Afterschool snack requirements for infants*—(i) *Afterschool snacks served to infants.* Schools serving afterschool snacks to infants ages birth through 11 months must serve the meal components and quantities required in the snack meal pattern established for the Child and Adult Care Food Program, under § 226.20(a), (b), and (d) of this chapter. In addition, schools serving afterschool snacks to infants must comply with the requirements set forth in paragraphs (a), (c)(3), (4), and (7), (g), and (m) of this section.

(ii) *Infant afterschool snack meal pattern table.* The minimum amounts of meal components to be served at snack are as follows:

TABLE 6 TO PARAGRAPH (o)(3)(ii)—INFANT AFTERSCHOOL SNACK MEAL PATTERN

Birth through 5 months	6 through 11 months
4–6 fluid ounces of breastmilk [1] or formula [2]	2–4 fluid ounces breastmilk [1] or formula; [2] and 0–½ ounce equivalent bread; [3 4] or 0–¼ ounce equivalent crackers; [3 4] or 0–½ ounce equivalent infant cereal; [2 4] or 0–¼ ounce equivalent ready-to-eat breakfast cereal; [3 4 5 6] and 0–2 tablespoons vegetable or fruit, or a combination of both.[6 7]

[1] Breastmilk or formula, or portions of both, must be served; however, it is recommended that breastmilk be served in place of formula from birth through 11 months. For some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding, a serving of less than the minimum amount of breastmilk may be offered, with additional breastmilk offered at a later time if the infant will consume more.
[2] Infant formula and dry infant cereal must be iron-fortified.
[3] A serving of grains must be whole grain-rich, enriched meal, or enriched flour.
[4] Refer to FNS guidance for additional information on crediting different types of grain items.
[5] Breakfast cereals must contain no more than 6 grams of added sugars per dry ounce.
[6] A serving of this component is required when the infant is developmentally ready to accept it.
[7] Fruit and vegetable juices must not be served.

(4) *Monitoring afterschool snacks.* Compliance with the requirements of this paragraph is monitored by the State agency as part of the administrative review conducted under § 210.18. If the snacks offered do not meet the requirements of this paragraph, the State agency or school food authority must provide technical assistance and require corrective action. In addition, the State agency must take fiscal action, as authorized in §§ 210.18(l) and 210.19(c).

(p) *Lunch requirements for preschoolers*—(1) *Lunches served to preschoolers.* Schools serving lunches to children ages 1 through 4 under the National School Lunch Program must serve the meal components and quantities required in the lunch meal pattern established for the Child and Adult Care Food Program, under § 226.20(a), (c)(2), and (d) of this chapter. In addition, schools serving lunches to this age group must comply with the requirements set forth in paragraphs (a), (c)(3), (4), and (7), (d)(2) through (4), (g), (k), (l), and (m) of this section.

(2) *Preschooler lunch meal pattern table.* The minimum amounts of meal components to be served at lunch are as follows:

TABLE 7 TO PARAGRAPH (p)(2)—PRESCHOOL LUNCH MEAL PATTERN

[Select the appropriate components for a reimbursable meal]

Meal components and food items [1]	Minimum quantities	
	Ages 1–2	Ages 3–5
Fluid milk	4 fluid ounces [2]	6 fluid ounces.[3]
Protein sources [4]	1 ounce equivalent	1½ ounce equivalents.
Vegetables [5]	⅛ cup	¼ cup.
Fruits [5]	⅛ cup	¼ cup.
Grains [6]	½ ounce equivalent	½ ounce equivalent.

[1] Must serve all five components for a reimbursable meal. Offer versus serve is an option for at-risk afterschool care centers.
[2] Must serve unflavored whole milk to children age 1.
[3] Must serve unflavored milk to children ages 5 and younger. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.
[4] Alternate protein products must meet the requirements in Appendix A to Part 226 of this Chapter. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). Refer to FNS guidance for crediting different types of protein source items.
[5] Juice must be pasteurized. Full-strength juice may only be used to meet the vegetable or fruit requirement at one meal or snack, per day. A vegetable may be used to meet the entire fruit requirement. When two vegetables are served at lunch or supper, two different kinds of vegetables must be served.
[6] Must serve at least one whole grain-rich serving, across all eating occasions, per day. Grain-based desserts may not be used to meet the grains requirement. Breakfast cereal must have no more than 6 grams of added sugars per dry ounce. Refer to FNS guidance for crediting different types of grain items.

(q) *Lunch requirements for infants*—(1) *Lunches served to infants.* Schools serving lunches to infants ages birth through 11 months under the National School Lunch Program must serve the meal components and quantities required in the lunch meal pattern established for the Child and Adult Care Food Program, under § 226.20(a), (b), and (d) of this chapter. In addition, schools serving lunches to infants must comply with the requirements set forth in paragraphs (a), (c)(3), (4), and (7), (g), (l), and (m) of this section.

(2) *Infant lunch meal pattern table.* The minimum amounts of meal components to be served at lunch are as follows:

TABLE 8 TO PARAGRAPH (q)(2)—INFANT LUNCH MEAL PATTERN

Birth through 5 months	6 through 11 months
4–6 fluid ounces breastmilk [1] or formula [2]	6–8 fluid ounces breastmilk [1] or formula; [2] and 0–½ ounce equivalent infant cereal; [2 3] or 0–4 tablespoons meat, fish, poultry, whole egg, cooked dry beans, or cooked dry peas; or 0–2 ounces of cheese; or 0–4 ounces (volume) of cottage cheese; or 0–4 ounces or ½ cup of yogurt; [4] or a combination of the above; [5] and 0–2 tablespoons vegetable or fruit, or a combination of both.[5 6]

[1] Breastmilk or formula, or portions of both, must be served; however, it is recommended that breastmilk be served in place of formula from birth through 11 months. For some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding, a serving of less than the minimum amount of breastmilk may be offered, with additional breastmilk offered at a later time if the infant will consume more.
[2] Infant formula and dry infant cereal must be iron-fortified.
[3] Refer to FNS guidance for additional information on crediting different types of grain items.
[4] Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce).
[5] A serving of this component is required when the infant is developmentally ready to accept it.
[6] Fruit and vegetable juices must not be served.

(r) *Severability.* If any provision of this section promulgated through the final rule, ''Child Nutrition Programs: Revisions to Meal Patterns Consistent with the 2020 Dietary Guidelines for Americans'' (FNS–2020–0038; RIN 0584–AE88) is held to be invalid or unenforceable by its terms, or as applied to any person or circumstances, it shall be severable from this section and not affect the remainder thereof. In the event of such holding of invalidity or unenforceability of a provision, the meal pattern standard covered by that provision reverts to the version that immediately preceded the changes promulgated through the aforementioned final rule.

■ 9. In § 210.11:
■ a. Revise paragraph (a)(3);
■ b. Add paragraph (a)(7);
■ c. Revise paragraph (f)(2)
■ d. In paragraph (i), remove the phrase ''Effective July 1, 2016, these'' and add in its place the word ''These'';
■ e. Revise paragraph (m); and
d. Remove paragraph (n).

The revisions and addition read as follows:

§ 210.11 Competitive food service and standards.

(a) * * *

(3) *Entrée item* means an item that is intended as the main dish in a reimbursable meal and is either:

(i) A combination food of a protein source and a grain;

(ii) A combination food of a vegetable or fruit and a protein source; or

(iii) A protein source alone with the exception of yogurt, low-fat or reduced fat cheese, nuts, seeds and nut or seed butters, and meat snacks (such as dried beef jerky); or

(iv) A grain only entrée that is served as the main dish in a school breakfast.

* * * * *

(7) *Hummus* means, for the purpose of competitive food standards implementation, a spread made from ground pulses (beans, peas, and lentils), and ground nut/seed butter (such as tahini [ground sesame], peanut butter,

etc.) mixed with a vegetable oil (such as olive oil, canola oil, soybean oil, etc.), seasoning (such as salt, citric acid, etc.), and vegetables and juice for flavor (such as olives, roasted pepper, garlic, lemon juice, etc.). Manufactured hummus may also contain certain ingredients necessary as preservatives and/or to maintain freshness.

* * * * *

(f) * * *

(2) *Exemptions to the total fat requirement.* (i) Seafood with no added fat is exempt from the total fat requirement, but subject to the saturated fat, *trans* fat, sugar, calorie, and sodium standards.

(ii) Hummus (as defined in paragraph (a)(7) of this section), is exempt from the total fat standard, but subject to the saturated fat, *trans* fat, sugar, calorie, and sodium standards. This exemption does not apply to combination products that contain hummus with other ingredients such as crackers, pretzels, pita, manufactured, snack-type vegetable and/or fruit sticks, etc.

* * * * *

(m) *Beverages*—(1) *Elementary schools.* Allowable beverages for elementary school-aged students are limited to:

(i) Plain water or plain carbonated water (no size limit);

(ii) Milk and fluid milk substitutes that meet the standards outlined in § 210.10(d)(1) and (2) (no more than 8 fluid ounces); and

(iii) One hundred (100) percent fruit/vegetable juice, and 100 percent fruit and/or vegetable juice diluted with water, with or without carbonation and with no added sweeteners (no more than 8 fluid ounces).

(2) *Middle schools.* Allowable beverages for middle school-aged students are limited to:

(i) Plain water or plain carbonated water (no size limit);

(ii) Milk and fluid milk substitutes that meet the standards outlined in § 210.10(d)(1) and (2) (no more than 12 fluid ounces); and

(iii) One hundred (100) percent fruit/vegetable juice, and 100 percent fruit and/or vegetable juice diluted with water, with or without carbonation and with no added sweeteners (no more than 12 fluid ounces).

(3) *High schools.* Allowable beverages for high school-aged students are limited to:

(i) Plain water or plain carbonated water (no size limit);

(ii) Milk and fluid milk substitutes that meet the standards outlined in § 210.10(d)(1) and (2) (no more than 12 fluid ounces);

(iii) One hundred (100) percent fruit/vegetable juice, and 100 percent fruit and/or vegetable juice diluted with water, with or without carbonation and with no added sweeteners (no more than 12 fluid ounces);

(iv) Calorie-free, flavored water, with or without carbonation (no more than 20 fluid ounces);

(v) Other beverages that are labeled to contain less than 5 calories per 8 fluid ounces, or less than or equal to 10 calories per 20 fluid ounces (no more than 20 fluid ounces); and

(vi) Other beverages that are labeled to contain no more than 40 calories per 8 fluid ounces or 60 calories per 12 fluid ounces (no more than 12 fluid ounces).

§ 210.12 [Amended]

■ 10. In 210.12, paragraph (e), remove ''§ 210.30(d)'' and add in its place ''§ 210.31(d)''.

§ 210.14 [Amended]

■ 11. In § 210.14:

■ a. In paragraph (e) introductory text, remove the phrase ''beginning July 1, 2011'';

■ b. In paragraph (e)(5)(ii)(D), remove the phrase ''after July 1, 2011'';

■ c. Remove paragraph (e)(6)(iii); and

■ d. In paragraph (f) introductory text, remove the phrase ''Beginning July 1, 2011, school'' and add in its place the word ''School''.

§ 210.15 [Amended]

■ 12. In 210.15, in paragraph (b)(9), remove ''§ 210.30(f)'' and add in its place ''§ 210.31(f)''.

§ 210.18 [Amended]

■ 13. In § 210.18:

■ a. In the paragraph (g)(2)(i) heading, remove the words ''Food components'' and add in their place the words ''Meal components'';

■ b. In paragraph (g)(2)(i)(A)(*1*), remove the term ''meat/meat alternates'' and add in its place the words ''protein sources'';

■ c. In paragraph (g)(2)(i)(B)(*1*), remove the term ''food components/items'' and add in its place the term ''meal components/items'';

■ d. In paragraphs (g)(2)(i)(B)(*2*), remove the words ''food components'' and add in their place the words ''meal components'';

■ e. In paragraph (h)(2)(x), remove ''§ 210.30'' and add in its place ''§ 210.31''; and

■ f. In paragraph (l)(2)(iv) introductory text, remove the phrase ''calorie, saturated fat, sodium, and trans fat'' and add in its place the word ''the''.

§ 210.19 [Amended]

■ 14. In § 210.19:

■ a. In paragraph (c)(4), remove the word ''leter'' and add in its place the word ''letter''; and

■ b. In paragraph (f), remove the phrase ''The first list shall be provided by March 15, 1997; subsequent lists shall'' and add in its place the phrase ''The lists must'' and remove the word ''shall'' each time it appears and add in its place the word ''must''.

§ 210.20 [Amended]

■ 15. In § 210.20:

■ a. Remove paragraphs (a)(6) and (7) and redesignate paragraphs (a)(8) and (9) as paragraphs (a)(6) and (7), respectively; and

■ b. Remove paragraph (b)(10) and redesignate paragraphs (b)(11) through (14) as paragraphs (b)(10) through (13), respectively.

■ 16. In § 210.21, revise paragraphs (d) and (g)(1) to read as follows:

§ 210.21 Procurement.

* * * * *

(d) *Buy American*—(1) *Definitions.* For the purpose of this paragraph:

(i) ''Domestic commodity or product'' means:

(A) An agricultural commodity that is produced in the United States; and

(B) A food product that is processed in the United States substantially using agricultural commodities that are produced in the United States.

(ii) ''Substantially using agriculture commodities that are produced in the United States'' means over 51 percent of a food product must consist of agricultural commodities that were grown domestically.

(2) *In general.* Subject to paragraph (d)(4) of this section, a school food authority must purchase, to the maximum extent practicable, domestic commodities or products.

(3) *Required language.* School food authorities must include language requiring the purchase of foods that meet the Buy American requirements in paragraph (d)(1) of this section in all procurement procedures, solicitations, and contracts.

(4) *Limitations.* Paragraphs (d)(2) and (3) of this section shall apply only to:

(i) A school food authority located in the contiguous United States; and

(ii) A purchase of domestic commodity or product for the school lunch program under this part.

(5) *Exceptions.* The purchase of foods not meeting the definition of paragraph (d)(1) of this section is only permissible when the following criteria are met:

(i) The school food authority determines that one of the following limited exceptions is met:

(A) The product is not produced or manufactured in the United States in

sufficient and reasonably available quantities of a satisfactory quality; or

(B) Competitive bids reveal the costs of a United States product is significantly higher than the non-domestic product.

(ii) Food purchases not meeting the definition of paragraph (d)(1) of this section do not exceed a 5 percent annual threshold of total commercial food purchases a school food authority purchases per school year, when use of domestic foods is truly not practicable.

(iii) School food authorities maintain documentation to demonstrate that when utilizing an exception under (d)(5)(i) of this section their non-domestic food purchases do not exceed the 5 percent annual threshold.

(6) *Harvested fish.* To meet the definition of a domestic commodity or product, harvested fish must meet the following requirements:

(i) Farmed fish must be harvested within the United States or any territory or possession of the United States; and

(ii) Wild caught fish must be harvested within the Exclusive Economic Zone of the United States or by a United States flagged vessel.

(7) *Applicability to Hawaii.* Paragraph (d)(2) of this section applies to a school food authority in Hawaii with respect to domestic commodities or products that are produced in Hawaii in sufficient quantities to meet the needs of meals provided under the school lunch program under this part.

* * * * *

(g) * * *

(1) A school food authority participating in the Program, as well as State agencies making purchases on behalf of such school food authorities, may apply a geographic preference when procuring unprocessed locally grown or locally raised agricultural products, including the use of ''locally grown'', ''raised'', or ''caught'' as procurement specifications or selection criteria for unprocessed or minimally processed food items. When utilizing the geographic preference to procure such products, the school food authority making the purchase or the State agency making purchases on behalf of such school food authorities have the discretion to determine the local area to which the geographic preference option will be applied, so long as there are an appropriate number of qualified firms able to compete;

* * * * *

§ 210.23 [Amended]

■ 17. In § 210.23, in paragraph (a), wherever it appears, remove the words ''meal supplements'' and add in their place the words ''afterschool snacks''.

■ 18. In § 210.29, revise paragraph (d)(3) introductory text to read as follows:

§ 210.29 Management evaluations.

* * * * *

(d)* * *

(3) *School food authority appeal of FNS findings.* When administrative or follow-up review activity conducted by FNS in accordance with the provisions of paragraph (d)(2) of this section results in the denial of all or part of a Claim for Reimbursement or withholding of payment, a school food authority may appeal the FNS findings by filing a written request with the Food and Nutrition Service in accordance with the appeal procedures specified in this paragraph:

* * * * *

■ 19. In § 210.30:

■ a. In paragraphs (b)(1)(i)(A) through (C), (b)(1)(ii)(A), (B), and (D) and (b)(1)(iii)(A) and (B), add the phrase ''as determined by the State agency,'' after the phrase ''or equivalent educational experience,'';

■ b. Remove paragraph (b)(1)(i)(E);

■ c. Revise paragraph (b)(1)(iv);

■ d. Remove paragraph (b)(2), redesignate paragraph (b)(3) as paragraph (b)(2), and revise newly redesignated paragraph (b)(2); and

■ e. Revise paragraphs (c) introductory text, (d) introductory text, and (e).

The revisions read as follows:

§ 210.30 School nutrition program professional standards.

* * * * *

(b)* * *

(1)* * *

(iv) *Exceptions to the hiring standards.* (A) For a local educational agency with less than 500 students, the State agency may approve the hire of a director who meets one of the educational criteria in paragraphs (b)(1)(i)(B) through (D) of this section but has less than the required years of relevant food service experience.

(B) For a local educational agency with 2,500 to 10,000 students, the State agency may approve the hire of a director who does not meet the educational criteria in paragraphs (b)(1)(ii)(A) through (D) or paragraphs (b)(1)(iii)(A) through (C) of this section, as applicable, but who has at least 10 years of school nutrition program experience.

(C) Acting school nutrition program directors are not required to meet the hiring standards established in paragraph (b)(1) of this section; however, the State agency may require acting school nutrition program directors expected to serve for more than 30 business days to meet the hiring standards established in established in paragraph (b)(1).

* * * * *

(2) *Continuing education/training standards for all school nutrition program directors.* Each school year, the school food authority must ensure that all school nutrition program directors, (including acting directors, at the discretion of the State agency) complete 12 hours of annual continuing education/training. The annual training must include, but is not limited to, administrative practices (including training in application, certification, verification, meal counting, and meal claiming procedures), as applicable, and any other specific topics identified by FNS, as needed, to address Program integrity or other critical issues. Continuing education/training required under this paragraph is in addition to the food safety training required in the first year of employment under paragraph (b)(1)(v) of this section.

(c) *Continuing education/training standards for all school nutrition program managers.* Each school year, the school food authority must ensure that all school nutrition program managers have completed 10 hours of annual continuing education/training. The annual training must include, but is not limited to, the following topics, as applicable:

* * * * *

(d) *Continuing education/training standards for all staff with responsibility for school nutrition programs.* Each school year, the school food authority must ensure that all staff with responsibility for school nutrition programs that work an average of at least 20 hours per week, other than school nutrition program directors and managers, completes 6 hours of annual training in areas applicable to their job. Part-time staff working an average of less than 20 hours per week must complete 4 hours of annual training. The annual training must include, but is not limited to, the following topics, as applicable to their position and responsibilities:

* * * * *

(e) *Summary of required minimum continued education/training standards and flexibilities.* Program managers, directors, and staff hired on or after January 1 of each school year must complete half of their required annual training hours before the end of the school year. At the discretion of the State agency:

(1) Acting and temporary staff, substitutes, and volunteers must complete training in one or more of the topics listed in paragraph (d) of this

section, as applicable, within 30 calendar days of their start date; and

(2) School nutrition program personnel may carry over excess annual training hours to an immediately previous or subsequent school year and demonstrate compliance with the training requirements over a period of two school years, provided that some training hours are completed each school year.

TABLE 1 TO PARAGRAPH (e): SUMMARY OF REQUIRED ANNUAL TRAINING

School Nutrition Program Directors	Each year, at least 12 hours of annual education/training. Includes topics such as: • Administrative practices (including training in application, certification, verification, meal counting, and meal claiming procedures). • Any specific topics required by FNS, as needed, to address Program integrity and other critical issues. This required continuing education/training is in addition to the food safety training required in the first year of employment, or for all school nutrition program directors if determined by the State agency.
School Nutrition Program Managers	Each year, at least 10 hours of annual education/training. Includes topics such as: • Administrative practices (including training in application, certification, verification, meal counting, and meal claiming procedures). • The identification of reimbursable meals at the point of service. • Nutrition, health, and safety standards. • Any specific topics required by FNS, as needed, to address Program integrity or other critical issues.
School Nutrition Program Staff	Each year, at least 6 hours of annual education/training. Includes topics such as: • Free and reduced price eligibility. • Application, certification, and verification procedures. • The identification of reimbursable meals at the point of service. • Nutrition, health, and safety standards. • Any specific topics required by FNS, as needed, to address Program integrity or other critical issues. This requirement applies to staff, other than directors and managers, who work at least 20 hours per week.

* * * * *

PART 215—SPECIAL MILK PROGRAM FOR CHILDREN

■ 20. The authority citation for part 215 continues to read as follows:

Authority: 42 U.S.C. 1772 and 1779.

■ 21. In § 215.14a, revise paragraph (e) to read as follows:

§ 215.14a Procurement standards.

* * * * *

(e) *Geographic preference.* A school food authority participating in the Program may apply a geographic preference when procuring milk, including the use of ''locally grown'', ''raised'', or ''caught'' as procurement specifications or selection criteria for unprocessed or minimally processed food items. When utilizing the geographic preference to procure milk, the school food authority making the purchase has the discretion to determine the local area to which the geographic preference option will be applied, so long as there are an appropriate number of qualified firms able to compete.

PART 220—SCHOOL BREAKFAST PROGRAM

■ 22. The authority citation for part 220 continues to read as follows:

Authority: 42 U.S.C. 1773, 1779, unless otherwise noted.

■ 23. In § 220.2:

■ a. In the definition of ''Breakfast'', remove ''§§ 220.8 and 220.23,'' and add in its place ''§ 220.8'';

■ b. Remove the definition of ''CND'';

■ c. In the definition of ''Department'', remove ''U.S.'' and add in its place ''United States'';

■ d. Revise the definitions of ''Distributing agency'' and ''Fiscal year'';

■ e. In the definition of ''FNS'', remove the phrase ''Service of the Department'' and add in its place ''Service, United States Department of Agriculture'';

■ f. In the definition of ''FNSRO'', remove the phrase ''appropriate Food and Nutrition Service'' and add in its place ''appropriate'';

■ g. Add in alphabetical order a definition for ''Food item'';

■ h. Revise the definition of ''Free breakfast'';

■ i. Add in alphabetical order a definition for ''Meal component'';

■ j. Remove the definitions of ''Menu item'';

■ k. Remove the second definition of ''Nonprofit'';

■ l. Remove the definitions of ''Nutrient Standard Menu Planning/Assisted Nutrient Standard Menu Planning'', ''OA'', and ''OI'';

■ m. Revise the definitions of ''Reduced price breakfast'' and ''Reimbursement'';

■ n. In the definition of ''School'', remove the last two sentences in paragraph (3);

■ o. Revise the definition of ''School Food Authority'' and designate it in proper alphabetical order;

■ p. In the definition of ''School week'' remove ''and § 220.23'';

■ q. Revise the definition of ''State agency'';

■ r. In the definition of ''Tofu'', remove the term ''meats/meat alternates'' and add in its place words ''protein sources'';

■ s. Add in alphabetical order a definition for ''Whole grain-rich'';

■ t. In the definition of ''Whole grains'', remove the last sentence; and

■ u. Revise the definition of ''Yogurt''.

The additions and revisions read as follows:

§ 220.2 Definitions.

* * * * *

Distributing Agency means a State agency which enters into an agreement with the Department for the distribution to schools of donated foods pursuant to part 250 of this chapter.

Fiscal year means a period of 12 calendar months beginning on October

1 of any year and ending September 30 of the following year.

* * * * *

Food item means a specific food offered within a meal component.

Free breakfast means a breakfast served under the Program to a child from a household eligible for such benefits under 7 CFR part 245 and for which neither the child nor any member of the household pays or is required to work.

* * * * *

Meal component means one of the food groups which comprise reimbursable meals. The meal components are: protein sources, grains, vegetables, fruits, and fluid milk.

* * * * *

Reduced price breakfast means a breakfast served under the Program:

(1) To a child from a household eligible for such benefits under 7 CFR part 245

(2) For which the price is less than the school food authority designated full price of the breakfast and which does not exceed the maximum allowable reduced price specified under 7 CFR part 245; and

(3) For which neither the child nor any member of the household is required to work.

Reimbursement means Federal cash assistance including advances paid or payable to participating schools for breakfasts meeting the requirements of § 220.8 served to eligible children.

* * * * *

School food authority means the governing body which is responsible for the administration of one or more schools; and has legal authority to operate the Program therein *or* be otherwise approved by FNS to operate the Program.

* * * * *

State agency means:

(1) The State educational agency;

(2) Such other agency of the State as has been designated by the Governor or other appropriate executive or legislative authority of the State and approved by the Department to administer the Program in schools as specified in § 210.3(b); or

(3) The FNSRO, where the FNSRO administers the Program as specified in § 210.3(c).

* * * * *

Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.

* * * * *

Yogurt means commercially prepared coagulated milk products obtained by the fermentation of specific bacteria, that meet milk fat or milk solid requirements and to which flavoring foods or ingredients may be added. These products are covered by the Food and Drug Administration's Definition and Standard of Identity for yogurt, 21 CFR 131.200, and low-fat yogurt and non-fat yogurt covered as a standardized food under 21 CFR 130.10.

§ 220.3 [Amended]

■ 24. In § 220.3, in paragraph (a), remove the last sentence.

■ 25. In § 220.7:

■ a. In paragraph (d)(3)(iii), remove the words ''food component'' and add in their place the words ''meal component'';

■ b. In paragraph (e)(1)(iii), remove the word ''contruct'' and add in its place the word ''construct'';

■ c. In paragraph (e)(2), remove the phrase '', during a period designated as the breakfast period by the school'';

■ d. Revise paragraph (e)(4);

■ e. In paragraph (e)(5), remove the word ''his'' and add in its place the words ''the child's'' and remove the word ''of'' and add in its place the word ''for'';

■ f. In paragraph (e)(9) remove the phrase '', or the CFPDO, where applicable'';

■ g. In paragraph (e)(13), remove the phrase '', to FNS and to OA'' and add in its place the words ''and to FNS''; and

■ h. In paragraph (h), remove ''§ 210.30'' and add in its place ''§ 210.31''.

The revision reads as follows:

§ 220.7 Requirements for participation.

* * * * *

(e) * * *

(4) Serve breakfast free or at a reduced price to all children who are determined by the local education agency to be eligible for such meals under part 245 of this section;

* * * * *

■ 26. In § 220.8:

■ a. In paragraph (a)(2), remove the word ''lunch'' and add in its place the word ''breakfast'';

■ b. In paragraphs (a)(3) and (b)(1)(i) and (iii), remove the words ''food components'' and add in their place the words ''meal components'';

■ c. Revise paragraphs (b)(2) and (c) through (f);

■ d. In paragraph (g), remove the phrase ''for calorie, saturated fat, sodium, and *trans* fat'';

■ e. In paragraphs (h)(1), (i), and (j), wherever it appears, remove the term ''saturated fat,'' and add in its place the phrase ''saturated fat, added sugars,'';

■ f. Revise paragraphs (o) and (p); and

■ g. Add paragraph (q).

The revisions and addition read as follows:

§ 220.8 Meal requirements for breakfasts.

* * * * *

(b) * * *

(2) Over a 5-day school week:

(i) Average calorie content of the meals offered to each age/grade group must be within the minimum and maximum calorie levels specified in paragraph (f) of this section;

(ii) Average saturated fat content of the meals offered to each age/grade group must be less than 10 percent of total calories as specified in paragraph (f) of this section;

(iii) Average added sugars content of the meals offered to each age/grade group must be less than 10 percent of total calories as specified in paragraph (f) of this section; and

(iv) Average sodium content of the meals offered to each age/grade group must not exceed the maximum level specified in paragraph (f) of this section.

(c) *Meal pattern for school breakfasts for grades K through 12.* A school must offer the meal components and quantities required in the breakfast meal pattern established in the following table:

TABLE 1 TO PARAGRAPH (c) INTRODUCTORY TEXT: SCHOOL BREAKFAST PROGRAM MEAL PATTERN

Meal components	Grades K–5	Grades 6–8	Grades 9–12
			Amount of food [1] per week (minimum per day)
Fruits (cups) [2]	5 (1)	5 (1)	5 (1)
Vegetables (cups) [2]	0	0	0

TABLE 1 TO PARAGRAPH (c) INTRODUCTORY TEXT: SCHOOL BREAKFAST PROGRAM MEAL PATTERN—Continued

Meal components	Grades K–5	Grades 6–8	Grades 9–12
			Amount of food [1] per week (minimum per day)
Dark Green Subgroup	0	0	0
Red/Orange Subgroup	0	0	0
Beans, Peas, and Lentils Subgroup	0	0	0
Starchy Subgroup	0	0	0
Other Vegetables Subgroup	0	0	0
Grains (oz. eq) [3]	7–10 (1)	8–10 (1)	9–10 (1)
Protein Sources (oz. eq) [4]	0	0	0
Fluid Milk (cups) [5]	5 (1)	5 (1)	5 (1)
Dietary Specifications: Daily Amount Based on the Average for a 5-Day Week [6]			
Minimum-Maximum Calories (kcal)	350–500	400–550	450–600
Saturated Fat (% of total calories)	<10	<10	<10
Added Sugars (% of total calories)	<10	<10	<10
Sodium Limit: Effective July 1, 2025 (mg)	≤485	≤540	≤575
Sodium Limit: Effective July 1, 2027 (mg)	≤435	≤485	≤520
Trans Fat	Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.		

