

FEDERAL REGISTER

Vol. 78 Friday,

No. 125 June 28, 2013

Part II

Department of Agriculture

Food and Nutrition Service

7 CFR Parts 210 and 220

National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010; Interim Final Rule

DEPARTMENT OF AGRICULTURE

Food and Nutrition Service

7 CFR Parts 210 and 220

[FNS-2011-0019]

RIN 0584-AE09

National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010

AGENCY: Food and Nutrition Service,

USDA.

ACTION: Interim final rule.

SUMMARY: This interim final rule amends the National School Lunch Program and School Breakfast Program regulations to establish nutrition standards for all foods sold in schools. other than food sold under the lunch and breakfast programs. Amendments made by Section 208 of the Healthy, Hunger-Free Kids Act of 2010 (HHFKA) require the Secretary to establish nutrition standards for such foods. consistent with the most recent Dietary Guidelines for Americans, and directs the Secretary to consider authoritative scientific recommendations for nutrition standards; existing school nutrition standards, including voluntary standards for beverages and snack foods; current State and local standards; the practical application of the nutrition standards; and special exemptions for infrequent school-sponsored fundraisers (other than fundraising through vending machines, school stores, snack bars, à la carte sales and any other exclusions determined by the Secretary). In addition, this interim final rule requires schools participating in the National School Lunch Program and School Breakfast Program to make potable water available to children at no charge in the place where lunches are served during the meal service, consistent with amendments made by section 203 of the HHFKA, and in the cafeteria during breakfast meal service. This interim final rule is expected to improve the health and well-being of the Nation's children, increase consumption of healthful foods during the school day, and create an environment that reinforces the development of healthy eating habits.

DATES: Effective date: This rule is effective August 27, 2013. Implementation dates: State agencies, local educational agencies and school food authorities must implement the provisions of this rule as follows:

- 1. The *potable water* provisions in §§ 210.10(a)(1)(i) and 220.8(a)(1) must be implemented no later than August 27, 2013.
- 2. All other provisions of this interim final rule must be implemented beginning on July 1, 2014.

Comment Date: Written comments on this interim final rule must be received on or before October 28, 2013 to be assured of consideration.

ADDRESSES: The Food and Nutrition Service (FNS), United States Department of Agriculture (USDA or Department), invites interested persons to submit written comments on this interim final rule. To be considered for this rulemaking, written comments must be submitted by one of the following methods:

- Federal eRulemaking Portal: Go to http://www.regulations.gov, select "Food and Nutrition Service" from the agency drop-down menu, and click "Submit." In the Docket ID column of the search results select "FNS-2011-0019" to submit or view public comments and to view supporting and related materials available electronically. Information on using Regulations.gov, including instructions for accessing documents, submitting comments, and viewing the docket after the close of the comment period, is available through the site's "User Tips" link
- By Mail: Send comments to William Wagoner, Section Chief, Policy and Program Development Branch, Child Nutrition Division, Food and Nutrition Service, P.O. Box 66874, Saint Louis, MO 63166. Mailed comments must be postmarked on or before the comment deadline identified in the DATES section of this preamble to be assured of consideration.

All submissions received in response to this interim final rule will be included in the record and will be available to the public. Please be advised that the substance of the comments and the identity of the individuals or entities submitting comments will be subject to public disclosure. FNS will also make the comments publicly available by posting a copy of all comments on http://www.regulations.gov.

FOR FURTHER INFORMATION CONTACT:

William Wagoner, Section Chief, Policy and Program Development Branch, Child Nutrition Division, Food and Nutrition Service, 3101 Park Center Drive, Alexandria, Virginia 22302, or by telephone at (703) 305–2590.

SUPPLEMENTARY INFORMATION:

Executive Summary

Purpose of the Regulatory Action

This interim final rule sets forth provisions to implement amendments made by sections 203 and 208 of Public Law 111-296, the Healthy, Hunger-Free Kids Act of 2010 (HHFKA), to the Child Nutrition Act of 1966 (CNA) and the Richard B. Russell National School Lunch Act (NSLA) for schools that participate in the National School Lunch Program (NSLP) and the School Breakfast Program (SBP). This rule amends the NSLP and SBP regulations consistent with amendments made in the HHFKA. The HHFKA requires that the Secretary promulgate regulations to establish nutrition standards for foods sold in schools other than those foods provided under the CNA and the NSLA. The amendments made by the HHFKA specify that such nutrition standards apply to all foods sold (a) outside the school meal programs; (b) on the school campus; and (c) at any time during the school day. In addition, the amendments made by the HHFKA require that such standards be consistent with the most recent Dietary Guidelines for Americans and that the Secretary consider authoritative scientific recommendations for nutrition standards; existing school nutrition standards, including voluntary standards for beverages and snack foods; current State and local standards; the practical application of the nutrition standards; and special exemptions for infrequent school-sponsored fundraisers (other than fundraising through vending machines, school stores, snack bars, à la carte sales and any other exclusions determined by the Secretary). These changes are intended to improve the health and well-being of the Nation's children, increase consumption of healthful foods during the school day and create an environment that reinforces the development of healthy eating habits.

The standards for food and beverages in this interim final rule represent minimum standards that local educational agencies, school food authorities and schools are required to meet. Should they wish to do so, State agencies and/or local school districts have the discretion to establish their own standards for non-program foods sold to children, as long as such standards are consistent with the Federal standards. This interim final rule also requires, per the amendments made by the HHFKA, that schools participating in the NSLP make free potable water available to children in the place lunches are served during

meal service, and also at breakfast when breakfast is served in the cafeteria.

Summary of Major Provisions

Competitive foods and beverages must meet the nutrition standards specified in the interim final rule, beginning July 1, 2014. A special exemption to the standards is allowed for foods and beverages that do not meet competitive food standards but which are sold for the purpose of conducting infrequent school-sponsored fundraisers. Such exempt fundraisers must not occur more often than the frequency specified by the State agency. Exempted fundraiser foods or beverages may not be sold in competition with school meals in the food serving area during the meal service. In addition, NSLP and SBP entrées sold à la carte are exempt from the interim final rule's nutrient standards if sold on the day that they are offered as part of a reimbursable meal, or sold on the following school day.

Food Requirements

To be allowable, a competitive food must meet all of the competitive food nutrient standards *and*:

- Be a grain product that contains 50 percent or more whole grains by weight or have as the first ingredient a whole grain; *or*
- Have as the first ingredient one of the non-grain major food groups: fruits, vegetables, dairy or protein foods (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.); *or*
- Be a combination food that contains ½ cup of fruit and/or vegetable; *or*
- For the period through June 30, 2016, contain 10 percent of the Daily Value of a nutrient of public health concern based on the most recent Dietary Guidelines for Americans (i.e., calcium, potassium, vitamin D or dietary fiber). Effective July 1, 2016, this criterion is obsolete and may not be used to qualify as a competitive food; and
- If water is the first ingredient, the second ingredient must be one of the food items above.

Fresh, canned, and frozen fruits or vegetables with no added ingredients except water, or in the case of fruit, packed in 100 percent juice, extra light, or light syrup are exempt from the interim final rule's nutrient standards. Canned vegetables that contain a small amount of sugar for processing purposes are also exempt.

Competitive foods must contain 35 percent or less of total calories from fat per item as packaged or served. Exemptions to the total fat standard are granted for reduced fat cheese and part-

skim mozzarella cheese, nuts, seeds, nut or seed butters, products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat, and seafood with no added fat.

Competitive foods must contain no more than 10 percent of total calories from saturated fat per item as packaged or served. Exemptions to the saturated fat standard are granted for reduced fat cheese and part-skim mozzarella cheese, nuts, seeds, nut or seed butters, and products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat.

Competitive foods must have 0 g of trans fat per item as packaged or served.

Sodium content in snacks is limited to 230 mg per item as packaged or served. On July 1, 2016, the sodium standard will move to 200 mg per item as packaged or served. Entrée items must have no more than 480 mg of sodium per item as packaged or served, unless they meet the exemption for NSLP/SBP entrée items.

Total sugar must be no more than 35 percent by weight. Exemptions to the sugar standard are provided for dried whole fruits or vegetables; dried whole fruit or vegetable pieces; dehydrated fruits or vegetables with no added nutritive sweeteners; and dried fruits with nutritive sweeteners that are required for processing and/or palatability purposes.

Snack items and side dishes served à la carte must have no more than 200 calories per item as packaged or served, including accompaniments such as butter, cream cheese, salad dressing, etc. Entrée items sold à la carte must contain no more than 350 calories including accompaniments, unless they meet the exemption for NSLP/SBP entrée items.

Accompaniments must be included in the nutrient profile as a part of the item served.

Beverage Requirements

Allowable beverages for elementary students are limited to plain water (carbonated or uncarbonated), lowfat milk (unflavored) and nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and full strength fruit or vegetable juices and full strength fruit and vegetable juice diluted with water or carbonated water. All beverages must be no more than eight ounces with the exception of water, which is unlimited.

Allowable beverages for middle school students are limited to plain water (carbonated or uncarbonated), lowfat milk (unflavored) and nonfat milk (including flavored), nutritionally equivalent milk alternatives (as

permitted by the school meal requirements), and full strength fruit or vegetable juice and full strength fruit or vegetable juice diluted with water or carbonated water. All beverages must be no more than 12 ounces, with the exception of water, which is unlimited.

Elementary and middle school foods and beverages must be caffeine free with the exception of naturally occurring trace amounts.

Allowable beverages for high school students are limited to plain water (carbonated or uncarbonated), lowfat milk (unflavored) and nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and full strength fruit or vegetable juice and full strength fruit and vegetable juice diluted with water or carbonated water. Milk and milk equivalent alternatives and fruit or vegetable juice must be no more than 12 ounces.

Also allowed in high schools are calorie-free, flavored and/or carbonated water and other calorie-free beverages that comply with the FDA requirement of less than five calories per 8 ounce serving (or less than or equal to 10 calories per 20 fluid ounces), in no more than 20 ounce servings. Beverages of up to 40 calories per eight fluid ounce (or 60 calories per 12 fluid ounce) in no more than 12 ounce servings are also allowed. There is no ounce restriction on plain water (carbonated or uncarbonated). Beverages containing caffeine are also permitted. Allowable beverages are available in the food service area and elsewhere without restriction.

Costs, Benefits and Transfers

This interim final rule requires schools to improve the nutritional quality of foods offered for sale to students outside of the Federal school lunch and school breakfast programs. The new standards apply to foods sold à la carte, in school stores, snack bars, or vending machines. The principal benefit of such a rule is improvement in public health. The primary purpose of the rule is to ensure that foods sold in competition with school meals (competitive foods) are consistent with the most recent Dietary Guidelines, effectively holding competitive foods to the same standards as other foods sold at school during the school day. The link between poor diet and health problems (such as childhood obesity) is a matter of policy concern because the associated health problems produce significant social costs; imposing nutrition standards on competitive foods is one way to ensure that children

are provided with healthy food options throughout the school day.

The Department anticipates the rule will result in significant changes to the nutritional quality of competitive foods available in schools, although it is not possible to quantify those benefits on overall diets or student health. Excess body weight has long been demonstrated to have adverse health, social, psychological, and economic consequences for affected adults, and recent research has also demonstrated that excess body weight has negative impacts for obese and overweight children. Ancillary benefits, although also not quantifiable, may be realized by the nutrition standards in the rule, e.g., improving the nutritional value of competitive foods will support the efforts of parents to promote healthy choices at home and at school, reinforce school-based nutrition education and promotion efforts, and contribute significantly to the overall effectiveness of the school nutrition environment in promoting healthful food and physical activity choices.

Upon implementation of the rule, students will have new food choices which will meet standards for calories, fats, sugar, and sodium, and have whole grains, lowfat dairy, fruits, vegetables, or protein foods as their main ingredients. Our regulatory impact analysis examines a range of possible behavioral responses of students and schools to these changes. To estimate the effects on school revenue, we look to the experience of school districts that have adopted or piloted competitive food reforms in recent years. While no State standard aligns to all of the provisions of the rule, these State standards offer the closest "real-world" analogue to the rule.

The available information indicates that many schools have successfully introduced competitive food reforms with little or no loss of revenue. In some of those schools, losses from reduced sales of competitive foods were fully offset by increases in reimbursable meal revenue. In other schools, students responded favorably to the healthier options and competitive food revenue increased or remained at previous levels.

But not all schools that adopted or piloted competitive food standards fared as well. Some of the same studies and reports that highlight school success stories note that other schools sustained losses after implementing similar standards. The competitive food revenue lost by those schools was not offset (at least not fully) by revenue gains from the reimbursable meal programs.

We present a series of possible school revenue effects in the regulatory impact analysis that reflect the variation in outcomes across these case studies, differences in the adopted nutrition standards and implementation strategies, and differences in the schools' economic circumstances. This discussion illustrates a range of potential outcomes; the limited nature of available data and the substantial variation in school experiences to date prevent any assessment of the most likely outcome. The analysis examines the possible effects of the rule on school revenues from competitive foods, the administrative costs of complying with the rule, and the benefits to school children. The magnitude of these effects is subject to considerable uncertainty; the ultimate impact of the rule will be determined by the manner in which schools implement the new standards and how students respond. That said, the most current and comprehensive research available does indicate that nutritional standards for competitive foods can be successfully implemented with no revenue loss or even revenue gains by schools.

Background

The NSLP served an average of 31.6 million children per day in Fiscal Year (FY) 2012. In that same FY, the SBP served an average of 12.9 million children daily.

The Richard B. Russell National School Lunch Act (NSLA) (42 U.S.C. 1751 et seq.) and the Child Nutrition Act of 1966 (CNA) (42 U.S.C. 1771 et seq.) require the Secretary to establish nutrition standards for meals served under the NSLP and SBP, respectively. Prior to the enactment of the Healthy, Hunger-Free Kids Act of 2010 (HHFKA), section 10 of the CNA limited the Secretary's authority to regulate competitive foods, i.e., foods sold in competition with the school lunch and breakfast programs, to those foods sold in the food service area during meal periods. The Secretary did not have authority to establish regulatory requirements for food sold in other areas of the school campus or at other times in the school day.

The HHFKA, enacted December 13, 2010, directed the Secretary to promulgate regulations to establish science-based nutrition standards for foods sold in schools other than those foods provided under the NSLP and SBP. Section 208 of the HHFKA amended section 10 of the CNA (42 U.S.C. 1779) to require that such nutrition standards apply to all foods sold:

Outside the school meal programs;

• On the school campus; and

 At any time during the school day. Section 208 requires that such standards be consistent with the most recent Dietary Guidelines for Americans (DGA) and that the Secretary consider authoritative scientific recommendations for nutrition standards; existing school nutrition standards, including voluntary standards for beverages and snack foods; current State and local standards; the practical application of the nutrition standards; and special exemptions for infrequent school-sponsored fundraisers (other than fundraising through vending machines, school stores, snack bars, à la carte sales and any other exclusions determined by the Secretary).

In addition, the amendments made by section 203 of the HHFKA amended section 9(a) of the NSLA (42 U.S.C. 1758(a)) to require that schools participating in the NSLP make potable water available to children at no charge in the place where meals are served during the meal service. This is a nondiscretionary requirement of the HHFKA that became effective October 1, 2010.

The Department published a proposed rule in the Federal Register on February 8, 2013 (78 FR 9530), also titled National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of 2010. This rule proposed nutrition standards for foods offered for sale to students outside of the Federal school lunch and school breakfast programs, including foods sold à la carte and in school stores and vending machines. The proposed standards were designed to complement recent improvements in school meals, and to help promote diets that contribute to students' long term health and wellbeing. For information on recent improvements to school meals, refer to the final rule, Nutrition Standards in the National School Lunch and School Breakfast Programs (January 26, 2012, at 77 FR 4088). The proposed rule also would have required schools participating in the NSLP and afterschool snack service under NSLP to make water available to children at no charge during the lunch and afterschool

As previously indicated, the nutrition standards established by the Secretary must be consistent with the most recent DGA, which are the 2010 DGA released on January 31, 2011. The guidelines are available at http://www.cnpp.usda.gov/DietaryGuidelines.htm. In accordance with the amendments made by the HHFKA, in developing competitive food

standards, the Secretary was also to consider authoritative scientific recommendations for nutrition standards; existing school nutrition standards, including voluntary standards for beverages and snack foods and State and local standards; and the practical application of the nutrition standards. As part of USDA's review of authoritative scientific recommendations for nutrition standards, the Agency gave consideration to the National Academies' Institute of Medicine's (IOM) 2007 report, Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth (available at: http://www.iom.edu/Reports/2007/ Nutrition-Standards-for-Foods-in-Schools-Leading-the-Way-toward-Healthier-Youth.aspx).

The Department also conducted a broad review of nutrition standards developed by other entities, including USDA's HealthierUS School Challenge (HUSSC) standards, existing State and local school nutrition standards for foods and beverages sold in competition with school meals, and existing voluntary standards and recommendations developed by various organizations such as the National Alliance for Nutrition and Activity and the Alliance for a Healthier Generation. In addition, the Department solicited input from Federal child nutrition program stakeholders, including nutrition and health professionals, academia, industry, interest groups and the public through a variety of channels. The practical application of the competitive food nutrition standards in school settings was a key consideration for the standards.

USDA received a total of 247,871 public comments during the 60-day comment period from February 8, 2013, through April 9, 2013. This total included several single submissions with thousands of identical comments. Approximately 245,665 of these were form letters, nearly all of which were related to 104 different mass mail campaigns. The remaining comments over 2,200—were unique comments rather than form letters. Comments represented a diversity of interests, including advocacy organizations; health care organizations; industry and trade associations; farm and industry groups; schools, school boards and school nutrition and education associations; State departments of education; consumer groups; and others. Comments were analyzed using computer software that facilitated the identification of the key issues addressed by the commenters.

In general, there was support for the proposed rule. Approximately 17,827 submissions, including a mass mail campaign, expressed general overall support for the proposed rule in its entirety without commenting on specific provisions. Approximately 426 submissions expressed general opposition to the proposed rule in its entirety without commenting on specific provisions. USDA considered all comments in the development of this interim final rule. Given the unprecedented volume and complexity of comments on the proposed rule, USDA prepared a comprehensive comment summary and analysis which includes detailed information on the comments, including the source of the comments. The description and analysis of comments in this preamble focus on general comment themes, most frequent comments, and those that influenced revisions to the proposed rule. The preamble also discusses modifications made to the proposed rule in response to public input. To view all public comments on the proposed rule, go to www.regulations.gov and search for public submissions under document number FNS-2011-0019. Once the search results populate, click on the blue text titled, "Open Docket Folder." The comprehensive comment summary and analysis is available as supporting material under the docket folder summary. It is also available at www.fns.usda.gov/cnd/Governance/ $Legislation/all \bar{f}oods.htm.$

USDA greatly appreciates the public comments as they have been essential in developing an interim final rule that is expected to improve the quality of foods sold in schools participating in the NSLP and SBP.

General Requirements

Definitions

The amendments made by the HHFKA stipulate that the nutrition standards for competitive food apply to all foods and beverages sold: (a) Outside the school meals programs; (b) on the school campus; and (c) at any time during the school day. The proposed rule at § 210.11(a) included definitions of *Competitive food, School day*, and *School campus*, as follows:

Competitive food means all food and beverages other than meals reimbursed under programs authorized by the Richard B. Russell National School Lunch Act and the Child Nutrition Act of 1966 available for sale to students on the School campus during the School day.