[1] Food items included in each group and subgroup and amount equivalents.

[2] Minimum creditable serving is ⅛ cup. Schools must offer 1 cup of fruit daily and 5 cups of fruit weekly. Schools may substitute vegetables for fruit at breakfast. Schools that substitute vegetables for fruits at breakfast more than one day per school week must offer vegetables from a variety of subgroups. One quarter cup of dried fruit counts as ½ cup of fruit; 1 cup of leafy greens counts as ½ cup of vegetables. No more than half of the fruit or vegetable offerings may be in the form of juice. All juice must be 100 percent full-strength.

[3] Minimum creditable serving is 0.25 oz. eq. At least 80 percent of grains offered weekly must meet the whole grain-rich criteria specified in FNS guidance, and the remaining grain items offered must be enriched.

[4] Minimum creditable serving is 0.25 oz. eq. There is no protein sources requirement; however, schools may substitute 1 oz. eq. of protein sources for 1 oz. eq. of grains after the minimum daily grains requirement is met.

[5] Minimum creditable serving is 8 fluid ounces. All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less) and must meet the requirements in paragraph (d) of this section.

[6] Effective SY 2027–2028, schools must meet the dietary specification for added sugars. Schools must meet the sodium limits by the dates specified in this chart. Discretionary sources of calories may be added to the meal pattern if within the dietary specifications.

(1) *Age/grade groups.* Schools must plan menus for students using the following age/grade groups: Grades K–5 (ages 5–10), grades 6–8 (ages 11–13), and grades 9–12 (ages 14–18). If an unusual grade configuration in a school prevents the use of the established age/grade groups, students in grades K–5 and grades 6–8 may be offered the same food quantities at breakfast provided that the calorie and sodium standards for each age/grade group are met. No customization of the established age/grade groups is allowed.

(2) *Meal components.* Schools must offer students in each age/grade group the meal components specified in meal pattern in paragraph (c). Meal component descriptions in § 210.10 of this chapter apply to this Program.

(i) *Protein sources component.* Schools are not required to offer protein sources as part of the breakfast menu. Schools may substitute protein sources for grains, after the daily grains requirement is met, to meet the weekly grains requirement. One ounce equivalent of protein sources is equivalent to one ounce equivalent of grains.

(A) *Enriched macaroni.* Enriched macaroni with fortified protein as defined in appendix A to part 210 of this chapter may be used to meet part of the protein sources requirement when used as specified in appendix A to part 210.

(B) *Nuts and seeds.* Nuts and seeds and their butters are allowed as protein sources in accordance with program guidance. Acorns, chestnuts, and coconuts may not be used because of their low protein and iron content. Nut and seed meals or flours may be used only if they meet the requirements for Alternate Protein Products established in appendix A to this part.

(C) *Yogurt.* Yogurt may be used to meet all or part of the protein sources component. Yogurt may be plain or flavored, unsweetened or sweetened. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). Noncommercial and/or non-standardized yogurt products, such as frozen yogurt, drinkable yogurt products, homemade yogurt, yogurt flavored products, yogurt bars, yogurt covered fruits and/or nuts or similar products are not creditable. Four ounces (weight) or ½ cup (volume) of yogurt equals one ounce of the protein sources requirement.

(D) *Tofu and soy products.* Commercial tofu and soy products may be used to meet all or part of the protein sources component in accordance with FNS guidance. Noncommercial and/or non-standardized tofu and products are not creditable.

(E) *Beans, peas, and lentils.* Cooked dry beans, peas, and lentils may be used to meet all or part of the protein sources component. Beans, peas, and lentils are identified in this section and include foods such as black beans, garbanzo beans, lentils, kidney beans, mature lima beans, navy beans, pinto beans, and split peas.

(F) *Other protein sources.* Other protein sources, such as cheese and eggs, may be used to meet all or part of the protein sources component in accordance with FNS guidance.

(ii) *Fruits component.* Schools must offer daily the fruit quantities specified in the breakfast meal pattern in paragraph (c) of this section. Fruits that are fresh; frozen without added sugar; canned in light syrup, water or fruit juice; or dried may be offered to meet

the fruits component requirements. Vegetables may be offered in place of all or part of the required fruits at breakfast. Schools that substitute vegetables for fruits at breakfast more than one day per school week must offer vegetables from a variety of subgroups. All fruits are credited based on their volume as served, except that ¼ cup of dried fruit counts as ½ cup of fruit. Only pasteurized, full-strength fruit juice may be used, and may be credited to meet no more than one-half of the fruit component.

(iii) *Vegetables component.* Schools are not required to offer vegetables as part of the breakfast menu but may offer vegetables to meet part or all of the fruit requirement. Schools that substitute vegetables for fruits at breakfast more than one day per school week must offer vegetables from a variety of subgroups. Fresh, frozen, or canned vegetables and dry beans, peas, or lentils may be offered to meet the fruit requirement. All vegetables are credited based on their volume as served, except that 1 cup of leafy greens counts as ½ cup of vegetables and tomato paste and tomato puree are credited based on calculated volume of the whole food equivalency. Pasteurized, full-strength vegetable juice may be used to meet no more than one-half of the vegetable component. Cooked dry beans, peas, or lentils may be counted as either a vegetable or as a protein source but not as both in the same meal.

(iv) *Grains component.* Schools are required to offer grains daily as part of the breakfast menu.

(A) *Whole grain-rich requirement.* Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched. At least 80 percent of grains offered at lunch weekly must meet the whole grain-rich criteria specified in FNS guidance, and the remaining grain items offered must be enriched.

(B) *Daily and weekly servings.* The grains component is based on minimum daily servings plus total servings over a 5-day school week. Schools serving breakfast 6 or 7 days per week must increase the weekly grains quantity by approximately 20 percent (⅕) for each additional day. When schools operate less than 5 days per week, they may decrease the weekly quantity by approximately 20 percent (⅕) for each day less than 5. The servings for biscuits, rolls, muffins, and other grain/bread varieties are specified in FNS guidance.

(C) *Desserts.* Schools may count up two grain-based desserts per week towards meeting the grains requirement at breakfast as specified in FNS guidance.

(D) *Breakfast cereals.* Effective SY 2025–2026, breakfast cereals must contain no more than 6 grams of added sugars per dry ounce.

(E) *Substituting protein sources for grains at breakfast.* Schools may substitute protein sources for grains, after the daily grains requirement is met, to meet the weekly grains requirement. One ounce equivalent of a protein source is equivalent to one ounce equivalent of grains.

(v) *Fluid milk component.* Fluid milk must be offered daily in accordance with paragraph (d) of this section.

(3) *Grain substitutions.* Schools in American Samoa, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands, and tribally operated schools, schools operated by the Bureau of Indian Education, and schools serving primarily American Indian or Alaska Native children, may serve vegetables such as breadfruit, prairie turnips, plantains, sweet potatoes, and yams to meet the grains component.

(4) *Traditional foods.* Traditional foods may credit towards the required meal components in accordance with FNS guidance. Schools are encouraged to serve traditional foods as part of their breakfast service. Per the Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)) traditional foods means ''food that has traditionally been prepared and consumed by an [American] Indian tribe,'' including wild game meat; fish; seafood; marine mammals; plants; and berries.

Alternative A for Paragraph (d)

(d) *Fluid milk requirements.* Breakfast must include a serving of fluid milk as a beverage or on cereal or used in part for each purpose. Schools must offer students a variety (at least two different options) of fluid milk. All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less). Milk with higher fat content is not allowed. Low-fat or fat-free lactose-free and reduced-lactose fluid milk may also be offered. For grades K–8, milk varieties must be unflavored, effective SY 2025–2026. For grades 9–12, milk varieties may be unflavored or flavored, provided that unflavored milk is offered at each meal service. Effective SY 2025–2026, flavored milk must contain no more than 10 grams of added sugars per 8 fluid ounces, or for flavored milk sold as competitive food for high schools, 15 grams of added sugars per 12 fluid ounces. Schools must also comply with other applicable fluid milk requirements in § 210.10(d) of this chapter.

Alternative B for Paragraph (d)

(d) *Fluid milk requirements.* Breakfast must include a serving of fluid milk as a beverage or on cereal or used in part for each purpose. Schools must offer students a variety (at least two different options) of fluid milk. All fluid milk must be fat-free (skim) or low-fat (1 percent fat or less). Milk with higher fat content is not allowed. Low-fat or fat-free lactose-free and reduced-lactose fluid milk may also be offered. Milk may be flavored or unflavored, provided that unflavored milk is offered at each meal service. Effective SY 2025–2026, flavored milk must contain no more than 10 grams of added sugars per 8 fluid ounces, or for flavored milk sold as competitive food for middle and high schools, 15 grams of added sugars per 12 fluid ounces. Schools must also comply with other applicable fluid milk requirements in § 210.10(d) of this chapter.

(e) *Offer versus serve for grades K through 12.* School breakfast must offer daily at least the three meal components required in the meal pattern in paragraph (c) of this section. To exercise the offer versus serve option at breakfast, a school food authority or school must offer a minimum of four food items daily as part of the required components. Under offer versus serve, students are allowed to decline one of the four food items, provided that students select at least ½ cup of the fruit component for a reimbursable meal. If only three food items are offered at breakfast, school food authorities or schools may not exercise the offer versus serve option.

(f) *Dietary specifications*—(1) *Calories.* School breakfasts offered to each age/grade group must meet, on average over the school week, the minimum and maximum calorie levels specified in the following table:

TABLE 2 TO PARAGRAPH (f)(1)—SCHOOL BREAKFAST PROGRAM CALORIE RANGES

	Grades K–5	Grades 6–8	Grades 9–12
Minimum-Maximum Calories (kcal) [1]	350–500	400–550	450–600

[1] The average daily amount for a 5-day school week must fall within the minimum and maximum levels. Discretionary sources of calories may be added to the meal pattern if within the dietary specifications.

(2) *Saturated fat.* School breakfast offered to all age/grade groups must, on average over the school week, provide less than 10 percent of total calories from saturated fat.

(3) *Added sugars.* Effective SY 2027–2028, school breakfasts offered to all age/grade groups must, on average over the school week, provide less than 10 percent of total calories from added sugars.

(4) *Sodium.* School breakfasts offered to each age/grade group must meet, on average over the school week, the levels of sodium specified in the following table within the established deadlines:

TABLE 3 TO PARAGRAPH (f)(4)—SCHOOL BREAKFAST PROGRAM SODIUM LIMITS

Age/grade group	Sodium limit: effective July 1, 2025 (mg)	Sodium limit: effective July 1, 2027 (mg)
Grades K–5	≤485	≤435
Grades 6–8	≤540	≤485
Grades 9–12	≤575	≤520

(5) *Trans fat.* Food products and ingredients used to prepare school meals must contain zero grams of *trans* fat (less than 0.5 grams) per serving. Schools must add the *trans* fat specification and request the required documentation (nutrition label or manufacturer specifications) in their procurement contracts. Documentation for food products and food ingredients must indicate zero grams of trans fat per serving. Meats that contain a minimal amount of naturally-occurring *trans* fats are allowed in the school meal programs.

* * * * *

(o) *Breakfast requirements for preschoolers*—(1) *Breakfasts served to preschoolers.* Schools serving breakfast to children ages 1 through 4 under the School Breakfast Program must serve the meal components and quantities required in the breakfast meal pattern established for the Child and Adult Care Food Program under § 226.20(a), (c)(1), and (d) of this chapter. In addition, schools serving breakfasts to this age group must comply with the requirements set forth in paragraphs (a), (c)(3), (g), (k), (l), and (m) of this section as applicable.

(2) *Preschooler breakfast meal pattern table.* The minimum amounts of meal components to be served at breakfast are as follows:

TABLE 4 TO PARAGRAPH (o)(2)—PRESCHOOL BREAKFAST MEAL PATTERN

[Select the appropriate components for a reimbursable meal]

Meal components and food items [1]	Minimum quantities	
	Ages 1–2	Ages 3–5
Fluid Milk [2]	4 fluid ounces	6 fluid ounces
Vegetables, Fruits, or portions of both [3]	¼ cup	½ cup
Grains (oz. eq.) [4]	½ ounce equivalent	½ ounce equivalent

[1] Must serve all three components for a reimbursable meal.

[2] Must be unflavored whole milk for children age one. Must be unflavored low-fat (1 percent) or unflavored fat-free (skim) milk for children two through five years old.

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

[4] At least one serving per day, across all eating occasions, must be whole grain-rich. Grain-based desserts do not count towards meeting the grains requirement. Protein sources may take the place of the entire grains requirement, up to 3 times per week at breakfast. One ounce equivalent of a protein source is equal to one ounce equivalent of grains. A serving of breakfast cereal must have no more than 6 grams of added sugars per dry ounce. Refer to FNS guidance for additional information on crediting different types of grain items and different types of protein source items.

(p) *Breakfast requirements for infants*—(1) *Breakfasts served to infants.* Schools serving breakfasts to infants ages birth through 11 months under the School Breakfast Program must serve the meal components and quantities required in the breakfast meal pattern established for the Child and Adult Care Food Program, under § 226.20(a), (b), and (d) of this chapter. In addition, schools serving breakfasts to infants must comply with the requirements set forth in paragraphs (a), (c)(3), (g), (k), (l), and (m) of this section as applicable.

(2) *Infant breakfast meal pattern table.* The minimum amounts of meal components to be served at breakfast are as follows:

TABLE 5 TO PARAGRAPH (p)(2)—INFANT BREAKFAST MEAL PATTERN

Birth through 5 months	6 through 11 months
4–6 fluid ounces breastmilk[1] or formula[2]	6–8 fluid ounces breastmilk[1] or formula;[2] and
	0–½ ounce equivalent infant cereal;[2 3] or
	0–4 tablespoons meat, fish, poultry, whole egg, cooked dry beans, or cooked dry peas; or
	0–2 ounces of cheese; or
	0–4 ounces (volume) of cottage cheese; or
	0–4 ounces or ½ cup of yogurt;[4] or a combination of the above;[5] and
	0–2 tablespoons vegetable or fruit, or a combination of both.[5 6]

[1] Breastmilk or formula, or portions of both, must be served; however, it is recommended that breastmilk be served in place of formula from birth through 11 months. For some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding, a serving of less than the minimum amount of breastmilk may be offered, with additional breastmilk offered at a later time if the infant will consume more.
[2] Infant formula and dry infant cereal must be iron-fortified.
[3] Refer to FNS guidance for additional information on crediting different types of grain items.
[4] Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce).
[5] A serving of this component is required when the infant is developmentally ready to accept it.
[6] Fruit and vegetable juices must not be served.

(q) *Severability.* If any provision of this section promulgated through the final rule, ''Child Nutrition Programs: Revisions to Meal Patterns Consistent with the 2020 Dietary Guidelines for Americans'' (FNS–2020–0038; RIN 0584–AE88) is held to be invalid or unenforceable by its terms, or as applied to any person or circumstances, it shall be severable from this section and not affect the remainder thereof. In the event of such holding of invalidity or unenforceability of a provision, the meal pattern standard covered by that provision reverts to the version immediately preceding the changes promulgated through the aforementioned final rule.

■ 27. In § 220.13:

■ a. Revise paragraph (b)(3);

■ b. In paragraph (c), remove ''or OI'';

■ c. In paragraph (f)(3), remove ''§§ 220.8 and 220.23'' and add in its place ''§ 220.8''; and

■ d. Remove paragraph (l) and redesignate paragraph (m) as paragraph (l).

The revision reads as follows:

§ 220.13 Special responsibilities of State agencies.

* * * * *

(b) * * *

(3) Each State agency must keep the records supplied by school food authorities showing the number of food safety inspections obtained by schools for the current and three most recent school years.

* * * * *

§ 220.14 [Amended]

■ 28. In § 220.14:

■ a. In paragraph (c), remove the phrase ''CND through the FNSRO'' and add in its place the term ''FNS''; and

■ b. In paragraph (e), remove the term ''CND'' wherever it appears and add in its place the term ''FNS''.

■ 29. In § 220.16, revise paragraphs (d) and (f) to read as follows:

§ 220.16 Procurement standards.

* * * * *

(d) *Buy American*—(1) *Definitions.* For the purpose of this paragraph:

(i) *Domestic commodity or product* means:

(A) An agricultural commodity that is produced in the United States; and

(B) A food product that is processed in the United States substantially using agricultural commodities that are produced in the United States.

(ii) *Substantially using agriculture commodities that are produced in the United States* means over 51 percent of a food product must consist of agricultural commodities that were grown domestically.

(2) *In general.* Subject to paragraph (d)(4) of this section, a school food authority must purchase, to the maximum extent practicable, domestic commodities or products.

(3) *Required language.* School food authorities must include language requiring the purchase of foods that meet the Buy American requirements in paragraph (d)(1) of this section in all procurement procedures, solicitations, and contracts.

(4) *Limitations.* Paragraphs (d)(2) and (3) of this section shall apply only to:

(i) A school food authority located in the contiguous United States; and

(ii) A purchase of domestic commodity or product for the school breakfast program under this part.

(5) *Exceptions.* The purchase of foods not meeting the definition of paragraph (d)(1) of this section is only permissible when the following criteria are met:

(i) The school food authority determines that one of the following limited exceptions are met:

(A) The product is not produced or manufactured in the United States in sufficient and reasonably available quantities of a satisfactory quality; or

(B) Competitive bids reveal the costs of a United States product is significantly higher than the non-domestic product.

(ii) Food purchases not meeting the definition of paragraph (d)(1) of this section do not exceed a 5 percent annual threshold of total commercial food purchases a school food authority purchases per school year, when use of domestic foods is truly not practicable;

(iii) School food authorities maintain documentation to demonstrate that when utilizing an exception under (d)(5)(i) of this section their non-domestic food purchases do not exceed the 5 percent annual threshold.

(6) *Harvested fish.* To meet the definition of a domestic commodity or product, harvested fish must meet the following requirements:

(i) Farmed fish must be harvested within the United States or any territory or possession of the United States; and

(ii) Wild caught fish must be harvested within the Exclusive Economic Zone of the United States or by a United States flagged vessel.

(7) *Applicability to Hawaii.* Paragraph (d)(2) of this section applies to a school food authority in Hawaii with respect to domestic commodities or products that are produced in Hawaii in sufficient quantities to meet the needs of meals provided under the school breakfast program under this part.

* * * * *

(f) *Geographic preference.* (1) School food authorities participating in the Program, as well as State agencies making purchases on behalf of such school food authorities, may apply a geographic preference when procuring unprocessed locally grown or locally raised agricultural products, including the use of ''locally grown'', ''raised'', or ''caught'' as procurement specifications

or selection criteria for unprocessed or minimally processed food items. When utilizing the geographic preference to procure such products, the school food authority making the purchase or the State agency making purchases on behalf of such school food authorities have the discretion to determine the local area to which the geographic preference option will be applied, so long as there are an appropriate number of qualified firms able to compete;

PART 225—SUMMER FOOD SERVICE PROGRAM

■ 30. The authority citation for part 225 continues to read as follows:

Authority: Secs. 9, 13 and 14, Richard B. Russell National School Lunch Act, as amended (42 U.S.C. 1758, 1761 and 1762a).

■ 31. In § 225.16, revise paragraphs (d)(2), (e)(5), and (f)(3) to read as follows:

§ 225.16 Meal service requirements.

* * * * *

(d) * * *

(2) *Lunch or supper.* The minimum amounts of meal components to be served as lunch or supper are as follows:

TABLE 2 TO PARAGRAPH (d)(2)—LUNCH OR SUPPER MEAL PATTERN

Meal components	Minimum amount
Meats and Meat Alternates	
Lean meat or poultry or fish or	2 ounces.
Alternate protein products [1] or	2 ounces.
Cheese or	2 ounces.
Egg (large) or	1.
Cooked dry beans or peas or	½ cup.[2]
Peanut butter or soynut butter or other nut or seed butters or	4 tablespoons.
Peanuts or soynuts or tree nuts or seeds [3] or	2 ounces.
Yogurt, plain or flavored, unsweetened or sweetened or an equivalent quantity of any combination of the above meat/meat alternates.	8 ounces or 1 cup.
Vegetables and Fruits	
Vegetables and/or fruits [4]	¾ cup total.
Bread and Bread Alternatives [5]	
Bread or	1 slice.
Cornbread, biscuits, rolls, muffins, etc. or	1 serving.[6]
Cooked pasta or noodle products or	½ cup.
Cooked cereal grains or an equivalent quantity of any combination of bread or bread alternate.	½ cup.
Milk	
Milk, fluid, served as a beverage	1 cup (½ pint, 8 fluid ounces).

[1] Must meet the requirements of appendix A of this part.
[2] For the purposes of the requirement outlined in this table, a cup means a standard measuring cup.
[3] Tree nuts and seeds that may be used as meat alternate are listed in program guidance.
[4] Serve 2 or more kinds of vegetable(s) and/or fruits or a combination of both. Full strength vegetable or fruit juice may be counted to meet not more than one-half of this requirement.
[5] Bread, pasta or noodle products, and cereal grains (such as rice, bulgur, or corn grits) shall be whole-grain or enriched; cornbread, biscuits, rolls, muffins, etc., shall be made with whole-grain or enriched meal or flour; cereal shall be whole-grain, enriched or fortified.
[6] Serving sizes and equivalents will be in guidance materials to be distributed by FNS to State agencies.

* * * * *

(e) * * *

(5) *Nuts and seeds.* Nuts and seeds and their butters are allowed as meat alternates in accordance with FNS guidance. Acorns, chestnuts, and coconuts may not be used as meat alternates due to their low protein content. Nut and seed meals or flours may be used only if they meet the requirements for alternate protein products established in appendix A of this part.

(f) * * *

(3) *Bread and bread alternative substitutions.* In American Samoa, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands, and for sponsors in any State that serve primarily American Indian or Alaska Native children, vegetables such as breadfruit, prairie turnips, plantains, sweet potatoes, and yams may be served to meet the bread and bread alternatives requirement.

* * * * *

■ 32. In § 225.17, revise paragraph (e)(1) to read as follows:

§ 225.17 Procurement standards.

* * * * *

(e) * * *

(1) Sponsors participating in the Program may apply a geographic preference when procuring unprocessed locally grown or locally raised agricultural products, including the use of ''locally grown'', ''raised'', or ''caught'' as procurement specifications or selection criteria for unprocessed or minimally processed food items. When utilizing the geographic preference to procure such products, the sponsor making the purchase has the discretion to determine the local area to which the geographic preference option will be applied, so long as there are an appropriate number of qualified firms able to compete;

* * * * *

PART 226—CHILD AND ADULT CARE FOOD PROGRAM

■ 33. The authority citation for part 226 continues to read as follows:

Authority: Secs. 9, 11, 14, 16, and 17, Richard B. Russell National School Lunch Act, as amended (42 U.S.C. 1758, 1759a, 1762a, 1765 and 1766).

■ 34. In § 226.2, add in alphabetical order a definition for ''Whole grain-rich'' to read as follows:

§ 226.2 Definitions.

* * * * *

Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.

* * * * *

■ 35. In § 226.20:

■ a. Revise paragraphs (a), (c), and (f);

■ b. In paragraph (o)(1)(i)(A), remove the words ''meat or meat alternates'' and add in their place the words ''protein sources'';

■ c. In paragraphs (o)(1)(i)(B) and (C) and (o)(1)(ii) remove the words ''food components'' and add in their place the words ''meal components'' and remove the words ''meat or meat alternate'' and add in their place the words ''protein sources''; and

■ d. Add paragraph (q).

The revisions and addition read as follows:

§ 226.20 Requirements for meals.

(a) *Meal components.* Except as otherwise provided in this section, each meal served in the Program must contain, at a minimum, the indicated components:

(1) *Fluid milk.* Fluid milk must be served as a beverage or on cereal, or a combination of both, as follows:

(i) *Children 1 year old.* Unflavored whole milk must be served.

(ii) *Children 2 through 5 years old.* Unflavored low-fat (1 percent) or unflavored fat-free (skim) milk must be served.

(iii) *Children 6 years old and older.* Low-fat (1 percent fat or less) or fat-free (skim) milk must be served. Milk may be unflavored or flavored.

(iv) *Adults.* Low-fat (1 percent fat or less) or fat-free (skim) milk must be served. Milk may be unflavored or flavored. Six ounces (weight) or ¾ cup (volume) of yogurt may be used to fulfill the equivalent of 8 ounces of fluid milk once per day. Yogurt may be counted as either a fluid milk substitute or as a protein source, but not as both in the same meal.

(2) *Vegetables.* A serving may contain fresh, frozen, or canned vegetables; dry beans, peas, or lentils; or vegetable juice. All vegetables are credited based on their volume as served, except that 1 cup of leafy greens counts as ½ cup of vegetables.

(i) Pasteurized, full-strength vegetable juice may be used to fulfill the entire requirement. Vegetable juice or fruit juice may only be served at one meal, including snack, per day.

(ii) Cooked dry beans, peas, or lentils may be counted as either a vegetable or as a protein source, but not as both in the same meal.

(3) *Fruits.* A serving may contain fresh, frozen, canned, dried fruits, or fruit juice. All fruits are based on their volume as served, except that ¼ cup of dried fruit counts as ½ cup of fruit.

(i) Pasteurized, full-strength fruit juice may be used to fulfill the entire requirement. Fruit juice or vegetable juice may only be served at one meal, including snack, per day.

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

(4) *Grains*—(i) *Enriched and whole grains.* All grains must be made with enriched or whole grain meal or flour.

(A) At least one serving per day, across all eating occasions of bread, cereals, and grains, must be whole grain-rich, as specified in FNS guidance. Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.

(B) A serving may contain whole grain-rich or enriched bread, cornbread, biscuits, rolls, muffins, and other bread products; or whole grain-rich, enriched, or fortified cereal grain, cooked pasta or noodle products, or breakfast cereal; or any combination of these foods.

(ii) *Breakfast cereals.* Breakfast cereals are those as defined by the Food and Drug Administration in 21 CFR 170.3(n)(4) for ready-to-eat and instant and regular hot cereals. Breakfast cereals must contain no more than 6 grams of added sugars per dry ounce.

(iii) *Desserts.* Grain-based desserts do not count towards meeting the grains requirement.

(5) *Protein sources.* (i) Protein sources must be served in a main dish, or in a main dish and one other menu item. The creditable quantity of protein sources must be the edible portion as served of:

(A) Lean meat, poultry, or fish;

(B) Alternate protein products;

(C) Cheese;

(D) Egg;

(E) Cooked dry beans, peas, or lentils; or

(F) Any combination of these foods.

(ii) *Nuts and seeds.* Nuts and seeds and their butters are allowed as protein sources in accordance with FNS guidance.

(A) Nut and seed meals or flours may be used only if they meet the requirements for alternate protein products established in appendix A of this part.

(B) Acorns, chestnuts, and coconuts cannot be used as protein sources because of their low protein and iron content.

(iii) *Yogurt.* Four ounces (weight) or ½ cup (volume) of yogurt equals one ounce of the protein sources component. Yogurt may be used to meet all or part of the protein sources component as follows:

(A) Yogurt may be plain or flavored, unsweetened, or sweetened;

(B) Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce);

(C) Noncommercial or commercial standardized yogurt products, such as frozen yogurt, drinkable yogurt products, homemade yogurt, yogurt flavored products, yogurt bars, yogurt covered fruits or nuts, or similar products are not creditable; and

(D) For adults, yogurt may only be used as a protein source when it is not also being used as a fluid milk substitute in the same meal.

(iv) *Tofu and soy products.* Commercial tofu and soy products may be used to meet all or part of the protein sources component in accordance with FNS guidance and appendix A of this part. Non-commercial and non-standardized tofu and soy products cannot be used.

(v) *Beans, peas, and lentils.* Cooked dry beans, peas, and lentils may be used to meet all or part of the protein sources component. Beans, peas, and lentils include black beans, garbanzo beans, lentils, kidney beans, mature lima beans, navy beans, pinto beans, and split peas. Beans, peas, and lentils may be counted as either a protein source or as a vegetable, but not as both in the same meal.

(vi) *Other protein sources.* Other protein sources, such as cheese, eggs, and nut butters may be used to meet all or part of the protein sources component.

* * * * *

(c) *Meal patterns for children age 1 through 18 and adult participants.* Institutions and facilities must serve the meal components and quantities specified in the following meal patterns for children and adult participants in order to qualify for reimbursement.

(1) *Breakfast.* Fluid milk, vegetables or fruit, or portions of both, and grains are required components of the breakfast meal. Protein sources may be used to meet the entire grains requirement a maximum of three times per week. The minimum amounts of meal components to be served at breakfast are as follows:

TABLE 2 TO PARAGRAPH (c)(1)—CHILD AND ADULT CARE FOOD PROGRAM BREAKFAST

[Select the appropriate components for a reimbursable meal]

Meal components and food items [1]	Minimum quantities				
	Ages 1–2	Ages 3–5	Ages 6–12	Ages 13–18 [2]	Adult participants
Fluid Milk	4 fluid ounces [3]	6 fluid ounces [4]	8 fluid ounces [5]	8 fluid ounces [5]	8 fluid ounces.[6]
Vegetables, fruits, or portions of both [7].	¼ cup	½ cup	½ cup	½ cup	½ cup.
Grains [8]	½ ounce equivalent	½ ounce equivalent	1 ounce equivalent	1 ounce equivalent	2 ounce equivalents.