School day means, for the purpose of competitive food standards

implementation, the period from the midnight before, to 30 minutes after the end of the official school day.

School campus means, for the purpose of competitive food standards implementation, all areas of the property under the jurisdiction of the school that are accessible to students during the school day.

Another term, Combination foods was also proposed to be defined under § 210.11(a) to mean products that contain two or more components representing two or more of the recommended food groups: fruit, vegetable, dairy, protein or grains.

In addition, an *Entrée item* was defined in § 210.11(k)(1) of the proposal as an item that includes only the following three categories of main dish food items:

- A combination food of meat or meat alternate and whole grain rich bread;
- A combination food of vegetable or fruit and meat or meat alternate; or
- A meat or meat alternate alone, with the exception of yogurt, low-fat or reduced fat cheese, nuts, seeds and nut or seed butters.

The preamble provided several examples for each part of the entrée definition.

Almost 6,000 commenters provided input on the proposed definition of Competitive food. Many of these commenters generally agreed with the proposed definition. Of the more than 6,000 comments received on the definition of School day, many generally agreed with the proposed definition. Numerous commenters suggested the definition should be expanded to include the extended school day and afterschool programs that take place on the school campus. Commenters recommended a range of times, both before and after school, including 30 minutes before the start of the instructional day, instead of the midnight before.

Per amendments by section 208 of the HHFKA, the CNA requires that the competitive food standards apply to foods sold at any time during the school day, which does not include afterschool programs, events and activities. The timeframe for the school day definition starting the "midnight before" was proposed to ensure that the competitive food standards would apply during the School Breakfast Program meal service, in recognition of the variety of school schedules and methods of serving breakfast to students.

Almost 3,000 commenters provided input on the proposed definition of *School campus*. Many of these commenters generally agreed with the proposed definition. Several

commenters requested clarification on the applicability of the definition to various locations and activities, including teachers' lounges and similar areas restricted to faculty and staff. The proposed definition of *School campus* includes specific reference to areas that are "accessible to students" during the school day. To the extent that teachers' lounges and other similar areas are restricted areas not accessible to students, the competitive food standards in this rule would not apply to foods sold in those areas.

Approximately 850 commenters provided input on the proposed definition of Entrée item. Several commenters requested a separate definition of "breakfast entrée" to allow grain only, whole grain rich entrées, which are commonly served in the SBP. Including this definition would allow a higher calorie limit for many popular breakfast items such as pancakes, waffles, bagels and cereal, some of which could have difficulty qualifying under the snack/side item limits. The Department acknowledges that the proposed definition of *Entrée item* could present challenges to schools in serving some traditional breakfast items. At this time, the consequences of modifying the proposed definition of Entrée item or adding a separate definition of "breakfast entrée" are unclear. The Department would appreciate further comment on this issue in the context of the totality of the competitive food standards set forth in this interim final rule, so that we can appropriately address this in future guidance and/or the final rule.

A few commenters recommended that meat snack items, such as beef jerky and meat sticks, be excluded similar to yogurt, cheese, nuts, seeds and nut butters, as these are typically not considered main dishes but rather snacks. USDA agrees and will add an exclusion for meat snack items to the definition.

Accordingly, this interim final rule codifies the proposed definitions of Combination foods, Competitive food, School day, and School campus at § 210.11(a), without change. In addition, this interim final rule adopts the proposed definition of *Entrée item*, with an additional exception added for meat snacks, and a technical correction to change "whole grain rich bread" to "whole grain rich food" to ensure that entrées with pasta, rice and other grain items are included as intended. The definition of Entrée item is also moved to § 210.11(a) of this interim final rule, as the definition is applicable to several provisions across the competitive food standards.

State and Local Educational Agency Standards

Under § 210.11(b)(1) of the proposed rule, State and/or local educational agencies would have the discretion to establish additional restrictions on competitive food, as long as they are consistent with the provisions set forth in program regulations.

Approximately 10,280 commenters addressed the discretion of States and local school districts to establish more rigorous competitive food standards. Numerous commenters expressly supported the proposed provision. However, a few commenters expressed concern about additional competitive food restrictions created by States and/ or individual school districts, arguing that the standards should be as consistent as possible across States. The commenters asserted that having one set of standards would facilitate the development of nutritious formulations by manufacturers which could potentially lower the overall cost.

The ability of State agencies and school districts to establish additional standards that do not conflict with the Federal competitive food requirements is consistent with the intent of section 208 of the HHFKA, and with the operation of the Federal school meal programs in general. That discretion also provides an appropriate level of flexibility to States and school districts to set or maintain additional requirements that reflect their particular circumstances consistent with the development of their local school wellness policies. Any additional restrictions on competitive food established by school districts must be consistent with both the Federal requirements as well as any State requirements.

Accordingly, this interim final rule codifies in § 210.11(b)(1), as proposed, the provision allowing States and local educational agencies to establish additional restrictions on competitive food that are not inconsistent with the Federal requirements.

Nutrition Standards for Competitive Food

In response to section 208 of the HHFKA, the proposed rule at § 210.11(c) included general nutrition standards for foods sold in schools outside of the Federal school meal programs. At a minimum, all competitive food sold to students on the school campus during the school day would be required to meet these competitive food nutrition standards.

General Nutrition Standards for Competitive Food

Under § 210.11(c)(1) and (c)(2) of the proposal, an allowable competitive food item would be required to meet all of the proposed competitive food nutrient standards and:

- Be a grain product that contains 50 percent or more whole grains by weight or have whole grains as the first ingredient; or
- Have as a first ingredient one of the non-grain major food groups as defined by the 2010 DGA: fruits, vegetables, dairy products, protein foods (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.); or
- Contain 10 percent of the Daily Value of a naturally occurring nutrient of public health concern from the DGA (i.e., calcium, potassium, vitamin D or dietary fiber): or
- Be a combination food that contains at least ½ cup of fruit or vegetable.

If water is the first ingredient listed for a food item, the second ingredient must be one of the food items above.

General Comments

Approximately 209,400 commenters expressed general support for the food requirements in the proposed rule, while approximately 20 commenters expressed general opposition to the food requirements.

Some commenters recommended that USDA remove the general standards for food and only require competitive food to meet the nutrient standards. The Department does not agree. The general standards for competitive food, as proposed, are consistent with the IOM recommendations, and are intended to promote and encourage the consumption of foods in their whole forms as much as possible, as recommended by the DGA. Removing the general standards and requiring that foods meet only the nutrient standards would not support this goal.

Some commenters recommended that USDA require a proportionate increase in, and/or recommended amounts of, food group contributions for entrée-type competitive food items, since entrées are larger and should contribute more to dietary needs than snacks or side dishes. We acknowledge that due to their larger size and composition, entrée items generally contribute more to diets than other items. However, the Department does not agree that a separate, higher general standard for entrées is necessary, since an entrée's portion size and overall nutrient content will be controlled by the standards for calories, fats, sodium and sugar. A separate general standard for entrées

would also add complexity to the determination of whether a food item meets the standards.

More than 1.100 commenters recommended that combination foods be required to contain only ½ cup of fruit or vegetable, instead of 1/4 cup. The comment reflects USDA's current policy allowing schools to credit 1/8 cup fruit or vegetable toward the total quantity required for school meals. Maintaining the higher 1/4 cup fruit/vegetable quantity for combination foods generally supports the availability of more nutritious products and is consistent with the IOM recommendation and the DGA. However, it is possible that combination foods with less than 1/4 cup of fruit or vegetable could qualify under the whole grain rich or food group criteria, depending on their composition.

One commenter suggested specifying that "dairy products" include non-standard products such as cultured dairy snacks and frozen dairy desserts. In drafting the proposed rule, the Department did not intend to exclude non-standard dairy products such as those mentioned by the commenter. We will ensure that guidance and technical assistance materials in support of this interim final rule will include that clarification.

Based on these comments, this interim final rule does not make any change to these proposed general standards for competitive food, except to correct technical errors with references in the proposed regulatory text regarding the applicability of water as the first ingredient in a product, and to clarify that fruit "and/or" vegetable may be present in a combination food. Additional discussion of the general standards related to whole grains and naturally occurring nutrients of concern follows.

Whole Grains

As mentioned above, one of the general standards for competitive food, proposed at paragraphs (c)(2)(ii) and (e) in § 210.11, would require that grain products contain 50 percent or more whole grains by weight, or have whole grains as the first ingredient.

Approximately 25 commenters expressed support for the proposed whole grain standard, stating that this standard would align with the DGA as well as the school meal standard. Other commenters urged amendment of the standard by allowing FDA whole grain health claims to ensure consistency with the standards for school meals. Approximately 40 commenters supported making the standard more stringent, suggesting that 100 percent of

grains should be whole grain, not whole grain rich.

Approximately 980 commenters supported making the proposed standard less stringent. Some of these commenters suggested that USDA expand the whole grain rich grain product standard to allow products that contain at least 8 grams of whole grains per serving.

As indicated in the preamble to the proposed rule, this standard is consistent with the DGA recommendations, the whole grain rich requirements for school meals, including FDA health claims, and the HUSSC whole grain rich requirement. The whole grain criteria for competitive food is used as a criterion for determining product allowability, while school meals' whole grain rich criteria determine crediting of the grain portion of menu items toward the grain component of the meal. Allowing the additional measures for grain suggested by some commenters such as ≥ 8 grams of whole grain would not ensure that grain products contain at least 50 percent whole grain and would be inconsistent with the DGA. Therefore, this interim final rule adopts the standard as proposed.

Naturally Occurring Nutrients

One of the general standards for competitive food, proposed at § 210.11(c)(2)(iv), would require an allowable competitive food to contain 10 percent of the Daily Value of a naturally occurring nutrient of public health concern (i.e., calcium, potassium, vitamin D, or dietary fiber). The proposed rule requested comments on whether or not food items that contain only naturally occurring nutrients should be allowed, or whether food items to which specific nutrients of concern have been added should also be allowable.

Approximately 450 commenters expressed support for the proposal to limit non-DGA food group competitive food to only those with "naturally occurring" 10 percent Daily Value of nutrients of concern. Numerous commenters reasoned that limiting nutrients to those that are naturally occurring would promote the intake of foods closer to their whole, natural state, which is recommended in the 2010 DGA, and is consistent with the IOM recommendations. Several commenters expressed concern that if the competitive food requirements permitted fortification, unhealthy or less healthy foods would be fortified and made available in schools. Some commenters also argued that crediting nutrients added through fortification

could lead food manufacturers to add nutrients to foods that would not usually be sources of a particular nutrient and could lead to the potential for nutrient imbalances. Some commenters suggested that school food service personnel would require training to identify which food items contain naturally occurring nutrients of concern versus those that have been fortified. Several commenters suggested that the regulation specify that the nutrients of concern are based on the most recent DGA so that if future versions of the DGA include different nutrients of concern, USDA would have the authority to update them for competitive food.

A few commenters urged USDA to broaden the list of "nutrients of concern" to include vitamins A and C, iron, folic acid, and protein, referencing the FDA definition of "healthy" (21 CFR 101.65(d)(2)) and the current Nutrition Facts label.

Approximately 1,240 commenters opposed the proposed restriction to only "naturally occurring" nutrients. Several commenters argued that allowing competitive foods to qualify because of fortified nutrients would provide greater flexibility in menu planning and increase the variety of items that schools can offer as competitive foods. Several commenters stated that the current nutrition information on food labels does not distinguish between fortified and naturally occurring nutrients and that there is no standardized labeling for nutrients of concern. These commenters argued that the requirement for nutrients should be aligned with the information that is currently present on food nutrition labels. These same commenters concluded that it would be challenging or impossible for food service staff to determine from food labels what nutrients are naturally occurring and which are added through fortification.

This is a particularly challenging issue. The Department recognizes some of the current difficulties and limitations with determining whether products contain naturally occurring nutrients. We also appreciate the complexity this would create for local educational agencies and schools in identifying allowable competitive food, as well as the challenges for State agencies in monitoring compliance with these standards. In addition, there are existing voluntary standards that have no restriction on adding nutrients to qualify, and therefore some product manufacturers may not be prepared to support a naturally occurring nutrient standard.

However, as indicated in the preamble to the proposed rule, the Department also supports recognizing only naturally occurring nutrient sources as more consistent with the recommendation of the DGA that "nutrients should come primarily from foods." The nutrients of concern referenced in the proposed rule calcium, potassium, vitamin D, and dietary fiber—are explicitly identified in the 2010 DGA. It is not appropriate for the Department to add other nutrients at this time, but it would be the Department's intent to update the nutrients as future changes occur. As commenters noted, the proposed criterion is also consistent with the recommendations from IOM, which indicated that this approach "reinforces the importance of improving the overall quality of food intake rather than nutrient-specific strategies such as fortification and supplementation."

Therefore, in recognition of the current marketplace and implementation limitations but also mindful of important national nutrition goals, this interim final rule implements a phased-in approach to identifying allowable competitive food under the general standard. For the initial implementation period in School Year 2014-15, through June 30, 2016, the general food standard will include a criterion that an allowable competitive food may contain 10 percent of the Daily Value of a nutrient of public health concern (i.e., calcium, potassium, vitamin D, or dietary fiber). The specified nutrient may be naturally occurring, which is encouraged, or may be added to the product. Effective July 1, 2016, the criterion for 10 percent of the Daily Value of a nutrient of public health concern will be removed as a general criterion. At that time, competitive food must qualify on the basis of being whole grain rich, having one of the non-grain main food groups as the first ingredient (or second if water if the first ingredient), or a combination food with at least 1/4 cup fruit and/or vegetable. This approach will allow three years for product manufacturers to reformulate their products, if desired, to qualify under the other criteria of the general standards. It will also provide a more straightforward method for schools to identify allowable products, both initially and in the long-term. Ultimately this will more closely align the competitive food standards with the DGA, as required by the HHFKA. Should the 2015 DGA identify additional nutrients of concern applicable to school-age children, the Department anticipates allowing these

additional nutrients to qualify products until that criterion is removed on July 1, 2016.

Summary of Changes to the General Nutrition Standards

Accordingly, this interim final rule modifies the proposed general standards for competitive food to require that an allowable competitive food item must meet all of the competitive food nutrient standards *and*:

- Be a grain product that contains 50 percent or more whole grains by weight or have whole grains as the first ingredient; *or*
- Have as a first ingredient one of the non-grain major food groups: Fruits, vegetables, dairy, protein foods (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.); *or*
- Be a combination food that contains at least ½ cup of fruit and/or vegetable;
- Through June 30, 2016, contain 10 percent of the Daily Value of a nutrient of public health concern from the DGA (i.e., calcium, potassium, vitamin D or dietary fiber).

If water is the first ingredient listed for a food item, the second ingredient must be one of the food items listed above. These provisions are found in paragraphs (c)(1) and (c)(2) in § 210.11 of this interim final rule.

Exemptions From Some or All of the Nutrition Standards for Menu Items Provided as Part of the NSLP/SBP

The proposed rule at § 210.11(c)(3) identified two alternatives by which any menu item (both entrées and side dishes) provided as part of the NSLP and/or SBP school meal would be exempt from all or some of the proposed competitive food nutrition standards. Under both proposed alternatives, grain based dessert products would be required to meet all competitive food standards, and all menu items would be required to be served in the same or smaller portion sizes as the NSLP and SBP.

Under proposed Alternative A1, all menu items provided as part of the NSLP or SBP reimbursable meal would be exempt from all of the proposed competitive food standards except the standards established for fat and sugar. (The fat and sugar standards are discussed later in this preamble.)

Under proposed Alternative A2, all menu items provided as part of the NSLP or SBP reimbursable meal would be exempt from all of the proposed competitive food standards, provided such menu items are served within specified timeframes. Two alternatives (Alternatives B1 and B2) were proposed

regarding the timing of allowable service of the exempted menu items. The proposed alternatives would allow an exemption to the proposed nutrient standards for competitive food for NSLP and SBP menu items served:

• On the same day that the items were served in the school meals program (proposed Alternative B1); or

• Within four operating days of service in the programs (proposed Alternative B2).

The Department received a wide variety of comments on the proposed exemptions for NSLP/SBP menu items.

More than 209,000 commenters suggested that NSLP/SBP menu items should not receive any exemption from the competitive food standards. Many suggested that allowing exemptions would introduce "loopholes" for items sold in the à la carte lines. Others asserted that the nutritional benefits of the school meal are diminished when items from the meal are sold individually. Several of these commenters warned that the exemptions would undermine the integrity of the competitive food standards.

Approximately 740 commenters suggested that NSLP/SBP menu items should be exempted from all competitive food standards. Some of these commenters specifically opposed restrictions on fat, sugar, sodium and the frequency of allowable sale of NSLP/ SBP menu items, which they asserted would decrease flexibility and increase food costs for schools. Some commenters supported the idea that because foods in reimbursable meals have already been determined to be a nutritious part of a school meal, they should not be subjected to a second set of nutrition standards in order to be served as a competitive food.

Approximately 25 commenters expressed support for proposed Alternative A1 (NSLP/SBP menu items sold à la carte exempt from all competitive food standards except the fat and sugar standards). Several commenters recommended that if NSLP/SBP menu items are exempted, Alternative A1 should be chosen over Alternative A2 because students could purchase those foods à la carte at any time but Alternative A1 would promote limited fat and sugar intake.

Approximately 935 commenters expressed support for proposed Alternative A2 (NSLP/SBP menu items sold à la carte exempt from all competitive food standards). These commenters cited reasons for their support including flexibility in menu planning for school food authorities, positive messaging to students about

healthy foods, and consistency between à la carte and reimbursable meal requirements. Several of the commenters that supported proposed Alternative A2 did so with the recommendation that there be no frequency restrictions for service of the à la carte menu items. Some of these commenters suggested that not allowing the service of NSLP/SBP menu items would send a confusing message that particular foods are healthful when they are part of a meal but not when they are sold separately. Another commenter recommended that only NSLP/SBP entrées be exempted from the competitive food standards, and not side dishes.

Approximately 40 commenters expressed support for proposed Alternative B1 (allowing an exemption to the nutrient standards for NSLP/SBP menu items on the day of service). Several commenters suggested that this alternative would offer consistency between the à la carte offering and the school meal offerings. Other commenters suggested that schools be allowed to serve NSLP/SBP menu items on the day the items are offered as well as the day after.

Approximately 80 commenters expressed support for proposed Alternative B2 (allowing an exemption to the nutrient standard for NSLP/SBP menu items served within four operating days of their service in the meal). Commenters suggested that proposed Alternative B2 would provide the most flexibility for menu planners and would reduce food waste.

Approximately 960 commenters expressed the view that there should be no frequency restrictions on the service of NSLP/SBP menu items, citing implementation difficulties such inventory control and tracking and maintaining student participation. Other commenters suggested that compliance with the meal pattern would ensure that students are consuming nutritious foods.

The Department appreciates the diverse public comment on this provision. Any exemption to the competitive food standards for NSLP/ SBP menu items must ensure that improvements from updated school meal standards are not undermined and also take into account implementation by program operators and messaging to students. This interim final rule adopts an exemption for NSLP/SBP entrée items only. Side dishes served à la carte would be required to meet all applicable competitive food standards. The exemption for the entrée items is available on the day the entrée item is served in NSLP/SBP, and the following

school day. Entrée items are provided an exemption, but side dishes are not, in an attempt to balance significant commenter opposition to any exemptions for NSLP/SBP menu items and needed menu planning flexibilities. The approach adopted in this interim final rule supports the concept of school meals as being healthful, and provides flexibility to program operators in planning à la carte sales and handling leftovers. The "day after" exemption is provided primarily to accommodate leftovers. We anticipate that this approach, along with the recent changes to school meal standards will result in healthier menu items in meals than in the past, including entrées.

Additionally, providing flexibility for schools to sell à la carte those entrée items that are served as part of the reimbursable meal on the day of service greatly mitigates potential operational disruption in the cafeteria that may occur from students being confused about whether particular foods being served to other students can be purchased individually. This approach also mitigates potential confusion among parents, students and schools that a particular entrée item is healthful when sold as part of the reimbursable meal but not when the same entrée item is sold separately. That said, USDA will closely monitor this exemption during implementation to determine the overall nutrient profile of products being offered under the exemption, as well as any food safety impacts related to leftovers served à la carte. Should the exemption undermine the overall goal of the competitive food standards for healthier products for sale in schools, we will consider a stricter standard.

Accordingly, this interim final rule, in § 210.11(c)(3)(i), provides an exemption to the competitive food standards for NSLP and SBP entrée items that are offered on the same day or the school day after they are offered in the NSLP or SBP. Exempt entrées that are sold as competitive food must be offered in the same or smaller portion sizes as the NSLP and SBP, and with the same accompaniments.

Fruits and Vegetables

Consistent with the DGA and IOM recommendations, the proposed rule at § 210.11(d) would exempt from the competitive food nutrition standards fresh, frozen and canned fruits and vegetables with no added ingredients except water or, in the case of fruit, packed in 100 percent fruit juice or extra light syrup.

Over 900 commenters asserted that the proposed exemption for fruits and vegetables should be expanded, including a recommendation that USDA expand the exemption to include fruit packed in light syrup. These commenters and others also recommended expanding the exemption to allow certain canned vegetables to which a small amount of sugar has been added to maintain the structural integrity of the vegetable. A few commenters supported the allowance of frozen fruit with added sugar. Some commenters expressed the need to include dried fruit with no added ingredients in the proposed nutrient standard exemption.

USDA agrees that the fruit and vegetable nutrient exemption should be expanded to include fruit packed in light syrup, consistent with what is allowed in school meals. The Department also agrees that this exemption should include canned vegetables to which a small amount of sugars has been added to maintain the structural integrity of the vegetable, e.g., corn and peas, as is allowed in USDA's Special Supplemental Nutrition Program for Women, Infants and Children (WIC). We would like to clarify that frozen fruit with added sugar is also exempt, if it can be considered to be packed in extra light syrup or light syrup. The Department prefers to address an exemption for dried fruit under the sugar standard, since including dried fruit under the general nutrient exemption for fruits and vegetables may result in servings that are high in calories due to the nature of dried fruit.

Accordingly, this interim final rule codifies in § 210.11(d) an exemption to the nutrient standards for fresh, frozen and canned fruits and vegetables with no added ingredients except water or, in the case of fruit, packed in 100 percent fruit juice, extra light syrup, or light syrup; and for canned vegetables that contain a small amount of sugar for processing purposes, to maintain the quality and structure of the vegetable.

Nutrient Standards

The proposed rule included standards for total fat, saturated fat, trans fat, total sugars, calories, and sodium. These standards were proposed to apply to the competitive food "per portion as packaged" or "per portion." Over 206,000 commenters expressed support for the proposed nutrient standards for competitive food, while approximately 1,050 expressed general opposition. A few commenters suggested that the phrase "per portion as packaged" needs clarification because there is a difference between a "portion" and a "serving." One commenter stated that per portion as packaged means the

entire package of food sold, not a serving within the package.

The intent of the proposed language "per portion as packaged" and "per portion" was to apply the competitive food standards to the item sold to the student, as noted by the commenter, and not to each "serving" in a package. Some packaged items may include more than one "serving", as indicated on the Nutrition Facts label. We also understand that some items provided as a competitive food are not "packaged" by a manufacturer but rather are scratch prepared in the school and served to the student. For clarity, we are modifying the regulatory text for the nutrient standards to use the term "per item as packaged or served" instead of "per portion as packaged" or "per portion." This language more effectively reflects how the standards must be applied.

Total Fat, Saturated Fat and Trans Fat

To qualify as an allowable competitive food, the proposal at § 210.11(f)(1) would require that not more than 35 percent of the total calories per portion as packaged be derived from fat. Exemptions to the total fat requirement, in proposed § 210.11(f)(2), would include:

• Reduced fat cheese; and

 Nuts and seeds and nut/seed butters (excluding combination products that contain nuts, nut butters or seeds or seed butters with other ingredients such as peanut butter and crackers, trail mix, chocolate covered peanuts, etc.); and

• Products that consist of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat; and

• Seafood with no added fat. For saturated fat, the proposal at § 210.11(g)(1) would require that less than 10 percent of the total calories per portion of a food be derived from saturated fat. The proposal included an exemption to the saturated fat standard, in paragraph (g)(2), for reduced fat cheese.

Under proposed § 210.11(h), the trans fat content of a competitive food must be zero grams trans fat per portion as packaged (not more than 0.5 g per portion)

Several thousand commenters expressed support for the proposed limits on total fat, saturated fat, and trans fat; many also expressed specific support for the proposed exemptions from the fat standards. Approximately 130 commenters were opposed to the proposed restriction on total fat; approximately 70 commenters were opposed to the proposed to the proposed restriction on saturated fat; and a few commenters opposed the proposed trans fat restriction. These commenters argued in

favor of making the restrictions less stringent or eliminating the standards entirely.

Some commenters wanted USDA to consider adding an exemption for nuts and seeds and nut/seed butters to the saturated fat standard, in addition to the proposed total fat standard exemption. The Department agrees with providing a saturated fat exemption for nuts and seeds and nut/seed butters, given the healthy fat profile and positive nutrition benefits of these products.

Numerous commenters urged USDA to expand the exemption for reduced fat cheeses to include all cheeses, citing the importance of increasing children's access to dairy products. Many of the commenters in support of the exemption for reduced fat cheese asked USDA not to extend the exemption to combination products that include reduced-fat cheese (e.g., cheese and crackers). A few commenters recommended that USDA extend the fat exemptions to part-skim cheese (mozzarella), which is lower in fat than full fat cheese but may not necessarily meet the FDA criteria for the reduced fat claim.

In response, USDA looked closely at the fat content of cheeses, including part-skim cheeses, to determine if additional exemptions to the fat standards are warranted. Based on our examination, we agree that extending an exemption to the total fat and saturated fat standards for part-skim mozzarella cheese is appropriate, as there is an FDA standard of identity for part-skim mozzarella cheese. In addition, there is a similar fat profile for part-skim mozzarella compared to many reduced fat cheeses. Other part-skim cheese may be exempt if it also meets the FDA requirement as a reduced fat cheese. The reduced-fat cheese (and now partskim mozzarella) exemptions do not apply to combination foods.

Another commenter recommended that protein foods which supply at least 10 percent Daily Value for protein be exempt from the total fat and saturated fat limits. The Department does not agree that such an exemption from the fat standards is appropriate. To support the DGA, meat and poultry should be consumed in lean forms to decrease the intake of solid fat. Nuts and seeds and nut/seed butters and seafood, which have been exempted, contain oils rather than solid fats.

Accordingly, this interim final rule codifies in § 210.11(f) the total fat and saturated fat standards and exemptions as proposed, with additional exemptions to the total fat and saturated fat standards for part-skim mozzarella cheese, an additional exemption to the

saturated fat standard for nuts and seeds and nut/seed butters, and clarification that the standards apply to the item as packaged or served. This language also clarifies that the exemptions for cheese and nuts and seeds and nut/seed butters do not apply to combination foods. The trans fat standard is adopted in this interim final rule as proposed, in § 210.11(g).

Total Sugars

The proposed rule at § 210.11(i)(1) provided two alternatives for comment regarding total sugars in foods. Under proposed Alternative C1, total sugars contained in a competitive food could not be more than 35 percent of *calories* per portion. Under proposed Alternative C2, not more than 35 percent of the *weight* per portion could be derived from total sugars.

Regardless of which measure (total sugars by calories or weight) is utilized, the proposed rule at § 210.11(i)(2) would provide the following exemptions to the total sugar standard:

- Dried whole fruits or vegetables; dried whole fruit or vegetable pieces; and dehydrated fruits or vegetables with no added nutritive sweeteners;
- Products that consist of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat; and
- Flavored and unflavored nonfat and low-fat yogurt with no more than 30 grams of total sugars per 8 ounce serving.

More than 2,500 commenters expressed general support for a sugar restriction for competitive food. Approximately 70 commenters supported proposed Alternative C1 (total sugar by calories), citing consistency with IOM and other public health recommendations. Some commenters stated that Alternative C1 would be easier to implement because the calculation is simpler to perform. A number of commenters argued that a standard based on calories would be better than limiting sugars to 35 percent by weight, which would allow a number of sugary foods to be sold that would otherwise be excluded by a limit based on percent of calories, e.g., those with high water content such as ice pops, fruit snacks, ice cream, pudding, granola bars, and snack cakes.

More than 1,100 commenters expressed support for proposed Alternative C2 (total sugars by weight). These commenters argued that this is the standard many schools and food manufacturers have been using, and that it is consistent with other standards such as USDA's HUSSC and the Alliance for a Healthier Generation, which many schools have already

implemented. Many commenters stated that this alternative would allow greater flexibility and would permit more products that are favorites among students, such as low-fat ice cream, sweetened frozen fruit, and vogurt parfaits. Several commenters expressed support for Alternative C2 because they believe it would be easier to implement. A few commenters asserted that it would be easier for school food service personnel to assess a product's conformance to the sugar standard as a percentage of the product's weight because it would only involve calculations based on information provided on the Nutrition Facts label.

Many commenters suggested USDA should set the sugar standard based on added sugars, rather than total sugars. These commenters argued that added sugars are what science shows should be limited in children's diets. However, these commenters acknowledged that added sugars are not specified on the Nutrition Facts label, which would make it difficult for local schools to determine. Consequently, some of these commenters urged USDA to work with FDA to ensure that added sugars are listed on the revised Nutrition Facts label.

In response, USDA agrees with these commenters that a sugar standard based on added sugars is preferable but that it would be very difficult for local program operators to implement and State agencies to monitor since the current Nutrition Facts label does not differentiate between naturally occurring and added sugars. If added sugars information is required on the Nutrition Facts label in the future, USDA would anticipate updating the standards for competitive food to incorporate that standard.

The interim final rule adopts Alternative C2, which requires that 35 percent or less of the weight of the food come from total sugars. We acknowledge that this standard generally allows more products to qualify, but the portion sizes of these and all foods would be limited by the calorie and fat standards. Sugar by weight is also a standard used by some voluntary standards. State agencies and school districts could choose to implement a sugar standard based on calories, as long as it is at least as restrictive as the regulatory standard (i.e., no allowable product under the calorie measure could exceed 35 percent sugar by weight). As mentioned earlier, any additional restrictions on competitive food established by school districts must be consistent with both the Federal requirements as well as any State requirements.

Approximately 350 commenters provided input on the proposed exemptions to the sugar standard. Many of these commenters expressed support for the sugar exemptions as proposed. Approximately 130 commenters addressed the exemption for dried fruits/vegetables. Numerous commenters expressed general support for the exemption for dried fruits/ vegetables with no added nutritive sweeteners. Many commenters suggested expanding the sugar exemptions to allow certain dried fruits with added nutritive sweeteners where it is required for processing and palatability. However, many other commenters did not support an expansion of the exemption for dried fruits with added caloric sweeteners. A few commenters requested that processed fruit and vegetable snacks (e.g., fruit strips or fruit drops) be included under the proposed exemption for dried fruit, as many are processed with fruit juice concentrate.

USDA supports an additional limited exemption for dried fruit with added nutritive sweeteners only when the added sweeteners are required for processing and/or palatability of the product, such as dried cranberries, tart cherries and blueberries. The portion sizes of these dried fruits would be limited by the calorie standards. The Department, however, does not agree that processed fruit and vegetable snacks should be included under either dried fruit exemption. Since these snack type products are not whole dried fruit pieces, the fruit concentrate (added sugar) used to make these products is often the primary ingredient. These products could still qualify without the exemption as a competitive food if they meet all of the standards, including a fruit or vegetable as the first ingredient.

Approximately 360 commenters addressed the proposed exemption of flavored and unflavored non-fat and low-fat vogurts from the sugar limit. Most of these commenters expressed support for the proposed exemption, based on a desire to increase the availability of popular dairy products that children are likely to eat. Several commenters recommended that the 30 grams per 8 ounce limit for total sugars in yogurt be scaled proportionately by serving size (e.g., 22 grams total sugar for a 6 ounce portion). Several commenters proposed more restrictive standards for yogurt products to receive an exemption from the sugar limit, while a few commenters proposed less restrictive standards.

The intention of the proposed exemption for yogurt was that the total sugars limit be scaled according to

serving size. Since this interim final rule adopts a sugar standard based on the weight of the product, as discussed above, an exemption for yogurt is unnecessary and is removed in this interim final rule. However, USDA encourages local program operators to select yogurt with lower amounts of sugar whenever possible. Ingredient lists reveal that many popular drinkable yogurts have significant levels of added sugars instead of sugars conveyed naturally from fruit or dairy. USDA will gather additional information as competitive food standards are implemented and may address standards for drinkable yogurt in a future rulemaking.

Accordingly, this interim final rule requires, in § 210.11(h)(1), that the total sugar content of a competitive food must be not more than 35 percent of weight per item as packaged or served. Section 210.11(h)(2) includes the exemptions to the total sugar standard that were proposed, except for the yogurt exemption which is not retained. This section also includes an exemption for dried fruit with added nutritive sweeteners that are required for processing and/or palatability purposes. USDA will issue future guidance on determining which dried fruits with added nutritive sweeteners for processing and/or palatability qualify for the exemption.

Calories and Sodium

Under the proposed rule at § 210.11(j), snack items and side dishes sold à la carte could contain no more than 200 calories and 200 mg of sodium per portion as served, including the calories and sodium in any accompaniments, and must meet all other nutrient standards for non-entrée items.

Under proposed § 210.11(k), entrée items sold à la carte could contain no more than 350 calories and 480 mg sodium per portion as served, including any accompaniments, and meet all other nutrient standards.

As indicated in the *Definitions* section of this preamble, an entrée item was defined in § 210.11(k)(1) of the proposal, and would apply in determining the calorie and sodium limits.

Calories

Almost 2,600 commenters expressed general support for calorie restrictions for competitive food, while approximately 30 commenters generally opposed the proposed calorie restrictions.

Approximately 200,000 commenters suggested separate calorie limits by grade, similar to the structure of the school meal program, reasoning that

children have different calorie needs as they grow. Some of these commenters stated that many schools across the country have already successfully implemented tiered calorie maximums for snack foods as part of the Alliance for a Healthier Generation's Healthy Schools Program.

More than 1,000 commenters opposed the proposed calorie limits for entrees, while approximately 165 opposed the proposed limits for snack items. Commenters said the proposed limits were too stringent and would limit student access to many food products. Some of these commenters stated that the calorie limit for entrée items is inconsistent with USDA's HUSSC criteria, and is not required for entrees served as part of the NSLP. Other commenters expressed concern that manufacturers would have to expend resources to repackage or reformulate products to meet a 200 calorie limit for snack items, stating that many manufacturers' current packaging for school districts is just slightly over 200 calories. Some commenters provided specific suggestions for alternative calorie limits for snacks, ranging from 240 to 300 calories, and for entrées, ranging from 400 to 500 calories.

This interim final rule retains the proposed calorie limits for snacks/side dishes (200 calories per item as packaged or served), and entrée items (350 calories per item as packaged or served), which are consistent with IOM recommendations and some voluntary standards. The Department does not agree that higher limits are appropriate, as suggested by some commenters. In addition, we appreciate that separate calorie limits by grade levels for snacks would align with existing voluntary standards that many schools have adopted, and would be more tailored to the nutritional needs of children of different ages. However, separate calorie limits for different grade levels would also add complexity for local program operators with schools of varying grade levels. State agencies or school districts could choose to implement varying calorie limits based on grades, provided the maximum level does not exceed the limit in this interim final rule. Please note that the calorie limit for entrée items would apply to all entrées that do not meet the exemption for NSLP/SBP entrée items.

Sodium

Over 2,600 commenters expressed support for the proposed limits on sodium of 200 mg per portion as served for snacks/side dishes and 480 mg per portion as served for entrée items. Some of these commenters cited studies that

they asserted show a growing prevalence of high blood pressure in American children linked to obesity rates, high sodium level intakes, and high calorie diets.

More than 900 commenters generally opposed the proposed sodium restrictions. Approximately 80 commenters specifically opposed the proposed sodium limit for entrées, while approximately 90 opposed the proposed limits for snack items. Many suggested the sodium limits be raised and made consistent with the NSLP/ SBP standards or with USDA's HUSSC standards, citing difficulty for manufacturers to reduce sodium levels while maintaining palatability and low food costs. Several commenters recommended that the sodium reductions should be phased in gradually to allow taste preferences and manufacturers time to adjust. A few commenters suggested that additional assessments of health and student acceptance be conducted or reviewed prior to setting sodium requirements. Some commenters provided suggestions for higher sodium limits, ranging from 230 mg to 360 mg for snacks and 550 mg to 650 mg for entrées. One commenter, a manufacturer, wanted USDA to add an exemption to the sodium limit for natural reduced fat cheese and reduced fat, reduced sodium pasteurized processed cheese.

The Department's proposed standards for sodium were based on the IOM recommendations. The proposed "per portion as served" standards for competitive food were considered in the context of overall sodium limits for school meals, the first of which take effect in School Year 2014-15, the same school year these competitive food standards are implemented. USDA acknowledges that sodium reduction is an issue that impacts the broader marketplace, not just schools, and understands that sodium reduction is a process that will take time. However, it is an important health issue that must be addressed. We also understand that there are existing voluntary standards for competitive food that have a higher sodium limit of 230 mg for snacks/side dishes, which means there are existing products that have been formulated to meet the higher standard available to schools. Therefore, we are setting an initial limit for sodium for snacks and side dishes of 230 mg per item as packaged or served, for the first two vears of implementation of these standards. As of July 1, 2016, the sodium limit for snacks and side dishes will be reduced to 200 mg per item as packaged or served. This phased in approach will ensure product

availability for schools for initial implementation and provide ample time for manufacturers to adjust to meet the lower limit. We are not changing the proposed entrée limit of 480 mg per item as packaged and served, as entrées served in school meals will be covered under the NSLP/SBP entrée item exemption, in § 210.11(c)(3)(i). We are also not providing an exemption to the sodium standard for cheese, as we are concerned given the nutrient profile of cheese that this would result in high sodium products as competitive food.