[1] Must serve all three components for a reimbursable meal. Offer versus serve is an option for at-risk afterschool care and adult day care centers.
[2] May need to serve larger portions to children ages 13 through 18 to meet their nutritional needs.
[3] Must serve unflavored whole milk to children age 1.
[4] Must serve unflavored milk to children ages 5 and younger. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.
[5] May serve unflavored or flavored milk to children ages 6 and older. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.
[6] May serve unflavored or flavored milk to adults. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less. Yogurt may take the place of milk once per day for adults. Yogurt may count as either a fluid milk substitute or as a protein source, but not both, in the same meal. Six ounces (by weight) or ¾ cup (by volume) of yogurt is the equivalent of 8 ounces of fluid milk. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce).
[7] Juice must be pasteurized. Full-strength juice may only be used to meet the vegetable or fruit requirement at one meal or snack, per day.
[8] Must serve at least one whole grain-rich serving, across all eating occasions, per day. Grain-based desserts may not be used to meet the grains requirement. Protein sources may take the place of the entire grains requirement, up to 3 times per week at breakfast. One ounce equivalent of protein sources is equal to one ounce equivalent of grains. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). A serving of breakfast cereal must have no more than 6 grams of added sugars per dry ounce. Refer to FNS guidance for crediting different types of grain items and different types of protein source items.

(2) *Lunch and supper.* Fluid milk, protein sources, vegetables, fruits, and grains are required components in the lunch and supper meals. The minimum amounts of meal components to be served at lunch and supper are as follows:

TABLE 3 TO PARAGRAPH (c)(2)—CHILD AND ADULT CARE FOOD PROGRAM LUNCH AND SUPPER

[Select the appropriate components for a reimbursable meal]

Meal components and food items [1]	Minimum quantities				
	Ages 1–2	Ages 3–5	Ages 6–12	Ages 13–18 [2]	Adult participants
Fluid milk	4 fluid ounces [3]	6 fluid ounces [4]	8 fluid ounces [5]	8 fluid ounces [5]	8 fluid ounces.[6]
Protein sources [7]	1 ounce equivalent	1½ ounce equivalents.	2 ounce equivalents	2 ounce equivalents	2 ounce equivalents.
Vegetables [8]	⅛ cup	¼ cup	½ cup	½ cup	½ cup.
Fruits [8]	⅛ cup	¼ cup	¼ cup	¼ cup	½ cup.
Grains [9]	½ ounce equivalent	½ ounce equivalent	1 ounce equivalent	1 ounce equivalent	2 ounce equivalents.

[1] Must serve all five components for a reimbursable meal. Offer versus serve is an option for at-risk afterschool care and adult day care centers.
[2] May need to serve larger portions to children ages 13 through 18 to meet their nutritional needs.
[3] Must serve unflavored whole milk to children age 1.
[4] Must serve unflavored milk to children ages 5 and younger. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.
[5] May serve unflavored or flavored milk to children ages 6 and older. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.
[6] May serve unflavored or flavored milk to adults. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less. Yogurt may take the place of milk once per day for adults. Yogurt may count as either a fluid milk substitute or as a protein source, but not both, in the same meal. Six ounces (by weight) or ¾ cup (by volume) of yogurt is the equivalent of 8 ounces of fluid milk. A serving of fluid milk is optional for suppers served to adult participants.
[7] Alternate protein products must meet the requirements in Appendix A to Part 226 of this Chapter. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). Refer to FNS guidance for crediting different types of protein source items.
[8] Juice must be pasteurized. Full-strength juice may only be used to meet the vegetable or fruit requirement at one meal or snack, per day. A vegetable may be used to meet the entire fruit requirement. When two vegetables are served at lunch or supper, two different kinds of vegetables must be served.
[9] Must serve at least one whole grain-rich serving, across all eating occasions, per day. Grain-based desserts may not be used to meet the grains requirement. Breakfast cereal must have no more than 6 grams of added sugars per dry ounce. Refer to FNS guidance for crediting different types of grain items.

(3) *Snack.* Serve two of the following five components: Fluid milk, protein sources, vegetables, fruits, and grains. Fruit juice, vegetable juice, and milk may comprise only one component of the snack. The minimum amounts of meal components to be served at snacks are as follows:

TABLE 4 TO PARAGRAPH (c)(3)—CHILD AND ADULT CARE FOOD PROGRAM SNACK

[Select two of the five components for a reimbursable snack]

Meal components and food items [1]	Minimum quantities				
	Ages 1–2	Ages 3–5	Ages 6–12	Ages 13–18 [2]	Adult participants
Fluid milk	4 fluid ounces [3]	4 fluid ounces [4]	8 fluid ounces [5]	8 fluid ounces [5]	8 fluid ounces.[6]
Protein sources [7]	½ ounce equivalent	½ ounce equivalent	1 ounce equivalent	1 ounce equivalent	1 ounce equivalent.
Vegetables [8]	½ cup	½ cup	¾ cup	¾ cup	½ cup.
Fruits [8]	½ cup	½ cup	¾ cup	¾ cup	½ cup.
Grains [9]	½ ounce equivalent	½ ounce equivalent	1 ounce equivalent	1 ounce equivalent	1 ounce equivalent.

[1] Must serve two of the five components for a reimbursable snack. Milk and juice may not be served as the only two items in a reimbursable snack.

[2] May need to serve larger portions to children ages 13 through 18 to meet their nutritional needs.

[3] Must serve unflavored whole milk to children age 1.

[4] Must serve unflavored milk to children ages 5 and younger. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.

[5] May serve unflavored or flavored milk to children ages 6 and older. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less.

[6] May serve unflavored or flavored milk to adults. The label on the milk must be fat-free, skim, low-fat, or 1 percent or less. Yogurt may take the place of milk, once per day for adults. Yogurt may count as either a fluid milk substitute or as a protein source, but not both, in the same meal. Six ounces (by weight) or ¾ cup (by volume) of yogurt is the equivalent of 8 ounces of fluid milk.

[7] Alternate protein products must meet the requirements in Appendix A to Part 226 of this Chapter. Yogurt must contain no more than 12 grams of added sugars per 6 ounces (2 grams of added sugars per ounce). Refer to FNS guidance for crediting different types of protein source items.

[8] Juice must be pasteurized. Full-strength juice may only be used to meet the vegetable or fruit requirement at one meal or snack, per day.

[9] Must serve at least one whole grain-rich serving, across all eating occasions, per day. Grain-based desserts may not be used to meet the grains requirement. Breakfast cereal must have no more than 6 grams of added sugar per dry ounce. Refer to FNS guidance for crediting different types of grain items.

* * * * *

(f) *Grain substitutions.* In American Samoa, Guam, Hawaii, Puerto Rico, and the U.S. Virgin Islands, and in institutions or facilities in any State that serve primarily American Indian or Alaska Native children, vegetables such as breadfruit, prairie turnips, plantains, sweet potatoes, and yams may be served to meet the grains requirement.

* * * * *

(q) *Severability.* If any provision of this section promulgated through the final rule, ''Child Nutrition Programs: Revisions to Meal Patterns Consistent with the 2020 Dietary Guidelines for Americans'' (FNS–2020–0038; RIN 0584–AE88) is held to be invalid or unenforceable by its terms, or as applied to any person or circumstances, it shall be severable from this section and not affect the remainder thereof. In the event of such holding of invalidity or unenforceability of a provision, the meal pattern standard covered by that provision reverts to the version that immediately preceded the changes promulgated through the aforementioned final rule.

■ 36. In § 226.22, revise paragraph (n)(1) to read as follows:

§ 226.22 Procurement.

* * * * *

(n) * * *

(1) Institutions participating in the Program may apply a geographic preference when procuring unprocessed locally grown or locally raised agricultural products, including the use of ''locally grown'', ''raised'', or ''caught'' as procurement specifications or selection criteria for unprocessed or minimally processed food items. When utilizing the geographic preference to procure such products, the institution making the purchase has the discretion to determine the local area to which the geographic preference option will be applied so long as there are an appropriate number of qualified firms able to compete;

* * * * *

Cynthia Long,

Administrator, Food and Nutrition Service.

Appendix

Note: This appendix will not appear in the Code of Regulations.

Regulatory Impact Analysis

Statement of Need

On February 7, 2022, the United States Department of Agriculture (USDA) published *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (referred to here as the transitional standards rule) [110] to support schools in their programs after over two years of serving meals during the COVID–19 pandemic. In the absence of the transitional standards rule, schools would have been expected to immediately meet standards established in the 2012 final rule, *Nutrition Standards in the National School Lunch and School Breakfast Programs.*[111] Those standards would have been difficult, if not impossible, for many schools to meet given the pandemic's impacts on the supply chain and the disruption to normal school food service operations. The transitional standards rule was meant to set interim, achievable nutrition standards until new standards could be implemented beginning in school year (SY) 2024–2025. This proposed rule is meant to align with the *Dietary Guidelines for Americans, 2020–2025,* [112] and as a result will continue to improve the health of meals and snacks served in child nutrition programs in the coming years. To develop the proposed rule, *Child Nutrition Programs: Revisions to Meal Patterns Consistent with the 2020 Dietary Guidelines for Americans,* USDA considered broad stakeholder input, including written comments received in response to the transitional standards rule and oral comments submitted during listening sessions, and a comprehensive review of the latest *Dietary Guidelines.* The proposed rule represents the next stage of the rulemaking process to permanently update and improve school meal pattern requirements. As with the transitional standards rule, this proposed rule includes a focus on sodium, whole grains, and milk; however, this proposed rule also includes a new focus on added sugars. Further, in addition to addressing these and other nutrition standards, this rulemaking proposes measures to strengthen the Buy American provision in the school meal programs and proposes a variety of other changes to school meal requirements. Updates for the Child and Adult Care Food Program (CACFP) and Summer Food Service Program (SFSP) are

[110] *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (87 FR 6984, February 7, 2022). Available at: *https://www.federalregister.gov/.*

[111] *Nutrition Standards in the National School Lunch and School Breakfast Programs* (77 FR 4088, January 26, 2012). Available at: *https://www.federalregister.gov/documents/2012/01/26/2012-1010/nutrition-standards-in-the-national-school-lunch-and-school-breakfast-programs.*

[112] U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020–2025. 9th Edition. December 2020. Available at *DietaryGuidelines.gov.*

also detailed within certain provisions of this proposed rule.

Background

The National School Lunch Program (NSLP) and School Breakfast Program (SBP) were established in 1946 and 1966, respectively. Both programs provide nutritionally balanced, and both affordable and no-cost meals to children in schools each day. From January 2019 through December 2019, prior to the pandemic, almost 5 billion lunches and 2.5 billion breakfasts were served through the NSLP and SBP.[113] The transitional standards rule, published in early 2022, finalized the *Restoration of Milk, Whole Grains, and Sodium Flexibilities Proposed Rule* that was published in late 2020. USDA also published an interim final rule and a final rule related to the milk, whole grains, and sodium standards in 2017 [114] and 2018,[115] respectively. Prior to these rules, school nutrition standards had not been updated since 2012 with the *Nutrition Standards in the National School Lunch and School Breakfast Programs Final Rule*. The 2012 rule focused on increasing fruit, vegetable, and whole grain offerings while reducing sodium, total calories, saturated fat, and trans-fat in school meals. Many components of the 2012 rule were successfully implemented; however, full implementation of the 2012 meal pattern requirements for milk, whole grains, and sodium was delayed due to legislative and administrative actions, including meal pattern waivers that were in place due to the COVID–19 pandemic.[116] The transitional standards rule, which took effect in SY 2022–2023, provided a middle ground between the 2012 standards for milk, whole grains, and sodium, and the meal pattern waivers that many schools relied on during the pandemic. This proposed rule builds on USDA's prior rulemaking to further align school meal nutrition standards with the goals of the *Dietary Guidelines, 2020–2025.*

Comments

USDA received approximately 30 comments on the economic summary from the transitional standards rule. Comments were centered around two topics:

- The challenges of sustaining a revenue-neutral program due to food and labor costs rising higher than is typical the last 2+ years, and
- The additional costs for manufacturers in product reformulation; respondents were particularly concerned about reformulation costs associated with meeting the transitional sodium standards.

Comments: Respondents noted the challenges of maintaining a revenue-neutral program while providing both healthy and tasty meals for school children during the COVID–19 pandemic and beyond. Multiple comments expressed concern regarding inflation and the rising costs of food, labor, and equipment. Respondents supported use of the higher Summer Food Service Program meal reimbursement rate during COVID–19 operations in SY 2021–2022. They argued the increased reimbursement rates at that time made it easier to provide healthy meals; however, respondents also expressed concern about returning to normal operations post-COVID.

USDA Response: USDA recognizes the challenges schools are facing and is proposing to phase in updated standards that USDA expects to be achievable in the current food environment. This proposed rule contains multiple standards that would be implemented incrementally over time, rather than implementing broader changes during SY 2024–2025. For instance, USDA is proposing to implement the third NSLP sodium limit in SY 2029–2030, five years after the anticipated effective date of the final rule.

Comments: Three comments discussed the need for recipe and product reformulation as a result of the transitional standards rule and future rules. These respondents assert that changes to school meal standards would potentially be costly for food service operators and manufacturers that produce foods and products to meet both USDA sodium limits and Food and Drug Administration (FDA) voluntary sodium reduction targets.

USDA Response: Data from the School Nutrition Meal Cost Study (SNMCS) suggest that, on average, in SY 2014–2015 schools at all grade levels were less than 50 mg away (per meal) from meeting the transitional standards rule sodium limits, including Target 1A (effective in SY 2023–2024) for the NSLP, and Target 1 (effective SY 2022–2023 and SY 2023–2024) for the SBP.[117] Product reformulation that occurred between 2015 and 2019 may have resulted in additional reduction of sodium content in school meals prior to the pandemic. USDA recognizes that in order to meet the sodium limits proposed in this rulemaking, additional recipe and product reformulation will need to occur over time. To that end, this rulemaking proposes alignment with the current short-term FDA voluntary sodium targets. Similar to the incremental approach taken by FDA, this rulemaking proposes a series of gradual sodium reductions of 10 percent each in school breakfasts and lunches from the weekly average sodium limits established in the transitional standards rule.[118] While the FDA guidance is designed to support a decrease of average daily sodium intake of 12 percent across almost all food groups, [119] it should be noted that there are some differences in the food categories addressed in FDA's voluntary sodium reduction goals and foods served in the school meal programs. Some foods served in school meal programs including milk, fruits, and fresh vegetables are not targeted by FDA for sodium reduction, but condiments/accompaniments and combination entrees are highly targeted. As a result of only certain foods being targeted that are served in school meals, a total reduction of 10 percent of menu sodium content is observed when applying the FDA goals to school menus. When simulating a reduction in sodium content for individual food items offered according to FDA's voluntary sodium reduction goals, the reduction overall from the previous sodium targets was 10 percent. The proposed weekly average sodium targets would allow time and space for a variety of sodium reduction practices including product reformulation, facility upgrades to increase scratch cooking, menu adjustments, changing the frequency of offering higher sodium foods, and recipe alterations. This rulemaking also proposes incremental sodium reduction over a period of five school years (from the proposed implementation date of the rule), giving time for these changes to be made by manufacturers and food service operations.

Summary of Impacts

The estimated impacts of this rulemaking reflect shifts in food purchases and labor resources incurred by schools for school meal production, as well as accounting for inflation. The analyses for this rulemaking provide the cost of moving from the 2022 transitional standards rule to this proposed rule that will likely begin to go into effect in SY 2024–2025, as well as the longer-term costs of moving to the standards in this rulemaking from current operations. USDA estimates this proposed rule would cost [120] schools between $0.03 and $0.04 per breakfast and lunch served [121] or between $220 and $274 million [122] annually including both the SBP and NSLP starting in SY 2024–2025, accounting for the fact that standards are going to be implemented gradually and

[113] USDA—Food and Nutrition Service, National Data Bank—Publicly available data.

[114] *Interim Final Rule: Child Nutrition Program Flexibilities for Milk, Whole Grains, and Sodium Requirements* (82 FR 56703, November 30, 2017). Available at: *https://www.federalregister.gov/documents/2017/11/30/2017-25799/child-nutrition-programs-flexibilities-for-milk-whole-grains-and-sodium-requirements.*

[115] *Child Nutrition Programs: Flexibilities for Milk, Whole Grains, and Sodium Requirements* (83 FR 63775, December 12, 2018). Available at: *https://www.federalregister.gov/documents/2018/12/12/2018-26762/child-nutrition-programs-flexibilities-for-milk-whole-grains-and-sodium-requirements.*

[116] See page 6986 of the transitional standards rule for an overview of legislative and administrative actions that prevented full implementation of the 2012 milk, whole grains, and sodium standards. *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (87 FR 6984, February 7, 2022). Available at: *https://www.federalregister.gov/*

[117] *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.*

[118] The sodium standards from the transitional standards rule are detailed in the 'Sodium' subsection of the 'Impacts' section below.

[119] *https://www.fda.gov/food/cfsan-constituent-updates/fda-issues-sodium-reduction-final-guidance.*

[120] Except where noted in the participation impacts, the terms ''costs'' and ''savings'' are used in this analysis to describe the school level shifts in food purchases and labor associated with school meal production.

[121] According to the School Nutrition Meal Cost Study (SNMCS) Report—Volume 3, the average SFA had a reported cost of $3.81 per NSLP lunch and $2.72 per SBP breakfast—*https://fns-prod.azureedge.us/sites/default/files/resource-files/SNMCS-Volume3.pdf.*

[122] There are multiple proposed alternatives for milk regulations, so there is a range of costs including both alternative A and B.

adjusting for annual inflation.[123] The costs to schools are mainly due to a shift in purchasing patterns to products with reduced levels of added sugars and sodium, administrative costs, as well as increases in labor costs for continued sodium reduction over time. Updating afterschool snack standards to reflect the proposed added sugars standards would result in some savings due to a reduction of grain-based desserts being served. Simplifying vegetable variety requirements for schools opting to substitute vegetables for fruits at breakfast also results in some savings, because on average in school meals, vegetables are cheaper than fruits, per serving.[124] An increase in cost due to the Buy American provision is a result of additional labor costs and food costs necessary to reach the updated threshold. The changes proposed in this document are achievable and realistic for schools and recognize the need for strong nutrition standards in school meals. This analysis provides seven-year cost streams to project potential impacts over each impacted fiscal year (FY), though FY 2024 and FY 2030 are shown as half year costs to account for the fact that this proposed rule spans six total school years (Table 1). This same data is presented in Table A in the 'Appendix' section by school year.

TABLE 1: STREAM OF QUANTIFIABLE COSTS TO SCHOOLS DURING THE 7 YEARS OF IMPLEMENTATION, IN 2022 DOLLARS[125,126]

	FISCAL YEAR ($ MILLIONS)							
	2024[127]	2025[128]	2026	2027	2028	2029	2030[129]	Total[130]
ALTERNATIVE A: Proposes to limit milk choices in elementary and middle schools (K-8) to unflavored milks only								
NOMINAL COST STREAM[131]								
ADMINISTRATIVE COSTS	$21	$42	$21	$21	$21	$21	$21	$169
ADDED SUGARS	$0	$42	$83	$83	$83	$83	$42	$415
MILK	$0	$28	$55	$55	$55	$55	$28	$275
SODIUM	$0	$45	$90	$117	$144	$144	$72	$614
AFTERSCHOOL SNACKS	-$5	-$10	-$10	-$10	-$10	-$10	-$5	-$62
SUBSTITUTE VEGETABLES FOR FRUITS AT BREAKFAST	-$2	-$4	-$4	-$4	-$4	-$4	-$2	-$24
BUY AMERICAN	$3	$7	$7	$7	$7	$7	$3	$39
TOTAL	**$17**	**$149**	**$242**	**$269**	**$296**	**$296**	**$158**	**$1,426**
% COST OF BASELINE[132]	**0.1%**	**0.6%**	**0.9%**	**1.0%**	**1.0%**	**1.0%**	**1.0%**	**0.8%**
DISCOUNTED COST STREAM								
3 PERCENT	$17	$144	$228	$246	$263	$255	$133	$1,286
7 PERCENT	$17	$139	$211	$219	$226	$211	$1106	$1,129
ALTERNATIVE B: Proposes to maintain the current standard allowing all schools to offer flavored and unflavored milks								
NOMINAL COST STREAM								

[123] Using 2022 dollars and not adjusting for annual inflation results in costs between $1.2 and $1.4 billion dollars over six school years (over seven fiscal years) or $192 to $238 million annually ($0.03 per meal), see Appendix.

[124] According to USDA special tabulations utilizing SNMCS data from SY 2014–2015.

[125] No adjustment for inflation was done for this table aside for inflation from the time-period of data collection up to 2022.

[126] For data presented by school years instead of fiscal years, see Table A in the 'Appendix' section. Totals are the same as Table 1 and the breakdown of costs is shown across the six school years.

[127] Presenting half a year of costs from SY 2024–2025 (first half of the school year)

[128] Including costs from the second half of SY 2024–2025 and the first half of SY 2025–2026; this style is also true of FY 2026, 2027, 2028, and 2029.

[129] Presenting half a year of costs from SY 2029–2030 (second half of the school year).

[130] This is six full fiscal years, including 5 full fiscal years and two half years.

[131] The nominal cost stream values are based upon 2019 participation levels and assumes participation holds steady through FY 2030.

[132] The percentage of baseline is calculated as total costs of the proposed changes divided by the total expected costs of the NSLP, SBP, and CACFP programs in each fiscal year. Expected costs for NSLP, SBP and CACFP are inflated from FY 2019 based on actual and forecasted food price inflation.

ADMINISTRATIVE COSTS	$21	$42	$21	$21	$21	$21	$21	$169
ADDED SUGARS	$0	$42	$83	$83	$83	$83	$42	$415
MILK	$0	$0	$0	$0	$0	$0	$0	$0
SODIUM	$0	$45	$90	$117	$144	$144	$72	$614
AFTERSCHOOL SNACKS	-$5	-$10	-$10	-$10	-$10	-$10	-$5	-$62
SUBSTITUTE VEGETABLES FOR FRUITS AT BREAKFAST	-$2	-$4	-$4	-$4	-$4	-$4	-$2	-$24
BUY AMERICAN	$3	$7	$7	$7	$7	$7	$3	$39
TOTAL	**$17**	**$121**	**$187**	**$214**	**$241**	**$241**	**$131**	**$1,151**
% COST OF BASELINE	**0.1%**	**0.5%**	**0.7%**	**0.8%**	**0.8%**	**0.8%**	**0.9%**	**0.7%**
DISCOUNTED COST STREAM								
3 PERCENT	$17	$118	$176	$196	$214	$208	$110	$1,037
7 PERCENT	$17	$113	$163	$174	$184	$172	$87	$910

As required by OMB Circular A–4, in Table 2 below, the Department has prepared an accounting statement showing the annualized estimates of benefits, costs, and transfers associated with the provisions of this proposed rule. The next section provides an impact analysis for each change.

TABLE 2: ACCOUNTING STATEMENT

Benefits	Range	Estimate	Year Dollar	Discount Rate	Period Covered
Qualitative: Proposes achievable standards that will improve the nutritional content of meals served through USDA child nutrition programs. These proposed standards include an introduction of added sugars standards and changes to sodium standards in order to transition from the transitional standards rule of operations. Additional provisions were provided for milk, as well as menu planning options for American Indian and Alaska Native students, traditional foods, afterschool snacks, substitution of vegetables for fruit at breakfast, nuts and seeds, hummus exemption, professional standards, and Buy American.					
Annualized Monetized ($millions/year)		n.a.	n.a.	n.a.	n.a.	FY 2024-2030
Costs Incurred by Schools	**Range**	**Estimate**	**Year Dollar**	**Discount Rate**	**Period Covered**
Quantitative: This proposed rule would implement standards for added sugars and make changes to sodium requirements for schools. Additional provisions were provided for milk, as well as menu planning options for American Indian and Alaska Native students, traditional foods, nuts and seeds, hummus exemption, professional standards, and Buy American. The changes in this rulemaking are achievable standards as schools move from the transitional standards rule after the COVID-19 pandemic to traditional operations. The estimated potential impacts are provided to quantify the changes in purchasing patterns and labor hours to meet these requirements.					
Proposed Milk Alternative A Annualized Monetized ($millions/year)	Total	$183	2022	7 percent	FY 2024-2030
		$195	2022	3 percent	
Proposed Milk Alternative B Annualized Monetized ($millions/year)	Total	$148	2022	7 percent	FY 2024-2030
		$157	2022	3 percent	
Federal Costs	**Range**	**Estimate**	**Year Dollar**	**Discount Rate**	**Period Covered**
Qualitative and Quantitative: There are no estimated changes in Federal reimbursement levels associated with this rulemaking. It is assumed participation will not measurably change from the baseline approximated by the status quo.					
Annualized Monetized ($millions/year)	n.a.	n.a.	n.a.	n.a.	FY 2024-2030

Section by Section Analysis

This document proposes standards for added sugars, milk, whole grains, and sodium. It also includes proposals related to menu planning options for American Indian and Alaska Native children, traditional foods, afterschool snacks, substituting vegetables for fruits at breakfast, nuts and seeds, hummus, professional standards, the Buy American Provision, and geographic preference. Since the transitional standards rule was released in early 2022, USDA worked closely with program stakeholders to gather input for this proposed rule. In addition, the public was also able to make comments on the transitional standards rule and the accompanying Regulatory Impact Analysis. Analyses below detail the financial impacts of each element of this rulemaking from the implementation of the transitional standards rule onward.

Key Assumptions

Impacts in this analysis are based on data collected during SY 2014–2015 for the School Nutrition and Meal Cost Study (SNMCS).[133] Distribution of the types and quantities of foods school districts purchase may have shifted since that time due to the implementation of the 2022 standards, pandemic supply chain challenges, COVID–19 flexibilities provided to schools, and industry changes. Utilizing a 10-year average of the Consumer Prices Indexes (CPI) of all food (including food consumed away from home and at home) from 2014 to the predicted 2022 and 2023 years, cost data were inflated three percent annually for the analyses detailed below.[134] The analyses in this rulemaking assume that the significant progress schools made towards serving healthier meals after 2012 rule was implemented will continue.

These analyses assume that school meal participation (average daily participation and meal counts) will normalize to be consistent with the service levels in FY 2019, as that is the most recent year of typical program operations. USDA acknowledges that the proposed standards could impact student participation. These potential impacts are detailed in this Regulatory Impact Analysis under Participation Impacts in the 'Uncertainties/Limitations' section as a sensitivity analysis. Additional students may participate as a result of being introduced to the program with the free meals served during the pandemic, and it is possible fewer students may participate if there are certain foods they miss as a result of the standards proposed in this document (*i.e.* foods higher in added sugars or sodium no longer being served). The analyses in this Regulatory Impact Analysis, assume participation returns to more typical, pre-pandemic levels and projects participation will hold steady each school year during the time period between SY 2024–2025 and SY 2029–2030.

Impacts on diet quality of the proposed changes are based on the SNMCS and prior data from SNDA IV.[135] Between SY 2009–2010 and SY 2014–2015, ''Healthy Eating

[133] *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.*

[134] *https://www.ers.usda.gov/data-products/food-price-outlook/.*

[135] *https://www.fns.usda.gov/school-nutrition-dietary-assessment-study-iv.*

Index-2010'' (HEI–2010) scores [136] of diet quality for NSLP and SBP meals increased significantly. The Healthy Eating Index is a ''measure of diet quality that can be used to assess how well a set of foods aligns with key recommendations of the *Dietary Guidelines*.'' [137] At the time of data collection in the SNMCS, the HEI–2010 score was used for evaluation so that there could be a direct comparison in diet quality between SY 2009–2010 and SY 2014–2015. Over this period, the overall mean HEI–2010 score for NSLP lunches served increased from 57.9 to 81.5 out of a possible 100 points, and the mean HEI–2010 score for SBP breakfasts increased from 49.6 to 71.3 out of a possible 100 points. USDA assumes these improvements were due to the 2012 rule. This impact analysis assumes that the dietary content of served school meals continued to improve until 2019 and potentially even during the pandemic for some schools because of the 2012 rule. However, USDA acknowledges that there may have been changes to meals as a result of the 2018 rule (providing flexibilities for milk, whole grains, and sodium requirements) and the COVID meal pattern waivers.

With regards to added sugars, USDA assumes that schools will use a variety of menu changes to reduce added sugars to 10 percent or less of the weekly calorie content at school lunch and breakfast. Because added sugars are new on food labels and have not been part of school meal regulations in the past, there may be a learning curve for School Food Authorities (SFAs) to adjust as the product specific and weekly average limits are implemented. Analyses on milk product data were completed with the assumption that some products that meet the proposed flavored milk added sugars limit of 10 grams per 8 fluid ounces are available. At the time data were collected for SNMCS in SY 2014–2015, no products met a 10-gram added sugars limit. However, data collected by USDA[138] in 2022 from a limited number of K–12 school and food service catalogs suggest that there has been a shift in the added sugars content of milk products available to schools in the last 7 years. More information on the findings of the data collected are in the 'Added Sugars' subsection of the 'Impacts' section below.

The proposed changes to limit added sugars in flavored milk[139]—which is the leading source of added sugars in school meals—creates some overlap in the impact analyses of added sugars and milk proposed changes. In one proposed milk alternative, Alternative A, USDA proposes to limit milk choices in elementary and middle schools to unflavored milks only. In the other proposed milk alternative, Alternative B, USDA proposes to maintain the current standard allowing all schools to offer flavored and unflavored milks. For Alternative A, there may be some cost overlap with the proposed added sugars provisions but for this analysis, it is assumed that the proposed change in milk regulations for elementary and middle schools would be an additional cost to the changes in added sugars milk regulations.

Analyses completed to evaluate the impacts of proposed whole grain standards assume that the majority of grains offered in the school meal programs are whole grain-rich. On average, in SY 2014–2015, 70 percent of the weekly menus offered at least 80 percent of the grain items as whole grain-rich for both breakfast and lunch.[140] The transitional standards rule requires that schools offer at least 80 percent of their weekly grains as whole grain-rich starting in SY 2022–2023. This analysis assumes that schools participating in the NSLP and SBP will fully meet this requirement by the time this proposed rule is finalized and subsequently implemented in SY 2024–2025.