Summary of Changes to Calories and Sodium Limits

Accordingly, this interim final rule in § 210.11(i) requires that snack items and side dishes sold à la carte must have not more than 200 calories and 230 mg of sodium per item as packaged or served, including accompaniments, and must meet all other nutrient standards. Effective July 1, 2016, these snack items and side dishes must have not more than 200 calories and 200 mg of sodium per item as packaged or served. Section 210.11(j) requires that entrée items sold à la carte, other than those that meet the exemption for NSLP/SBP entrée items, must have not more than 350 calories and 480 mg of sodium per item as packaged or served, including accompaniments, and must meet all other nutrient standards.

Accompaniments

The proposed rule at § 210.11(n) limited the use of accompaniments to competitive food, such as cream cheese, jelly, butter, salad dressing, etc., by requiring that all accompaniments to a competitive food item be pre-portioned and included in the nutrient profile as part of the food item served.

More than 1,000 commenters opposed the requirement that accompaniments be pre-portioned as being costly and impractical.

About 20 commenters supported requiring accompaniments to be included in the nutrient profile as part of the food item served. Some of these commenters urged USDA to amend the proposed requirement to include an average serving size of the appropriate accompaniments when evaluating the nutrient profile for an item. Other commenters urged USDA to provide technical assistance to schools on strategies to limit accompaniments that are high in sodium, fats, and sugars.

About 470 commenters did not support pre-portioning or inclusion of accompaniments in the nutrient profile

of the competitive food.

In response to these comments, USDA acknowledges that pre-portioning of

accompaniments could add some cost and complication to competitive food service in some schools. We maintain, however, as many commenters did, that it is important to account for the dietary contribution of accompaniments in determining whether a food item may be served as a competitive food. Therefore, this rule removes the proposed requirement for pre-portioning of competitive food accompaniments but retains the requirement that accompaniments be included in the nutrient profile of foods. Schools may determine the average serving size of the accompaniments at the site of service (e.g., school district). This is similar to the approach schools have used in conducting nutrient analysis of school meals in the past. USDA will provide guidance and technical assistance as needed during implementation.

Accordingly, this interim final rule requires, in § 210.11(l) that the accompaniments to a competitive food item must be included in the nutrient profile as a part of the food item served in determining if an item meets the nutrition standards for competitive food. The contribution of the accompaniments may be based on the average serving size of the accompaniment used per item.

Chewing Gum

The proposed rule did not address chewing gum. Several commenters recommended that USDA provide an exemption from the competitive food standards for sugar-free chewing gum, claiming it has a proven impact on dental and oral health. Some of these commenters also suggested that States should retain the authority to establish more restrictive standards governing the sale of sugar-free gum in their schools should they chose to do so for reasons unrelated to health or nutrition.

USDA agrees that sugar-free chewing gum should be provided an exemption from the competitive food standards. Clinical studies have shown that chewing sugarless gum for 20 minutes following meals can help prevent tooth decay. State agencies and school districts may choose not to allow the sale of sugar-free gum, for a variety of reasons.

Accordingly, this interim final rule includes in § 210.11(c)(3)(ii) an exemption to the competitive food standards for sugar-free chewing gum.

Nutrition Standards for Beverages

The proposed rule at paragraphs (b)(2) and (m) of § 210.11 established standards for allowable beverage types for elementary, middle and high school students. At all grade levels, water, low

fat and nonfat milk, and 100 percent juice would be allowed, in specified maximum container sizes which varied by grade level. The proposed rule would also allow additional beverages for high school students, specifically calorie-free and low-calorie (less than 40 or 50 calories per 8 ounces) beverages, with and without carbonation. These additional beverages for high school students would not be allowed in the meal service area during meal service. This approach was designed to recognize the wide range of beverages available to high school students in the broader marketplace and the increased independence such students have, relative to younger students, in making consumer choices. The proposed beverage requirements in § 210.11(m) included:

Elementary School

- Plain water (no size limit);
- Low fat milk, plain (not more than 8 fluid ounces);
- Non fat milk, plain or flavored (not more than 8 fluid ounces);
- Nutritionally equivalent milk alternatives as permitted by the school meal requirements (not more than 8 fluid ounces); and
- 100% fruit/vegetable juice (not more than 8 fluid ounces).

Middle School

- Plain water (no size limit);
- Low fat milk, plain (not more than 12 fluid ounces);
- Non fat milk, plain or flavored (not more than 12 fluid ounces);
- Nutritionally equivalent milk alternatives as permitted by the school meal requirements (not more than 12 fluid ounces); and
- 100% fruit/vegetable juice (not more than 12 fluid ounces).

High School

- Plain water (no size limit);
- Low fat milk, plain (not more than 12 fluid ounces);
- Non fat milk, plain or flavored (not more than 12 fluid ounces);
- Nutritionally equivalent milk alternatives as permitted by the school meal standards (not more than 12 fluid ounces); and
- 100% fruit/vegetable juice (not more than 12 fluid ounces);

Additional beverages proposed to be allowed for sale in high school, but not in the meal service area during the meal service:

- Calorie-free, flavored and/or carbonated water (not more than 20 fluid ounces);
- Other beverages (not more than 20 fluid ounces) that comply with the FDA

requirement for bearing a "calorie free" claim of less than 5 kcals/serving; and

- Other beverages in ≤ 12 oz servings. Two "other beverage" alternatives were proposed:
- Allow beverages with not more than 40 calories per 8 fluid ounce serving or 60 calories per 12 fluid ounce serving. (proposed Alternative D1)
 Allow beverages with not more

 Allow beverages with not more than 50 calories per 8 fluid ounce serving or 75 calories per 12 ounce fluid serving. (proposed Alternative D2)

Over 10,000 commenters expressed general support for the proposed beverage requirements, while only approximately 55 commenters expressed general opposition. Many commenters provided specific suggestions related to the proposed beverage requirements. Discussion of these comments and USDA's response follows.

Grade Groupings

A few commenters suggested that USDA use only two grade groups for the beverage standards—elementary and secondary—to ease implementation. Some commenters stated that it would be difficult and/or costly to administer the proposed beverage requirements in combined grade campuses, such as 7–12 or K-12. In response, USDA appreciates that implementation could be more difficult in schools with overlapping grade groups, but considers it important to maintain the three grade groupings proposed. These groupings reflect IOM's recommendations and appropriately provide additional choices to high school students, based on their increased level of independence. USDA will provide technical assistance and facilitate the sharing of best practices during implementation.

Water

Some commenters encouraged USDA to change "plain water" to "water with no additives." Several commenters urged USDA to allow carbonated water without additives at all grade levels with no portion size limit. One commenter recommended that the standards allow for water with carbonation and/or natural flavors but not sweeteners (whether caloric or noncaloric) at all grade levels. Some commenters, including advocacy organizations, asked USDA to clarify that water could include added fluoride.

In response, the nutritional differences between carbonated water without additives and water are insignificant. Therefore, USDA agrees that this rule should not restrict access on portion size at any grade levels. However, we are not allowing natural

flavors or sweeteners under this standard for all grade levels; these beverages would likely qualify as allowable beverages for high school students. As for terminology, USDA is retaining the use of the term "plain water," as it accurately describes the intent of what may be provided in unlimited quantities at all grade levels. We recognize that some bottled waters have added minerals including fluoride, which is acceptable.

Milk

Some commenters suggested replacing the term "plain milk" with "unflavored milk." USDA agrees that unflavored milk (e.g., milk with no sweeteners) is a more accurate term than plain milk, and it is also consistent with terminology used in the school meal patterns. Therefore, we will modify the regulatory text to use the term "unflavored milk."

Several commenters provided input on flavored milk. A few commenters requested that USDA allow low fat flavored milk, in addition to nonfat flavored milk. To address the sugar content in flavored milk, commenters made several suggestions. One suggestion would establish a sugar maximum of no more than 28 grams of sugar per 8 fluid ounces of milk. Another suggestion would have USDA provide schools with information on how to select flavored milk that contains minimum levels of added sugars. USDA was also encouraged to provide a calorie limit for flavored milk (no more than 130 calories per 8 fluid ounces) to help limit calories and added

USDA does not support allowing low fat flavored milk. It is not an allowable milk type under the school meal patterns, based on IOM's school meal recommendations to help control calories. USDA recognizes that some flavored milk (even nonfat versions) can be high in calories and added sugars, but we are not supportive of requiring a calorie or sugar limit for flavored milk at this time. Nonfat flavored milk is allowed in the school meal patterns without any sugar or calorie caps. In general, schools that wish to offer nonfat flavored milk must select products that are lower in calories and added sugars, in order to stay within the school meal calorie ranges. The milk offered with the school meal is usually the same milk that is offered for sale to students à la carte. In addition, over time many manufacturers have reformulated flavored milk to be lower in calories and added sugar. We will continue to monitor this issue as the competitive food standards are being implemented

to determine if a future calorie cap and/ or sugar limit for flavored milk is warranted. We will also provide technical assistance as necessary to assist schools in selecting flavored milk with lower sugar levels.

Juice

Many commenters supported the proposal to require 100 percent juice, as well as the proposed portion size limits. Several of these commenters recommended allowing diluted juices, with and without carbonation, at all grade levels. Some commenters encouraged USDA to allow juice diluted with water, but only in high schools. Some commenters suggested a calorie cap for all juices that are sold, and similarly other commenters suggested smaller maximum serving sizes for 100 percent juice.

Beverages combining full-strength

juice and water or carbonated water are increasingly popular in the marketplace. Allowing these blends with juice results in a product with fewer calories and less sugar than a comparable amount of natural unsweetened 100 percent juice, and provides additional options for schools. Therefore, this interim final rule allows 100 percent fruit and/or vegetable juice diluted with water, with or without carbonation and with no added sweeteners, at all grade levels. The portion size limit for each grade level would be the same as the maximum juice portion size—i.e., 8 fluid ounces for elementary schools, and

Other Beverages for High School

by the portion size limit.

12 fluid ounces for middle and high

necessary to add a calorie cap for full-

strength juice, as calories are controlled

schools. We do not agree that is it

USDA received a significant number of comments on the proposed standards for other beverages allowed in high school.

A few commenters wanted lowcalorie beverages to be available in elementary and middle schools as well as high schools, while others opposed these beverages at any grade level.

A few commenters also requested that USDA modify the proposed language regarding FDA's "calorie free" claim, to avoid inconsistent treatment of very low calorie beverages based on labeling decisions made by manufacturers and allowed by FDA. The suggested modification would specify beverages could contain less than 5 calories per 8 fluid ounces, or less than or equal to 10 calories per 20 fluid ounces.

Several commenters expressed support for establishing a more stringent calorie restriction for low-calorie beverages in high schools. A few commenters expressed opposition to sports drinks in schools, stating these beverages contribute to excess calorie consumption and are not needed for hydration. Approximately 30 commenters supported proposed Alternative D1 (allowing no more than 40 calories per 8 fluid ounces and no more than 60 calories per 12 fluid ounces), 12 ounces maximum. A few commenters requested technical changes to the proposed language for clarity and consistency. Several commenters suggested a limit of 40 calories "per container," instead of the standards that were proposed. These commenters reasoned that the FDA defines low-calorie beverages as those with fewer than or equal to 40 calories per Reference Amount Customarily Consumed (RACC).

More than 500 commenters supported proposed Alternative D2 (allowing no more than 50 calories in 8 fluid ounces and no more than 75 calories in 12 fluid ounces), 12 ounces maximum. Several commenters recommended that USDA adopt a modified version of Alternative D2 that would reflect the fact that FDA rounding rules require a beverage with 75 calories in a 12 ounce portion to be labeled as having 80 calories per 12 fluid ounces.

In response, USDA appreciates the input provided by commenters on the proposed standards for other beverages allowed in high school. In this interim final rule, we are allowing calorie-free beverages with a maximum container size of 20 fluid ounces, as proposed but with the technical changes requested by commenters. We are also adopting proposed Alternative D1 for lowercalorie beverages, which allows up to 40 calories per 8 ounces and 60 calories per 12 ounces, with the maximum proposed 12 ounce limit. This standard allows a great variety of popular beverage choices to be available for sale in high schools, while also limiting the calories these beverages could provide. Limiting the maximum container size to 12 ounces for these lower calories beverages also reinforces the important concept of appropriate serving sizes for items with calories.

Restrictions on the Sale of Other Beverages in High School—"Time and Place" Rule

Approximately 1,300 commenters addressed proposed "time and place" restrictions for the sale of other beverages in high school. Numerous commenters opposed the distinction in the proposed rule between beverages allowed to be sold during meal times in meal service areas (i.e., water, milk and

juice) and those available only outside of meal times and meal service areas (other beverages in high school). These commenters argued that if an alternative beverage is allowed under the competitive food standards, it should be allowed regardless of the point of service. They reasoned that allowing the sale of lower-calorie and calorie-free beverages but not during the meal periods would send a mixed message to students regarding whether such beverages are a part of a healthy diet or should be avoided. Some of these commenters also stated that this provision would drive revenue from school nutrition programs into the alternative areas of the schools because students would go elsewhere to purchase those beverages.

USDA agrees with commenters that the distinction on when and where beverages can be sold in high schools during the school day may be unnecessary. The beverage standards adopted in this interim final rule allow a variety of beverage choices in high school, while limiting their calories. Therefore, we are removing the "time and place" restrictions for "other" beverages in high schools, as set forth in the proposed rule. Therefore, this rule does not restrict the sale of any allowable beverage, at any grade level, throughout the school day anywhere on the school campus. However, USDA will monitor this provision to ensure that the sale of such competitive beverages in the food service area does not negatively impact consumption of milk, an excellent source of calcium. USDA will continue monitoring milk sales and consumption in schools in periodic studies. State agencies or school districts could choose to prohibit sale of these other beverages in food service areas.

Summary of Changes to Nutrition Standards for Beverages

Accordingly, this interim final rule codifies, in § 210.11(m)(1) and (m)(2), the proposed nutrition standards for beverages for elementary schools and middle schools, with the addition of plain carbonated water with no size limit; 100 percent juice diluted with water (with or without carbonation and with no added sweeteners) in the proposed size limit for juice for each grade group; and a change in terminology from plain milk to unflavored milk.

Section 210.11(m)(3) of this interim final rule adopts the proposed nutrition standards for water, milk and juice in high schools, with the addition of plain carbonated water with no size limit; 100 percent juice diluted with water (with or without carbonation and with no added sweeteners) in no more than 12 ounces; and a change in terminology from plain milk to unflavored milk.

In addition, § 210.11(m)(3) allows, in high schools, calorie-free, flavored water, with or without carbonation (no more than 20 fluid ounces); 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 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).

Caffeine

The proposed rule at § 210.11(l) would require foods and beverages available in elementary and middle schools to be caffeine free, with the exception of trace amounts of naturally occurring caffeine substances. This is consistent with IOM recommendations. However, the proposed nutrition standards for beverages would permit caffeine for high school students, and the proposed rule requested commenter input on this issue.

Over 350 commenters supported the proposed caffeine restrictions for elementary and middle schools. Approximately 120 commenters thought the standard for these lower grade levels should be less restrictive. Some commenters requested guidance on what constitutes "trace amounts of naturally occurring" caffeine. More than 400 commenters supported allowing caffeine in high schools, while 75 commenters opposed allowing caffeine for high school students at all, citing that it is not consistent with IOM's recommendation. A number of commenters, including advocacy organizations, also highlighted their particular concern over the growing popularity and consumption of energy drinks because these often have very high levels of caffeine. One of these commenters cited potential adverse health and safety effects of energy drinks on students.

USDA is concerned, as are some commenters, that some foods and beverages with very high levels of caffeine may not be appropriate to be sold in schools, even at the high school level. Although the American Academy of Pediatrics discourages the consumption of caffeine and other stimulants by children and adolescents, the FDA has not set a daily caffeine limit for children. However, FDA recently announced that it will investigate the safety of caffeine in food products, particularly its effects on

children and adolescents. The FDA announcement cites a proliferation of products with caffeine that are being aggressively marketed to children, including "energy drinks." FDA is working with the IOM to convene a public workshop in the near future to explore these issues, including determining a safe level for caffeine consumption and the potential consequences to children of caffeinated products in the food supply.

Given the lack of authoritative recommendations at this time, this interim final rule will not prohibit caffeine for high school students. However, USDA acknowledges commenters' concerns and encourages schools to be mindful of the level of caffeine in food and beverages when selecting products for sale in schools, especially when considering the sale of high caffeine products such as energy drinks. USDA will continue to monitor research and recommendations on caffeine in children as we develop a final rule. We will also provide guidance to program operators on what constitutes trace amounts of naturally occurring caffeine, for use at the elementary and middle school levels.

Accordingly, this interim final rule codifies the caffeine provisions, as proposed, in § 210.11(k).

Non-nutritive sweeteners

The proposal did not explicitly address the issue of non-nutritive sweeteners; however, the proposal would allow calorie-free and low-calorie beverages in high schools, which implicitly would allow beverages including non-nutritive sweeteners.

Approximately 40 commenters addressed the use of non-nutritive sweeteners in food products. Some commenters opposed allowing artificially sweetened beverages. For example, some commenters opposed the sale of diet sodas, whereas others stated that there is little evidence regarding the advisability of intake of sugarsweetened beverages versus intake of non-nutritive sweeteners in beverages. In contrast, some commenters supported the use of non-nutritive sweeteners USDA appreciates commenter input but is not explicitly addressing in the regulatory text of this interim final rule the use of non-nutritive sweeteners. Local program operators can decide whether to offer items for sale with nonnutritive sweeteners.

Other Requirements

Fundraisers

Proposed § 210.11(b)(5) would require that food and beverage items sold

during the school day meet the nutrition standards for competitive food, but would allow for special exemptions for the purpose of conducting infrequent school-sponsored fundraisers.

Commenters were asked to address two proposed alternatives to establishing the limitations on the frequency of specially exempted fundraisers. Under the proposed alternatives, the frequency would be specified:

• By the State agency during such periods that schools are in session (proposed Alternative E1); or

• By the State agency and approved by USDA during such periods that schools are in session (proposed Alternative E2).

In either case, the proposed rule required that no specially exempted fundraiser foods or beverages would be sold in competition with school meals in the food service area during meal service.

As stated in the preamble to the proposed rule, the proposal would not limit the sale of food items that meet the proposed nutrition requirements (as well as the sale of non-food items) at fundraisers. In addition, the proposed standards would not apply to food sold during non-school hours, weekends and off-campus fundraising events such as concessions during after-school sporting events

Approximately 85 commenters supported proposed Alternative E1 allowing State agencies the discretion to determine the allowed frequency of exempted fundraisers. Commenters argued that State agencies possess the necessary knowledge, understanding or resources to make decisions about what "limited number" of fundraisers is appropriate for their communities. Several commenters requested clarifying that if a State agency does not specify an acceptable exempted fundraiser frequency, it would be implied that no exemptions are granted.

Approximately 800 commenters expressed support for proposed Alternative E2 which would allow State agencies to set the frequency of exempted fundraisers, with USDA approval, citing that this would better ensure consistent application of nutrient standards across all fundraisers. Some commenters suggested that USDA should set the number or standards for exempt fundraisers per year for purposes of consistency. A few commenters provided more specific recommendations for the frequency of fundraisers.