For the analysis of the sodium provision of this proposed rule, a few assumptions were made. Sodium content of school meals has been trending downwards since the 2012 rule implementation began, demonstrated by an almost 270 percent increase in HEI–2010 sodium component scores from SY 2009–2010 to SY 2014–2015 (10 to 27 percent of the maximum score). An assumption made for this analysis was that the sodium content of school meals continued to decrease until pandemic waivers allowed flexibility to the meal standards, including sodium, in 2020 due to the COVID–19 pandemic disruptions to school meal operations. Additionally, USDA assumes sodium reductions in school meals will take place in a variety of ways and that there are a multitude of strategies schools can use to reduce sodium content of meals served. As a result, a variety of meal pattern component combinations were utilized and then averaged in this impact analysis to account for the various ways that sodium can be reduced.

For the impact analyses of the additional sections of this proposed rule, including menu planning options for American Indian and Alaska Native children, traditional foods, afterschool snacks, substituting vegetables for fruits at breakfast, nuts and seeds, and the Buy American provision, a few assumptions had to be made. It was assumed that the proportion offered of the food items or food groups related to these elements of the proposed rule would be similar to offered proportions from SY 2014–2015. This assumption gave a baseline to work from in order to simulate the impact of the proposed updates to meal patterns. For instance, USDA assumed the proportion of offered food components in afterschool snacks would be comparable to the proportion of food components offered in school in the current school year (SY 2022–2023). Another example of an assumption is that the proportion of foods purchased under an exemption in the Buy American provision would be comparable to current purchasing patterns.

For all analyses, the baseline for meals served was the number of breakfasts, lunches, and afterschool snacks served in 2019 (Table 3). There were approximately 5 billion lunches served in the NSLP, 2.5 billion breakfasts served in the SBP, and almost 200 million snacks served through NSLP afterschool snacks. As stated above, it is assumed that service will return to a 2019 level during school year by the time the proposed changes in this rulemaking are implemented. An annual inflation factor of three percent was used to inflate meal costs data from SY 2014–2015 up to SY 2024–2025 when the proposed rule is expected to be finalized and implemented. This inflation factor was determined by taking a 10-year average of the Consumer Prices Indexes (CPI) of all food (including food consumed away from home and at home) from 2014 to the predicted 2022 and 2023 years.

TABLE 3. TOTAL MEALS SERVED IN 2019 - VALUES USED FOR IMPACT CALCULATIONS

MEALS	N
BREAKFASTS	2,451,114,809
LUNCHES	4,866,712,429
SNACKS	194,382,037

[136] The Healthy Eating Index is a measure of diet quality used to assess how well a set of foods aligns with key recommendations of the *Dietary Guidelines for Americans* that is periodically updated with each edition of the Guidelines. HEI–2010 and HEI–2015 scores are cited/calculated in this impact analysis. At this time, no HEI–2020 score version has been released.

[137] *https://www.fns.usda.gov/healthy-eating-index-hei.*

[138] This was not an exhaustive data collection of milk products across the marketplace, simply a fact-finding search. See 'Added Sugars' subsection of the 'Impacts' section below.

[139] Added Sugars in School Meals and Competitive Foods.

[140] Based on an internal USDA analysis using data from: U.S. Department of Agriculture, Food and Nutrition Service, School Nutrition and Meal Cost Study Final Report Volume 2: Nutritional Characteristics of School Meals, by Elizabeth Gearan et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: *www.fns.usda.gov/research-and-analysis.*

Impacts

Baseline

The goal of this proposed rule and the eventual final rule is to align school meal nutrition standards more closely with recommendations in the *Dietary Guidelines for Americans, 2020–2025.* This proposed rule was also designed to update and carry forward school meal related regulations that were detailed in the transitional standards rule published in February 2022. It is assumed that the costs detailed in the regulatory impact analysis for the transitional standards rule will carry forward from SY 2022–2023 through SY 2023–2024. For this Regulatory Impact Analysis, SY 2022–2023—the first year in which the transitional standards rule was implemented in the school meal programs—provides inputs used for characterizing the baseline for measuring changes schools would need to make in order to meet the newly proposed standards. Since USDA expects that the final rule associated with this proposed rule would be implemented beginning in SY 2024–2025, this is the starting point for annual costs.

However, it must be noted that in the Regulatory Impact Analysis for the transitional standards rule, data from SY 2009–2010 were utilized for analyses involving milk and whole grain-rich foods. Analyses in this proposed rule have been updated with more recent cost data from SY 2014–2015.[141] Therefore, the estimates in this analysis are not directly comparable to the estimates from the previous analysis. Further discussion of this issue is included in the 'Uncertainties/Limitations' section.

Based on the total costs of the NSLP, SBP, and CACFP programs from FY 2019, costs have been forecasted to the time-period between FY 2024 and FY 2030. There would be an overall baseline program cost of approximately $169 billion over the seven fiscal years, five full fiscal years and two half fiscal years. As a result, the total cost estimates to implement this proposed rule of $1.2 to $1.4 billion make up 0.7 percent to 0.8 percent[142] of the baseline cost of the three largest child nutrition programs (Table 1). Throughout the 'Impacts' section, annual cost estimates are presented for SY 2024–2025, meaning that they are based on data that has been inflated to SY 2024–2025 from the time of data collection.

Administrative Costs

In order to implement this proposed rule between SY 2024–2025 and SY 2029–2030, it is expected that there will be some regulatory familiarization costs, including state administrative costs and training at the local level, as well as local staff adjusting purchasing patterns and menus. While USDA has not collected data on this element of rule implementation in the past, there are measures that are comparable that were used in the 2012 final rule. For that rule, the Federal Government provided $50 million per year for two years (FY 2013 and 2014) for state administrative costs, as well as 'increasing federal reimbursements for schools by 6 cents for all lunches in schools that serve both breakfasts and lunches that meet meal pattern regulations and nutrition standards.'[143] Since this proposed rule includes more gradual and smaller shifts than the 2012 rule, USDA expects these state administrative costs to amount to $25 million annually during the four school years of proposed rule implementation in which new changes are being implemented, SY 2024–2025, SY 2025–2026, SY 2027–2028, SY 2029–2030 for a total of $100 million. It should be noted that there are no current plans for the Federal Government to contribute to these costs, but rather these are costs that SFAs must account for within their operations. The same is true of the local costs detailed in the following paragraph.

For familiarization costs at the local level, USDA based the estimates on the additional reimbursement rate (from the 2012 final rule) of $0.06 per school lunch and about half of other non-production labor costs, which make up 19.8% of total SFA labor. The proportion of cost breakdown used in the transitional standards rule was 45% labor, 45% food, and 10% other. Non-production labor costs include familiarization costs, likely at about half the total amount used for nutrition education and promotion, including administration of school meal programs and other non-production activities to support school meals.[144] Therefore, we assume that 45% of the $0.06 addition reimbursement represents labor costs, and 10% of this amount, or $0.003 ($0.004 after adjusting for inflation up to 2022) per lunch meal, was the expected cost associated with becoming familiar with the proposed rule and making necessary adjustments. This would then cost $18 million annually at the local level during the four school years of proposed rule implementation with new changes being implemented, $73 million overall. In total with state and local costs, this would be $173 million dollars over the course of the proposed rule that would be incurred by SFAs during rule implementation, or $43 million annually (Table 4).

TABLE 4: ESTIMATED ADMINISTRATIVE COSTS (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

CATEGORY	Estimated Annual Cost	Estimated Four Year Cost[145]
STATE	$25	$100
LOCAL	$18	$73
TOTAL	**$43**	**$173**

Added Sugars

In this rulemaking, USDA proposes both product-based limits for added sugars and a weekly dietary limit for added sugars that would begin two years after the product-based limits begin. With added sugars now included on the updated product nutrition facts label and the recommendation in the *Dietary Guidelines for Americans, 2020–2025* to limit intake of added sugars to less than 10 percent of calories per day, added sugars limits in school meals would help students to achieve a healthy dietary pattern without restricting naturally occurring sugars. For school lunch and breakfast, this document proposes product specific standards for grain-based desserts, breakfast cereals, yogurt, and flavored milk. For consistency, USDA also proposes to apply the product-based added sugars limits for breakfast cereals and yogurts to the CACFP; the added sugars limits would replace the current total sugar limits for breakfast cereal and yogurt in CACFP. This would create alignment between the two programs to simplify any necessary product reformulation. Grain-based desserts would be limited to no more than 2-ounce equivalents per week in school breakfast to mirror the current limit for school lunch. Grain-based desserts include, for example, sweet crackers, cookies, doughnuts, cereal bars, sweet rolls, and toaster pastries. Grain-based desserts do not include pancakes, waffles, French toast, or muffins. Breakfast cereals would be limited to no more than 6 grams of added sugars per dry ounce, yogurt would be limited to no more than 12 grams of added sugars per 6 ounces, and flavored milk would be limited to no more than 10 grams of added sugars per 8 fluid ounces. The weekly dietary limit proposed for school lunch and breakfast aligns with the *Dietary Guidelines* recommendation to limit added sugars to less than 10 percent of calories.

While the SBP and NSLP have not had total sugar or added sugars limits in the past, CACFP has had product specific total sugar

[141] School Nutrition Meal Cost Study data.

[142] These costs are SFA costs as a percentage of reimbursement baselines at this time (not Federal costs).

[143] *https://www.cbo.gov/sites/default/files/111th-congress-2009-2010/costestimate/healthyhungerfreekidsact0.pdf.*

[144] SNMCS Study Report Volume 3: Table 2.6.

[145] Four school years with proposed implemented new changes: SY2024–2025, SY2025–2026, SY2027–2028, SY2029–2030.

limits since 2017 for breakfast cereals (≤6 g total sugar/1 dry oz)[146] and yogurt (≤23 g total sugar/6 oz).[147] As noted, this rulemaking proposes to apply the product-based added sugars limits for breakfast cereals and yogurts to the CACFP for consistency. The product specific limits in this proposed rule for breakfast cereals and yogurts were supported by food label data collected by USDA in May 2022.[148] This data was used to estimate the proportion of recently available products that could meet the newly proposed added sugars limits and demonstrated a shift in the proportion of products currently meeting the current CACFP total sugar limits. SNMCS data shows that in SY 2014–2015 only nine percent of served yogurt products met the current CACFP total sugar yogurt limit and 35 percent of hot and cold cereal products met the CACFP total sugar cereal limit. Based on recent food label data about 90 percent of yogurt products and 44 percent of hot and cold cereal products available during SY 2021–2022 met the current CACFP total sugar standards.[149] This indicates that in the last 5 years manufacturers were able to make considerable changes in the sugar content of both yogurt and cereal products. Currently, the CACFP does not have any flavored milk total sugar limits. This analysis compares the cost of products meeting the proposed added sugars limits to those that did not during SNMCS data collection. Since there is now wider market availability of products with a lower sugar content than there were during SY 2014–2015, it is possible that the actual cost of these changes may be even lower than estimated due to a higher number of product options.

Grain Based Desserts

Schools are required to offer 1 ounce equivalent of grains daily per school breakfast and must also meet weekly grain amounts that vary by age/grade group, 8 ounce equivalents weekly, on average.[150] In SY 2014–2015, at least 28 percent of SBP menus included grain-based desserts such as pastries, granola bars or breakfast bars.[151] This would equate to at least 1.1 billion ounce equivalents of grain-based desserts and 2.8 billion of non-grain-based desserts offered annually. Under the proposed maximum of 2-ounce equivalents weekly, approximately 25 percent of offered grains could be grain-based desserts. This could lead to at least 987 million offered ounces of grain-based desserts and 3 billion ounces offered of non-grain-based desserts annually. On average, grain-based desserts cost $0.35 per ounce equivalent and non-grain-based desserts cost $0.19 per ounce equivalent, about a $0.22 difference after adjusting for inflation. As a result, limiting servings of grain-based desserts to two-ounce equivalents per week would lead to a savings of at least $24 million annually (Table 5). This may in part be due to the varying serving sizes for grain ounce equivalents according to the Food Buying Guide,[152] in which items such as toaster pastries and strudels have a higher ounce equivalent gram amount (up to 69 grams) than toast (28 grams) or pancakes (34 grams), for example.

TABLE 5. ANNUAL COST COMPARISON OF IMPLEMENTING GRAIN BASED DESSERT LIMIT TO SY 2014-2015 MENUS (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

	Totals with 2 oz. eq of grain-based desserts offered weekly		Totals with grain-based desserts making up 28% of grains offered		Difference in cost
GRAINS	# of offered oz eq (millions)	Cost	# of offered oz eq (millions)	Cost	
GRAIN-BASED DESSERTS	987	$462	1,105	$517	-$55
NON- GRAIN-BASED DESSERTS	2,960	$774	2,841	$743	$31
TOTAL GRAINS OFFERED	3,946	$1,236	3,946	$1,260	-$24

Cereal

For breakfast only, the estimated cost of sweetened and unsweetened cold cereals was the same per dry ounce regardless of added sugars content. All hot cereal products met the proposed added sugars limit in SY 2014–2015. While hot cereal is about half the price of cold cereal per dry ounce, it is not widely served; only five percent of menus included hot cereal and an even lower proportion of students consumed hot cereal. The cost of hot cereal per dry ounce also does not account for potentially costly toppings, such as nuts, seeds, or dried fruit. Toppings for hot cereal such as brown sugar or chocolate chips would also contain additional added sugars that have not been accounted for in SNMCS data. Because it is unknown whether the proportion of schools serving hot cereal would increase and because there is no cost difference among cold cereals based on added sugars content, we expect no change in annual cost for cereals despite the introduction of the added sugars limit. Of those hot and cold cereal products available during data collection in 2022,[153] 50 percent of products currently available would meet the proposed added sugars limit of ≤6 g added sugars per ounce.

Yogurt

Of the yogurt products available during SY 2021–2022,[154] 57 percent of yogurts met the proposed added sugars limit. When data were collected in SY 2014–2015, low-fat and fat free yogurt products meeting the proposed yogurt added sugars limit cost $0.05 more than those products not meeting the proposed limit. On average, yogurt products with more than 12 grams of added sugars per 6-ounce container cost $0.42 and those with 12 grams or less of added sugars cost $0.47. About 1.1 billion portions of yogurt are served annually at breakfast and lunch combined. Estimating that 57 percent of products served currently meet the proposed added sugars limit would mean that approximately 627 million portions of yogurt served currently meet the proposed limit. During SY 2014–2015, almost all yogurt products exceeded the proposed 12 grams of added sugars limit per 6 ounces, so for this analysis the 57 percent proportion was used to more accurately reflect currently available products. The recent nutrition label data collection indicates that manufacturers have already made significant changes to yogurt products since the implementation of CACFP total sugar standards in 2017, but also indicates that there is room for product

[146] *https://www.fns.usda.gov/tn/calculating-sugar-limits-breakfast-cereals-cacfp.*

[147] *https://www.fns.usda.gov/tn/calculating-sugar-limits-yogurt-cacfp.*

[148] USDA Food and Nutrition Service, Office of Policy Support data collection of nutrition label information from major cereal and yogurt manufacturer K–12 and food service catalogs.

[149] USDA Food and Nutrition Service, Office of Policy Support internal analysis using collected nutrition label data. Data were collected on 110 total yogurt products and 191 total cereal products.

[150] *https://www.fns.usda.gov/sbp/meal-pattern-chart.*

[151] SNMCS Report Volume 2.

[152] *https://foodbuyingguide.fns.usda.gov/Appendix/DownLoadFBG.*

[153] USDA Food and Nutrition Service, Office of Policy Support data collection of nutrition label information from major cereal and yogurt manufacturer K–12 and food service catalogs. Data were collected on 191 total cereal products.

[154] USDA Food and Nutrition Service, Office of Policy Support data collection of nutrition label information from major cereal and yogurt manufacturer K–12 and food service catalogs. Data were collected on 110 total yogurt products.

reformulation in at least 43 percent of currently available products if manufacturers would like those products to meet the proposed limit. If the proposed limit were to be met in every meal that includes yogurt, it would cost $32 million assuming the calculation is based on yogurts that meet the proposed limit (which cost $0.05 more per meal compared to those that do not, or about $0.07 after adjusting for inflation) (Table 6).

TABLE 6. ANNUAL COST OF IMPLEMENTING PROPOSED YOGURT ADDED SUGARS LIMIT (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

	100% of yogurt products offered meeting limit			57% of yogurt products meeting limit (based on 2022 data)			Difference in Cost
	# of servings meeting limit (millions)	# of servings not meeting limit	Cost	# of servings offered meeting limit (millions)	# of servings not meeting limit	Cost	
SBP	613	NA	$387	349	263	$369	$18
NSLP	487	NA	$307	277	209	$293	$14
TOTAL	1,100	NA	$694	627	473	$663	$32

Milk

In SY 2014–2015 there were no flavored milk products that meet the proposed added sugars limit (≤10 g added sugars/8 fluid ounces); therefore, USDA could not compare the cost of flavored milk products that did and did not meet the proposed limit. Instead, cost analyses are based on the difference in cost of unflavored and flavored milk. Utilizing the SY 2014–2015 data, it was found, on average, that low-fat, flavored milk cost $0.01 more than low-fat, unflavored milk per carton (8 fluid ounces). It was also found that fat-free, flavored milk cost $0.01 less than fat free unflavored milk per carton. The cost of milk varied by fat content, but not consistently. In other words, 8 ounces of low-fat, flavored milk cost $0.25 and 8 ounces of low-fat, unflavored milk cost $0.24. Eight ounces of fat-free, flavored milk cost $0.24 and 8 ounces of fat-free, unflavored milk cost $0.25. Low-fat, flavored milk was the least offered milk variety based on the SNMCS report (Table 7). Low-fat, unflavored milk and fat-free, flavored milk were offered on a majority of menus at both breakfast and lunch, whereas fat-free, unflavored milk was offered on about half of menus for both breakfast and lunch. By comparing the cost of milk based on the proportions of fat-free and low-fat milk, flavored and unflavored, served in SY 2014–2015 to only unflavored milk varieties being served, there would be a cost increase of approximately $81 million annually (Table 8).

TABLE 7. PERCENTAGE OF MILK PRODUCTS OFFERED ON DAILY SBP AND NSLP MENUS IN SY 2014-2015[155]

	SBP	NSLP
LOW-FAT, FLAVORED	6%	7%
LOW-FAT, UNFLAVORED	91%	91%
FAT FREE, FLAVORED	76%	91%
FAT FREE, UNFLAVORED	51%	50%

[155] SNMCS Report—Volume 2.

TABLE 8. ANNUAL COST OF IMPLEMENTING PROPOSED MILK ADDED SUGARS LIMIT (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

	100% unflavored milk (proxy for milk with ≤10 grams added sugars per 8 fluid ounces)		Based on SY 2014-2015 menu proportions		Difference in cost
	# of servings of milk	Cost	# of servings of milk	Cost	
SBP					
LOW-FAT, FLAVORED	NA	NA	145	$49	-$49
LOW-FAT, UNFLAVORED	2,373	$779	2,228	$732	$47
FAT FREE, FLAVORED	NA	NA	1,862	$601	-$601
FAT FREE, UNFLAVORED	3,103	$1,043	1,240	$417	$626
NSLP					
LOW-FAT, FLAVORED	NA	NA	350	$118	-$118
LOW-FAT, UNFLAVORED	4,784	$1,571	4,434	$1,456	$115
FAT FREE, FLAVORED	NA	NA	4,429	$1,429	-$1,429
FAT FREE, UNFLAVORED	6,862	$2,306	2,433	$818	$1,488
TOTAL	17,121	$5,698	17,121	$5,618	$81

It is possible that prices of milk types have aligned since SY 2014–2015 and that the annual cost changes from milks served will be minimal. These are the best estimates with the most recent SFA-representative data available. The reason that a switch to unflavored milk would have an associated cost of $81 million is because there is a much higher proportion of fat-free, flavored milk served compared to low-fat flavored milk. During SY 2014–2015, flavored milk products had a mean added sugars content of 12.2 grams (minimum: 10.4 grams, maximum:17.8 grams). Public comment on the 2022 transitional standards rule [156] from the International Dairy Foods Association and National Milk Producers Federation indicates that the average added sugar content of flavored milk has declined from 16.7 to 7.1 grams in an eight ounce serving of flavored school milk between SY 2006–2007 and SY 2019–2020. Despite the fact that no flavored milk products served in SY 2014–2015 met the proposed added sugars limit, an internally conducted search of recent K–12 and food service product catalogs containing milk products indicated that there are some flavored milks now available to schools that meet the 10 grams of added sugar per eight fluid ounces limit.[157] It was found that at least four manufacturers had at least one flavored milk product with under 10 grams of added sugars per eight fluid ounce serving and in fact, three of them had products with six grams of added sugars per eight fluid ounce serving. A total of 10 flavored milk products from four companies were below the 10-gram proposed limit. The catalogs used for data collection generally showed that there were lower sugar and higher sugar versions of flavored milk available. However, it is likely that additional product reformulation will be necessary for those manufacturers that have yet to reduce added sugar content of their flavored milk products.

Product Limit Total Impact

In total, across all four product categories, we estimate the total cost to meet the proposed added sugars limits would be around $88 million per year. This value reflects the savings of limiting breakfasts served in the SBP to only 2-ounce equivalents of grain-based desserts per week, the no-cost change of the cereal added sugars limit (at breakfast only), and the costs of the yogurt and flavored milk added sugar limits that affect both the SBP and the NSLP. These estimated annual costs, adjusted for inflation, are shown in Table 9.

TABLE 9: ESTIMATED COST OF PRODUCT-SPECIFIC ADDED SUGAR LIMITS (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

PRODUCT TYPE	Estimated Annual Cost
GRAIN-BASED DESSERTS (SBP ONLY)	-$24
BREAKFAST CEREALS (SBP ONLY)	$0
YOGURT	$32
FLAVORED MILK	$81
TOTAL	**$88**

[156] *https://www.regulations.gov/comment/FNS-2020-0038-4702.*

[157] This was not an exhaustive data collection of milk products across the marketplace, simply a fact-finding search.

Weekly Limit

This rulemaking also proposes a weekly limit of less than 10 percent of calories per week from added sugars in the school lunch and breakfast programs, effective SY 2027–2028. Considerable menu changes would be required to meet the weekly limit at breakfast. This analysis finds that in SY 2014–2015 approximately 11 percent of calories offered at lunch and 17 percent at breakfast were from added sugars, and these values match the analysis completed for a USDA report on added sugars in school meals for Congress in May 2022.[158] Since there are so many approaches to reduce added sugars across menus, there is not an accurate way to estimate the cost change of reducing all breakfast menus to containing less than 10 percent of calories per week from added sugars. In school breakfasts during SY 2014–2015, fat-free, flavored milk contributed 30 percent of added sugars content, with sweetened cold cereals contributing 13 percent, grain-based desserts contributing 12 percent, and condiments/toppings contributing 12 percent.[159] Schools may find that replacing flavored with unflavored milk is an effective way to begin to approach the weekly limits. If all flavored milk products were replaced with unflavored milk products, the percentage of calories from added sugars drops to six percent at lunch and to 13 percent at breakfast.[160] Although this approach is not required in this proposed rule, it would be a simple and effective way to initiate a decrease in added sugars content of menus. SFAs may also choose to reduce or eliminate grain-based desserts, sweetened cold cereals, and/or some condiments. In making menu changes, SFAs will likely choose to balance making the best economic decision for their operations with the need to minimize impacts on student participation/acceptance of new foods. The phased-in approach of this proposed rule first with the product specific limits and then with a weekly average limit of added sugars will help to temper some of these potential participation changes.

Health Benefits

A major source of added sugars, sugar-sweetened beverages (SSBs), has been studied widely as it relates to health outcomes. The World Health Organization defines SSBs as all beverages containing free sugars, including carbonated or non-carbonated soft drinks, liquid and power concentrates, flavored water, energy and sports drinks, ready-to-drink tea, ready-to-drink coffee, and flavored milk drinks.[161] Flavored milk is the top source of added sugar in school meals, and other SSBs may be served as competitive foods to students.[162] Consumption of SSBs is related to weight gain, obesity, and risk of both type 2 diabetes (T2D) [163] and CVD,[164] [165] as well as chronic kidney disease.[166] Tooth decay and cavities are also associated with increased SSB consumption.[167] Other top sources of added sugars in school meals include sweetened cold cereal and grain-based desserts which is why these categories of foods are being targeted in particular for added sugars content reduction. Gradual reduction in added sugar content to 10 percent of calories per week at school lunch and breakfast, will align with the *Dietary Guidelines* and will promote improved lifestyle habits and health outcomes during childhood that can track into adulthood.[168]

Milk

This rulemaking proposes two alternatives for the milk standard:

- Alternative A: Proposes to allow flavored milk (fat-free and low-fat) at school lunch and breakfast for high school children only, effective SY 2025–2026. Under this alternative, USDA is proposing that children in grades K–8 would be limited to a variety of unflavored milk. The proposed regulatory text for Alternative A would allow flavored milk for high school children only (grades 9–12). USDA also requests public input on whether to allow flavored milk for children in grades 6–8 as well as high school children (grades 9–12). Children in grades K–5 would again be limited to a variety of unflavored milk. Under both Alternative A scenarios, flavored milk would be subject to the new proposed added sugars limit.
- Alternative B: Proposes to maintain the current standard allowing all schools to offer fat-free and low-fat milk, flavored and unflavored, with the new proposed added sugars limit for flavored milk.

Alternative A does carry some associated costs. Meals served to elementary school students make up a majority of school meals served, including 54 percent of school lunches and 59 percent of school breakfasts. Meals served to middle school students make up a smaller proportion of school meals served, including 22 percent of school lunches and 18 percent of school breakfasts. In the NSLP, around 90 percent of elementary menus contain fat-free, flavored milk and seven percent contain low-fat, flavored milk. In the SBP, around 71 percent of elementary menus contain fat-free, flavored milk and six percent contain low-fat, flavored milk (Table 10). In the NSLP, around 92 percent of middle school menus contain fat-free, flavored milk and seven percent contain low-fat, flavored milk. In the SBP, around 83 percent of middle school menus contain fat-free, flavored milk and six percent contain low-fat, flavored milk (Table 10).[169] Using these proportions, USDA estimates an annual cost of $58 million when adjusted for inflation, to limit elementary and middle schools to unflavored milks only (Table 11).[170]

There are several limitations to this analysis. First, multiple unflavored milk options would need to be served in elementary and middle schools under this proposal which could change the cost. Additionally, USDA does not know the current cost of milk for schools; costs are based on SY 2014–2015 cost data. It should be noted that if utilizing SY 2009–2010 cost data, consistent with the transitional standards rule, this proposal would actually be a cost savings. The 'Uncertainties/Limitations' section below includes an updated impact analysis for the transitional standards rule utilizing newer cost data from SY 2014–2015.[171]

[158] Added Sugars in School Meals and Competitive Foods.

[159] Fox MK, Gearan EC, Schwartz C. Added Sugars in School Meals and the Diets of School-Age Children. *Nutrients.* 2021;13(2):471. Published 2021 Jan 30. doi:10.3390/nu13020471.

[160] Based on an internal USDA analysis.

[161] World Health Organization Taxes on Sugary Drinks: Why Do It? World Health Organization. 2017 Available online: *https://apps.who.int/iris/handle/10665/260253.*

[162] Fox MK, Gearan EC, Schwartz C. Added Sugars in School Meals and the Diets of School-Age Children. *Nutrients.* 2021;13(2):471. Published 2021 Jan 30. doi:10.3390/nu13020471.

[163] Warshaw H, Edelman SV. Practical Strategies to Help Reduce Added Sugars Consumption to Support Glycemic and Weight Management Goals. *Clin Diabetes.* 2021;39(1):45–56. doi:10.2337/cd20–0034.

[164] Malik VS, Hu FB. Sugar-Sweetened Beverages and Cardiometabolic Health: An Update of the Evidence. *Nutrients.* 2019;11(8):1840. Published 2019 Aug 8. doi:10.3390/nu11081840.

[165] O'Connor L, Imamura F, Brage S, Griffin SJ, Wareham NJ, Forouhi NG. Intakes and sources of dietary sugars and their association with metabolic and inflammatory markers. *Clin Nutr.* 2018;37(4):1313–1322. doi:10.1016/j.clnu.2017.05.030.

[166] Bomback AS, Derebail VK, Shoham DA, et al. Sugar-sweetened soda consumption, hyperuricemia, and kidney disease. *Kidney Int.* 2010;77(7):609–616. doi:10.1038/ki.2009.500.

[167] Valenzuela MJ, Waterhouse B, Aggarwal VR, Bloor K, Doran T. Effect of sugar-sweetened beverages on oral health: a systematic review and meta-analysis. *Eur J Public Health.* 2021;31(1):122–129. doi:10.1093/eurpub/ckaa147.

[168] Lioret S, Campbell KJ, McNaughton SA, et al. Lifestyle Patterns Begin in Early Childhood, Persist and Are Socioeconomically Patterned, Confirming the Importance of Early Life Interventions. *Nutrients.* 2020;12(3):724. Published 2020 Mar 9. doi:10.3390/nu12030724.

[169] School Nutrition and Meal Cost Study Final Report Volume 2: Nutritional Characteristics of School Meals, by Elizabeth Gearan et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: *www.fns.usda.gov/research-and-analysis.*

[170] The alternate group that USDA is requesting public comment on for Alternative A is the elementary age group (K–5). The estimated annual cost of limiting elementary schools only to unflavored milk is $42 million, adjusted for inflation to SY 2024–2025. See Table 11.

[171] SNMCS data.