More than 600 commenters suggested that there should be no exemptions for fundraisers from the competitive food standards because fundraiser foods compete with school meals and providing exemptions would blur the message of good nutrition practices.

Approximately 550 commenters provided comments regarding the place and/or time that specially exempted fundraisers could be sold. Numerous commenters suggested that USDA prohibit sales by exempt fundraisers across the entire school campus instead of only food service areas during meal service.

Several commenters expressed concern over the potential loss of revenue if fundraisers are limited; other commenters were concerned about the effects of the proposed fundraiser limitations on schools, clubs and student organizations that rely on revenue from fundraising.

Some commenters requested clarification that the competitive food standards did not apply to fundraisers in which the food was not intended to be consumed on the school campus (e.g., catalog sales or frozen pizzas and cookie dough).

In response, USDA believes that the most appropriate approach to specifying the standards for exempt fundraisers is to allow State agencies to set the allowed frequency (proposed Alternative E1). If a State agency does not specify the exemption frequency, no fundraiser exemptions may be granted. As noted in the preamble to the proposed rule, ŪSDA's expectation is that State agencies will ensure that the frequency of such exempt fundraisers on school grounds during the school day does not reach a level to impair the effectiveness of the competitive food requirements in this rule. It is not USDA's intent that the competitive food standards in this interim final rule apply to fundraisers in which the food sold is clearly not for consumption on the school campus during the school day. It is important to note that school districts may implement more restrictive competitive food standards, including those related to the frequency with which exempt fundraisers may be held in their schools, and further restrictions on the areas and times when exempt fundraisers may occur.

Accordingly, § 210.11(b)(4) of this interim final rule specifies that competitive food and beverage items sold during the school day must meet the nutrition standards for competitive food, and that a special exemption is allowed for the sale of food and/or beverages that do not meet the competitive food standards for the purpose of conducting an infrequent school-sponsored fundraiser. Such specially exempted fundraisers must not take place more than the frequency

specified by the State agency during such periods that schools are in session. Finally, no specially exempted fundraiser foods or beverages may be sold in competition with school meals in the food service area during the meal service.

Availability of Water During the Meal Service

The proposed rule at $\S 210.10(a)(1)$ would require schools to make potable water available to children at no charge in the place where lunches and afterschool snacks are served during the meal service. The proposed rule encouraged, but did not require potable water to be served in the SBP. The proposal responded to amendments made to Section 9(a)(5) of the NSLA, 42 U.S.C. 1758(a)(5), by section 203 of the HHFKA which requires schools participating in the school lunch program to make available to children free of charge, potable water for consumption in the place where meals are served during meal service and which was effective as of October 1, 2010.

Approximately 490 commenters addressed implementation issues related to this provision. Approximately 7,000 commenters addressed other issues. Many of these commenters expressed support for the requirement for schools to make potable water readily accessible to children at no charge during the school meal service. Many commenters urged USDA to strengthen the proposed water requirements to include breakfast food service. Several commenters opposed requiring that potable water be available in schools in the afterschool snack service, citing concern that some groups outside of school food service may have logistical difficulty complying. Many commenters suggested that USDA specify that schools must make potable water available "readily accessible without restriction" in addition to being "available" (e.g., if only one water source is available, cups should be provided).

USDA agrees with many commenters that the potable water requirement be added to the breakfast meal service. We acknowledge, however, the variety of models of serving school breakfast including kiosks and breakfast in the classroom. In recognition of these alternative approaches to serving breakfast, we are only requiring the availability of free potable water during the SBP breakfast meal service when breakfast is served in the cafeteria. We encourage schools to provide water in other settings to the extent possible. In addition, we understand that afterschool

snack service could present logistical difficulties in compliance. Therefore, we are not requiring that free potable water be made available during afterschool programs, though we would strongly encourage program operators to do so, to the extent possible, particularly if milk or juice is not offered as part of the snack.

USDA issued an implementation memorandum entitled Child Nutrition Reauthorization 2010: Water Availability During National School Lunch Program Meal Service, on April 14, 2011 (SP 28-2011). On July 12, 2011, the memorandum was revised to provide more detailed guidance in the form of a series of questions and answers regarding the implementation of the water requirement. This memorandum is available on the FNS Web site at http://www.fns.usda.gov/ cnd/governance/policy.htm. In that memorandum, we indicated that water should be available "without restriction," to ensure program operators implement the provision as intended. The words "without restriction" are included in this interim final rule, and the memorandum will be updated to reflect the addition of breakfast when it is served in the cafeteria.

Please note that this provision, as revised, will become effective 60 days after publication of this interim final rule, as the HHFKA potable water provision was effective as of October 1, 2010, and program operators have been implementing the requirement for lunch meal service since that time.

Accordingly, this interim final rule, in § 210.10(a)(1), requires that schools make potable water available and accessible without restriction to children at no charge in the place where lunches are served during the meal service. In addition, § 220.8(a)(1) requires that when breakfast is served in the cafeteria, schools must make potable water available and accessible without restriction to children at no charge.

Recordkeeping Requirements

Under proposed § 210.11(b)(3), local educational agencies and school food authorities would be required to maintain records documenting compliance with the proposed requirements. Local educational agencies would be responsible for maintaining records documenting compliance with the competitive food nutrition standards for food sold in areas that are outside of the control of the school food service operation. Local educational agencies also would be responsible for ensuring any organization designated as responsible

for food service at the various venues in the school (other than the school food service) maintains records documenting compliance with the competitive food nutrition standards. The school food authority would be responsible for maintaining records documenting compliance with the competitive food nutrition standards for foods sold in meal service areas during meal service periods. Required records would include, at a minimum, receipts, nutrition labels and/or product specifications for the items available for sale.

Many commenters expressed concerns about these recordkeeping requirements. Some suggested recordkeeping is an unfunded mandate; others considered it costly, unrealistic and/or not necessary. Yet others recommended minimizing the recordkeeping on non-school groups. A number of commenters representing school food service were concerned that the local educational agency would require school food service to be responsible for recordkeeping on behalf of school food service as well as other entities/organizations within the local educational agency. These commenters were particularly concerned that additional recordkeeping responsibilities would compromise their efforts to implement the updated school meal pattern requirements. Additionally, they were concerned that school food service could not affect the requirements throughout the local educational agency since they have no authority over other school organizations. Some commenters suggested the responsibility should be at the local educational agency, not at individual schools. Finally, some commenters suggested a delayed implementation of the recordkeeping requirements, including an opportunity to study the impact of the requirements.

The Department appreciates that this regulation will create some new challenges initially, as schools seek to improve the school nutrition environment. However, evaluating records is essential to the integrity of the competitive food standards. To determine whether a food item is an allowable competitive food, the local educational agency designee(s) must assess the nutritional profile of the food item. Absent an evaluation of the nutritional profile, the local educational agency has no way of knowing whether a food item meets the nutrition standards set forth in this interim final rule. The recordkeeping requirement simply requires the local educational agency to retain the reviewed documentation (e.g., the nutrition

labels, receipts, and/or product specifications).

Perhaps the larger issue raised by commenters is who is responsible for this activity. The Department does not necessarily expect the responsibility to rest solely with the nonprofit school food service. School food service personnel are expected to have a clear understanding of the nutrition profile of foods purchased using nonprofit school food service funds for reimbursable meals, à la carte offerings, etc. Retaining receipts, nutrition labels or product specifications for foods purchased with nonprofit school food service funds is a part of doing business. Yet their authority and responsibilities are typically limited to the nonprofit school food service. Local educational agencies are responsible for ensuring that all entities involved in food sales within a school understand that the local educational agency as a whole must comply with these requirements.

The Department appreciates that sorting through who is responsible will initially require planning and cooperation which could be facilitated by the local school wellness policy designee(s). Section 204 of the HHFKA amended the NSLA by adding section 9A (42 U.S.C. 1758b) which requires each local educational agency to (a) establish a local school wellness policy which includes nutrition standards for all foods available on each school campus, and (b) designate one or more local educational agency officials or school officials, to ensure that each school complies with the local school wellness policy. State agencies were advised of the section 204 requirements in FNS Memorandum, Child Nutrition Reauthorization 2010: Local School Wellness Policies, issued July 8, 2011 (SP 42-2011).

The Department acknowledges the first year of implementation may be challenging as groups work together to establish a healthy school nutrition environment; however, if the local school wellness designee(s), school food service and other entities and groups work together to share information on allowable foods, we believe that implementation in future years will be greatly streamlined. As always, State agencies and the Department will provide technical assistance to facilitate implementation of the competitive food nutrition standards. Further, since implementation is not required until July 1, 2014, local educational agencies have time to sort out implementation issues and ensure all parties are well trained. Delayed implementation combined with the opportunities for public comment provided by this

interim final rule, have the added benefit of providing additional information which will inform the final rule and future research agendas.

Finally, the Department would like to address the comment suggesting this requirement is an unfunded mandate. The Department provides cash and donated food assistance to States and schools participating in the NSLP and SBP to strengthen and expand food service programs for children. In exchange, State agencies and participating local educational agencies/school food authorities agree to comply with the regulations set forth in 7 CFR 210 and 220.

Accordingly, the interim final rule at 210.11(b)(2), codifies the provision, as proposed, with one minor technical change. The proposed rule stated the school food authority is responsible for maintaining records documenting compliance with these standards in meal service areas during meal service periods. The interim final rule modifies this language to state that the school food authority is responsible for maintaining records for foods served under the auspices of the nonprofit school food service. This change acknowledges that nonprofit school food service activity may extend beyond meal service areas.

Compliance

Proposed § 210.18(h)(7) would require State agencies to ensure that local educational agencies comply with the nutrition standards for competitive food and retain documentation demonstrating compliance with the competitive food service and standards.

A number of commenters, largely school food service personnel, expressed concerns about how monitoring would occur for foods sold by groups outside of the school food service. Some commenters believed technical assistance would be insufficient and raised questions about means to effect compliance, e.g., some sort of fiscal action. Other commenters expressed concerns about the need to train and educate non-school food service personnel as to how to comply with the regulations.

The Department agrees that training will be needed to ensure compliance with the nutrition standards. As mentioned under *Recordkeeping*, the Department envisions local educational agency designees, potentially the local school wellness coordinator(s), taking the lead in developing performance or compliance standards and training for all local educational personnel tasked with selling competitive food on the school campus during the school day.

The Department and State agencies will also offer training to ensure local educational agencies are able to comply in the most efficient manner possible.

School food service operations are routinely monitored by State agencies. State agencies conduct administrative reviews of school nutrition program operations once every three years. However, the HHFKA expanded the scope of the Department's responsibilities to include the school nutrition environment, not just school nutrition program operations. The Department now has responsibilities regarding the development and implementation of local school wellness policies, as required by the amendments made to the NSLA by section 204 of the HHFKA. In addition, the Department now has oversight and authority of foods sold outside of the school nutrition programs on the school campus during the school day, as required by the amendments made to the NSLA by section 208 of the HHFKA.

The Department will be addressing the scope of these extended monitoring responsibilities in a forthcoming proposed rule addressing administrative review requirements. Interested parties will have an opportunity to comment on the Department's approach to monitoring during the public comment period following publication of the proposed administrative review rule. The Department would like to assure commenters that we see technical assistance and training as the first approach to non-compliance, however, we recognize that egregious, repeated cases of non-compliance may require a more aggressive approach. In this regard, section 303 of the HHFKA amended section 22 of the NSLA (42 U.S.C. 1769c) to provide the Department with the authority to impose fines against any school or school food authority failing to comply with program regulations. This authority will be addressed in a forthcoming proposed rule addressing a number of integrity issues related to local educational agencies administering the Child Nutrition Programs. As with the proposed administrative rule, interested parties will have an opportunity to address these issues during a public comment period following publication of that proposed integrity rule.

Accordingly, § 210.18(h) is adopted as proposed.

Special Situations

The proposed rule would have required all local educational agencies and schools participating in the NSLP and SBP to meet the competitive food nutrition standards.

Several commenters noted the competitive food nutrition standards may be difficult for small schools, residential child care institutions (RCCIs) and culinary programs to administer. Commenters noted small or medium-sized schools may not have sufficient resources to carry out the required calculations or comply with the proposed recordkeeping requirements. In the case of RCCIs, one commenter noted that existing State regulations for juvenile detention centers may obviate the need for USDA nutrition standards for competitive foods. Several commenters recommended that foods made and sold by career centers and culinary arts programs be exempted from the competitive food standards, as the foods made in these programs may not meet the new standards and, therefore, could not be sold at student-run cafes. Alternatively, the proposed standards could limit the skills development necessary for careers in the food industry because the foods prepared would exceed the proposed standards. Yet other commenters argued there should be no difference between standards applying to the nonprofit school food service and other food service operations in the schools, such as school stores, culinary arts programs and vending machines. The competitive food standards should "level the playing field" between the nonprofit school food service and other school food sellers, including culinary arts programs.

Regarding small schools and RCCIs, the Department firmly believes the overall health and well-being of students in small entities is just as important as that of students in large entities. For this reason, the interim final rule continues to apply to all schools participating in the NSLP and SBP, including small schools and RCCIs. However, we do appreciate that these entities may have staffing limitations that make implementation more challenging. We look to the State agency to provide guidance to these entities, possibly sharing observations on allowable products and practices employed by other school districts in the State to meet the requirements. Schools with limited resources are likely to offer a limited number of competitive foods for sale which may facilitate meeting the requirements in these situations.

Career centers and culinary arts programs present a more challenging issue. These programs often make and sell foods to students. These programs are providing vocational training for culinary art careers. Students are preparing to enter the workforce where the nutritional standards and requirements may vary widely from those required under the NSLP and SBP. Applying the nutrition standards for competitive food to these programs may limit the skill development necessary for careers in the food industry. Section 12(c) of the NSLA (42 U.S.C. 1760(c)) and section 11(a) of the CNA (42 U.S.C. 1780(a)) prohibit the Secretary from imposing any requirement with respect to teaching personnel, curriculum, instructions, methods of instruction, and materials for instruction in any school. However, section 10 of the CNA, as amended by section 208 of the HHFKA requires any food sold outside of the school meal programs, on the school campus and at any time during the school day to meet the competitive food nutrition standards set forth in this interim final rule. Therefore, in recognition of the potential conflict of legislative intent, the Department is willing to consider each situation on a case by case basis, and provide a waiver where appropriate. State agencies are

advised to contact FNS' Regional Offices as situations arise.

Related Information

Implementation

State agencies and local educational agencies must implement the competitive food provisions of this interim final rule beginning on July 1, 2014, as specified in the DATES section of this preamble. Amendments made by section 208 of the HHFKA made it clear that the Department must allow State and local educational agencies at least one full school year from the date of publication of this interim final rule to implement the competitive food provisions. For this reason, the interim final rule retains the existing competitive food requirements which included a prohibition on the sale of foods of minimal nutritional value in the food service areas during the meal periods (hereafter termed "foods of minimal nutritional value regulation"). Prior to August 27, 2013, these requirements were found at 7 CFR 210.11.

State and local educational agencies may begin implementing the competitive food provisions of this interim final rule prior to July 1, 2014; provided that those provisions complement and do not conflict with the foods of minimal nutritional value regulation which remains in effect through June 30, 2014.

To effect these changes, the foods of minimal nutritional value regulation (entitled Competitive food services) is being redesignated as § 210.11a in this rule. The new interim competitive food nutrition standards are added to § 210.11. The Department intends to remove § 210.11a and its corresponding Appendix B in the final rule. Similar changes are made to the breakfast program regulations. Until such time as the final rule is published, the Department added paragraph § 210.11a(c), which limits the effective period for the foods of minimal nutritional value regulation through June 30, 2014. Thus, when the new interim regulations take effect, the old regulations expire.

SUMMARY OF INTERIM FINAL RULE COMPETITIVE FOOD STANDARDS

Food/nutrient	Standard	Exemptions to the standard
General Standard for Competitive Food.	To be allowable, a competitive FOOD item must:	 Fresh and frozen fruits and vegetables with no added ingredients except water are exempt from all nutrient standards. Canned fruits with no added ingredients except water, which are packed in 100% juice, extra light syrup, or light syrup are exempt from all nutrient standards. Canned vegetables with no added ingredients except water or that contain a small amount of sugar for processing purposes to maintain the quality and structure of the vegetable are exempt from all nutrient standards.
NSLP/SBP Entrée Items Sold à la Carte.	Any entrée item offered as part of the lunch program or the breakfast program is exempt from all competitive food standards if it is served as a competitive food on the day of service or the day after service in the lunch or breakfast program.	
Grain Items	Acceptable grain items must include 50% or more whole grains by weight, or have whole grains as the first ingredient.	
Total Fats	Acceptable food items must have ≤ 35% calories from total fat as served.	 Reduced fat cheese (including part-skim mozzarella) is exempt from the total fat standard. Nuts and seeds and nut/seed butters are exempt from the total fat standard. Products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fats are exempt from the total fat standard. Seafood with no added fat is exempt from the total fat standard. Combination products are not exempt and must meet all the nutrient standards.

SUMMARY OF INTERIM FINAL RULE COMPETITIVE FOOD STANDARDS—Continued

Food/nutrient	Standard	Exemptions to the standard
Saturated Fats Trans Fats Sugar	Acceptable food items must have <10% calories from saturated fat as served. Zero grams of trans fat as served (≤0.5 g per portion). Acceptable food items must have ≤35% of weight from total sugar as served.	 Reduced fat cheese (including part-skim mozzarella) is exempt from the saturated fat standard. Nuts and seeds and nut/seed butters are exempt from the saturated fat standard. Products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fats are exempt from the saturated fat standard. Combination products are not exempt and must meet all the nutrient standards. Dried whole fruits or vegetables; dried whole fruit or vegetable pieces; and dehydrated fruits or vegetables with no added nutritive sweeteners are exempt from the sugar standard. Dried whole fruits, or pieces, with nutritive sweeteners that are required for processing and/or palatability purposes (i.e., cranberries, tart cherries, or blueberries) are exempt from the sugar standard. Products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fats are
Sodium	Snack items and side dishes sold à la carte: ≤230 mg sodium per item as served. Effective July 1, 2016 snack items and side dishes sold à la carte must be: ≤200 mg sodium per item as served, including any	exempt from the sugar standard.
Calories	added accompaniments. Entrée items sold à la carte: ≤480 mg sodium per item as served, including any added accompaniments. Snack items and side dishes sold à la carte: ≤ 200 calories per item as served, including any added accompaniments. Entrée items sold à la carte: ≤350 calories per item as	
Accompaniments	served including any added accompaniments. Use of accompaniments is limited when competitive food is sold to students in school. The accompaniment must be included in the nutrient profile as part of the food item served and meet all proposed standards.	
Caffeine	Elementary and Middle School: foods and beverages must be caffeine-free with the exception of trace amounts of naturally occurring caffeine substances. High School: foods and beverages may contain caffeine.	
Beverages	 Elementary School Plain water or plain carbonated water (no size limit); Low fat milk, unflavored (≤8 fl oz); Non fat milk, flavored or unflavored (≤8 fl oz), including nutritionally equivalent milk alternatives as permitted by the school meal requirements; 100% fruit/vegetable juice (≤8 fl oz); and 100% fruit/vegetable juice diluted with water (with or without carbonation), and no added sweeteners (≤8 fl oz). Middle School Plain water or plain carbonated water (no size limit); Low-fat milk, unflavored (≤12 fl oz); Non-fat milk, flavored or unflavored (≤12 fl oz), including nutritionally equivalent milk alternatives as permitted by the school meal requirements; 100% fruit/vegetable juice (≤12 fl oz); and 100% fruit/vegetable juice diluted with water (with or without carbonation), and no added sweeteners (≤12 fl oz). 	