TABLE 10. PERCENTAGE OF ELEMENTARY AND MIDDLE SCHOOL MENUS WITH FLAVORED MILK PRODUCTS OFFERED IN SBP AND NSLP IN SY 2014-2015[172]

	ELEMENTARY	
	SBP	NSLP
LOW-FAT, FLAVORED	6%	7%
FAT FREE, FLAVORED	71%	90%
	MIDDLE	
LOW-FAT, FLAVORED	6%	7%
FAT FREE, FLAVORED	83%	92%

TABLE 11. ANNUAL COST OF IMPLEMENTING PROPOSED MILK PLAN – ALTERNATIVE A (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

	SBP		NSLP		Total
# OF ELEMENTARY MEALS	1,436		2,613		4,045
# OF MIDDLE SCHOOL MEALS	451		1,046		1,497
	# of servings of milk to be replaced	Cost	# of servings of milk to be replaced	Cost	Cost
LOW-FAT, FLAVORED (K-5)	86	-$1	183	-$2	-$4
FAT FREE, FLAVORED (K-5)	1,020	$14	2,352	$32	$45
ELEMENTARY TOTAL	1,106	$13	2,535	$29	$42
LOW-FAT, FLAVORED (6-8)	28	-$0.4	72	-$1	-$1
FAT FREE, FLAVORED (6-8)	375	$5	967	$13	$18
MIDDLE TOTAL	403	$5	1,039	$12	$17
GRAND TOTAL	1,509	$17	3,574	$41	$58

Alternative B would maintain the milk standard from the transitional standards rule, which allows schools to offer fat-free and low-fat milk, flavored and unflavored, in reimbursable school lunches and breakfasts, and for sale as a competitive beverage. For Alternative B, no annual change in the cost of milk is expected due to maintaining the transitional milk standards.

Several additional proposals would apply under either milk alternative. The proposed added sugars standard for flavored milk, which would limit flavored milks to 10 grams of added sugars per 8 fluid ounces, effective SY 2025–2026, would apply to milk served in reimbursable school lunches and breakfasts, and for sale as a competitive beverage.[173] Consistent with current requirements, this rulemaking would require that unflavored milk be offered at each school meal service. This documet also proposes to continue to allow fat-free and low-fat milk, flavored and unflavored, to be offered to participants ages 6 and older in the SMP and CACFP.

[172] School Nutrition and Meal Cost Study Final Report Volume 2: Nutritional Characteristics of School Meals, by Elizabeth Gearan et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: *www.fns.usda.gov/research-and-analysis*.

[173] USDA is proposing a higher added sugars limit for flavored milk sold as a competitive food in middle and high schools due to the larger serving size. The serving size for milk offered as part of a reimbursable meal is 8 fluid ounces. Milks sold to middle and high school students as a competitive food may be up to 12 fluid ounces. One alternative proposed by USDA in Section 3: Milk would allow flavored milk (fat-free and low-fat) at school lunch and breakfast for older children only, effective SY 2025–2026. Under this alternative, USDA is proposing to allow flavored milk only for high schools (grades 9–12) and younger children (grades K–8) would be limited to unflavored milk varieties only. Although the proposed regulatory text for Alternative A would allow flavored milk only for high schools (grades 9–12), USDA also requests public input on whether it would be preferable to instead allow flavored milk only for middle schools and high schools (grades 6–12) where younger children (grades K–5) would be limited to unflavored milk varieties only. If in the final rule, based on public input, USDA finalizes the option allowing flavored milk only for high schools (grades 9–12), flavored milk would only be allowed as a competitive food in high schools.

Health Benefits

In the transitional standards rule, the decision to allow flavored low-fat milk reflected concerns about declining milk consumption and the importance of the key nutrients provided by milk for school-aged children.[174] However, USDA recognizes that flavored milk is the highest source of added sugars in school meals, which is why the product-specific added sugars limit has been proposed of no more than 10 grams per 8 fluid ounces of milk. The proposal to limit milk choices in elementary and middle schools to unflavored milks only (Alternative A) would further reduce added sugars and promote the more nutrient-dense choice of unflavored milk in young children when their tastes are being formed. This proposal would allow flavored milk only for high schools (grades 9–12); however, regarding this alternative, USDA also requests public input on whether to allow flavored milk for children in grades 6–8 as well as high school children (grades 9–12). USDA aims to balance the importance of reducing young children's exposure to added sugars with the importance of providing older children the autonomy to choose among a greater variety of milk beverages that they enjoy; in public comments, respondents are encouraged to provide input on how to balance these important priorities when considering the two milk proposals as well as the specific age/grade groups to which Alternative A should apply.

Both flavored milk and unflavored milk contain protein, calcium, potassium, vitamin A, vitamin D, and many more essential nutrients.[175] A recent systematic review conducted to support the *Dietary Guidelines for Americans, 2020–2025* concluded that dietary patterns consumed by children that were lower in fruits, vegetables, whole grains, and low-fat dairy but higher in added sugars, refined grains, fried potatoes and processed meats, were associated with higher fat-mass index and body mass index later in adolescence.[176] Low-fat dairy was also shown in some evidence to be part of a healthy dietary pattern in children that was associated with lower blood pressure and improved blood lipid levels later in life.[177] These potential health benefits combined with the fact that milk is a nutrient-dense beverage support the continued serving of both fat-free and low-fat flavored and unflavored milk, but also support serving unflavored milk to young children in order to reduce the added sugars content of meals.

Whole Grains

This section of the proposed rule centers on operational and definition clarifications. This rulemaking proposes to maintain the current requirement that at least 80 percent of the weekly grains offered are whole grain-rich, based on ounce equivalents of grains served in the school lunch and breakfast programs. The proposed definition of whole grain-rich would read as follows: *Whole grain-rich is the term designated by FNS to indicate that the grain content of a product is between 50 and 100 percent whole grain with any remaining grains being enriched.* This proposed definition would not change the meaning of whole grain-rich, which has previously been communicated in USDA guidance, but is simply a clarification for SFAs. The current whole grain-rich criteria, which was first introduced as a school meal program requirement with the 2012 final rule, describes whole grain-rich products as those that contain at least 50 percent whole grains and the remaining grains in the product must be enriched. The proposed definition would be included in NSLP, SBP, and CACFP regulations. There is no cost change expected as a result of these proposals because the requirement for 80 percent of weekly grains offered being whole grain-rich is carried forward from the 2022 transitional standards rule. However, an updated impact analysis from the transitional standards rule utilizing newer cost data from SY 2014–2015 [178] is detailed in the 'Uncertainties/Limitations' section below.

Health Benefits

The 2022 transitional standards rule requires that 80 percent of grains served be whole grain-rich, which was an increase from the 2018 rule which called for 50 percent of grains served be whole grain-rich, in light of the challenges schools were facing in meeting the 2012 rule requirements. Despite these challenges, schools have made considerable progress offering whole grain-rich products. On average, in SY 2014–2015, 70 percent of the weekly menus offered at least 80 percent of the grain items as whole grain-rich for both breakfast and lunch.[179] This proposed rule continues to emphasize the importance of consuming a dietary pattern with grains that are whole grain-rich, but also carries forward manageable, achievable goals.

Prepared lunches in the NSLP in SY 2014–2015 scored 95 percent of the maximum HEI–2010 whole grains component score, on average, and prepared breakfasts in the SBP scored 92 percent of the maximum [180] Participants of the NSLP scored a maximum HEI–2010 whole grains component score, for lunches consumed, on average in SY 2014–2015 and nonparticipants of the NSLP scored only 63 percent of a maximum score, a significant difference. Participants of the SBP scored 98 percent of the maximum HEI–2010 whole grain component score on breakfasts consumed, whereas, nonparticipants scored 68 percent of the maximum score.[181] A maximum whole grain component score in the HEI–2010 is achieved with at least 1.5 ounces equivalent of whole grains per 1000 kilocalories of intake, a measure of nutrient density. In SY 2014–2015, school meal programs were matching recommendations from the *Dietary Guidelines* at a high level, with regards to whole grains.

A recent systematic review conducted to support the Dietary Guidelines for Americans, 2020–2025 concluded that dietary patterns consumed by children that were lower in fruits, vegetables, whole grains, and low-fat dairy but higher in added sugars, refined grains, fried potatoes and processed meats, were associated with higher fat-mass index and body mass index later in adolescence.[182] Whole grains were also shown in some evidence to be part of a healthy dietary pattern in children that was associated with lower blood pressure and improved blood lipid levels later in life.[183] Throughout the lifespan, consumption of whole grains has also been shown to reduce the risk of type 2 diabetes.[184] Factors that contribute to increased consumption of whole grains in children include providing a variety of whole grain options, serving whole grains in school programs, and improving appearance of package and product marketing.[185] The documented health benefits of the consumption of whole grain-

[174] *https://www.gpo.gov/fdsys/pkg/FR-2017-11-30/pdf/2017-25799.pdf.*

[175] Nutrition Requirements for Fluid Milk and Fluid Milk Substitutions in the Child and Adult Care Food Program, Questions and Answers.

[176] Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Butera G, Terry N, Obbagy J. Dietary Patterns and Growth, Size, Body Composition, and/or Risk of Overweight or Obesity: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: *https://doi.org/10.52570/NESR.DGAC2020.SR0101.*

[177] Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Butera G, Terry N, Obbagy J. Dietary Patterns and Risk of Cardiovascular Disease: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: *https://doi.org/10.52570/NESR.DGAC2020.SR0102.*

[178] SNMCS data.

[179] Based on an internal USDA analysis using data from: U.S. Department of Agriculture, Food and Nutrition Service, School Nutrition and Meal Cost Study Final Report Volume 2: Nutritional Characteristics of School Meals, by Elizabeth Gearan et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: *www.fns.usda.gov/research-and-analysis.*

[180] SNMCS Volume 2—Figures 5.2 and 5.5.

[181] SNMCS Volume 4—Figures 9.2 and 12.2.

[182] Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Butera G, Terry N, Obbagy J. Dietary Patterns and Growth, Size, Body Composition, and/or Risk of Overweight or Obesity: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: *https://doi.org/10.52570/NESR.DGAC2020.SR0101.*

[183] Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Butera G, Terry N, Obbagy J. Dietary Patterns and Risk of Cardiovascular Disease: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: *https://doi.org/10.52570/NESR.DGAC2020.SR0102.*

[184] Chanson-Rolle A., Meynier A., Aubin F., Lappi J., Poutanen K., Vinoy S., Braesco V. Systematic Review and Meta-Analysis of Human Studies to Support a Quantitative Recommendation for Whole Grain Intake in Relation to Type 2 Diabetes. PLoS ONE. 2015;10:e0131377. doi: 10.1371/journal.pone.0131377.

[185] Meynier A, Chanson-Rollé A, Riou E. Main Factors Influencing Whole Grain Consumption in Children and Adults—A Narrative Review. Nutrients. 2020;12(8):2217. Published 2020 Jul 25. doi:10.3390/nu12082217.

rich products and strategies to increase whole grain intake in children both support a continued whole grain requirement in school meals.

Sodium

This rulemaking proposes an updated approach to sodium reduction in school meals. Lessons learned from the 2012 rule indicate that smaller, incremental reductions in sodium content may be more achievable given the need for industry to reformulate products and for schools to modify both the products they serve and their preparation methods. As a result, smaller reductions compared to those from the 2012 rule are proposed over two-year increments. USDA proposes to establish weekly sodium limits, informed by the FDA's voluntary sodium reduction goals, with further reductions to support closer alignment with the goals of the *Dietary Guidelines*.[186] This proposed rule would set forth three 10 percent reductions for school lunch and two 10 percent reductions for school breakfast from the sodium standard in the transitional standards rule. To provide context, the previous three sodium targets from the 2012 rule and targets from the 2022 transitional standards rule are presented below (Table 12). The transitional standards rule requires schools to meet Sodium Target 1 for school lunch and breakfast, effective SY 2022–2023. For school lunch only, schools are required to meet Sodium Target 1A beginning in SY 2023–2024. The proposed targets from this rulemaking are in the subsequent table (Table 13).

TABLE 12: THREE 2012 SODIUM TARGETS AND TARGETS FROM THE TRANSITIONAL STANDARDS RULE (MG) FOR SCHOOL LUNCH AND SCHOOL BREAKFAST

	NSLP				
AGE/GRADE GROUP	2012 TARGET 1	2012 TARGET 2	2012 TARGET 3	TARGET 1 SY 2022-2023	TARGET 1A SY 2023-2024
K-5	1,230	935	640	1,230	1,110
6-8	1,360	1,035	710	1,360	1,225
9-12	1,420	1,080	740	1,420	1,280
	SBP				
	2012 TARGET 1	2012 TARGET 2	2012 TARGET 3	TARGET 1 SY 2022-2023 AND SY 2023-2024	
K-5	540	485	430	540	
6-8	600	535	470	600	
9-12	640	570	500	640	

TABLE 13: THREE NEW PROPOSED RULE SODIUM LIMITS (MG) FOR SCHOOL LUNCH AND SCHOOL BREAKFAST

NSLP			
AGE/GRADE GROUP	PROPOSED SY 2025-2026	PROPOSED SY 2027-2028	PROPOSED SY 2029-2030
K-5	1,000	900	810
6-8	1,105	990	895
9-12	1,150	1,035	935

SBP		
	PROPOSED SY 2025-2026	PROPOSED SY 2027-2028
K-5	485	435
6-8	540	485
9-12	575	520

The school lunch baseline for this analysis is the menu served sodium content from SY 2014–2015 in which elementary, middle, and high school menus had sodium content, on average, of 1135 mg, 1235 mg, and 1330 mg, respectively. The school breakfast baseline for this analysis is the menu served sodium content from SY 2014–2015 in which elementary, middle, and high school menus had sodium content, on average, of 510 mg, 570 mg, and 580 mg, respectively. This indicates that the majority of schools were

[186] The *Dietary Guidelines for Americans, 2015–2020* support the most recent Dietary Reference Intake (DRI) values for sodium. DRI upper limit values for daily intake of sodium were updated to be called Chronic Disease Risk Reduction values (CDRRs) in 2019 and proportions of these values are used as targets for parts of this analyses. Dietary Reference Intakes for Sodium and Potassium (2019).

already meeting the first sodium target for both breakfast and lunch from the 2012 rule in SY 2014–2015, and almost meeting Target 1A in the NSLP from the 2022 transitional standards rule. More specifically, 72 percent of weekly lunch menus and about 66 percent of weekly breakfast menus were meeting Sodium Target 1 in SY 2014–2015.[187]

While meeting the first proposed 10 percent reduction in sodium is possible with products already available, the additional reductions may require product reformulation and in-house scratch cooking involving a potential change in staffing and equipment. This is supported by the USDA study on Successful Approaches to Reduce Sodium in School Meals,[188] in which schools, Food Service Management Companies, and manufacturers noted similar findings with the original sodium targets from the 2012 rule. Previous studies have shown that the majority of schools have some capacity to take part in scratch-cooking, but that new/updated equipment and increased staff may be necessary to achieve additional recipe reformulation and cooking or baking from scratch.[189] Because data have not been collected since SY 2014–2015, it is possible that further product reformulation and recipe restructuring occurred prior to or during the COVID–19 pandemic. Likewise, it is unclear how much menus changed during the pandemic and what the baseline level of sodium in menus will be for SY 2022–2023. The USDA study on Successful Approaches to Reduce Sodium in School Meals also noted that reducing sodium can be challenging, especially when using pre-packaged products, which may result in schools no longer purchasing these items or could result in manufacturers eliminating certain product lines.[190] However, it is of note that the FDA voluntary sodium goals are highly targeting packaged foods, which may help to counter some of these effects.

Food and labor costs account for the majority of the cost to produce a meal in a school (about 45 percent for labor and 45 percent for food, on average). This analysis was completed using the same methodology to determine labor costs that was used for the 2022 transitional standards rule RIA, and assumes a need for increased scratch cooking, staffing changes, and time needed for manufacturer product reformulation. The USDA study on Successful Approaches to Reduce Sodium in School Meals found that school districts in the study reported serving more fresh fruits and vegetables to reduce sodium content. This may cause a reduction in food costs if items purchased to scratch cook are less expensive; however, these costs may be offset by the quantity needed or additional foods purchased to prepare meals from scratch. In order to simulate the potential increase in costs due to the newly proposed sodium limits, the analysis described above to match products served in schools to the FDA short-term voluntary sodium targets was utilized. By comparing the cost of a meal using products that either already meet or are not subject to the FDA short-term voluntary targets to a meal using products that do not meet and are being subject to the FDA short-term voluntary targets a difference in price by meal was determined. An average cost of multiple food group combinations for menus was utilized for both breakfast and lunch in order to simulate a variety of menus that might be created and used by SFAs.

In comparing menus with high sodium foods (those being targeted by FDA voluntary guidance) to menus already containing lower sodium products, it was found that high sodium foods are less expensive. Menus from SY 2014–2015 with high sodium foods were $0.09 cheaper per SBP meal and $0.05 cheaper per NSLP meal than those menus that contain lower sodium products when only considering food costs. Adjusted for inflation, this was a $0.08 difference per meal, on average, for breakfast and lunch. For the three sodium reductions we use those per meal food cost differences, adjusted for inflation, to estimate the food cost of the proposed target. We also include labor costs associated with increased scratch cooking. For the first sodium limit we only include 25 percent of labor cost estimates since products should already be available that would allow schools to meet this limit. The full labor costs were included for the two additional sodium reductions at lunch and the one additional reduction for breakfast. Factoring in food, labor costs, and inflation gave the final values in Table 14. Over 5 years, the approximate cost of implementing the series of sodium reductions is $651 million, with an annual average cost of $130 million for both breakfast and lunch. Potential equipment costs are detailed in the 'Uncertainties/Limitations' section below.

TABLE 14: ESTIMATED FIVE-YEAR COSTS OF IMPLEMENTING NEW SODIUM REDUCTION PLAN (MILLIONS) IN NSLP AND SBP INCLUDING LABOR,[191] ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

SODIUM LIMIT EFFECTIVE SCHOOL YEAR	SY 2025 - 2026	SY 2026-2027	SY 2027-2028	SY 2028-2029	SY 2029-2030	5-YEAR TOTAL	FIVE YEAR AVERAGE
FOOD	$77	$77	$77	$77	$77	$268	$54
LABOR	$19	$19	$77	$77	$77	$383	$77
TOTAL	$96	$96	$153	$153	$153	$651	$130

Analyses Related to Gradual Reduction

There are a variety of factors to note regarding the proposed continued gradual 10 percent reductions of sodium intake in school meals, including the recently released short-term FDA sodium voluntary targets, improved sodium component Healthy Eating Index (HEI) scores, an adjustment for actual consumption of meals by students, and palatable reduction over time. Additionally, a comparison to sodium requirements in other organizations, and a summary of health benefits occurring as a result of sodium reduction also may inform further reduction of sodium content of school meals. These points may be considered alongside the expected additional cost of these proposed sodium limits.

The FDA sodium voluntary targets are designed to support a decrease of average daily sodium intake of 12 percent by targeting products across almost all available food categories containing commercially processed, packaged, and prepared foods.[192] USDA analyses found that when foods served in school meals met the FDA voluntary sodium reduction targets that the overall sodium content of menus decreased by approximately 10 percent. It should be noted that not all food categories in the FDA voluntary food guidance are represented in school meal programs. Meal components in school meal programs such as milk, fruits, meat/meat alternates, and most vegetables are not being targeted for sodium reduction because most contain naturally occurring

[187] SNMCS Report Volume 2.

[188] Gordon, E.L., Morrissey, N., Adams, E., Wieczorek, A. Glenn, M.E., Burke, S & Connor, P. (2019). Successful Approaches to Reduce Sodium in School Meals Final Report. Prepared by 2M Research under Contract No. AG–3198–P–15–0040. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service.

[189] Standing, Kim, Joe Gasper, Jamee Riley, Laurie May, Frank Bennici, Adam Chu, and Sujata Dixit-Joshi. Special Nutrition Program Operations Study: State and School Food Authority Policies and Practices for School Meals Programs School Year 2012–13. Project Officer: John R. Endahl. Prepared by Westat for the U.S. Department of Agriculture, Food and Nutrition Service, October 2016.

[190] Gordon, E.L., Morrissey, N., Adams, E., Wieczorek, A. Glenn, M.E., Burke, S & Connor, P. (2019). Successful Approaches to Reduce Sodium in School Meals Final Report. Prepared by 2M Research under Contract No. AG–3198–P–15–0040. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service.

[191] Changes to sodium limits as a result of this proposed rule would not begin to go into effect until SY 2025–2026.

[192] *https://www.fda.gov/food/cfsan-constituent-updates/fda-issues-sodium-reduction-final-guidance.*

sodium, but condiments/accompaniments, breads/grains and combination entrees are highly targeted, leading to a total reduction of 10 percent of menu sodium content. The internal USDA analysis of products that met the FDA voluntary food guidance and those that did not, involved a thorough matching process between categories of food products shown to have been on menus in the SNMCS and the FDA food categories. For products that did not meet the FDA voluntary sodium reduction guidance, the sodium content of these products was capped at the upper bound of the short-term FDA targets to simulate reduction in those targeted food groups, resulting in the total sodium reduction of 10 percent.

This analysis also showed that there are products available already (as of SY 2014–2015) that could meet the first proposed sodium limit for both breakfast and lunch if menus are changed to include these products. At lunch, about 70 percent of accompaniments/condiments and combination entrees available were meeting the FDA voluntary sodium targets. At breakfast, 96 percent of accompaniments and 85 percent of combination entrees were meeting the FDA sodium targets already. Milk, fruit and most vegetable products served at breakfast and lunch are not targeted by FDA. The condiments and combination entrees served at lunch will require the most effort with regards to sodium reduction through scratch cooking, and menu changes and reformulation for the reductions after the initial 10 percent reduction at school lunch. It is of note that current FDA voluntary targets are short-term and equal to a 10 percent reduction when applied to the NSLP and SBP menus,[193] but this rulemaking proposes three 10 percent reductions for the NSLP and two ten percent reductions for the SBP. This document proposes to continue gradual sodium reduction consistent with the *Dietary Guidelines.*

The next point to support a 10 percent reduction in menu sodium content is an analysis of HEI component scores. While the HEI is usually utilized for daily dietary intake (ex. 24 hour recalls, food diaries), it can also be utilized to evaluate the alignment of single meals to the *Dietary Guidelines.* The maximum score for sodium is 10, indicating ≤1.1 grams of sodium per 1,000 calories, and the minimum score available is zero, indicating ≥2.0 grams of sodium per 1,000 calories.[194] A lower score indicates a higher sodium level in foods (higher sodium density), so a score of 10 is best and indicates lower levels of sodium in line with the *Dietary Guidelines.* This formula for scoring the sodium component is the same in the HEI–2010 and HEI–2015 scoring versions.[195] The SNMCS reports [196] use the HEI–2010 version, but because the sodium component score did not change in 2015, HEI scores in Tables 15 and 16 could be considered either HEI–2010 or HEI–2015. Intakes between the minimum and maximum levels of sodium are scored proportionately. Tables 15 and 16 show the HEI scores for menus that meet the sodium targets in the transitional standards rule, and as proposed in this rulemaking. The scores demonstrate improved consistency with the goals of the *Dietary Guidelines* through a decreased level of sodium density. For lunch, the proposed sodium limits correspond to an increase of 263 percent, 286 percent, and 182 percent in HEI sodium component scores over the proposed five years of implementation for elementary, middle, and high schools, respectively (Table 16).

Breakfast HEI scores are already 10 for the sodium component, even according to the data from SY 2014–2015. However, further improvement is necessary to reach sodium intake levels recommended in the 2019 sodium dietary reference intakes (DRIs),[197] which have also been recommended in the *Dietary Guidelines for Americans, 2020–2025.* As a result of the lower level of sodium already being served in the SBP, only two 10 percent reductions have been suggested compared to the three reductions in the NSLP. The proposed limits allow for small manageable changes over time, providing schools time to implement increased scratch cooking, staff changes, and menu adjustment as needed.

TABLE 15: SODIUM LEVELS AND CORRESPONDING HEI SODIUM COMPONENT SCORES AT BREAKFAST BY MAXIMUM CALORIE LEVEL

SODIUM LEVELS BY SCHOOL AGE/GRADE GROUP	SY 2022-2023 and SY 2023-2024 (transitional standards rule)	SY 2014-2015 Menu Sodium Served	Proposed SY 2025-2026 Limit	Proposed SY 2027-2028 Limit
ELEMENTARY (500 KCAL)	540	432	485	435
ELEMENTARY HEI SCORE	10	10	10	10
MIDDLE (550 KCAL)	600	447	540	485
MIDDLE HEI SCORE	10	10	10	10
HIGH (600 KCAL)	640	449	575	520
HIGH HEI SCORE	10	10	10	10

[193] Internal USDA analysis using FDA targets and SNMCS data.

[194] *https://www.fns.usda.gov/how-hei-scored.*

[195] *https://epi.grants.cancer.gov/hei/comparing.html.*

[196] *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.*

[197] *https://nap.nationalacademies.org/catalog/25353/dietary-reference-intakes-for-sodium-and-potassium.*

TABLE 16: SODIUM LEVELS AND CORRESPONDING HEI SODIUM COMPONENT SCORES AT LUNCH BY MAXIMUM CALORIE LEVEL

SODIUM LEVELS BY SCHOOL AGE/GRADE GROUP	SY 2023-2024 (transitional standards rule)	SY 2014-2015 Menu Sodium Served	Proposed SY 2025-2026 Limit	Proposed SY 2027-2028 Limit	Proposed SY 2029-2030 Limit
ELEMENTARY (650 KCAL)	1,110	1,057	1,000	900	810
ELEMENTARY HEI SCORE	3.2	4.2	5.1	6.8	8.4
MIDDLE (700 KCAL)	1,225	1,101	1,005	990	895
MIDDLE HEI SCORE	2.8	4.7	4.7	6.5	8.0
HIGH (850 KCAL)	1,280	1,236	1,150	1,035	935
HIGH HEI SCORE	5.5	6.1	7.2	8.7	10.0

These HEI scores above are all based on the menu sodium content and not based on actual school meal consumption data. Sodium component HEI scores of consumed lunches in SY 2014–2015 were 4.2 on average for NSLP participants and 4.0 on average for non-participants.[198] NSLP participants had a lunch sodium component score of 4.7, 4.6, and 3.0 for elementary, middle, and high schools, respectively. For breakfast, sodium component HEI scores in SY 2014–2015 were 8.7 on average for SBP participants and 7.9 on average for non-participants. SBP participants had a breakfast sodium component score of 9.6, 9.0, and 6.7 for elementary, middle, and high schools, respectively.[64] Since both breakfast and lunch data include consumption of competitive foods and foods brought from home, it is difficult to compare the menu sodium scores to the scores based on the consumed amount of sodium. Overall lunch HEI–2010 scores (scored out of 100) including all elements of the diet were 80.1 for all students that were NSLP participants and 65.1 for students that were not NSLP participants. Overall breakfast HEI–2010 scores were 66.1 for SBP participants and 58.9 for students that were not SBP participants.[199] While participants of school meal programs have higher meal HEI scores, indicating a higher adherence to the recommendations of the *Dietary Guidelines,*[200] there is room for improvement overall. For sodium, there is especially room for improvement in sodium in lunches in particular, at all ages, and for high school breakfasts as well. The newly proposed sodium limits would improve these scores even when accounting for foods consumed that are not part of a reimbursable meal.

Another analysis completed to determine a reasonable level of incremental sodium reduction is a consumption adjustment of the proposed limits. HEI sodium component scores are a good measure of sodium density, but Dietary Reference Intakes for sodium also provide recommendations for daily sodium intake by age group in the U.S. and Canada.[201] The latest edition of the sodium and potassium DRIs was released in 2019 and also included Chronic Disease Reduction Risk (CDRR) values that are a recommended maximum daily intake level to prevent chronic disease. For this analysis, the CDRR daily intake has been adjusted to determine the proportion of the CDRR amounts by age group as the maximum amount of sodium served at breakfast (21.5 percent) and lunch (32 percent), as shown in Table 18. These proportions were determined in the past by IOM (now NASEM) and were used in the 2012 school meals rule.[202] Various organizations, including both the USDA through the *Dietary Guidelines* and non-Federal groups [203] [204] have indicated support for usage of these CDRR proportions as the goal for sodium consumption in school meals. However, school meal sodium limits apply to the meals as offered; they do not apply to the actual amount of sodium consumed by students. As a result, an adjustment based on consumption data from the SNMCS helps to show a more accurate level of sodium intake compared to the CDRR values. USDA acknowledges that this analysis assumes a certain degree of plate waste, but also points out the difference in offered versus served foods. Offer versus Serve (OVS) is a provision in the NSLP and SBP that allows students to decline some of the food offered in order to reduce food waste [205] which would also contribute to sodium consumption being lower than the amount offered. According to the SNMCS [206] and SNDA–III,[207] consumption of sodium at breakfast is at least 10 percent lower than the amount served and consumption of sodium at lunch is 20 to 30 percent lower than the amount served.[208] Further data exploration is in progress at this time that may help to further inform the final rule that results from this proposed rule.

[198] SNMCS Report Volume 4 Appendices I to P—Tables J.1 to J.4 and Tables M.1 to M.4.

[199] SNMCS Report Volume 4.

[200] The HEI–2010 score corresponds to the *Dietary Guidelines for Americans, 2010–2015*.

[201] National Academies of Sciences, Engineering, and Medicine; Health and Medicine Division; Food and Nutrition Board; Committee to Review the Dietary Reference Intakes for Sodium and Potassium; Oria M, Harrison M, Stallings VA, editors. Dietary Reference Intakes for Sodium and Potassium. Washington (DC): National Academies Press (US); 2019 Mar 5. Available from: *https://www.ncbi.nlm.nih.gov/books/NBK538102/* doi: 10.17226/25353.

[202] **Federal Register**: *Final Rule:* Nutrition Standards in the National School Lunch and School Breakfast Programs.

[203] *https://www.cspinet.org/sites/default/files/2022-03/CSPI%20Transition%20Final%20Rule%20Comment%202022.pdf*.

[204] *https://www.heart.org/-/media/Files/About-Us/Policy-Research/Fact-Sheets/Access-to-Healthy-Food/INFOGRAPHIC-Lowering-Sodium-in-School-Foods.pdf*.