SUMMARY OF	INTERIM FINIAL	RULE COMPETITIVE	FOOD STANDARDS	—Continued
OUMINAD I OI		TIOLE OCIVIE LITTLE	I OOD STANDANDS	

Procedural Matters

Issuance of an Interim Final Rule and Date of Effectiveness

USDA, under the provisions of the Administrative Procedure Act at 5 U.S.C. 553(b)(B), finds for good cause that it is impracticable to issue a final rule at this time and thus is issuing an interim final rule, as authorized by section 208 of the Healthy, Hunger-Free Kids Act of 2010, Public Law 111-296, enacted on December 13, 2010. On February 8, 2013, USDA published a proposed rule to implement section 208 of the Healthy, Hunger-Free Kids Act of 2010 (78 FR 9530). The rule provided for a 60-day comment period, which ended on April 9, 2013. This interim final rule reflects comments received during that period. Section 208 requires that implementation of this statutory provision shall take effect at the beginning of the school year that is not earlier than one year and not later than two years following the date of the publication of an interim final or final rule. USDA recognizes that the significant, statutorily established, implementation delay will provide federal and state partners a lengthy period in which to provide technical assistance and administrative support to SFAs working toward compliance. At this time, as provided for in the DATES section, USDA invites public comment on this interim final rule. USDA will consider amendments to the rule based on comments submitted during the 120day comment period. The agency will address comments and affirm or amend the interim final rule in a final rule.

Executive Order 12866 and Executive Order 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 interim final rule has been designated an "economically significant regulatory action" under section 3(f) of Executive Order 12866. Accordingly, the rule has been reviewed by the Office of Management and Budget.

Regulatory Flexibility Analysis

This rule has been reviewed with regard to the requirements of the Regulatory Flexibility Act of 1980 (5 U.S.C. 601–612). The interim final rule directly regulates the 54 State education agencies and 3 State Departments of Agriculture that operate the NSLP pursuant to agreements with USDA's Food and Nutrition Service. While State agencies are not considered small entities as State populations exceed the 50,000 threshold for a small government jurisdiction, many of the serviceproviding institutions that work with them to implement the program do meet definitions of small entities.

The requirements established by this interim final rule will apply to school districts, which meet the definitions of "small governmental jurisdiction" and other establishments that meet the

definition of "small entity" in the Regulatory Flexibility Act. An Initial Regulatory Flexibility Act analysis is included as an Appendix to this rule.

Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104–4, establishes 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 the UMRA, the Department generally must prepare a written statement, including a cost/ benefit analysis, for proposed and final rules with Federal mandates that may result in expenditures by State, local, or Tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any one year. When such a statement is needed for a rule, section 205 of the UMRA generally requires the Department 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 rule. Because data is not available to meaningfully estimate the quantitative impacts of this rule on school food authority revenues, we are not certain that this rule is subject to the requirements of sections 202 and 205 of the UMRA. That said, it is possible that the rule's requirements could impose costs on State, local, or Tribal governments or to the private sector of \$100 million or more in any one year. FNS therefore conducted a regulatory impact analysis that includes a cost/ benefit analysis and describes and explains six alternatives to the interim final rule, substantially meeting the

requirements of sections 202 and 205 of the UMRA.

Executive Order 12372

The NSLP is listed in the Catalog of Federal Domestic Assistance under No. 10.555. The SBP is listed in the Catalog of Federal Domestic Assistance under No. 10.553. For the reasons set forth in the final rule in 7 CFR part 3015, Subpart V and related notice (48 FR 29115, June 24, 1983), these programs are included in the scope of Executive Order 12372, which requires intergovernmental consultation with State and local officials.

Executive Order 13132

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. USDA has considered the impact of this rule on State and local governments and has determined that this rule does not have federalism implications. This rule does not impose substantial or direct compliance costs on State and local governments. Therefore, under Section 6(b) of the Executive Order, a federalism summary impact statement is not required.

Executive Order 12988

This rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule 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. This rule is not intended to have retroactive effect unless specified in the **DATES** section of the final rule. Prior to any judicial challenge to the provisions of this rule or the application of its provisions, all applicable administrative procedures must be exhausted.

Civil Rights Impact Analysis

FNS has reviewed this rule in accordance with Departmental Regulations 4300-4, "Civil Rights Impact Analysis," and 1512-1, "Regulatory Decision Making Requirements." After a careful review of the rule's intent and provisions, FNS has determined that this rule is not intended to limit or reduce in any way the ability of protected classes of individuals to receive benefits on the basis of their race, color, national origin, sex, age or disability nor is it intended to have a differential impact on minority owned or operated business establishments and woman-owned or operated business establishments that participate in the Child Nutrition Programs.

Paperwork Reduction Act

The Paperwork Reduction Act of 1995 (44 U.S.C. Chap. 35; see 5 CFR part 1320), requires that the Office of Management and Budget (OMB) approve all collections of information by a Federal agency from the public

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. This rule does contain information collection requirements subject to approval by OMB under the Paperwork Reduction Act of 1995.

A 60-day notice was embedded into the proposed rule, "7 CFR Parts 210 and 220 National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy Hunger Free Kids Act of 2010," published in the Federal Register at 78 FR 9530 on February 8, 2013, which provided the public an opportunity to submit comments on the information collection burden resulting from this rule. The information collection requirements associated with this interim final rule have been submitted for approval to the Office of Management and Budget (OMB). FNS will publish a document in the **Federal Register** once these requirements have been approved.

FNS is requesting 927,634 burden hours for recordkeeping to document compliance with the new nutrition standards. The estimated average number of respondents for this rule is 122,662 (57 State agencies, 20,858 school food authorities, and 101,747 schools). The following table reflects the estimated burden associated with the new information collection requirements.

ESTIMATED ANNUAL BURDEN FOR 0584-New, 7 CFR PART 210 NATIONAL SCHOOL LUNCH PROGRAM AND SCHOOL BREAKFAST PROGRAM: NUTRITION STANDARDS FOR ALL FOODS SOLD IN SCHOOL

	Section	Estimated number of record- keepers	Records per record- keeper	Average annual records	Average burden per record	Annual burden hours
Recordkeeping:						
SA shall ensure that the LEA complies with the nutrition stand-						
ards for competitive foods and retains documentation dem- onstrating compliance	7 CFR 210.18(h)(7)	57	122	6,954	0.25	1,739
LEAs and SFAs shall be responsible for maintaining records doc-	- 0					
umenting compliance with the competitive food standards	7 CFR 210.11(b)(3)	20,858	1	20,858	20	417,160
Organizations responsible for competitive food service at various venues in schools shall maintain records	7 CFR 210.11(b)(3)	101,747	1	101,747	5	508,735
Total Recordkeeping Burden		122,662	1.0562	129,559	7.1599	927,634

E-Government Act Compliance

The Food and Nutrition Service is committed to complying with the E-

Government Act of 2002, 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.

Executive Order 13175—Consultation and Coordination With Indian Tribal

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, and other policy statements or actions that have substantial direct effects on one or more Indian Tribes, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the federal government and Indian Tribes. In Spring 2011, FNS offered opportunities for consultation with Tribal officials or their designees to discuss the impact of the Healthy, Hunger-Free Kids Act of 2010 on tribes or Indian Tribal governments. The consultation sessions were coordinated by FNS and held on the following dates and locations:

- 1. HHFKA Webinar & Conference Call—April 12, 2011
- 2. Mountain Plains—HHFKA Consultation, Rapid City, SD—March 23, 2011
- 3. HHFKA Webinar & Conference Call—June, 22, 2011
- 4. Tribal Self-Governance Annual Conference in Palm Springs, CA—May
- 5. National Congress of American Indians Mid-Year Conference, Milwaukee, WI-June 14, 2011

The five consultation sessions in total provided the opportunity to address Tribal concerns related to school meals. There were no comments about this regulation during any of the aforementioned Tribal consultation sessions.

Currently, FNS provides regularly scheduled quarterly consultation sessions as a venue for collaborative conversations with Tribal officials or their designees. The most recent specific discussion of the Nutrition Standards for Foods Sold in Schools proposed rule was included in the consultation conducted on February 13, 2013. No questions or comments were raised specific to this rulemaking at that time.

Reports from these consultations are part of the USDA annual reporting on Tribal consultation and collaboration. FNS will respond in a timely and meaningful manner to Tribal government requests for consultation concerning this rule.

Regulatory Impact Analysis Summary

A Regulatory Impact Analysis (RIA) was developed for this proposal, which is summarized below. The full RIA is included as an Appendix to this rule.

Need for Action

The interim final rule responds to two provisions of the Healthy, Hunger-Free Kids Act of 2010. Section 208 of HHFKA amended Section 10 of the Child Nutrition Act of 1966 to require the Secretary to establish science-based nutrition standards for all foods sold in schools during the school day.

Response to Comments

The full Regulatory Impact Analysis, which appears as an Appendix, includes a brief discussion of comments on the costs and benefits of the proposed rule submitted by school officials, public health organizations, industry representatives, parents, students, and other interested parties. The analysis also contains a discussion of how USDA modified the interim final rule in response, and the effect of those modifications on the costs and benefits of the rule.

Benefits

The primary purpose of the rule is to ensure that nutrition standards for competitive foods are consistent with the most recent DGA recommendations, effectively holding competitive foods to the same standards as the rest of the foods sold at school during the school day. These standards, combined with recent improvements in school meals, will help promote diets that contribute to students' long-term health and wellbeing. And they will support parents' efforts to promote healthy choices for children at home and at school.

Obesity has become a major public health concern in the U.S., with onethird of U.S. children and adolescents now considered overweight or obese (Beydoun and Wang 2011 1), with current childhood obesity rates four times higher in children ages six to 11 than they were in the early 1960s (19 vs. 4 percent), and three times higher (17 vs. 5 percent) for adolescents ages 12 to 19.2 Research focused specifically on the effects of obesity in children

indicates that obese children feel they are less capable, both socially and athletically, less attractive, and less worthwhile than their non-obese counterparts.3 Further, there are direct economic costs due to childhood obesity: \$237.6 million (in 2005 dollars) in inpatient costs 4 plus annual prescription drug, emergency room, and outpatient costs of \$14.1 billion.5

Because the factors that contribute both to overall food consumption and to obesity are so complex, it is not possible to define a level of disease or cost reduction expected to result from implementation of the rule. There is some evidence, however, that competitive food standards can improve

children's dietary quality.

 Taber, Chriqui, and Chaloupka (2012 6) concluded that California high school students consumed fewer calories, less fat, and less sugar at school than students in other States. Their analysis "suggested that California students did not compensate for consuming less within school by consuming more elsewhere" (p. 455).

- Schwartz, Novak, and Fiore, (2009 ⁷) determined that healthier competitive food standards decreased student consumption of low nutrition items with no compensating increase at home.
- Researchers at Healthy Eating Research and Bridging the Gap found that "[t]he best evidence available indicates that policies on snack foods and beverages sold in school impact children's diets and their risk for obesity. Strong policies that prohibit or restrict the sale of unhealthy competitive foods and drinks in schools are associated with lower proportions of

¹ Beydoun, M.A. and Y. Wang. 2011. Sociodemographic disparities in distribution shifts over time in various adiposity measures among American children and adolescents: What changes in prevalence rates could not reveal. International Journal of Pediatric Obesity, 6:21-35. As cited in Food Labeling: Calorie Labeling of Articles of Food in Vending Machines NPRM. 2011. Preliminary Regulatory Impact Analysis, Docket No. FDA-2011-F-0171.

² Ogden et al. Prevalence of Obesity Among Children and Adolescents: United States, Trends 1963-1965 Through 2007-2008. CDC-NHCS, NCHS Health E-Stat, June 2010. On the web at http://www. cdc.gov/nchs/data/hestat/obesity child 07 08/ obesity_child_07_08.htm.

³ Riazi, A., S. Shakoor, I. Dundas, C. Eiser, and S.A. McKenzie. 2010. Health-related quality of life in a clinical sample of obese children and adolescents. Health and Quality of Life Outcomes, 8:134-139. Samuels & Associates. 2006. Competitive Foods. Policy Brief prepared by Samuels & Associates for The California Endowment and Robert Wood Johnson Foundation. Available at: http://www.healthyeatingactive communities.org/downloads/.

⁴ Trasande, L., Y. Liu, G. Fryer, and M. Weitzman. 2009. Trends: Effects of Childhood Obesity on Hospital Care and Costs, 1999-2005. Health Affairs, 28:w751-w760.

⁵ Cawley, J. 2010. The Economics of Childhood Obesity. Health Affairs, 29:364-371. As cited in Food Labeling: Calorie Labeling of Articles of Foo in Vending Machines NPRM. 2011. Preliminary Regulatory Impact Analysis, Docket No. FDA-2011-

⁶ Taber, D.R., J.F. Chriqui, and F. J. Chaloupka. 2012. Differences in Nutrient Intake Associated With State Laws Regarding Fat, Sugar, and Caloric Content of Competitive Foods. Archives of Pediatric & Adolescent Medicine, 166:452–458.

⁷ Schwartz, M.B., S.A. Novak, and S.S. Fiore. 2009. The Impact of Removing Snacks of Low Nutritional Value from Middle Schools. Health Education & Behavior, 36:999-1011.

overweight or obese students, or lower rates of increase in student BMI" (Healthy Eating Research and Bridging the Gap, 2012, p. 3 ⁸).

A recent, comprehensive, and groundbreaking assessment of the evidence on the importance of competitive food standards conducted by the Pew Health Group concluded that a national competitive foods policy would increase student exposure to healthier foods, decrease exposure to less healthy foods, and would also likely improve the mix of foods that students purchase and consume at school. Researchers concluded that these kinds of changes in food exposure and consumption at school are important influences on the overall quality of children's diets.

Although nutrition standards for foods sold at school alone may not be a determining factor in children's overall diets, they are critical to providing children with healthy food options throughout the entire school day. Thus, these standards will help to ensure that the school nutrition environment does all that it can to promote healthy choices, and help to prevent diet-related health problems. Ancillary benefits could derive from the fact that improving the nutritional value of competitive foods may reinforce school-based nutrition education and promotion efforts and contribute significantly to the overall effectiveness of the school nutrition environment in promoting healthful food and physical activity choices.9

Costs

Any rule-induced benefit of healthier eating by school children would be accompanied by costs, at least in the short term. Healthier food may be more expensive than unhealthy food—either in raw materials, preparation, or both—and this greater expense would be distributed among students, schools, and the food industry. Moreover, students who switch to less-preferred foods and beverages could experience a utility loss. If students do not switch to healthier foods, they may incur travel or other costs related to obtaining their

preferred choices from a location less convenient than school. Regardless of student response, the proposed rule would also impose administrative costs on schools and their food authorities.

Transfers

The rule requires schools to improve the nutritional quality of foods offered for sale to students outside of the Federal school lunch and school breakfast programs. The new standards apply to foods sold à la carte, in school stores or vending machines, and, with limited exceptions, through in-school fundraisers sponsored by students, parents, or other school-affiliated groups. Upon implementation of the rule, students will face new food choices from these sources. The new choices will meet standards for fat, saturated fat, sugar, and sodium, and have whole grains, low fat dairy, fruits, vegetables, or protein foods as their main ingredients. Our analysis examines a range of possible behavioral responses of students and schools to these changes. To estimate potential effects on school revenue, we look to the experience of school districts that have adopted or piloted competitive food reforms in recent years.

The practice of selling foods in competition with federally reimbursable program meals and snacks is widespread. In SY 2004–2005, 82 percent of all schools—and 92 percent of middle and high schools—offered à la carte foods at lunch. Vending machines were available in 39 percent of all schools, including 13 percent of elementary schools, 72 percent of middle schools, and 87 percent of high schools (Fox, et al., 2012; Volume 1, p. 3–42)

The limited information available indicates that many schools have successfully introduced competitive food reforms with little or no loss of revenue and in a few cases, revenues from competitive foods increased after introducing healthier foods. In some of the schools that showed declines in competitive food revenues, losses from reduced sales were fully offset by increases in reimbursable meal revenue. In other schools, students responded favorably to the healthier options and competitive food revenue declined little or not at all.

But not all schools that adopted or piloted competitive food standards fared as well. Some of the same studies and reports that highlight school success stories note that other schools sustained some loss after implementing similar standards. While in some cases these were short-term losses, even in the longterm the competitive food revenue lost by those schools was not offset (at least not fully) by revenue gains from the reimbursable meal programs.

Our analysis examines the possible effects of the rule on school revenues from competitive foods and the administrative costs of complying with the rule's competitive foods provisions. The analysis uses available data to construct model-based scenarios that different schools may experience in implementing the rule. While these vary in their impact on overall school food revenue, each scenario's estimated impact is relatively small (+0.5 percent to -1.3 percent). In comparison, the regulations implementing the school food service revenue provisions of HHFKA would increase average overall school food revenue by roughly six percent. That said, the data behind the scenarios are insufficient to assess the frequency or probability of schools experiencing the impacts shown in each.

List of Subjects

7 CFR Part 210

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

7 CFR Part 220

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

Accordingly, 7 CFR parts 210 and 220 are amended as follows:

PART 210—NATIONAL SCHOOL LUNCH PROGRAM

- 1. The authority citation for 7 CFR part 210 continues to read as follows:
 - Authority: 42 U.S.C. 1751–1760, 1779."
- 2. In § 210.1, the second sentence of paragraph (b) is revised to read as follows:

§ 210.1 General purpose and scope.

- (b) * * * It specifies Program responsibilities of State and local officials in the areas of program administration, preparation and service of nutritious lunches, the sale of competitive foods, payment of funds, use of program funds, program monitoring, and reporting and recordkeeping requirements.
- 3. In § 210.10, amend paragraph (a)(1)(i) by adding a sentence at the end to read as follows:

⁸ Healthy Eating Research and Bridging the Gap. 2012. Influence of Competitive Food and Beverage Policies on Children's Diets and Childhood Obesity. Available at http://www.healthyeatingresearch.org/images/stories/her_research_briefs/Competitive_Foods_Issue_Brief_HER_BTG_7-2012.pdf.

⁹Pew Health Group and Robert Wood Johnson Foundation. 2012. Health Impact Assessment: National Nutrition Standards for Snack and à la Carte Foods and Beverages Sold in Schools. Available online: http://www.pewhealth.org/ uploadedFiles/PHG/Content_Level_Pages/Reports/ KS%20HIA_FULL%20Report%20062212_WEB%20 FINAL-v2.pdf.

§ 210.10 Meal requirements for lunches and requirements for afterschool snacks.

(a) * * * (1) * * *

(i) * * * Schools must make potable water available and accessible without restriction to children at no charge in the place(s) where lunches are served during the meal service.

* * * * *

§210.11 [Redesignated as §210.11a]

■ 4. Redesignate § 210.11 as § 210.11a and dd new § 210.11 to read as follows:

§ 210.11 Competitive food service and standards.

- (a) *Definitions*. For the purpose of this section:
- (1) Combination foods means products that contain two or more components representing two or more of the recommended food groups: fruit, vegetable, dairy, protein or grains.
- (2) Competitive food means all food and beverages other than meals reimbursed under programs authorized by the Richard B. Russell National School Lunch Act and the Child Nutrition Act of 1966 available for sale to students on the School campus during the School day.
- (3) Entrée item means an item that is either:
- (i) A combination food of meat or meat alternate and whole grain rich food; or
- (ii) A combination food of vegetable or fruit and meat or meat alternate; or
- (iii) A meat or meat alternate 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).
- (4) School campus means, for the purpose of competitive food standards implementation, all areas of the property under the jurisdiction of the school that are accessible to students during the school day.
- (5) School day means, for the purpose of competitive food standards implementation, the period from the midnight before, to 30 minutes after the end of the official school day.
- (b) General requirements for competitive food. (1) State and local educational agency policies. State agencies and/or local educational agencies must establish such policies and procedures as are necessary to ensure compliance with this section. State agencies and/or local educational agencies may impose additional restrictions on competitive foods, provided that they are not inconsistent with the requirements of this part.
- (2) Recordkeeping. The local educational agency is responsible for

- the maintenance of records that document compliance with the nutrition standards for all competitive food available for sale to students in areas under its jurisdiction that are outside of the control of the school food authority responsible for the service of reimbursable school meals. In addition, the local educational agency is responsible for ensuring that organizations designated as responsible for food service at the various venues in the schools maintain records in order to ensure and document compliance with the nutrition requirements for the foods and beverages sold to students at these venues during the school day as required by this section. The school food authority is responsible for maintaining records documenting compliance with these for foods sold under the auspices of the nonprofit school food service. At a minimum, records must include receipts, nutrition labels and/or product specifications for the competitive food available for sale to students.
- (3) Applicability. The nutrition standards for the sale of competitive food outlined in this section apply to competitive food for all programs authorized by the Richard B. Russell National School Lunch Act and the Child Nutrition Act of 1966 operating on the school campus during the school day.
- (4) Fundraiser restrictions. Competitive food and beverage items sold during the school day must meet the nutrition standards for competitive food as required in this section. A special exemption is allowed for the sale of food and/or beverages that do not meet the competitive food standards as required in this section for the purpose of conducting an infrequent schoolsponsored fundraiser. Such specially exempted fundraisers must not take place more than the frequency specified by the State agency during such periods that schools are in session. No specially exempted fundraiser foods or beverages may be sold in competition with school meals in the food service area during the meal service.
- (c) General nutrition standards for competitive food. (1) General requirement. At a minimum, all competitive food sold to students on the school campus during the school day must meet the nutrition standards specified in this section. These standards apply to items as packaged and served to students.
- (2) General nutrition standards. To be allowable, a competitive food item must:

- (i) Meet all of the competitive food nutrient standards as outlined in this section; and
- (ii) Be a grain product that contains 50 percent or more whole grains by weight or have as the first ingredient a whole grain; or
- (iii) Have as the first ingredient one of the non-grain major food groups: fruits, vegetables, dairy or protein foods (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.); or
- (iv) Be a combination food that contains ½ cup of fruit and/or vegetable: or
- (v) For the period through June 30, 2016, contain 10 percent of the Daily Value of a nutrient of public health concern based on the most recent Dietary Guidelines for Americans (i.e., calcium, potassium, vitamin D or dietary fiber). Effective July 1, 2016, the criterion in this paragraph is obsolete and may not be used to qualify as a competitive food; and
- (vi) If water is the first ingredient, the second ingredient must be one of the food items in paragraphs (c)(2)(ii), (iii) or (iv) of this section.
- (3) Exemptions. (i) Entrée items offered as part of the lunch or breakfast program. Any entrée item offered as part of the lunch program or the breakfast program under 7 CFR Part 220 is exempt from all competitive food standards if it is offered as a competitive food on the day of, or the school day after, it is offered in the lunch or breakfast program. Exempt entrée items offered as a competitive food must be offered in the same or smaller portion sizes as in the lunch or breakfast program. Side dishes offered as part of the lunch or breakfast program and served à la carte must meet the nutrition standards in this section.
- (ii) Sugar-free chewing gum. Sugar-free chewing gum is exempt from all of the competitive food standards in this section and may be sold to students on the school campus during the school day, at the discretion of the local educational agency.
- (d) Fruits and vegetables. (1) Fresh, frozen and canned fruits and vegetables with no added ingredients except water or, in the case of fruit, packed in 100 percent fruit juice or light syrup or extra light syrup, are exempt from the nutrient standards included in this section.
- (2) Canned vegetables that contain a small amount of sugar for processing purposes, to maintain the quality and structure of the vegetable, are also exempt from the nutrient standards included in this section.
- (e) *Grain products*. Grain products acceptable as a competitive food must

include 50 percent or more whole grains by weight or have whole grain as the first ingredient. Grain products must meet all of the other nutrient standards included in this section.

(f) Total fat and saturated fat. (1) General requirements. (i) 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, except as specified in paragraphs (f)(2) and (3) of this section.

(ii) The saturated fat content of a competitive food must be less than 10 percent of total calories per item as packaged or served, except as specified in paragraph (f)(3) of this section.

(2) Exemptions to the total fat requirement. 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.

(3) Exemptions to the total fat and saturated fat requirements. (i) Reduced fat cheese and part skim mozzarella cheese are exempt from the total fat and saturated fat standards, but subject to the trans fat, sugar, calorie and sodium standards. This exemption does not apply to combination foods.

(ii) Nuts and Seeds and Nut/Seed Butters are exempt from the total fat and saturated fat standards, but subject to the trans fat, sugar, calorie and sodium standards. This exemption does not apply to combination products that contain nuts, nut butters or seeds or seed butters with other ingredients such as peanut butter and crackers, trail mix, chocolate covered peanuts, etc.

(iii) Products that consist of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat are exempt from the total fat, saturated fat and sugar standards, but subject to the trans fat, calorie and sodium standards.

(g) Trans fat. The trans fat content of a competitive food must be zero grams trans fat per portion as packaged or served (not more than 0.5 grams per portion).

(h) Total sugars. (1) General requirement. The total sugar content of a competitive food must be not more than 35 percent of weight per item as packaged or served, except as specified in paragraph (h)(2) of this section.

(2) Exemptions to the total sugar requirement. (i) Dried whole fruits or vegetables; dried whole fruit or vegetable pieces; and dehydrated fruits or vegetables with no added nutritive sweeteners are exempt from the sugar standard, but subject to the total fat, saturated fat,, trans fat, calorie and sodium standards. There is also an exemption from the sugar standard for dried fruits with nutritive sweeteners

that are required for processing and/or palatability purposes;

- (ii) Products that consist of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat are exempt from the total fat, saturated fat, and sugar standards, but subject to the calorie, trans fat, and sodium standards; and
- (i) Calorie and sodium content for snack items and side dishes sold à la carte. Snack items and side dishes sold à la carte must have not more than 200 calories and 230 mg of sodium per item as packaged or served, including the calories and sodium contained in any added accompaniments such as butter, cream cheese, salad dressing, etc., and must meet all of the other nutrient standards in this section. Effective July 1, 2016, these snack items and side dishes must have not more than 200 calories and 200 mg of sodium per item as packaged or served.
- (j) Calorie and sodium content for entrée items sold à la carte. Entrée items sold à la carte. Entrée items sold à la carte other than those exempt from the competitive food nutrition standards in paragraph (c)(3)(i) of this section must have not more than 350 calories and 480 mg of sodium per item as packaged or served, including the calories and sodium contained in any added accompaniments such as butter, cream cheese, salad dressing, etc., and must meet all of the other nutrient standards in this section.
- (k) Caffeine. Foods and beverages available to elementary and middle school-aged students must be caffeine-free, with the exception of trace amounts of naturally occurring caffeine substances. Foods and beverages available to high school-aged students may contain caffeine.
- (l) Accompaniments. The use of accompaniments is limited when competitive food is sold to students in school. The accompaniments to a competitive food item must be included in the nutrient profile as a part of the food item served in determining if an item meets all of the nutrition standards for competitive food as required in this section. The contribution of the accompaniments may be based on the average amount of the accompaniment used per item at the site.
- (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) Low fat milk, unflavored (no more than 8 fluid ounces);
- (iii) Non fat milk, flavored or unflavored (no more than 8 fluid ounces);

- (iv) Nutritionally equivalent milk alternatives as permitted in § 210.10 and § 220.8 of this chapter (no more than 8 fluid ounces); and
- (v) 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) Low fat milk, unflavored (no more than 12 fluid ounces);
- (iii) Non fat milk, flavored or unflavored (no more than 12 fluid ounces):
- (iv) Nutritionally equivalent milk alternatives as permitted in § 210.10 and § 220.8 of this chapter (no more than 12 fluid ounces); and
- (v) 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) Low fat milk, unflavored (no more than 12 fluid ounces);
- (iii) Non fat milk, flavored or unflavored (no more than 12 fluid ounces);
- (iv) Nutritionally equivalent milk alternatives as permitted in § 210.10 and § 220.8 of this chapter (no more than 12 fluid ounces);
- (v) 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);
- (vi) Calorie-free, flavored water, with or without carbonation (no more than 20 fluid ounces);
- (vii) 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

(viii) 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).

- (n) *Implementation date.* This section is to be implemented beginning on July 1, 2014.
- \blacksquare 5. In newly redesignated § 210.11a and add paragraph (c) to read as follows:

 $\S 210.11a$ Competitive food services.

- (c) *Effective date.* This section remains in effect through June 30, 2014.
- 6. In § 210.18, paragraph (h)(6) is added to read as follows:

§210.18 Administrative reviews.

(h) * * *

- (6) Competitive food standards. The State agency must ensure that the local educational agency and school food authority comply with the nutrition standards for competitive food and retain documentation demonstrating compliance with the competitive food service and standards.
- 7. Appendix B to Part 210 is amended by adding paragraph (c) to read as follows:

Appendix B to Part 210—Categories of Foods of Minimal Nutritional Value

*

(c) Appendix B remains in effect through June 30, 2014.

* *

PART 220—SCHOOL BREAKFAST PROGRAM

■ 8. The authority citation for 7 CFR part 220 continues to read as follows:

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

§220.2 [Amended]

- 9. In § 220.2, remove the definitions of "Competitive foods" and "Foods of minimal nutritional value".
- 10. In § 220.8, amend paragraph (a)(1) by adding a sentence at the end to read as follows:

$\S\,220.8\,$ Meal requirements for breakfasts.

(a) * * *

(1) * * * When breakfast is served in the cafeteria, schools must make potable water available and accessible without restriction to children at no charge.

§ 220.12 [Redesignated as § 220.12a].

■ 11. Redesignate § 220.12 as § 220.12a and add new § 220.12 to read as follows:

§ 220.12 Competitive food services.

School food authorities must comply with the competitive food service and standards requirements specified in § 210.11 of this chapter.

■ 12. In newly redesignated § 220.12a, add paragraphs (c) and (d) to read as follows:

§ 210.12a Competitive food services.

* * *

(c) *Definitions*. For the purpose of this section:

(1) Competitive foods means any foods sold in competition with the

School Breakfast Program to children in food service areas during the breakfast period; and

(2) Foods of minimal nutritional value means:

(i) In the case of artificially sweetened foods, a food which provides less than five percent of the Reference Daily Intake (RDI) for each of eight specified nutrients per serving; and

(ii) In the case of all other foods, a food that provides less than five percent of the RDI for each of eight specified nutrients per 100 calories and less than five percent of the RDI for each of eight specified nutrients per serving. The eight nutrients to be assessed for this purpose are protein, vitamin A, vitamin C, niacin, riboflavin, thiamin, calcium and iron. Categories of foods of minimal nutritional value are listed in appendix B of this part.

(d) *Effective date*. This section remains in effect through June 30, 2014.

13. Appendix B to Part 220 is amended by adding paragraph (c) to read as follows:

Appendix B to Part 220—Categories of Foods of Minimal Nutritional Value.

(c) Appendix B remains in effect through June 30, 2014.

Dated: June 21, 2013.

Kevin W. Concannon,

Under Secretary, Food, Nutrition, and Consumer Services.

Note: The following appendices will not appear in the Code of Federal Regulations.

Appendix A

Regulatory Flexibility Analysis—Interim Final Rule

Nutrition Standards for All Foods Sold In School

Agency: Food and Nutrition Service, USDA.

Background: The Regulatory Flexibility Act (RFA) requires agencies to consider the impact of their rules on small entities and to evaluate alternatives that would accomplish the same objectives without undue burden when the rules impose a significant economic impact on a substantial number of small entities. Inherent in the RFA is the desire to remove barriers to competition and encourage consideration of ways to tailor regulations to the size of the regulated entities.

The RFA does not require that agencies necessarily minimize a rule's impact on small entities if there are significant, legal, policy, factual, or other reasons for the rule's impacts. The RFA requires only that agencies determine, to the extent feasible, the rule's economic impact on small entities, explore regulatory alternatives for reducing any significant economic impact on a substantial number of such entities, and explain the reasons for their regulatory choices.

I. Reasons That Action Is Being Considered

This interim final rule sets forth provisions to implement section 208 of Public Law 111–296, the Healthy, Hunger-Free Kids Act of 2010 (HHFKA). Section 208 amends Section 10 of the Child Nutrition Act of 1966 (42 U.S.C. 1779) (CNA) to give the Secretary of Agriculture new authority to establish science-based nutrition standards for all foods sold outside of the Federal child nutrition programs on the school campus during the school day. The Act also specifies that the nutrition standards shall apply to all foods sold (a) outside the school meal programs; (b) on the school campus; and (c) at any time during the school day.

II. Objectives of, and Legal Basis for, the Interim Final Rule

As stated above, the legal basis for the interim final rule are the amendments made to the CNA by HHFKA. The objectives of this rule are to establish nutrition standards for all foods and beverages sold to students in schools other than meals served through child nutrition programs authorized under the NSLA or the CNA and to improve the health and well being of the Nation's schoolaged children.

III. Number of Small Entities to Which the Interim Final Rule Will Apply

Small entities include independently owned and operated small businesses ¹⁰ or not-for profit organizations that are not dominant in their fields. Small businesses or non-profits that fall below certain size standards established by SBA (in terms of annual receipts or number of employees) are presumed not to be dominant in their fields. ¹¹ Small entities also include small governmental jurisdictions (including school districts) with populations under 50,000.

The interim final rule directly regulates the 54 State education agencies and 3 State Departments of Agriculture that operate the NSLP pursuant to agreements with USDA's Food and Nutrition Service. In turn, its provisions apply to school food authorities (SFAs) and non-SFA school groups that sell competitive foods and beverages to students during the school day. While State agencies are not considered small entities as State populations exceed the 50,000 threshold for a small government jurisdiction, many of the service-providing institutions that work with them to implement the program do meet definitions of small entities:12

Continued

¹⁰ Small businesses for purposes of the RFA are "small business concerns" as defined by the Small Business Act. These include independently owned and operated firms that are not dominant in their field of operation.

¹¹ "Guide to SBA's Definitions of Small Business," http://www.sba.gov/content/guide-sizestandards, accessed 06/03/2013. Small business concerns for purposes of the RFA.

¹² For purposes of this analysis we refer to business "establishments" that serve the school market. Establishments are the smallest units of a firm; large firms may include multiple establishments. We use statistics for establishments rather than larger corporate entities to avoid understating the number of small business entities that may be indirectly affected by the interim final rule. SBA Office of Advocacy, A Guide for

- · More than 20,000 SFAs, consisting of about 100,000 schools and residential child care institutions (RCCIs) participate in the NSLP. Many schools provide competitive foods through à la carte menus, vending machines, school stores, snack bars, fundraisers, or some combination of these sources. Within individual schools, a variety of school groups (e.g., student clubs, parent teacher organizations, or parent "booster' organizations supporting activities such as sports, music, and enrichment activities) earn revenue from competitive foods. Census data indicate that 90 percent of U.S. school districts had populations under 50,000 in 2010.13
- Vending machine operators are not regulated by the rule but are indirectly affected. Most of these businesses are likely small entities. Vending machine operators with annual receipts below \$10 million are presumed not to be dominant in their field. 14 Census data indicate that 97 percent of vending machine establishments that operated for the entire year of 2007 generated less than \$10 million in revenue. 15
- Like vending machine operators, food manufacturers are not directly regulated. Food manufacturers are a diverse group consisting of large national firms as well as regional and even local food producers. The rule does not define a set of products that can be sold in schools. Instead, it sets standards that may be satisfied by a wide variety of snack items, beverages, entrees, and side dishes. SFAs will turn to the food industry for pre-packaged items that are ready for sale to students, as well as for ingredients that will be used in foods prepared in schools. These foods and ingredients will be provided by establishments in nearly all subsectors of the food manufacturing industry. Without data on the relative share of the school market served by establishments in these subsectors, USDA cannot say very much about the impact on small entities. SBA size standards for the food manufacturing industry range from 500 to 1,000 employees per establishment, depending on industry subsector. 16 Establishments with employment below these thresholds are

Government Agencies: How to Comply with the Regulatory Flexibility Act, May 2012. http://www. sba.gov/content/guide-government-agencies-howcomply-with-regulatory-flexibility-act-0.

- ¹³ U.S. Census, Small Area Income and Poverty Estimates, http://www.census.gov/did/www/saipe/data/interactive/#. The percent of SFAs with populations under 50,000 almost certainly exceeds 90 percent since there are more SFAs than school districts.
- ¹⁴ "U. S. Small Business Administration Table of Small Business Size Standards Matched to North American Industry Classification System Codes", (SBA Size Standards, 2013), http://www.sba.gov/ sites/default/files/files/size_table_01072013(1).pdf, accessed 06/03/2013.
- 15 NAICS 454210 "vending machine operators."
 U.S. Census Bureau, 2007 Economic Census, accessed through the American Fact Finder Guided Search Web site, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml, 06/03/2013.
 Because we are comparing 2007 revenues against SBA's 2013 revenue standard, 97 percent may overstate the share of vending machine operator establishments that meet the SBA definition of small entities.