[205] Offer versus Serve 2015 memo.

[206] SNMCS Report, Volume 2.

[207] SNDA–III Report, Volume II.

[208] This is not a perfect adjustment factor because consumption data does include foods consumed that are not reimbursable, as well as foods brought from home. It is possible that the adjustment factors could be even bigger as a result.

TABLE 17. ESTIMATED SODIUM DIETARY REFERENCE INTAKES (CHRONIC DISEASE REDUCTION RISK VALUES) BY AGE/GRADE GROUP AND MEAL (MG)

	Elementary	Middle	High
BREAKFAST	340	390	500
LUNCH	510	580	740

The amount of calculated sodium consumed at school meals as a percentage of the CDRR values in Table 17 are in Tables 18 and 19. The adjusted percentages for all age/grade groups at the second reduction of sodium in the SBP ranged from 95 percent to 107 percent and at the third reduction of sodium in the NSLP ranged from 102 percent to 117 percent. These values indicate that the proposed reductions could bring student consumption to a level that meets the recommended CDRR values or is very close to meeting them. The sodium targets from 2012 did not account for consumption and the 2019 DRIs had not been published yet. This analysis takes into account both of these factors and indicates that unless sodium recommendations change significantly in future editions of the DRIs or Dietary Guidelines, the proposed limits may be able to serve students successfully for many years.

TABLE 18. MENU PERCENTAGE OF SODIUM DIETARY REFERENCE INTAKE VALUES AT BREAKFAST, ADJUSTED FOR ESTIMATED STUDENT CONSUMPTION LEVELS

	Years of Proposed Limits	10% to 20% Consumption Adjustment			
		Elementary	Middle	High	All
SY 2022-2023 AND SY 2023-2024 (TRANSITIONAL STANDARDS RULE)	SY 2022-23	127 to 143%	123 to 138%	102 to 115%	117 to 132%
PROPOSED SY 2025-2026 LIMIT	SY 2025-26	114 to 128%	111 to 125%	92 to 104%	106 to 119%
PROPOSED SY 2027-2028 LIMIT	SY 2027-28	102 to 115%	99 to 112%	83 to 94%	95 to 107%

TABLE 19. MENU PERCENTAGE OF SODIUM DIETARY REFERENCE INTAKE VALUES AT LUNCH, ADJUSTED FOR ESTIMATED STUDENT CONSUMPTION LEVELS

	Years of Proposed Limits	20% to 30% Consumption Adjustment			
		Elementary	Middle	High	All
SY 2023-2024 (TRANSITIONAL STANDARDS RULE)	SY 2023-24	152 to 174%	148 to 169%	121 to 138%	140 to 160%
PROPOSED SY 2025-2026 LIMIT	SY 2025-26	137 to 157%	133 to 152%	109 to 124%	126 to 145%
PROPOSED SY 2027-2028 LIMIT	SY 2027-28	124 to 141%	119 to 137%	98 to 112%	114 to 130%
PROPOSED SY 2029-2030 LIMIT	SY 2029-30	111 to 127%	108 to 123%	88 to 101%	102 to 117%

Another element of support for the 10 percent level of reduction falls to palatability and the ease of making changes by manufacturers. Manufacturers have found that a 10 percent reduction in sodium for individual products is manageable with regards to product reformulation and consumer approval in the past, as well as in internal discussions with USDA.[209] Various studies are in agreement with gradual intervals of reduction being manageable for consumers both at an individual and population.[210] [211] [212] Additionally, small reductions of sodium (2 to 5 percent) are generally not noticed by consumers.[213] The proposed 10 percent reductions will not affect every single food product equally, but will be spread across the breakfast and lunch menus at varying levels. For instance, some products may easily be reduced in sodium content by 20 percent, whereas only a 5 percent change may be possible in others. Manufacturers also may have existing lower sodium product lines in their portfolio that they may be able to shift to without needing to reformulate existing products. Additionally, manufacturers may already be making strides in adjusting products as a result of the short-term FDA voluntary sodium guidance that was released in October 2021, especially with additional guidance expected to come out in 2024.

USDA completed a limited search of other food service operations in the U.S. in order to compare their sodium requirements to those proposed in this document. The CDC Food Service Guidelines for Federal Facilities were designed to be used in Federal, state and local government facilities, as well as hospitals, health care facilities, colleges and universities, private worksites, stadiums, and recreation centers.[214] This set of guidelines recommends that all meals, defined as an entrée and two sides, contain ≤800 milligrams of sodium. Entrees alone should contain ≤600 mg sodium and all side items alone contain ≤230 milligrams of sodium. Though these guidelines are directed towards adults, it is of note that beverages are included in these guidelines, and the NSLP and SBP require milk as part of the school food pattern. The U.S. Army Food Program Implementation Guide for Nutrition Standards [215] and the Healthier Campus Initiative Guidelines [216] also advise that lunch and dinner meals should contain ≤800 milligrams of sodium. The National Restaurant Association's Kids Live Well program [217] advises that at least two of the children's meal options served in restaurants should contain ≤700 milligrams of sodium, including at least two different food groups (fruit, vegetable, non/low-fat dairy, meat/meat alternative, and whole grains) and at least one of the two food groups must be a fruit or vegetable. No mention is made in the Kids Live Well program materials if a beverage is to be included as part of a meal when calculating the total sodium content. An 8-ounce carton of milk contains up to 130 milligrams of sodium, indicating that the proposed lunch sodium limits of 810, 895 and 935 milligrams for elementary, middle, and high schools are not far from other organization limits when accounting for milk and the full meal pattern requirements.

Health Benefits

The most important reason for sodium reduction in school meals is the health benefits for students. Closer alignment of school meals with the goals of the *Dietary Guidelines for Americans, 2015–2020* is meant to promote a healthy lifestyle and prevent chronic disease by meeting dietary needs. During SY 2011–2012, elementary, middle, and high school age school children consumed about 3,050 mg, 3,115 mg, and 3,565 mg of sodium daily, respectively.[218] This is in excess of the recommended daily sodium DRI values [219] for school age children; 1,500 mg for age 4 to 8 years, 1,800 mg for age 9 to 13 years, and 2,300 mg for age 14 to 18 years. Sodium DRI values are presented by age group so there is some overlap when comparing to school age groups.

Reducing sodium intake has been shown to reduce blood pressure in children, birth to age 18 years. This was shown in a systematic review conducted in 2015 by the Dietary Guidelines Advisory Committee (DGAC).[220] The 2015 DGAC also conducted an update on the 2013 Institute of Medicine (IOM) (now NASEM) and National Heart, Lung, and Blood Institute (NHLBI) systematic reviews that evaluated the relationship between sodium intake and the risk of cardiovascular disease (CVD). These reviews found agreement with the NHLBI review, which concluded that ''a reduction in sodium intake by approximately 1,000 mg per day reduces CVD events by about 30 percent'' and that ''higher dietary sodium intake is associated with a greater risk for fatal and nonfatal stroke and CVD.'' The DGAC also found agreement with the IOM review that found that there is evidence to support a positive relationship between higher levels of sodium intake and risk of CVD and is consistent with blood pressure serving as a surrogate indicator of CVD risk.[64] Blood pressure tracks over the life course, meaning that reducing sodium intake and maintaining a healthy blood pressure level in childhood can benefit individuals into adulthood.[221] Evidence is strong to support the conclusion that reduction in sodium intake reduces blood pressure and in turn reduces CVD risk and CVD events. A gradual reduction in sodium content of school meals will likely contribute to an improvement of dietary habits, blood pressure, and CVD risk factors in NSLP and SBP participants that could track into adulthood; however, USDA welcomes public input on the potential health impacts of the proposed sodium reductions.

[209] Cobb LK, Appel LJ, Anderson CA. Strategies to reduce dietary sodium intake. *Curr Treat Options Cardiovasc Med.* 2012;14(4):425–434. doi:10.1007/s11936–012–0182–9.

[210] Liem DG, Miremadi F, Keast RS. Reducing sodium in foods: the effect on flavor. *Nutrients.* 2011;3(6):694–711. doi:10.3390/nu3060694.

[211] Levings JL, Cogswell ME, Gunn JP. Are reductions in population sodium intake achievable?. *Nutrients.* 2014;6(10):4354–4361. Published 2014 Oct 16. doi:10.3390/nu6104354.

[212] Dehmer SP, Cogswell ME, Ritchey MD, et al. Health and Budgetary Impact of Achieving 10-Year U.S. Sodium Reduction Targets. *Am J Prev Med.* 2020;59(2):211–218. doi:10.1016/j.amepre.2020.03.010.

[213] Drake SL, Lopetcharat K, Drake MA. Salty taste in dairy foods: can we reduce the salt? [published correction appears in J Dairy Sci. 2012 Dec;95(12):7429]. *J Dairy Sci.* 2011;94(2):636–645. doi:10.3168/jds.2010–3509.

[214] *https://www.cdc.gov/obesity/downloads/guidelines_for_federal_concessions_and_vending_operations.pdf.*

[215] *https://quartermaster.army.mil/jccoe/Operations_Directorate/QUAD/nutrition/Implementation-Guide-for-Go-for-Green-Army.pdf.*

[216] *https://www.ahealthieramerica.org/healthier-campus-initiative-20#resource_grid-292.*

[217] *https://restaurant.org/getmedia/f829f35b-917a-432d-8192-9b1c79864d0d/kids-livewell-getting-started.pdf.*

[218] Quader ZS, Gillespie C, Sliwa SA, et al. Sodium Intake among US School-Aged Children: National Health and Nutrition Examination Survey, 2011–2012. *J Acad Nutr Diet.* 2017;117(1):39–47.e5. doi:10.1016/j.jand.2016.09.010.

[219] 2019 Sodium Chronic Disease Reduction Risk (Dietary Reference Intake) values.

[220] 2015 *Dietary Guidelines* Advisory Committee and Nutrition Evidence Library. Systematic Reviews of the Cross-Cutting Topics of Public Health Importance Subcommittee. 2015 *Dietary Guidelines* Advisory Committee Project. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, March 2017. Available at: *https://nesr.usda.gov/2015-dietary-guidelines-advisory-committee-systematic-reviews.*

[221] Cheng S, Xanthakis V, Sullivan LM, Vasan RS. Blood pressure tracking over the adult life course: patterns and correlates in the Framingham heart study. *Hypertension.* 2012;60(6):1393–1399. doi:10.1161/HYPERTENSIONAHA.112.201780.

Menu Planning Options for American Indian and Alaska Native Students

This rulemaking proposes to add tribally operated schools, schools operated by the Bureau of Indian Education, and schools serving primarily American Indian or Alaska Native children to the list of schools that may serve vegetables to meet the grains requirement, and requests public input on additional menu planning options that would improve the child nutrition programs for American Indian and Alaska Native children. This change would allow these specific schools to substitute vegetables, including traditional vegetables such as breadfruit and prairie turnips, for grains in school meals. This proposal also extends to CACFP and SFSP.

Due to limited data regarding consumption of these foods in the SBP and NSLP and the cost of these specific foods to schools serving American Indian and/or Alaska Native children specifically, no cost analysis can be completed to predict how this proposal would affect these schools. Vegetables are a component of the school meal patterns and must be offered with each lunch; schools also have the option to offer vegetables at breakfast. SNMCS data from SY 2014–2015 indicates that starchy vegetables including potatoes, and red/orange vegetables including sweet potatoes cost $0.18 per portion on average and bread/grain items also cost $0.18 per portion on average. Therefore, we expect this proposal would lead to minimal, if any, cost change per meal based on this data and based on the fact that schools already serve vegetables in their school meals. Further, schools would not be required to make any changes to their menus under this proposal, and could choose to continue serving grain items to meet the grains component requirement.

Traditional Foods

This rulemaking proposes to explicitly state in regulation that traditional foods may be served in reimbursable school meals. USDA acknowledges that many traditional foods may already be served in school meal programs; the goal of this proposal is to draw attention to this option and support efforts to incorporate these foods into school meals. By ''traditional food,'' USDA means the definition included in the Agriculture Improvement Act of 2014 [222] which defines traditional food as 'food that has traditionally been prepared and consumed by an American Indian tribe', which includes wild game meat, fish, seafood, marine mammals, plants, and berries.

Due to limited data regarding consumption and cost of traditional foods in the SBP and NSLP, no cost analysis can be completed to predict how this proposal would affect child nutrition programs. Traditional foods may be served in school meals under existing guidance, and this proposal encourages rather than requires schools to serve traditional foods, so this proposal is expected to result in a non-significant cost change annually for food service operations.

Afterschool Snacks

USDA proposes to align NSLP snack standards for school-aged children with the CACFP snack requirements. NSLP requirements for snacks served to infants and preschool-aged children would remain in effect. For school-aged children, reimbursable snacks would include two of the following five components: milk, vegetables, fruits, grains, and meats/meat alternates. USDA also proposes to apply the following CACFP snack requirements to NSLP snacks served to school-aged children: only one of the two components served at snack may be a beverage, milk served to children age 6 and older must be fat-free or low-fat and may be flavored or unflavored, at least one serving of grains per day across all eating occasions must be whole grain-rich, and grain-based desserts do not count towards meeting the grains requirement. Additionally, the added sugars product limits for breakfast cereals and yogurt proposed in this rulemaking would apply to NSLP snacks. The component options for afterschool snacks are the same categories as previously, aside from fruits and vegetables now being separated.

Compared to the number of lunches served, there are only four percent as many afterschool snacks served, based on 2019 data.[223] Of those snacks served, over 80 percent of the items served were breads/grains, fruits, and milk. SNMCS data from SY 2014–2015 indicates that under half of snack items served were beverages. Milk served was already meeting the proposed requirement to be fat-free or low-fat, flavored or unflavored. Combination entrees were not considered in this analysis because they are so minimally served as snacks. Over half of grains served for snacks were whole grain-rich in SY 2014–2015, so the remaining three areas with potential updates for snacks as a result of this proposal include replacing grain-based desserts, and limiting cereals and yogurts to those that meet the proposed product-based added sugars limits. About half of grain items in snacks served were grain-based desserts, and in order to switch those over to grains/breads that are not considered to be grain-based desserts would save approximately $11 million. Since yogurt was not as widely served as a snack item, the cost to switching from yogurt products with higher added sugars content to yogurts with no more than 12 grams of added sugars per 6 ounces is under half a million dollars. Cereal costs the same per dry ounce regardless of added sugars content, so there would be no cost change. In total, the proposal to align NSLP snack standards with CACFP snack standards would save around $11 million on average (Table 20).

TABLE 20: ESTIMATED COST OF AFTERSCHOOL SNACKS RULE BY EACH AFFECTED PRODUCT (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

PRODUCT TYPE	Estimated Annual Cost
GRAIN-BASED DESSERTS	-$11
BREAKFAST CEREALS	$0
YOGURT	$0.3
TOTAL	-$11

Substituting Vegetables for Fruits at Breakfast

This rulemaking proposes that schools can continue to substitute vegetables for fruits at breakfasts, but changes the vegetable variety requirement. Schools that substitute vegetables more than one day per school week would be required to offer vegetables from at least two subgroups. The vegetable subgroups include starchy, red and orange, dark green, beans and peas (legumes), and lentils. Starchy vegetables are consumed at a higher rate in children and adolescents compared to the other vegetable subgroups, so this proposal would encourage consumption of additional types of vegetables at breakfast if substituted in for fruit.

SNMCS data from SY 2014–2015 showed that only about three percent of fruits were substituted for vegetables at breakfast. Of the servings of vegetables substituted for fruits in SY 2014–2015, half were starchy, and the other half were primarily red and orange vegetables. An internal USDA analysis simulated switching between 10 and 25 percent of fruit servings at breakfast to vegetables. This simulation assumed that half of the switched fruit servings would be to starchy vegetables and the other half to any of the other vegetable subgroups (red and orange, dark green, beans and peas, lentils),

[222] Agriculture Improvement Act of 2014, as amended (25 U.S.C. 1685(b)(5)).

[223] USDA—Food and Nutrition Service National Database Publicly Available Data.

similar to the data in SNMCS. In SY 2014–2015, starchy vegetables served at breakfast and lunch cost approximately $0.18 per portion, and all other vegetables served cost approximately $0.20 per portion, on average. Fruits served at breakfast were $0.21 per portion, on average. Utilizing these prices per portion and the number of breakfasts served in 2019, there would be a savings ranging from $4 million to $11 million resulting from a substitution of 10 to 25 percent of fruit servings with vegetable servings (Table 21).

TABLE 21: ESTIMATED ANNUAL COST OF SUBSTITUTING VEGETABLES FOR FRUITS AT BREAKFAST (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

PRODUCT TYPE	10% OF FRUIT SERVINGS SWITCHED TO VEGETABLES	25% OF FRUIT SERVINGS SWITCHED TO VEGETABLES
# OF TOTAL FRUIT SERVINGS	1,985	1,985
# OF FRUIT SERVINGS TO SWITCH	199	496
COST	-$4	-$11

USDA expects more vegetables to be utilized in breakfast meals with the proposed decrease in added sugars content of breakfasts, including a reduction in servings of grain-based desserts. This may lead to vegetables being utilized in servings of eggs or in breakfast burritos, for example. However, it is also expected that fruits will be served in the vast majority of breakfasts since they are easy to incorporate in meals and to build into menus, and fresh fruits contain no added sugars, only naturally occurring sugars. Depending on the local prices, SFAs will decide the most cost-effective menus for their operations, but this proposal continues to promote vegetable variety at breakfast.

Nuts and Seeds

This rulemaking proposes allowing nuts and seeds to credit for the full meat/meat alternate component in all child nutrition programs and meals. This would remove the 50 percent crediting limit for nuts and seeds at breakfast, lunch, and supper. USDA expects that nuts and seeds will most often continue to be offered in snacks or in small amounts at breakfast, lunch, or supper alongside other meat/meat alternate sources. Nuts and seeds are most often offered in school meals in the form of a nut butter (or nut butter alternative—soy, sunflower seed) in a sandwich.

About 17 percent of daily lunch menus in SY 2014–2015 offered 'other protein items' in the form of eggs, seeds, nuts, beans and peas.[224] Of combination entrees served in the NSLP, about six percent were peanut butter and jelly sandwiches,[225] including variations with sunflower seed butter and almond butter.[226] Of those peanut butter and jelly sandwiches served, over 85 percent were prepared using whole grain-rich bread. Less than one percent of meat and meat alternate food items offered on NSLP menus were nuts, seeds, or nut/seed butters.[227] Very few instances of serving whole nuts and seeds were found in this analysis at either breakfast or lunch. Because USDA expects that nuts and seeds will be minimally offered as the sole protein source at a meal and because this change may take shape in a variety of combinations across menus, no measurable per meal cost change is expected as a result of this proposed element of the rule. Saturated fat content of school meals must be less than ten percent of total calories per week and replacing some lean sources of meat with nuts or seeds may result in higher saturated fat content of meals. When creating menus, operators must be aware of saturated fat content of meals if using more servings of nuts and seeds.

Competitive Foods—Hummus Exemption

This rulemaking proposes to add hummus to the list of foods exempt from the total fat standard in the competitive food, or Smart Snack, regulations. Hummus would still be subject to the saturated fat standard, which limits competitive foods to less than 10 percent of calories from saturated fat per item as packaged or served and the sodium standard in which snacks must be 200 mg of sodium or less and entrees must be 480 mg of sodium or less.[228] Smart Snacks are foods that are sold to students outside of the school meal programs, such as foods sold a la carte, in school stores, in vending machines or any other venues where food is served to students during school hours. Hummus is already permitted as a part of a reimbursable school meal but with this change could also be sold as a Smart Snack. A specific definition of hummus is also given as part of this proposal.

USDA does not collect or track competitive food sales, so it is unclear the exact cost change to SFAs that will result from this proposal. A served portion of hummus was comparable in price to a served portion of regular or reduced-fat peanut butter according to SNMCS data. Peanut butter and hummus are comparable in that they are served as part of a snack alongside another food (*i.e.* pretzels, bread, vegetables, apple slices, etc.). As a result, USDA expects a minimal cost change for SFAs that choose to sell hummus as a competitive food due to this proposal. Individual schools often use competitive foods sold to complement reimbursable foods in order to maintain a revenue-neutral operation; therefore, USDA assumes that schools will opt to sell hummus as a competitive food if they determine it is beneficial cost-wise. When data were collected in SY 2014–2015, hummus was served minimally in the NSLP, but it is likely the popularity of hummus among students has increased since that time, so allowing an additional option for schools could be beneficial.

Professional Standards

USDA proposes to allow state agency discretion to approve the hiring of an individual to serve as a school nutrition program director in a medium or large local educational agency, for individuals who have 10 years or more of school nutrition program experience but who do not hold a bachelor's or associate's degree. In other words, this proposal includes an experience substitution for education in order to open a potentially wider applicant pool for school nutrition program director positions. A high school diploma or GED would still be necessary, but this shift may help with hiring challenges experienced in recent years. Instead of education being the only path to promotion, high levels of experience would be an alternative path. Directors hired under this proposed provision would be encouraged to work towards a degree related nutrition and/or business, but this would not be required. This rulemaking also proposes to clarify in regulation that State agencies themselves may determine what counts as 'additional educational experience' for the hiring standards.

It is unclear exactly how many SFAs this will affect and how many individuals have 10 years or more of experience that could be promoted to director positions. However, USDA has recently received requests and questions from State agencies that are facing challenges filling vacancies and would like to have the option to substitute school nutrition program experience for a degree. Also, in response to USDA's 2018 professional standards proposed rule,[229] UDSA received 13 comments (out of 76 total comments) that included alternatives for the education requirement. Of those, 9 specifically recommended experience as a substitute for a degree, with 10 years of experience being the most common suggestion. Data will be collected between SY 2024–2025 and SY 2029–2030 to support ongoing assessment of effects of this aspect of the rule. Around 8.3 million or 5.4 percent of U.S. workers were employed in food preparation and serving

[224] SNMCS Report Volume 2.

[225] Of these peanut butter and jelly sandwiches, over 85 percent were made with whole grain-rich bread.

[226] SNMCS Study Data, USDA internal analysis.

[227] SNMCS Study Data, USDA internal analysis.

[228] *https://fns-prod.azureedge.us/sites/default/files/resource-files/smartsnacks.pdf.*

[229] *https://www.federalregister.gov/documents/2018/03/06/2018-04233/hiring-flexibility-under-professional-standards.*

related occupations in 2017.[230] While this was prior to the pandemic, numbers are beginning to recover across this category of employment and it is predicted that this field, including food service managers, will continue to grow in the coming years.[231] Of the food service managers across the U.S. in 2018–2019, 9.2 percent had less than high school diploma, 28.5 percent had a high school diploma or equivalent, and 26.2 percent had some college but no degree.[232] Thirty-six percent of food service managers have an associate's degree or higher level of education. For SFA directors specifically, a recent USDA study indicated that 12 percent of SFA directors had advanced degrees, 29 percent had bachelor's degrees, 13 percent had associate's degrees, 20 percent had some college but no degree, and 26 percent had high school diplomas.[233] It also found that directors at larger SFAs had higher levels of educational attainment. Comparing SFA directors to food service managers across the U.S., SFA directors have a higher level of education on average, but about 46 percent of SFA directors have no degree. As a result, it is likely that a substantial percentage of operations could benefit from the ability to promote through experience rather than education level.

Buy American

This proposed rule seeks to strengthen the Buy American requirement but also acknowledge that purchasing domestic food products is not always feasible for schools. USDA proposes to maintain the current two limited exceptions to the Buy American provision and to also propose a new threshold limit for school food authorities utilizing these exceptions. The two exceptions USDA proposes to maintain will continue to apply when (1) the product is not produced or manufactured in the U.S. in sufficient and reasonably available quantities of a satisfactory quality; or (2) competitive bids reveal the costs of a U.S. product are significantly higher than the non-domestic product.

USDA proposes to institute a 5 percent ceiling on the non-domestic commercial foods a school food authority may purchase per school year. Consistent with current USDA guidance, this proposed rule would clarify in regulation that it is the responsibility of the school food authority to determine whether an exception applies. It proposes to require school food authorities to maintain documentation showing that no more than 5 percent of their total annual commercial food costs were for non-domestic foods. USDA would not require documentation for use of each individual exception used. Rather, school food authorities would be required to maintain documentation demonstrating that less than 5 percent of total commercial foods purchased per year are non-domestic. This documentation requirement would codify the requirement to maintain documentation for an exception, while decreasing the amount of required documentation compared to current practices. To supplement this documentation, USDA would continue to collect information and data on the Buy American provision and school food authority procurement. This proposed rule would require school food authorities to include the Buy American provision in documented procurement procedures, solicitations, and contracts for foods and food products procured using informal and formal procurement methods, and in awarded contracts. State agencies would verify the inclusion of this language when conducting reviews. Additionally, a definition of 'substantially' is proposed, as well as a clarification of requirements for harvested farmed and wild caught fish.

The Food and Nutrition Service (FNS) Program Operations Study[234] collected data during SY 2017–2018. This study found that products purchased under exceptions made up 8.5 percent of total food purchase expenditures among SFAs that used an exception to the Buy American provision. During SY 2017–2018, 25.7 percent of SFAs used an exception to the Buy American provision. Based on this data, it is likely that the majority of SFAs are already meeting the proposed 5 percent ceiling on the non-domestic commercial foods a school food authority may purchase per school year with around a quarter of SFAs needing to decrease their purchase of non-domestic commercial foods. Among the SFAs using an exception to the provision, the reasons cited for using an exception included: limited supply of the commodity or product (88 percent), increased costs of domestic commodities or products (43 percent), and quality issues with available domestic commodities or products (21 percent). The exceptions to the Buy American provision will help SFAs control costs of purchasing domestic food products despite the added 5 percent ceiling.

Characteristics of the SFAs by their level of participation in using exceptions is important to understand which schools will be most affected by the proposed Buy American provision. Products purchased under exceptions made up 9.5 percent of total food purchase expenditures among small SFAs (1–999 students), 8.1 percent among medium SFAs (1,000–4,999 students), 7.5 percent among large SFAs (5,000–24,999 students), and 7.5 percent among very large SFAs (≥25,000 students). For urbanicity, products purchased under exceptions made up 12.7 percent of total food purchase expenditures in SFAs that were in towns, 6.5 percent of SFAs in suburban areas, 7.9 percent of SFAs in urban/city areas, and eight percent of SFAs in rural areas. Those SFAs with a medium level of students approved for free and reduced price meals (30–59 percent) had 5.9 percent of food expenditures purchased under exceptions, but schools with a low percentage (0–29 percent) and with a high percentage (≥60 percent) of free and reduced price meal participants had 10.9 percent and 10.4 percent of total foods purchased under exceptions, respectively. SFAs that are small, that are in towns, and those that had both a low and high percentage of students approved for free and reduced-price meals are above the 8.5 percent average and schools falling in these groups may have the most challenge meeting the Buy American provision proposed in this rulemaking compared to SFAs greater in size (>999 students), those that are in suburban, city or rural environments, and those that have 30 to 59 percent of students approved for free and reduced-price meals.

For the 26 percent of SFAs that used an exception to the Buy American provision during SY 2017–2018, it is expected that some costs would exist associated with the time to reformulate menus and/or update purchasing practices to meet the five percent proposed ceiling. These costs are included in the regulatory familiarization cost totals that are detailed in the 'Administrative Costs' section above. Using SY 2009–2010 total food expenditure data from the School Food Purchase Study, an increase in food costs was estimated for all SFAs to reach the 5 percent threshold in the 26 percent of SFAs that were at 8.5 percent, on average, in SY 2017–2018. Of the 26 percent of SFAs that utilized an exception, 43 percent sought exemptions based on cost. The majority of SFAs (70 percent) used a cost threshold of 30 percent or less when determining whether a cost is significantly higher for a domestic commodity or product, warranting a use of exception. Therefore, we assume that, on average, the cost of purchasing domestic products will be 15% higher for those affected purchases. These data point to a $4 million annual food cost increase based on this provision. USDA requests public input on food costs that may result from the proposed threshold for non-domestic commercial food purchases.

Additionally, USDA estimates the proposed record keeping requirement for school food authorities to maintain documentation to demonstrate that their non-domestic food purchases do not exceed the proposed 5 percent annual threshold will impact all school authorities—approximately 19,019 school food authorities—or respondents. USDA estimates these 19,019 respondents will develop and maintain 10 records each year, and that it takes approximately 15 minutes (.25 hours)[235] to complete the record keeping requirement for each record. The proposed record keeping requirement adds a total of 47,547.5 annual burden hours into the new information collection request. When using the latest

[230] *https://www.census.gov/library/stories/2022/07/how-food-service-transportation-workers-fared-before-pandemic.html.*

[231] *https://www.bls.gov/ooh/management/food-service-managers.htm.*

[232] *https://www.bls.gov/emp/tables/educational-attainment.htm.*

[233] Urban location and low poverty level of the SFA were also correlated with higher educational attainment among SFA directors. USDA, FNS, Office of Policy Support, School Nutrition and Meal Cost Study, Final Report Volume 1: School Meal Program Operations and School Nutrition Environments, prepared by Mathematica Policy Research and Abt Associates, April 2019, pp. 34–35, *https://fns-prod.azureedge.net/sites/default/files/resource-files/SNMCSVolume1.pdf.*

[234] Child Nutrition Program Operations Study (CN–OPS–II) Report: School Year 2017–2018. *https://fns-prod.azureedge.us/sites/default/files/resource-files/CNOPS-II-SY2017-18.pdf.*

[235] As explained in the PRA (Paperwork Reduction Act program).

hourly cost of public administration in state and local government from 2022 of $54.05,[236] the total additional cost of this component of the proposed rule is about $3 million annually. In total, USDA estimates that the proposed Buy American provision would cost $7 million annually with both food costs and record keeping included (Table 22). USDA acknowledges that the estimated cost of this proposed provision would contribute to additional SFA costs, leading to potentially reduced funds for other areas of spending. However, it would be at SFA discretion how funds are shifted to meet this proposed threshold for non-domestic foods. USDA does not anticipate that this proposed provision will have any effect on the ability of SFAs to meet school meal nutrition standards.[237]

TABLE 22: ESTIMATED COST OF BUY AMERICAN PROVISION (MILLIONS), ADJUSTED FOR ESTIMATED INFLATION TO SY 2024-2025

CATEGORY	Estimated Annual Cost
FOOD COSTS	$4
RECORD KEEPING[237]	$3
TOTAL	$7

Geographic Preference

USDA is proposing a change in this rulemaking to expand geographic preference options by allowing locally grown, raised, or caught as procurement specifications (a written description of the product, or service that the vendor must meet to be considered responsive and responsible) for unprocessed or minimally processed food items in the child nutrition programs, in order to increase the procurement of local foods and ease procurement challenges for operators interested in sourcing food from local producers. Comments are requested from the public regarding this proposal on whether or not respondents agree that this approach would ease procurement challenges for child nutrition program operators or if it would encourage smaller-scale producers to submit bids to sell foods to child nutrition programs. No specific cost impact is being evaluated for this proposal since USDA does not have any applicable data, but USDA assumes that this element of the proposed rule will be used at SFA discretion as it works into individual school budgets (creating savings when needed). However, it is of note that of those SFAs participating in Farm to School, 85 percent served at least some local foods and about 20% of total food spending was on local foods,[238] so there is room for increased purchase of local foods across most SFAs at SFA discretion.

Miscellaneous Changes

This section proposes a variety of miscellaneous changes and updates to child nutrition program regulations, including terminology changes. For the 'meats/meat alternates' meal component that includes dry beans and peas, whole eggs, tofu, tempeh, meat, poultry, fish, cheese, yogurt, soy yogurt, peanut butter and other nut or seed butters, and nuts and seeds, this rulemaking proposes to change the component name to 'protein sources' for the NSLP, SBP, and CACFP. For the 'legumes (beans and peas)' vegetable subgroup, this document proposes to change the name to 'beans, peas, and lentils' to match the *Dietary Guidelines, 2020–2025*. As noted in the preamble, this rulemaking also proposes a variety of technical corrections, including correcting cross-references, updating definitions, removing outdated requirements, and making revisions to the meal pattern tables to make them more user-friendly.

Summary

As noted above, this proposed rule was developed in order to align school nutrition standards more closely with the goals of the *Dietary Guidelines* for Americans, 2020–2025 and to support the continued transition to long-term standards after the pandemic and the implementation of the transitional standards rule. Most of the impacts associated with this proposed rule are in the form of shifts in purchasing patterns and increased labor costs. Costs in this section are uncertain (and thus estimates should be considered as somewhat imprecise) but reflect the potential value of the changes proposed in this rulemaking.[239] [240] [241] [242]

[236] Using the U.S. Bureau of Labor Statistics series ID of CMU3019200000000D of total compensation cost per hour worked for state and local government workers in public administration industries (*https://data.bls.gov/cgi-bin/dsrv*).

[237] No inflation adjustment was completed for record keeping costs since they are not food costs or based on a factor of food costs.

[238] Bobronnikov, E. et al. (2021). Farm to School Grantee Report. Prepared by Abt Associates, Contract No. AG–3198–B–16–0015. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Ashley Chaifetz.

[239] Values reflect annual costs from sections above with added three percent annual inflation. Costs are also shown by school year in this table. This varies from Table 1 which utilizes fiscal years and does not include expected inflation during the duration of the proposed rule.

[240] Due to rounding, numbers may not add up to rounded sum in 'total' column exactly.

[241] Only local costs (not State costs) are adjusted for inflation because they are based on a factor of food-costs.

[242] Only food costs (not record keeping) are adjusted for inflation.

TABLE 23: ESTIMATED ANNUAL COSTS IN MOVING FROM TRANSITIONAL STANDARDS RULE TO PROPOSED RULE BEGINNING BY SCHOOL YEAR (MILLIONS), ADJUSTED FOR ANNUAL INFLATION[239,240]

YEAR OF IMPLEMENTATION	SY 2024-2025	SY 2025-2026	SY 2026-2027	SY 2027-2028	SY 2028-2029	SY 2029-2030	Total	Average over six school years
ADMINISTRATIVE COSTS[241]	$43	$44	$0	$45	$0	$46	$178	$30
ADDED SUGARS	$0	$91	$94	$96	$99	$102	$482	$80
MILK (ALTERNATIVE A)	$0	$60	$62	$64	$66	$68	$319	$53
MILK (ALTERNATIVE B)	$0	$0	$0	$0	$0	$0	$0	$0
SODIUM	$0	$99	$102	$167	$172	$178	$717	$120
AFTERSCHOOL SNACKS	-$11	-$11	-$12	-$12	-$12	-$13	-$70	-$12
SUBSTITUTING VEGETABLES FOR FRUITS AT BREAKFAST	-$4	-$4	-$5	-$5	-$5	-$5	-$27	-$5
BUY AMERICAN[242]	$7	$7	$7	$7	$7	$7	$42	$7
TOTAL (ALTERNATIVE A)	$35	$285	$248	$363	$328	$383	**$1,641**	**$274**
TOTAL PER MEAL (ALTERNATIVE A)	**$0.005**	**$0.039**	**$0.034**	**$0.050**	**$0.045**	**$0.052**	NA	**$0.037**
TOTAL (ALTERNATIVE B)	$35	$224	$186	$299	$262	$316	**$1,322**	**$220**
TOTAL PER MEAL (ALTERNATIVE B)	**$0.005**	**$0.031**	**$0.025**	**$0.041**	**$0.036**	**$0.043**	NA	**$0.030**

If this proposed rule is fully implemented with proposed milk Alternative A, it would cost $274 million annually on average over six school years, or $0.037 per lunch and breakfast meal. If this proposed rule is fully implemented with proposed milk Alternative B, it would cost schools $220 million annually over six school years, or $0.03 per lunch and breakfast in food and labor costs (Table 23). Per meal costs average from $0.005 to $0.052 annually between SY 2024–2025 and SY 2029–2030 for proposed milk Alternative A and ranged from $0.005 to $0.043 annually for proposed milk Alternative B. Impacts to the market will be similar in magnitude as purchasing patterns shift to encompass more products that are lower in sodium and lower in added sugars. The cost of shifting to the product specific added sugars limits is based on switching to products already available on the market; costs to schools may vary if manufacturers alter products or create new products to meet the proposed added sugars regulations. The majority of costs associated with this rulemaking are a result of purchasing different products with less sodium and the additional labor needed to increase scratch cooking, update menus, and implement new recipes to implement the proposed gradual sodium reductions. Costs savings due to the updated standards for afterschool snacks are all related to shifts in purchasing patterns to meet the proposed product-based added sugars limits for breakfast cereal and yogurt identical to the proposed NSLP and SBP added sugar limits for these products. A shift in purchasing patterns for substituting vegetables for fruits is also due to a shift in purchasing patterns. The costs associated with Buy American are due to additional food costs as a result of a shift in purchasing patterns and additional burden hours for documentation shifts. This proposed rule provides achievable standards formed by USDA and is accompanied by a variety of analyses with the most recently available data and additional data collected to monitor recent product availability.

Uncertainties/Limitations

In order to complete this Regulatory Impact Analysis, some assumptions had to be made, and additionally some uncertainties and limitations must be acknowledged. Some general limitations are noted below, as well as limitations specific to sections, and an analysis to shed light on the uncertainty of participation levels in school meal programs going forward. Some of these uncertainties and limitations result from this proposed rule being written in a time directly after the COVID–19 pandemic, in which assumptions must be made about future participation in school meal programs, as well as future food and labor prices.

General

Due to the delay in conducting the next edition of the School Nutrition Meal Cost Study (II) as a result of the pandemic, the most recent data that could be used for cost analysis were from SY 2014–2015. It is likely that product availability and product cost has changed from SY 2014–2015 to the current school year (SY 2022–2023) and will continue to change prior to when the planned implementation date for a final version of this proposed rule is likely to occur (SY 2024–2025). Because the transitional standards rule went into effect so recently, it is unclear how well schools will adapt to the updated standards to establish a clear baseline of menus and staffing, for this proposed rule. Additionally, a lack of recent data regarding school staffing levels and an uncertainty of the levels post-pandemic make it challenging to estimate a change in staffing cost, especially as it affects changes in sodium and professional standards proposed regulations.

USDA acknowledges that the data used to evaluate cost, although the most recent available data, is relatively old and has made efforts to account for this by adjusting for inflation from SY 2014–2015 to the years of implementation prescribed in this proposed rule. However, as noted throughout this analysis it is possible that changes in product formulation, availability, and cost have occurred in the years since these data were collected. Lower sodium and lower added sugars foods will be utilized if this proposed rule is implemented, so a change in costs resulting from this change must be considered specifically. In the 'Impacts' section above, there are sections detailing the changes expected as a result of the added sugars and sodium limits specifically, but using SY 2014–2015 data to estimate the cost differential. A sensitivity analysis accounting for potential changes in cost considers if there is a shift to half the cost differential or double the cost differential in the added sugars and sodium elements of meals (Table 24). It is possible that the differentials could be higher or lower in the future, but this sensitivity analysis offers a simulated shift in costs to illustrate the potential magnitude of change. If the differential between lower sodium and higher sodium foods and between foods lower in added sugars and higher in added sugars has doubled since SY 2014–2015, then the costs of implementing this rulemaking would be considerably more expensive. However, if the market has changed already due to the CACFP total sugar limits, public desire for healthier packaged food options, and the FDA voluntary sodium goals, then it is possible that the differential has decreased.

[243] Changes to sodium limits and added sugars product-specific limits as a result of this proposed rule would not begin to go into effect until SY 2025–2026.

TABLE 24: SENSITIVITY ANALYSIS - ESTIMATED 5-YEAR COST DIFFERENTIALS OF REDUCING SODIUM AND ADDED SUGARS IN SCHOOL MEALS (MILLIONS), ADJUSTED FOR ANNUAL INFLATION[243]

SODIUM LIMIT EFFECTIVE SCHOOL YEAR	SY 2025 - 2026	SY 2026-2027	SY 2027-2028	SY 2028-2029	SY 2029-2030	FIVE-YEAR TOTAL	ANNUAL FIVE-YEAR AVERAGE
ADDED SUGARS							
SY 2014-2015 ESTIMATES	$91	$94	$96	$99	$102	$482	$96
HALF COST DIFFERENTIAL	$45	$47	$48	$50	$51	$241	$48
DOUBLE COST DIFFERENTIAL	$182	$187	$193	$198	$204	$964	$193
SODIUM							
SY 2014-2015 ESTIMATES	$99	$102	$167	$172	$178	$717	$143
HALF COST DIFFERENTIAL	$49	$51	$84	$86	$89	$359	$72
DOUBLE COST DIFFERENTIAL	$197	$203	$335	$345	$355	$1,435	$287
TOTAL							
SY 2014-2015 ESTIMATES	$189	$195	$264	$272	$279	$1,200	$240
HALF COST DIFFERENTIAL	$95	$98	$132	$136	$140	$600	$120
DOUBLE COST DIFFERENTIAL	$379	$390	$527	$543	$559	$2,399	$480

Another uncertainty is if manufacturers will eliminate product lines if it is no longer profitable to sell them, especially for products that need to be reformulated. Some product lines have been created specifically for schools which may become even more common with these proposed regulations. Supply chain delays have been challenging in recent years and may continue in the coming years. About 92 percent of SFAs reported experiencing some challenges due to supply chain disruptions in SY 2021–2022, including product availability, orders arriving with missing or substituted items, as well as labor shortages.[244] In addition, it may take longer to reformulate certain product lines than anticipated. Food manufacturers play an integral role in school food service operations and the ability for menus to meet regulations, especially when it comes to added sugars, milk, whole grains, and sodium.

For this analysis, HEI scores were utilized to measure the alignment of school menus with recommendations from the *Dietary Guidelines.* HEI component scores for added sugars and sodium only reflect one aspect of the diet, not a complete diet. HEI scores were originally designed to measure a full day of intake, not necessarily designed to evaluate one or two meals a day. One additional limitation regarding HEI scores, is that the calculation does not exactly align with the recommendations in the *Dietary Guidelines* but is more focused on nutrient density. For instance, a maximum score for the sodium component is achieved if sodium content is ≤1.1 grams of sodium per 1,000 kilocalories (HEI–2010 and HEI–2015) and a maximum score for the added sugars component is achieved if added sugars are at ≤6.5 percent of total energy (HEI–2015).[245] The *Dietary Guidelines for Americans, 2020–2025* sodium recommendations are based on the sodium DRIs and the added sugar recommendations are more liberal at 10 percent when considering the entire population, including adults. While these are limitations of using the HEI score and component scores, HEI is still a valuable tool to evaluate meals in a standardized way that allows for comparison and measuring improvement over time.

Decreasing sodium and added sugars menu content may inadvertently increase other nutrients such as fat and protein. It is uncertain what the effect of these proposed changes across this proposed rule will have on average across SFAs since there are so many combinations of food groups and permutations of menu changes. A decrease in added sugars content alone in meals could inadvertently increase sodium content through usage of more meat/meat alternate products on menus. These will have to be changes that food service operators and those designing school meal menus will have to be aware of and account for when making adjustments.

Health Benefits

Health benefits can be challenging to quantify with regards to cost and savings, especially in the younger population. While a variety of studies have shown that habits developed in childhood can track into adulthood,[246] [247] it is unclear what proportion of individuals hold to this trend and the level of reduced chronic health conditions in adults consuming healthier meals during childhood and adolescence.

As detailed above in the 'Impacts' section, reducing intake of added sugars can result in reductions in weight gain, obesity, T2D, CVD, and chronic kidney disease. Consumption of dietary patterns with low-fat dairy (including low-fat milk) and whole grains, were associated with lower fat-mass index and body mass index later in adolescence, as well as lower blood pressure and improved blood lipid levels. Throughout the lifespan, consumption of whole grains has been shown to reduce the risk of CVD, T2D, and some types of cancer. Reducing sodium intake has been shown to reduce blood pressure in children, birth to age 18 years, and in turn also reduce CVD incidence.[248]

Despite the challenges of quantifying the costs or savings resulting from improved health outcomes in children, there are some available studies that quantify these findings in adults for major health outcomes. For instance, annual medical costs for individuals with high blood pressure are up

[244] Results of the U.S. Department of Agriculture, Food and Nutrition Service-Administered School Food Authority Survey on Supply Chain Disruptions.

[245] *https://epi.grants.cancer.gov/hei/comparing.html.*

[246] Lioret S, Campbell KJ, McNaughton SA, et al. Lifestyle Patterns Begin in Early Childhood, Persist and Are Socioeconomically Patterned, Confirming the Importance of Early Life Interventions. Nutrients. 2020;12(3):724. Published 2020 Mar 9. doi:10.3390/nu12030724.

[247] Movassagh EZ, Baxter-Jones ADG, Kontulainen S, Whiting SJ, Vatanparast H. Tracking Dietary Patterns over 20 Years from Childhood through Adolescence into Young Adulthood: The Saskatchewan Pediatric Bone Mineral Accrual Study. Nutrients. 2017;9(9):990. Published 2017 Sep 8. doi:10.3390/nu9090990.

[248] More detailed explanations of health effects by each major provision are in the 'Impacts' section above.

to $2,500 higher than costs for people without high blood pressure,[249] [250] resulting in a $79 billion total annual medical cost associated with high blood pressure in the U.S.[251] From 1996 to 2016, there was an increase of over $100 billion in spending on adult cardiovascular disease, to a total of $320 billion spent in 2016 in the U.S.[252] This indicates that a reduction in CVD overall could result in significant savings. In a 2017 article evaluating cost savings associated with weight reduction, a 20-year-old going from obese to overweight resulted in around $18,000 savings over a lifetime, compared to a $28,000 savings on average over a lifetime if going from obese to a healthy weight. The expected savings are slightly higher if this same level of weight reduction occurred in a 40-year-old.[253] In 2016, it was estimated that the aggregate medical cost to due to obesity amongst adults was approximately $261 billion in the U.S.,[254] indicating an area in which costs could be widely reduced as a result of healthier habits. The most expensive chronic condition in the U.S. is diabetes, with a $327 billion annual cost ($237 billion of which are medical costs).[255] The cost and benefit estimates from these studies may be subject to a variety of limitations depending on study design and available data; however, these estimates help to provide insight into potential savings associated with consuming a healthy diet during the lifespan. While there is some cost associated with improving the dietary intake of school-aged-children through school meals and other child nutrition programs, the potential savings that could occur in adulthood through reduced medical costs and increased productivity as a result of forming healthy habits starting in childhood could be substantial, especially when considering blood pressure, CVD, obesity, and diabetes.

Added Sugars

For milk products, the market availability of those flavored milks that meet the proposed added sugars standards of ≤10 mg of added sugar per 8 fluid ounces is uncertain. While a cursory search completed by USDA showed that some manufacturers are already producing flavored milks that meet the proposed standard, it is unclear the full availability across the nation or whether it will be a slow transition for manufacturers.[256] It is possible that some SFAs will need to serve unflavored milk varieties only, temporarily, if the availability of flavored milks with a lower level of added sugars is limited.

Milk

When comparing the price per eight fluid ounces of milk based on SY 2009–2010 data to the SY 2014–2015 data, both analyses showed a similar difference in price, but the differences were varied by milk type. For instance, in the SY 2009–2010 data, flavored low-fat milk cost $0.02 more than flavored fat free milk and both unflavored low-fat and fat-free milk, but in the SY 2014–2015 data, flavored low-fat milk cost $0.01 more than flavored fat free milk and flavored fat free milk cost $0.01 more than unflavored fat free milk. More data regarding these cost differences are in Table 25. USDA is uncertain if these cost differences are because of varied quantities in purchasing or another unknown reason. USDA acknowledges the possibility that as a result of this rulemaking and the transitional standards rule, the cost of milk products may change in the future and that regardless of the data from SY 2009–2010 and SY 2014–2015, the milk prices are very similar by fat content and flavor status. Comparing the analyses from the two different data collection time points (SY 2009–2010 and SY 2014–2015) is below in the 'Alternate Analysis' section.

TABLE 25. COMPARISON OF COST OF MILK PER EIGHT FLUID OUNCES BY MILK TYPE DURING TWO DATA COLLECTIONS

	SY 2009-2010 Data	SY 2014-2015 Data
LOW-FAT, FLAVORED	$0.21	$0.25
LOW-FAT, UNFLAVORED	$0.19	$0.24
FAT FREE, FLAVORED	$0.19	$0.24
FAT FREE, UNFLAVORED	$0.19	$0.25

Alternate Analysis

As noted above, the Regulatory Impact Analysis accompanying the transitional standards rule, used milk cost data from SY 2009–2010. In the previous sections of this RIA, data from SY 2014–2015 were used, including analyses with milk products. This section provides updated milk cost estimates in an alternative analysis compared to the analysis in the transitional standards rule. USDA recognizes that this is a limitation but wants to show the differences observed.

Utilizing the SY 2014–2015 data, it was found, on average, that low-fat, flavored milk cost $0.01 more than low-fat unflavored milk per carton (8 fluid ounces). It was also found that fat-free, flavored milk cost $0.01 less than fat free unflavored milk per carton. USDA theorizes that low-fat, flavored milk costs more than low-fat, unflavored milk because it was purchased by SFAs in such small quantities compared to low-fat, unflavored milk. Low-fat, unflavored and fat-free, flavored milks were the most frequently offered varieties on daily menus in SY 2014–2015. As a result of the transitional standards rule, SFAs have the option to offer fat-free or low-fat flavored milk varieties school lunches and breakfast. This proposed rule would maintain the option for schools to offer fat-free or low-fat flavored milk varieties with school meals. About 91 percent of daily NSLP menus and 76 percent of daily SBP menus offered fat-free, flavored milk in SY

[249] Wang G, Zhou X, Zhuo X, Zhang P. Annual total medical expenditures associated with hypertension by diabetes status in US adults. Am J Prev Med. 2017;53(6 suppl 2):S182–S189.

[250] Kirkland EB, Heincelman M, Bishu KG, et al. Trends in healthcare expenditures among US adults with hypertension: national estimates, 2003–2014. J Am Heart Assoc. 2018;7(11).pii: e008731.

[251] Dieleman JL, Cao J, Chapin A, et al. US Health Care Spending by Payer and Health Condition, 1996–2016. 2020;323(9):863–884. doi:10.1001/jama.2020.0734.

[252] Birger M, Kaldjian AS, Roth GA, Moran AE, Dieleman JL, Bellows BK. Spending on Cardiovascular Disease and Cardiovascular Risk Factors in the United States: 1996 to 2016. Circulation. 2021;144(4):271–282. doi:10.1161/CIRCULATIONAHA.120.053216.

[253] Fallah-Fini S, Adam A, Cheskin LJ, Bartsch SM, Lee BY. The Additional Costs and Health Effects of a Patient Having Overweight or Obesity: A Computational Model. Obesity (Silver Spring). 2017;25(10):1809–1815. doi:10.1002/oby.21965

[254] Cawley J, Biener A, Meyerhoefer C, et al. Direct medical costs of obesity in the United States and the most populous states. J Manag Care Spec Pharm. 2021;27(3):354–366. doi:10.18553/jmcp.2021.20410.

[255] American Diabetes Association. Economic costs of diabetes in the US in 2017. Diabetes Care. 2018;41:917–928.

[256] It was found that at least four manufacturers had at least one flavored milk product with under 10 grams of added sugars per serving and in fact, three of them had products with six grams of added sugars per serving. A total of 10 flavored milk products from four companies were below the 10-gram proposed limit. The catalogs used for data collection generally showed that there were lower sugar and higher sugar versions of flavored milk available.

2014–2015.[257] If across all NSLP and SBP menus, all fat-free, flavored milk was replaced with low-fat, flavored milk, it would cost about $85 million more a year (using updated data). Any change to low-fat, flavored milk from fat-free, flavored must be made within available resources and calorie and fat limits, so it is unlikely that all SFAs will make this change for all flavored milk offerings. Using the average number of children per school district,[258] [259] it is estimated that about 9 percent of daily NSLP and SBP menus include low-fat, flavored milk through exemptions or flexibilities.[260] USDA estimates this to be about $9 million more a year in the value spent on milk (Table 26). By using the updated milk cost data, the annual cost of purchasing low fat flavored milk is about 30 percent less than the cost of the previous estimates including a yearly inflation factor of three percent. The outcomes of both analyses are shown in Table 26.

TABLE 26: ESTIMATED IMPACT OF PURCHASING LOW-FAT, FLAVORED MILK (MILLIONS) WITH UPDATED DATA

SUBSTITUTION LEVEL	Estimated Annual Cost with SY 2009-2010 Data	Estimated Annual Cost with SY 2014-2015 Data
MAXIMUM – REPLACE ALL FAT-FREE, FLAVORED WITH LOW FAT FLAVORED	$126	$85
MINIMUM - 9 PERCENT OF DAILY MENUS REPLACED FAT-FREE, FLAVORED WITH LOW-FAT, FLAVORED (BASED ON EXEMPTION DATA)[103]	$13	$9

Whole Grains

Due to the age of the available data, it is unknown if schools made substantial changes with regards to the proportion of grains served being whole grain-rich during the time from SY 2014–2015 up until SY 2019–2020, when the pandemic began. In order to update the RIA with SY 2014–2015 data, an analysis was completed that also incorporated whole grain-rich based combination entrées because they contribute so highly to daily intake in school meals, according to the SNMCS report.[261] Another limitation of the whole grain analysis is that the cost of combination entrees also includes the cost of other food groups, so the cost comparison was based on a cost per portion of the combination entrées. The values are still comparable because the same methodology was used for whole grain-rich products and the non-whole grain-rich products overall, but it is not possible to compare to the transitional standards rule RIA methodology which included bulk cost data from another source.[262]

Alternate Analysis

As noted above, the Regulatory Impact Analysis accompanying the transitional standards rule, used whole grain cost data from SY 2009–2010 (SFPS–III).[263] In the previous sections of this RIA, data from SY 2014–2015 were used, including analyses with whole grain-rich products. Additionally, the 2022 transitional standards rule RIA utilized the per pound cost data for grains, and this RIA analysis includes an average cost of both grains offered individually (*i.e.* biscuits, rice, crackers, croutons, etc.) and grains offered in combination entrees, which may include foods from other food groups than grains (*i.e.* cheeseburgers, pizza with meat, spaghetti with sauce, etc.). This section provides updated whole grain cost estimates in an alternative analysis compared to the analysis in the transitional standards rule. USDA recognizes that this is a limitation but wants to show the differences observed. This analysis also differs because it considers a greater diversity of items offered on school menus compared to the previous RIA.

For both individually offered grains and combination entrees offered at breakfast and at lunch, the cost of whole grain-rich options per ounce equivalent was less than their non whole grain-rich counterparts. On average, whole grain-rich grains offered alone cost $0.01 and $0.02 less than their non whole grain-rich counterparts at breakfast and lunch, respectively. Whole grain-rich combination entrees cost $0.02 less than their non whole grain-rich counterparts at both breakfast and lunch, on average (Table 27). These values are weighted to the proportions in which subcategories of grains (*i.e.* sweetened cold cereal, muffins and sweet/quick breads, rice, etc.) are offered on menus. Breakfast and lunch combination entrees cost more than individual grain ounce equivalents, but this was expected since combination entrees include various other food groups (fruit, vegetable, meat/meat alternate).

TABLE 27: PRICE PER OZ/PORTION FOR GRAIN ITEMS FROM SNMCS (SY 2014-2015)

	BREAKFAST		LUNCH	
GRAIN ITEM	Individual Grain (oz eq.)	Combination Entrée (per portion)	Individual Grain (oz eq.)	Combination Entrée (per portion)
WHOLE GRAIN-RICH	$0.22	$0.38	$0.11	$0.54
NOT WHOLE GRAIN-RICH	$0.23	$0.40	$0.13	$0.56

For the RIA in the transitional standards rule, the range of calculated costs were built on two separate sets of assumptions. The high estimated cost level assumed that all schools were offering half of their grains as whole grain-rich, which was the requirement in SY 2019–2020. Because the transitional standards rule is currently in place, the 2012 estimate was not repeated for this RIA with

[257] U.S. Department of Agriculture, Food and Nutrition Service, School Nutrition and Meal Cost Study Final Report Volume 2: Nutritional Characteristics of School Meals, by Elizabeth Gearan et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: *www.fns.usda.gov/research-and-analysis.*

[258] Based on unpublished USDA data: Child Nutrition Program Operations study year 3.

[259] There were no significant characteristics of these school district suggesting that smaller or larger districts requesting the exemption. This analysis assumes that about 57 percent of children enrolled in the 8 percent of districts requesting an exemption participate in the NSLP and about 30 percent participate in the SBP.

[260] See Regulatory Impact Analysis from *Child Nutrition Programs: Transitional Standards for Milk, Whole Grains, and Sodium* (87 FR 6984, February 7, 2022). Available at: *https://www.federalregister.gov/.*

[261] *https://fns-prod.azureedge.us/sites/default/files/resource-files/SNMCS-Volume2.pdf.*

[262] School Food Purchase Study III.

[263] School Food Purchase Study III (SY 2009–2010).

the updated data. The low estimated scenario, which was the expected scenario, used the information to-date on whole grain-rich progress and assumed that on average schools are currently offering 75 percent grain items as whole grain-rich. This assumption was based on the finding that 70 percent of weekly menus at schools offered at least 80 percent of grain items as whole grain-rich in SY 2014–2015. This portion of the analysis was repeated utilizing the updated cost data from SY 2014–2015. Table 28 shows the costs associated with moving to the 80 percent threshold in this rulemaking from two estimated starting points (75 percent and 50 percent of grains as whole grain-rich) with SY 2009–2010 and SY 2014–2015 data. The 75 percent Alternative is the expected Alternative for both the transitional standards rule and the proposed rule, as shown above. Utilizing the updated data and expected alternative, there would be an expected savings of $21 million annually resulting from the increase to 80 percent of grain offerings being whole grain-rich across SFAs.

TABLE 28: ESTIMATED COSTS OF INCREASING WHOLE GRAIN-RICH ITEMS (MILLIONS) WITH UPDATED DATA

	ANNUAL COST WITH SY 2009-2010 DATA		ANNUAL COST WITH SY 2014-2015 DATA	
WHOLE GRAIN-RICH REQUIREMENT	Expected Annual Cost (Increasing from 75 percent WGR)	High Annual Cost (Increasing from 50 percent WGR)	Expected Annual Cost (Increasing from 75 percent WGR)	High Annual Cost (Increasing from 50 percent WGR)
INCREASING TO 80 PERCENT	$76	$454	-$21	-$126

USDA recognizes that the costs from SY 2009–2010 are very different from those collected in SY 2014–2015, as the previous analysis indicated that whole grain-rich foods cost more than their non whole grain-rich counterparts, whereas the opposite is true according to the SNMCS data. Additionally, the 2012 rule would have been implemented after data collection in SY 2009–2010. USDA believes that the whole grain-rich food items might be less expensive than their non whole grain-rich counterparts for a few reasons. First, whole grain-rich foods are offered far more often than enriched or other non-whole grain-rich products, as shown in the SNMCS data. Bulk purchases of these whole grain-rich items may have led to considerably lower prices over time. Next, it must be noted that grain ounce equivalents are not always exactly one ounce and can vary by food item according to the Food Buying Guide.[264] For instance, an ounce equivalent of doughnuts, sweet rolls, or toaster pastry ranges from 55 to 69 grams depending on if the product is frosted or not. For brownies and cake, an ounce equivalent is 125 grams, compared to bagels, biscuits, bread and tortillas which are 28 grams for one ounce equivalent. Adjusting for these ounce equivalent differences may have contributed to changes in price compared to the previous RIA analysis because they were not previously considered. Also, as noted above, this analysis included cost data for individual food items offered in SY 2014–2015 and weighted for how often each grouping of grains or combination entrees was offered. The two analyses should not be directly compared due to the differences in methodology. The findings of both analyses are included in Table 26 for reference.

Sodium

For the impact analysis of sodium specifically, a consumption adjustment was considered to account for actual daily consumption of meals by students excluding a percentage lost through waste or Offer versus Serve. Consumption data is estimated based on SNDA–III and SNMCS reports but this data includes foods consumed from competitive foods and foods brought from home without the isolated totals from reimbursable foods only, a significant limitation. As a result, it is likely that the estimates for a consumption adjustment are underestimated and actual sodium consumption from reimbursable school meals is lower than reported. Additional analyses are in progress to further clarify this data from SNMCS that will contribute to a final rule in the future.

Another limitation in the cost analysis of sodium is that the proposed limits are meant to be met by product reformulation, changing food menu items, and scratch cooking, so the 45 percent food, 45 percent labor, and 10 percent other split might not hold. As a result, the costs of sodium limits proposed after the first (2 additional for lunch and 1 for breakfast) were adjusted to account for additional cost of equipment as part of an estimate for this 'Uncertainties/Limitations' section. This is a limitation because the exact needs of each SFA to equip kitchens for scratch cooking and menu changes are not known.

This additional analysis provides a high and low estimate of the necessary costs for schools to become equipped to reduce sodium content of meals to the proposed limits. About half of schools make under 50 percent of their recipes from scratch according to the Farm to School Census data, based on 97,000 schools.[265] In the 2012 rule, estimates based on public comments regarding the sodium targets were included in the Uncertainties discussion to calculate potential equipment costs; around $5,000 per school for approximately half of schools.[266] Adjusting for inflation, this would be equivalent to $7,350 beginning in SY 2025–2026 for about 50,000 schools. On the low end, this would be equivalent to $367 million total, about $184 million each year over two school years (SY 2026–2027 and SY 2027–2028) or about $154 million annually for two school years when considering the offset of $30 million for equipment grants that are available annually. Assuming this estimate is on the low end of projected needs for schools, a higher end estimate doubles the expected cost to $14,700 per school for half of schools. The additional equipment costs for this estimate are factored into cost calculations from SY 2026–2027 to SY 2029–2030, starting the year before the second sodium reduction is proposed to be implemented to allow time for preparation to meet the proposed sodium limits. These estimates further adjusted for inflation are shown below in Table 29. As schools purchase more equipment, potential total costs range from $324 to $792 million during the 5-year implantation of the proposed sodium limits. The actual costs for equipment may be higher as the exact needs of schools with regards to equipment and remodeling to increase scratch cooking are unknown. Examples of equipment needed by schools to improve the appearance, safety of and healthfulness of food include, ovens, skillets, broilers, refrigerators or freezers, serving equipment, steam equipment, and food preparation equipment.[267] It is also possible that schools may sustain higher costs as a result of purchasing more pre-made meals and foods through food service companies if they do not have the necessary equipment to lower sodium content through scratch cooking or menu reformulation.

[264] U.S. Department of Agriculture, *Food Buying Guide for Child Nutrition Programs.* Available at: *https://foodbuyingguide.fns.usda.gov/Appendix/DownLoadFBG.*

[265] Bobronnikov, E. et al. (2021). Farm to School Grantee Report. Prepared by Abt Associates, Contract No. AG–3198–B–16–0015. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Project Officer: Ashley Chaifetz.

[266] **Federal Register**: Final Rule: Nutrition Standards in the National School Lunch and School Breakfast Programs.

[267] U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Child Nutrition Program Operations Study (CN–OPS–II): SY 2015–16 by Jim Murdoch and Charlotte Cabili. Project Officer: Holly Figueroa. Alexandria, VA: December 2019.

[268] Changes to sodium limits as a result of this proposed rule would not begin to go into effect until SY 2025–2026.

[269] Includes the $30 million offset of annually available equipment grants.

TABLE 29: ESTIMATED 5-YEAR COSTS OF EQUIPMENT FOR IMPLEMENTING NEW SODIUM REDUCTION PLAN (MILLIONS) [268]

SODIUM LIMIT EFFECTIVE SCHOOL YEAR	SY 2025 - 2026	SY 2026-2027	SY 2027-2028	SY 2028-2029	SY 2029-2030	FIVE-YEAR TOTAL	ANNUAL FIVE-YEAR AVERAGE
LOW END ESTIMATES[269]	NA	$159	$165	NA	NA	$324	$65
HIGH END ESTIMATES	NA	$189	$195	$201	$207	$792	$158

USDA seeks comments and data on the cost of equipment needed in schools to increase scratch cooking and to decrease sodium content of foods served in school meals.

Participation Impacts

As noted earlier, in the Key Assumptions section, participation costs associated with this proposed rule are based on a level of service in school lunch and breakfast programs that mirrors the 2019 level of service. There are multiple contributing factors that may lead to an increased or decreased level of school meal participation in these years after the pandemic. Due to the uncertainty of the direction of participation, a variety of possibilities are detailed here and change in cost is simulated below (Table 30). If participation drops, then there would be expected corresponding reductions in food costs and potentially a reduction in labor hours. If participation increases, then there would be an expected increase in food and labor costs, but potentially a reduction of cost due to economies of scale as the operation scale increases. Relatedly, more schools may be offering universal free school meals due to the realized benefits of free school meals during the COVID pandemic. This could be through State initiatives [270] or increased use of Community Eligibility Provision (CEP). Research has shown that schools offering all meals at no charge through CEP experience higher participation levels and increases in Federal revenues.[271] These revenue increases may offset (from the local perspective, though not from the nationwide perspective) some of the estimated costs associated with this rulemaking.

TABLE 30: PROJECTED COSTS BY PARTICIPATION CHANGE (MILLIONS)

PROPOSED MILK ALTERNATIVE A		
	ONE-YEAR	SIX SCHOOL YEARS
FULL PARTICIPATION	$274	$1,641
ESTIMATED COSTS IF SCHOOL MEAL PARTICIPATION INCREASES		
2.5 PERCENT PARTICIPATION INCREASE	$281	$1,682
5 PERCENT PARTICIPATION INCREASE	$288	$1,723
10 PERCENT PARTICIPATION INCREASE	$301	$1,805
ESTIMATED COSTS IF SCHOOL MEAL PARTICIPATION DECREASES		
2.5 PERCENT PARTICIPATION DECREASE	$267	$1,600
5 PERCENT PARTICIPATION DECREASE	$260	$1,559
10 PERCENT PARTICIPATION DECREASE	$247	$1,477
PROPOSED MILK ALTERNATIVE B		
	ONE-YEAR	SIX SCHOOL YEARS
FULL PARTICIPATION	$220	$1,322
ESTIMATED COSTS IF SCHOOL MEAL PARTICIPATION INCREASES		
2.5 PERCENT PARTICIPATION INCREASE	$226	$1,355
5 PERCENT PARTICIPATION INCREASE	$231	$1,388
10 PERCENT PARTICIPATION INCREASE	$242	$1,454
ESTIMATED COSTS IF SCHOOL MEAL PARTICIPATION DECREASES		
2.5 PERCENT PARTICIPATION DECREASE	$215	$1,289
5 PERCENT PARTICIPATION DECREASE	$209	$1,256
10 PERCENT PARTICIPATION DECREASE	$198	$1,190

In the past, implementing healthier standards, specifically those implemented in SY 2012–2013 and beyond as a result of the 2012 final rule resulted in variable changes to school meal program participation. Total breakfasts served increased steadily between fiscal year 2012 and fiscal year 2016. School lunches served decreased by approximately three percent between fiscal year 2012 and fiscal year 2016. However, both breakfast and lunch trends existed prior to fiscal year 2012 [272] and it is unclear what the relationship between the new standards and the changes in participation actually is based on this data.

Other factors unrelated to meal standards may also impact participation. In 2014, a sample of principals and foodservice managers in elementary schools indicated that 70 percent of students 'generally seem to

[270] *https://www.cde.ca.gov/ls/nu/sn/cauniversalmeals.asp.*

[271] *https://fns-prod.azureedge.us/sites/default/files/resource-files/CEPSY2016-2017.pdf.*

[272] USDA—Food and Nutrition Service, National Data Bank—Publicly available data.

like the new school lunch' and 78 percent said participation in school lunch was the same or more than the previous year.[273] However, about 25 percent of those surveyed still disagreed that students seemed to like the new lunch. CEP became available to all school districts nationwide in SY 2014–2015, and it was found that in SY 2016–2017 rates of SBP and NSLP participation had increased in those Local Education Agencies that had implemented CEP.[274] As participation in CEP continues to increase, there may be some offset of the downward trend of school lunch participation. While participation may be variable in the years after new regulations are implemented, it is known that those that participate in school meal programs consume more whole grains, fruits, vegetables, and milk than non-participants, leading to a better quality of daily diet overall.[275]

It is assumed that levels of SBP and NSLP participation will come back up to pre-pandemic rates, but it is difficult to know how long the supply chain disruptions and staffing shortages will continue. A variety of Executive Orders and plans within the Federal government have been employed to track and address supply chain disruptions, as well as a task force with a focus on supply chain issues.[276] The U.S. Department of Transportation reported improvements in supply chain disruption in early 2022, but that there are still existing stressors in the U.S. supply chain.[277] Unemployment levels have returned to pre-pandemic rates as of mid-2022, and gains are continuing in the hospitality sector, so it is likely staffing shortages in school food service will continue to improve.[278] These disruptions in service have created additional burden for SFAs and it is possible this burden may hold on for a few years, potentially affecting student participation in school meal programs. As schools implement the transitional standards rule standards for sodium, it will be an easier baseline to move forward to future sodium limits compared to the multiple school years during the pandemic in which SFAs may have served menus with higher sodium foods. Students will have had time to adjust to the initial decrease in sodium from the transitional standards rule and decreased participation as a result of these proposed rule standards may be avoided. There is potential for a decrease in participation if students find meals less desirable as a result of lower added sugars and sodium levels. If there is a five percent decrease in participation of school meal programs, then the readily-quantifiable annual cost of this proposed rule would be between $209 and $260 million, or between $1.3 and $1.6 billion over the seven years of implementation (Table 30).[279] Other possible levels of potential decrease in participation are also provided.

Many students that had never participated in the NSLP and SBP prior to the pandemic but who did participate under USDA's COVID–19 nationwide waivers, may have found a level of convenience associated with participating in the school meals programs instead of needing to consume a breakfast at home or bringing a lunch from home. Parents may also find that school meals with reduced sodium and sugar content are a healthier option than meals that were available previously, especially during the pandemic. If there is a five percent increase in participation of school meal programs, then the quantified annual cost of this proposed rule would be between $231 and $288 million, or between $1.4 and $1.7 billion over the seven years of implementation (Table 30).[280] Other possible levels of potential increase in participation are also provided. It is possible that an increase in revenue resulting from greater participation in school meal programs would offset some of the costs that would occur due to implementation of this proposed rule.

Benefits of the Proposed Rule and Other Discussion

Health Benefits

The goal of this proposed rule is to more closely align with recommendations from the *Dietary Guidelines for Americans, 2020–2025,* and the *Dietary Guidelines* are meant to promote health, prevent and reduce risk of chronic disease, and meet nutrient needs.[281] School meals are an important source of nutrition for school age children. Pandemic disruption to school operations demonstrated the continued importance of child nutrition programs including the NSLP and SBP.

Making the changes outlined in this proposed rule can lead to improved health outcomes in the long-term. Lifestyle habits including dietary habits are established in childhood and research has shown may carry through into adulthood.[282] [283] The two major proposed shifts in this rulemaking are for reductions in added sugars and sodium content of school meals. Reducing sodium and added sugars intake is associated with a variety of potential health benefits that are detailed above in the sodium and added sugars 'Impacts' sections. Reduction in sodium intake reduces blood pressure which in turn can reduce CVD risk and CVD events. Added sugars contribute to higher energy intake and also contribute to weight gain, obesity, and a variety of other potential chronic health conditions including CVD and T2D and risk factors for these chronic diseases. While this document proposes to maintain the same level of whole grain-rich foods served in school meals, it is of note that increased whole grain consumption is associated with an improved overall dietary pattern and a healthier body weight in both children and adults.[284] On average, in SY 2014–2015, 70 percent of the weekly menus offered at least 80 percent of the grain items as whole grain-rich for both breakfast and lunch.[285] Evidence also exists that shows intake in children of healthier dietary patterns including ''higher intakes of vegetables, fruits, whole grains, fish, low-fat dairy, legumes, and lower intake of sugar-sweetened beverages, other sweets, and processed meat,'' are associated with lower blood pressure and improved blood lipid levels later in life.[286] According to another systematic review, a similar dietary pattern is

[273] Turner, Lindsey, and Frank Chaloupka (2014). ''Perceived Reactions of Elementary School Students to Changes in School Lunches after Implementation of the United States Department of Agriculture's New Meals Standards: Minimal Backlash, but Rural and Socioeconomic Disparities Exist,'' Childhood Obesity 10(4):1–8.

[274] *https://fns-prod.azureedge.us/sites/default/files/resource-files/CEPSY2016-2017.pdf.*

[275] Fox MK, Gearan E, Cabili C, et al. School Nutrition and Meal Cost Study, Final Report Volume 4: Student Participation, Satisfaction, Plate Waste, and Dietary Intakes. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support; 2019. *https://www.fns.usda.gov/school-nutrition-and-meal-cost-study.*

[276] *https://crsreports.congress.gov/product/pdf/IN/IN11927.*

[277] *https://www.transportation.gov/briefing-room/usdot-supply-chain-tracker-shows-progress-supply-chains-remain-stressed.*

[278] *https://www.bls.gov/news.release/pdf/empsit.pdf.*

[279] If the decrease in participation is caused by provisions of the proposed rule, then there would be other effects—for example, incremental health consequences of revised eating patterns, or the transition cost to parents and guardians as they make other eating arrangements for their children—that would also be attributable to the proposal. By contrast, if participation decreases due to unrelated trends, then the quantified cost estimates would be as reported here but the (unquantified) accompanying effects would not be attributable to the proposed rule.

[280] If the increase in participation is caused by provisions of the proposed rule, then there would be other effects—for example, incremental health consequences of revised eating patterns—that would also be attributable to the proposal. By contrast, if participation increases due to unrelated trends, then the quantified cost estimates would be as reported here but the unquantified accompanying effects would not be attributable to the proposed rule.

[281] U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines* for Americans, 2020–2025. 9th Edition. December 2020. Available at *DietaryGuidelines.gov.*

[282] Grummer-Strawn LM, Li R, Perrine CG, Scanlon KS, Fein SB. Infant feeding and long-term outcomes: results from the year 6 follow-up of children in the Infant Feeding Practices Study II. *Pediatrics.* 2014;134 Suppl 1(Suppl 1):S1–S3. doi:10.1542/peds.2014–0646B.

[283] Lioret S, Campbell KJ, McNaughton SA, et al. Lifestyle Patterns Begin in Early Childhood, Persist and Are Socioeconomically Patterned, Confirming the Importance of Early Life Interventions. *Nutrients.* 2020;12(3):724. Published 2020 Mar 9. doi:10.3390/nu12030724.

[284] Albertson AM, Reicks M, Joshi N, Gugger CK. Whole grain consumption trends and associations with body weight measures in the United States: results from the cross sectional National Health and Nutrition Examination Survey 2001–2012. Nutr J. 2016;15:8. Published 2016 Jan 22. doi:10.1186/s12937–016–0126–4.

[285] Based on an internal USDA analysis using data from: U.S. Department of Agriculture, Food and Nutrition Service, School Nutrition and Meal Cost Study Final Report Volume 2: Nutritional Characteristics of School Meals, by Elizabeth Gearan et.al. Project Officer, John Endahl, Alexandria, VA: April 2019. Available online at: *www.fns.usda.gov/research-and-analysis.*

[286] 2020 *Dietary Guidelines* Advisory Committee and Nutrition Evidence Systematic Review Team. Dietary Patterns and Risk of Cardiovascular Disease: A Systematic Review. 2020 *Dietary Guidelines* Advisory Committee Project. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, July 2020. Available at: *https://nesr.usda.gov/2020-dietary-guidelines-advisory-committee-systematic-reviews.*

also associated with a lower fat-mass index and BMI in later adolescence.[287] These dietary patterns associated with improved health outcomes have higher intake of whole grains and lower intake of both foods high in sodium and high in added sugars. Improvements in the dietary pattern overall, as this rulemaking proposes across school meals, after school snacks, and competitive foods with a focus on sodium and added sugars reduction will lead to healthier dietary intake and improved health outcomes over time.

This proposed rule also includes sections on traditional foods and meal planning options for American Indian and Alaska Native students that may have some potential health benefits for the affected communities. USDA acknowledges that for decades, the United States government actively sought to eliminate traditional American Indian and Alaska Native ways of life—for example, by forcing indigenous families to send their children to boarding schools. This separated indigenous children from their families and heritage, and disrupted access to traditional foods, altering indigenous children's relationship to food. This disruption effected food access, food choice, and overall health. The Traditional Foods Project (TFP) and associated research have shown that there may be benefits to integrating culture and history through locally designed interventions framed by food sovereignty among American Indian and Alaska Native communities to help prevent chronic disease, especially type 2 diabetes.[288] [289]

Gradual Reduction

This rulemaking proposes for changes to occur gradually over time. Reduction of sodium to the limits proposed is meant to happen over a period of over five years, including the lead in time, allowing SFAs and manufacturers the time to make changes to menus and available food products. Reduction of added sugars in school meals first with product specific limits, and then with an overall reduction to ten percent of energy content of school meals will also allow time for adjustment both by food service operators and food/beverage manufacturers. Gradual formulation changes are also better for consumer satisfaction and product desirability.[290] [291] Taste preference may be established early in life and early food preference can influence later food choices, so a gradual change may influence school age children for years to come. This proposed rule ensures that there will be a high nutrition quality of school meals with continued improvements over time.

The issues just discussed relate to methodological challenges for benefit-cost analysis of a policy intervention of the type being proposed here, where benefits would typically be monetized with a willingness-to-pay (WTP) measure.[292] WTP reflects underlying preferences—in this case, preferences for food characteristics, including both health consequences and short-term eating experience—and if preferences are unstable, then key inputs to the analysis are not well-defined. Indeed, shifting taste preferences (when they are malleable during childhood) is a key potential outcome of this proposed rule. Feedback is welcome regarding analytic refinements to account for these issues, including the potential for parental preferences—as evidenced through observable actions, such as continuing or discontinuing their children's participation in the school meals program—to provide an adequate proxy for children's welfare effects.

Food Security

Prior to and during the pandemic, school meals played an important role in serving healthy meals to millions of children and preventing food insecurity. In 2020, about fifteen percent of households with children were food insecure compared to about fourteen percent in 2019.[293] This means that millions of children are affected by food insecurity on a daily basis in the U.S. Free and reduced-price meals in the SBP and NSLP are served to students from households with lower income levels. In 2019, about 85 percent of meals served in the SBP and about 75 percent of meals served in the NSLP were free or reduced-price meals.[294] Providing healthy school meals and snacks is especially valuable for children that may not always have access to healthy foods at home. In 2021, around 56 percent of food-insecure households participated in one or more of three Federal food and nutrition assistance programs (SNAP, WIC, NSLP).[295] This same report indicated that in households with income below 185 percent of the poverty line, those that received free or reduced-price school lunch in the previous 30 days (in 2021) were less likely to be food insecure compared to those that did not receive free or reduced-price lunch, indicating that school meals are an important source of food for families facing hardships. Student participation in the NSLP has been found to be associated with a reduction in food insecurity.[296] Households with incomes near or below the Federal poverty line, all households with children and particularly households with children headed by single women or single men, and Black- and Hispanic-headed households have higher rates of food insecurity than the national average.[115] Efforts to increase participation in child nutrition programs should focus on expanding and encouraging participation among children in households under these circumstances to promote equity in daily nutrient intake nationwide.[297] School meal programs reach children across the U.S. from households of all income levels and of various backgrounds and race/ethnicities with nutritious meals. As noted previously, the incremental effect of the proposed rule on program participation is uncertain as regards both magnitude and direction; the impact on food security is likewise uncertain.

Achievable Limits

While some elements of the 2012 rule were challenging to meet over a long period of time, this proposed rule prescribes smaller gradual shifts and changes to individual product types and overall nutrient content of meals. This rulemaking is calling for change, but at achievable levels for food service operators and manufacturers to adhere to. For instance, reductions in sodium are proposed in ten percent increments, which is more

[287] 2020 *Dietary Guidelines* Advisory Committee and Nutrition Evidence Systematic Review Team. Dietary Patterns and Growth, Size, Body Composition, and/or Risk of Overweight or Obesity: A Systematic Review. 2020 *Dietary Guidelines* Advisory Committee Project. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, July 2020. Available at: *https://nesr.usda.gov/2020-dietary-guidelines-advisory-committee-systematic-reviews.*

[288] DeBruyn L, Fullerton L, Satterfield D, Frank M. Integrating Culture and History to Promote Health and Help Prevent Type 2 Diabetes in American Indian/Alaska Native Communities: Traditional Foods Have Become a Way to Talk About Health. Prev Chronic Dis 2020;17:190213. DOI: *http://dx.doi.org/10.5888/pcd17.190213external icon.*

[289] Satterfield D, DeBruyn L, Santos M, Alonso L, Frank M. Health promotion and diabetes prevention in American Indian and Alaska Native communities—Traditional Foods Project, 2008–2014. CDC Morbidity Mortality Weekly Report. 2016;65(S1):4–10. *https://www.cdc.gov/mmwr/volumes/65/su/su6501a3.htm.*

[290] Hoppu U, Hopia A, Pohjanheimo T, et al. Effect of Salt Reduction on Consumer Acceptance and Sensory Quality of Food. Foods. 2017;6(12):103. Published 2017 Nov 27. doi:10.3390/foods6120103.

[291] Institute of Medicine (US) Committee on Strategies to Reduce Sodium Intake; Henney JE, Taylor CL, Boon CS, editors. Strategies to Reduce Sodium Intake in the United States. Washington (DC): National Academies Press (US); 2010. Available from: *https://www.ncbi.nlm.nih.gov/books/NBK50956/* doi: 10.17226/12818.

[292] Either a direct WTP estimate could be developed or a multistep estimation could quantify health and longevity effects with lost eating-experience utility subsequently being subtracted. For example, in the context of sugar-sweetened beverages (SSB), Kalamov and Runkel (2021), citing Allcott et al.'s (2019) estimates, suggest that internalities (representing the harm consumers of relatively unhealthy foods sub-optimally impose on their future selves) could be 30- to 50-percent of gross health impacts; it is the 30- to 50-percent that would appropriately be retained in an analysis of the intrapersonal benefits of a policy that reduces consumption of SSB or foods with similar characteristics. Kalamov, Z. Y. and M. Runkel, *Taxation of unhealthy food consumption and the intensive versus extensive margin of obesity.* International Tax and Public Finance, 2021: p. 1–27. Allcott, H., B. B. Lockwood, and D. Taubinsky, *Regressive sin taxes, with an application to the optimal soda tax.* The Quarterly Journal of Economics, 2019. 134(3): p. 1557–1626.

[293] *https://www.ers.usda.gov/amber-waves/2022/february/food-insecurity-for-households-with-children-rose-in-2020-disrupting-decade-long-decline/.*

[294] USDA—Food and Nutrition Service, National Data Bank—Publicly available data.

[295] Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, Anita Singh, September 2022. Household Food Security in the United States in 2021, ERR–309, U.S. Department of Agriculture, Economic Research Service.

[296] Ralston, K.; Treen, K.; Coleman-Jensen, A.; Guthrie, J. Children's Food Security and USDA Child Nutrition Programs; U.S. Department of Agriculture, Economic Research Service: Washington, DC, USA, 2017.

[297] Gearan EC, Monzella K, Jennings L, Fox MK. Differences in Diet Quality between School Lunch Participants and Nonparticipants in the United States by Income and Race. Nutrients. 2021;12(12):3891. *https://www.mdpi.com/2072-6643/12/12/3891.*

manageable than previous targets from the 2012 rule. The FDA Voluntary Sodium Reduction goals were introduced in October 2021, so manufacturers may already be making changes to their products, especially considering that additional reduction goals are expected in the coming years. SFAs and manufacturers have both indicated in the past that the sodium targets from the 2012 rule (especially Target 3) were unachievable pointing to a number of contributing challenges. These challenges included increased labor and equipment costs to support food preparation, decreased access to lower sodium products associated with SFA urbanicity and size, and a lack of student acceptance varying by cultural and regional taste preferences.[298] This proposed rule attempts to address these concerns with smaller incremental shifts in sodium limits that are supported by FDA voluntary sodium goals for industry and the 2019 dietary reference intakes [299] that call for continued reduction in sodium intake to promote health.

USDA data collection in 2022 showed that reductions in total and added sugars content of certain food types (yogurt, milk, cereal) have already been observed, on average, since the last data collection during SY 2014–2015. This indicates that manufacturers are willing to make shifts in their product formulations and that regulations for programs such as CACFP do help to jumpstart product shifts. Another strength of this proposed rule, is that USDA is not using total sugar limits, but is rather proposing added sugar limits. Limiting added sugars would not limit naturally occurring sugars from fruit or milk, which would allow many yogurt products containing fruit and cereals containing dried fruit to remain a part of school meals. This less restrictive group of limits for added sugars is more achievable for SFAs than total sugar limits would be.

Alternative(s)

Whole Grains

This proposed rule requests comments on an alternative proposal for the whole grain-rich requirement. Under this alternative, all grains offered in the school lunch and breakfast programs would be required to be whole grain-rich, except that one day each school week, schools may offer grains that are not whole grain-rich. For most school weeks, this would result in four days of whole grain-rich grains, with enriched grains allowed on one day. This alternative proposal might increase the number of servings of whole grain-rich foods that individual students consume despite no change in average whole grain-rich products purchased and served overall. For example, under the proposed standard, a school could serve 80 percent whole grain-rich products and 20 percent enriched products each school day, which would allow individual students to choose enriched grains on a daily basis. This would not be the case with the alternative proposal, as enriched grains would only be available one day per week. On average, a similar number of servings of whole grains would be provided in this alternative proposal, just on different days than before, leading to no additional expected costs.

Other Considered Alternatives

In the process of creating this proposed rule, there were a few other potential alternatives considered for added sugars and for whole grains. Initially, product-specific total sugar limits were considered to align with the current CACFP total sugar limits for breakfast cereals and yogurts. However, this restricted naturally occurring sugars and did not align with the *Dietary Guidelines for Americans* [300] which recommend limiting added sugars to 10 percent of calories per day. The proposed product-specific added sugars limits for yogurt, breakfast cereal, and flavored milk are expected to help to introduce the concept of limiting added sugars, specifically as part of the gradual goal of reaching the proposed 10 percent weekly limit. For whole grains, other percentages were considered for the proportions of grains to be served that must be whole grain-rich (*i.e.,* 50 or 100%). However, 80% was decided on as a measure that allows for flexibility, but also still resulting in the majority of grains served being whole grain-rich.

[298] Gordon, E.L., Morrissey, N., Adams, E., Wieczorek, A. Glenn, M.E., Burke, S & Connor, P. (2019). Successful Approaches to Reduce Sodium in School Meals Final Report. Prepared by 2M Research under Contract No. AG–3198–P–15–0040. Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service.

[299] *https://nap.nationalacademies.org/catalog/25353/dietary-reference-intakes-for-sodium-and-potassium.*

[300] U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020–2025. 9th Edition. December 2020. Available at *DietaryGuidelines.gov.*

Appendix

TABLE A: ESTIMATED ANNUAL COSTS IN MOVING FROM TRANSITIONAL STANDARDS RULE TO PROPOSED RULE BEGINNING BY SCHOOL YEAR (MILLIONS), IN 2022 DOLLARS[301, 302]

YEAR OF IMPLEMENTATION	SY 2024-2025	SY 2025-2026	SY 2026-2027	SY 2027-2028	SY 2028-2029	SY 2029-2030	Total	Average over six school years
ADMINISTRATIVE COSTS	$42	$42	$0	$42	$0	$42	$169	$28
ADDED SUGARS	$0	$83	$83	$83	$83	$83	$415	$69
MILK (ALTERNATIVE A)	$0	$55	$55	$55	$55	$55	$275	$46
MILK (ALTERNATIVE B)	$0	$0	$0	$0	$0	$0	$0	$0
SODIUM	$0	$90	$90	$144	$144	$144	$614	$102
AFTERSCHOOL SNACKS	-$10	-$10	-$10	-$10	-$10	-$10	-$62	-$10
SUBSTITUTING VEGETABLES FOR FRUITS AT BREAKFAST	-$4	-$4	-$4	-$4	-$4	-$4	-$24	-$4
BUY AMERICAN	$7	$7	$7	$7	$7	$7	$39	$7
TOTAL (ALTERNATIVE A)	**$34**	**$263**	**$221**	**$317**	**$275**	**$317**	**$1,426**	**$238**
TOTAL PER MEAL (ALTERNATIVE A)	$0.005	$0.036	$0.030	$0.043	$0.038	$0.043	NA	$0.032
TOTAL (ALTERNATIVE B)	**$34**	**$208**	**$166**	**$262**	**$220**	**$262**	**$1,151**	**$192**
TOTAL PER MEAL (ALTERNATIVE B)	$0.005	$0.028	$0.023	$0.036	$0.030	$0.036	NA	$0.026

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BILLING CODE 3410–30–P

[301] Due to rounding, numbers may not add up to rounded sum in 'total' column exactly.

[302] This data is the same as in Table 1, but broken down by school years instead of fiscal years.