- presumed not to be dominant in their fields. For the food manufacturing industry as a whole (NAICS code 311), more than 98 percent of establishments employ fewer than 500 people.¹⁷
- Beverage manufacturers are indirectly affected in the same way as food manufacturers. The rule establishes standards that can and will be met by a variety of products from many manufacturers, some that market their products nationally, and others with a more limited regional or local presence. The SBA's size standard for beverage manufacturers is 500 employees. ¹⁸ Almost 97 percent of soft drink manufacturing establishments and essentially all bottled water manufacturing establishments employ fewer than 500 people. ¹⁹
- Food service management companies (FSMCs) that prepare or serve reimbursable school meals under contract to SFAs are indirectly affected by the rule to the extent that they also provide schools with à la carte or other competitive foods. Nineteen percent of public school SFAs contracted with FSMCs in school year (SY) 2009–2010 for all or part of their food service operations.²⁰ Food service contractors with annual receipts below \$35.5 million are presumed not to be dominant in their field.²¹ Of 21,000 food service contractors that operated for the entire year in 2007, no fewer than 98 percent generated less than \$35.5 million.²²

IV. Projected Reporting, Recordkeeping and Other Compliance Requirements

School Food Authorities and Other School Groups

An estimated 95 percent of competitive school food sales accrue to SFAs; the remaining five percent accrues to other school groups such as student clubs, parent teacher organizations, or parent "booster" organizations. If SFAs, other school groups, and the food industry are able to satisfy

- 19 NAICS codes 312111 and 312112 "soft drink manufacturing" and "bottled water manufacturing." U.S. Census Bureau, 2007 Economic Census, accessed through the American Fact Finder Guided Search Web site, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml, 06/04/2013. For beverage manufacturers, our use of the Census's "establishment" size data, rather than firm-level data likely overstates the percentage of small entities that produce beverages for the school market given the importance of large national firms in this industry sector.
- ²⁰ U.S. Department of Agriculture, Food and Nutrition Service, Office of Research, Nutrition and Analysis, School Nutrition Dietary Assessment Study–IV, Vol. I, 2012 (SNDA–IV), p. 2–24, http:// www.fns.usda.gov/Ora/menu/Published/CNP/ FILES/SNDA-IV_Vol1Pt1.pdf.
- ²¹ SBA Size Standards, 2013.
- ²² NAICS code 72231, "food service contractors." U.S. Census Bureau, 2007 Economic Census. Accessed through http://factfinder2.census.gov/faces/nav/jsf/pages/guided_search.xhtml, 06/03/2013. 98 percent is the share of establishments with 2007 receipts under \$10 million, the top revenue category on the Census table.

current student demand for competitive foods with new options that meet the interim final rule standards, then there may be no change in competitive food sales or competitive food revenue. Although the evidence base is limited, it demonstrates that competitive food reforms can be implemented by SFAs with little or no loss of revenue. In some cases, revenues from competitive food sales have increased after introducing healthier foods. In some cases, decreases in competitive food sales have been offset by increases in school meal participation. In other cases, schools have experienced a decline in overall school food revenue.

The available data do not allow us to estimate the potential school revenue effect with any certainty. Instead, we have prepared a series of estimates that represent a range of plausible outcomes given the variety of experiences observed in several case studies.23 At one end of this range, we calculate that a four percent increase in competitive food revenues would result in a +0.5 percent increase in school food revenue over five years. At the other end of the range, we calculate that the standards in the interim final rule could reduce school food revenues by -1.3 percent. (Additional detail is provided in the Regulatory Impact Analysis for this rule.)

Case studies that consider the impacts of competitive food nutrition standards on SFA revenues find that reductions in competitive food revenue are often fully offset by increases in reimbursable meal revenue as students redirect their demand for competitive foods to the reimbursable school meal programs. In other instances, the lost competitive food revenue was not offset (at least not fully) by revenue gains from the reimbursable meal programs.

Most SFAs have a number of options and some flexibility within available revenue streams and operations that can help minimize lost revenue. For example, about half of all SFA revenues are from Federal payments for reimbursable meals. SFAs can increase revenues to the extent that schools successfully encourage greater meal participation. In addition, the revenue impacts presented here are from a baseline that increased substantially at the start of SY 2011-2012, on implementation of interim regulations for Sections 205 and 206 of HHFKA. Section 206 is intended to ensure that the revenue from competitive food sales is aligned with competitive food costs.24 The requirements of Section 206 are estimated to increase competitive food revenue by 35 percent, while the scenarios presented in the RIA for this rule anticipate far smaller competitive food revenue effects. The combined effect of HHFKA Section 206 and this rule remains a net increase in SFA competitive food revenue under all of the RIA scenarios.25

¹⁶ SBA Size Standards, 2013

¹⁷ NAICS 311 "vending machine operators." U.S. Census Bureau, 2007 Economic Census, accessed through the American Fact Finder Guided Search Web site, http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml, 06/04/2013.

 $^{^{18}\,\}mathrm{SBA}$ Size Standards, 2013

²³ These are described in detail in the Regulatory Impact Analysis (RIA) for the interim final rule.

²⁴ Federal Register, Vol. 76, No. 117, pp. 35301–35318.

²⁵ The same is not true of competitive food revenue of non-SFA school groups. Competitive food revenue that does not accrue to the foodservice account is not subject to regulation under Section 206.

Unlike SFAs, other school groups cannot make up lost revenues through school meal sales. The interim final rule mitigates the impact on such groups by providing an exception for infrequent fundraisers that do not meet the rule's competitive food standards. Alternatively, these groups may explore fundraising options that include foods that do meet the interim final rule standards or find other modes of fundraising that do not include competitive foods.

Industry Groups

Manufacturers, wholesalers, foodservice management companies, and distributors, including vending machine operators, are not directly regulated under the rule but may be affected indirectly to the extent that schools will need to purchase a different mix of foods to satisfy the requirements of the rule.

Vending machine operators served an estimated 18,000 primary and secondary schools in the U.S. in 2009.26 For 2009, the vending industry estimated that primary and secondary schools accounted for just two percent of total vending machine dollar sales. Although the school market is a relatively small one for the vending industry as a whole, it makes up a significant part of some vending machine operators' businesses.²⁷ Some vending machine operators will be challenged by the changes contained in the rule. Whether small or large, many vending machine operators will need to modify their product lines to meet the requirements of the rule. Similarly, food service management companies that provide à la carte foods to schools under contract to SFAs will need to provide a different mix of foods that conform to the changes in the rule.

Although industry will incur some costs to produce and deliver products to schools that meet the interim final rule standards, some of that cost has already been incurred. Many States and school districts have already adopted their own competitive food standards, some aligned with guidelines developed by the Alliance for a Healthier Generation (Alliance). The food industry has responded to these State and local standards by changing their product mix, and by producing a variety of new or reformulated products. One recent study found that between 2004 and 2009, the beverage industry reduced calories shipped to schools by 90 percent, with a total volume reduction in full-calorie soft drinks of over 95 percent.28 As noted by some commenters on the proposed rule, the vending machine industry has taken an active role in supporting schools that have adopted State or local competitive food standards consistent with the Alliance guidelines. USDA made some changes to the interim final rule that

move the rule closer to the Alliance guidelines as well as to NSLP requirements and USDA's HealthierUS School Challenge standards (HUSSC). These changes will help reduce industry's costs of providing foods to schools that comply with the interim final rule standards.

Administrative Costs

The interim final rule requires that State agencies ensure that all schools, SFAs, and other food groups comply with its competitive food standards. State agencies must also retain documentation demonstrating compliance. Schools, SFAs, and other food groups are responsible for maintaining records documenting compliance with competitive food standards. It is anticipated that the administrative cost to 57 State agencies, 102,000 schools, and 21,000 SFAs and local educational agencies will total \$126 million over five years (or about \$247 per school per year on average).

Distributional Impacts

A key characteristic associated with a school's dependence on competitive food revenue is grade level. High schools are more likely to offer competitive foods than are elementary schools. This is true of à la carte foods, foods sold through vending machines, and foods sold in school stores or snack bars.²⁹ Competitive food revenue is also associated with a school's mix of low and high income students. According to SNDA-III, schools serving at least one-third of their meals at full price to higher income students obtain more than seven times as much revenue from competitive food sales as schools serving a larger percentage of free and reduced-price (and hence lower-income) students.30 Other factors that may be associated with student access to competitive food sources and school revenue from competitive foods include whether students have the option of leaving campus during the school day, and whether schools grant students the right to leave the cafeteria during meal times. Generally, student mobility privileges increase with grade level.³¹ These factors are not necessarily associated with school or SFA size.

The most important source of competitive food revenue is à la carte sales. Sales from vending machines are less common, accounting for only about five percent of all competitive food sales. In general, small schools are less likely than larger schools to have vending machines accessible to students: just 36 percent of schools with fewer than 500 students had vending machines in SY 2004–2005. That increases to 48 percent of schools with 500 to 1,000

students and 78 percent of schools with more than 1,000 students. 32

V. Response to Public Comments on the Initial Regulatory Flexibility Analysis

In order to maximize stakeholder input in the comment process, USDA developed and presented two or more alternatives for several of the key provisions of the proposed rule. USDA anticipated that commenters would help clarify the relative merits of each of the alternatives, as well as identify critical concerns. USDA used this input from commenters to help guide the development of the interim final rule. The ultimate goal was to develop an interim final rule that adheres to the requirements of the statutory mandate while limiting adverse impacts on affected groups and facilitating implementation of the new standards.

USDA received more than 247,000 comments on the proposed rule from school and school food authority officials, industry representatives, parents, students, child health advocates, and other interested parties. Although very few comments mentioned the Initial Regulatory Flexibility Analysis by name, many comments addressed the economic impact of the rule on directly and indirectly regulated individuals or businesses. This section of the analysis describes the issues raised by the commenters, USDA's response to those comments, and changes made to the rule that limit its impact on small entities.

Given that almost all SFAs and schools, and many or most industry establishments that serve the school market are small entities, USDA's response to these concerns is appropriate for discussion in this analysis. However, because the industry groups affected by the rule are not directly regulated by it, our analysis of the effects of the rule on industry, and USDA action taken in response to those comments, is not required by the Regulatory Flexibility Act.

Nevertheless, we include a discussion of the comments raised by industry, and USDA action in response to those comments, as recommended by the SBA.³³

SFA and school officials, non-SFA school groups, and representatives of food manufacturing, vending, and food service management industries expressed concern that Federal competitive food standards would reduce the sale of competitive foods in schools and the impact the revenue generated by those sales. Commenters raised several points in this regard. Among the most common were:

²⁶ Vending Times.com, Census of the Industry, 2010 Edition, p. 4. http://www.vendingtimes.com/ Media/E-CommerceProductCatalog/Vending Times_ Census 2010.pdf, accessed 06/04/2013.

²⁷ This point was raised by several individuals and industry representatives who submitted comments on USDA's proposed rule.

²⁸ Wescott R., B. Fitzpatrick, and E. Philips. 2012. Industry Self-Regulation to Improve Student Health: Quantifying Changes in Beverage Shipments to Schools. *American Journal of Public Health*, published online August 16, 2012.

²⁹ U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, School Nutrition Dietary Assessment Study IV, Vol. I, by Mary Kay Fox, et al., 2012, p. 3–32.

³⁰ Unpublished ERS analysis of data from: U.S. Department of Agriculture, Food and Nutrition Service, 2007, School Nutrition Dietary Assessment Study-III, Vol. I by Mathematica Policy Research, Inc., (SNDA–III)

³¹U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, School Nutrition Dietary Assessment Study IV, Vol. I, by Mary Kay Fox, et al., 2012, p. 3–4.

³² U.S. Department of Agriculture, Food and Nutrition Service, 2007, School Nutrition Dietary Assessment Study-III, Vol. I by Mathematica Policy Research, Inc., p. 88.

^{33 &}quot;Although it is not required by the RFA, the Office of Advocacy believes that it is good public policy for the agency to perform a regulatory flexibility analysis even when the impacts of its regulation are indirect. An agency should examine the reasonably foreseeable effects on small entities that purchase products or services from, sell products or services to, or otherwise conduct business with entities directly regulated by the rule." SBA Office of Advocacy, A Guide for Government Agencies: How to Comply with the Regulatory Flexibility Act, May 2012. http://www.sba.gov/content/guide-government-agencies-how-comply-with-regulatory-flexibility-act-0

- The rule would reduce the number and variety of compliant competitive food products available for sale,
- Students will replace their competitive school food purchases with food brought from home or purchased off campus, and revenue lost from competitive food sales will not be offset by increased participation in the reimbursable meal programs, and
- Compliance with the new standards will be administratively costly.

We discuss each of these separately below.

Product Availability

Commenters indicated that many popular competitive food items will not meet the new standards and will no longer be allowed for sale in à la carte lines, vending machines, or school stores. Both school and industry officials are concerned that the availability, variety, and appeal of compliant products is insufficient to meet student demand. These officials fear that students, especially older students, will respond by purchasing fewer competitive foods and beverages at school.

Comments from some industry representatives and school officials focused on the investments that they have already made to meet State or local competitive food standards, or to meet USDA's HUSSC standards. As we discuss in Section III of the Regulatory Impact Analysis (RIA) prepared for the interim final rule, USDA recognizes the value in aligning the rule's competitive food requirements with existing or emerging standards to the extent that those standards are consistent with the statutory mandate behind the rulemaking. USDA made several changes to the proposed rule standards that more closely align the interim final rule with existing NSLP standards, guidelines developed by the Alliance for a Healthier Generation, and USDA's HUSSC requirements. These include:

- Increasing the proposed rule's sodium limit on snacks and non-program side dishes from 200 mg per portion as packaged to 230 mg (through June 2016),
- Exempting nuts/seeds and nut/seed butters from the rule's total and saturated fat standards,
- Exempting part skim mozzarella cheese from the total and saturated fat standards,
- Allowing full strength juice diluted with added water (or carbonated water), and
- Allowing fruit packed in light syrup. In addition, the interim final rule adopts the proposed rule's 35 percent by weight standard for sugar over the alternate 35 percent of calories standard.

Each of these changes further aligns the interim final rule with existing NSLP requirements, voluntary HUSSC standards, and Alliance for a Healthier Generation guidelines. The effect of these changes is to increase the number of already available healthy products, many already for sale in schools that meet interim regulations. This will tend to reduce the risk that SFAs will lose revenue due to the lack of readily available, market-tested products that meet interim final rule standards.

For food manufacturers, greater alignment of the interim final rule with existing standards will ensure a continued market for existing products that they may have developed specifically to meet those standards. Similarly, for distributors such as vending machine operators, greater alignment with existing standards will eliminate some of the cost associated with adjusting to a different set of product specifications (such as finding new products to carry, and developing relationships with new producers).

In comments submitted to USDA on the proposed rule, the National Automatic Merchandising Association (NAMA) urged USDA to adopt standards that consistent with the vending industry's voluntary Fit Pick® program. That program promotes vending machine snack items that meet certain nutritional standards. One of the industry's two Fit Pick® packages promotes foods whose calories from fat, calories from saturated fat, percent of sugar by weight, total calories per serving, and sodium per serving match the guidelines developed by the Alliance for a Healthier Generation. NAMA notes that the vending industry's Fit Pick program is "popular and successful" within the industry. With regard to the Alliance standards, NAMA notes that

"These standards are already widely used in schools and provide more flexibility while assuring that the items that are sold on school campuses meet established nutritional guidelines. Fit Pick® would provide the USDA with an option that provides flexibility for the industry and lessens the impact on small business on both the revenue and expense sides. This would provide a program that the industry and schools are familiar with, therefore creating a simpler and more cost-effective implementation process."

By moving closer to the Alliance standards, USDA's interim final rule responds directly to concerns about the cost of implementation faced by vending machine operators, particularly small businesses.

Other school groups that rely on competitive food sales as fundraisers benefit along with SFAs to the extent that they can choose from a wider variety of foods to sell.

 $Loss\ of\ Competitive\ Food\ Sales\ to\ Other\\ Student\ Options$

A reduction in competitive food sales following the implementation of Federal standards is a concern of both schools and industry that rely on that revenue. The changes discussed above that better align several of the rule's nutrient and food standards with existing standards and guidelines helps to guarantee that a wide variety of market-tested products will be available on implementation. Along with school-based strategies to win student acceptance of healthier competitive foods,34 schools should have an easier time retaining existing competitive food revenues to the extent that industry is able to offer a variety of appealing choices.

USDA also modified the proposed rule's provision regarding the sale of beverages

other than milk, plain water, and 100 percent fruit and vegetable juice in the cafeteria during meal service periods. Although the proposed and interim final rules allow the sale of a wider selection of beverages to high school students, the proposed rule would have kept those beverages out of meal service areas during a meal service. Commenters were concerned about the effect of that "time and place" restriction on SFA revenues. The proposed rule restriction had the potential to discourage some high school students from even entering the cafeteria at meal time and considering a reimbursable meal or à la carte foods as an option to food brought from home or purchased off campus. The interim final rule's elimination of that restriction removes a potential barrier to SFA efforts to maintain existing levels of competitive food revenue, or to replace lost competitive food revenue with revenue from reimbursable meals. Higher in-school sales of competitive foods or program meals also benefits the food service industries that sell food to schools.

Administrative Costs

As we note in the RIA, the proposed and the interim final rules impose some new recordkeeping requirements on school officials. These recordkeeping requirements are necessary to document compliance and ensure that the benefits of the rule are fully realized, and they are retained in the interim final rule with only one small technical change. However, the changes that USDA made to the interim final rule to align several provisions with existing NSLP standards, HUSSC requirements, or Alliance for a Healthier Generation guidelines will help reduce transition and compliance costs for many schools.

VI. Significant Alternatives

Each of the following alternatives is discussed more fully in the RIA. What follows is a summary of that broader discussion with particular focus on the economic and administrative impact on the small entities directly regulated or indirectly affected by the rule.

Exemption for Reimbursable Meal Entrées

The proposed rule presented two basic alternatives for the treatment of entrées and side dishes that are served as part of a reimbursable meal. Under the first alternative, these items could be served à la carte as long as they met the rule's fat and sugar standards that apply to all other competitive foods. Under the second alternative, NSLP entrées and sides (except grain-based desserts) would be exempt from all of the rule's competitive food requirements if served à la carte on same day that they are part of a reimbursable meal (alternative B1) or within four days of service as part of a reimbursable meal (alternative B2).

The interim final rule adopts a variation on the second alternative. Entrées (but not side dishes) served as part of a reimbursable meal will be exempt from the rule's competitive food requirements on the day they are served as part of the meal and the following day. USDA recognizes that being able to serve leftover entrées the next day is an important tool for menu planning and cost control. The

³⁴ The Regulatory Impact Analysis discusses strategies that schools around the country have employed successfully to limit or eliminate revenue losses after implementing State or local competitive food standards.

interim final rule provision attempts to balance those administrative and cost concerns against the need to make sure that an exemption from competitive food standards for reimbursable meal entrées does not undermine the broader health related goals of the rule. For that reason, USDA did not adopt alternative B2.

The interim final rule provision offers somewhat greater administrative simplicity compared to the other alternative considered by USDA. That alternative would have required a nutrient analysis of reimbursable meal items before they could be sold à la carte in order to measure their compliance with the rule's fat and sugar standards.

School-Sponsored Fundraisers

The proposed rule offered two alternatives for establishing limits on the frequency of exempt fundraisers. One would have allowed States to set limits subject to USDA approval. The other would grant full discretion to the States.

After consideration of comments from interest groups and school officials, USDA opted to allow States to set their own limits on the frequency of exempt fundraisers without USDA review.35 Eliminating USDA review will not directly affect school or SFA administrative costs, although it will reduce administrative costs at the State agency and Federal levels. However, to the extent that offering State agencies somewhat greater discretion in making this decision, it may offer some relief to schools and SFAs. Full State discretion allows State administrators' to tailor their policies, and adjust them when necessary (without having to wait for Federal review) to address unanticipated inefficiencies or cost issues at the local level. The time and administrative expense of USDA review might discourage fine-tuning of established policies.

Total Sugar

The proposed rule solicited public comment on two alternate sugar standards for competitive foods. These would have limited total sugar content to either 35 percent of calories or 35 percent of weight. Both standards would have placed a meaningful check on the amount of sugar allowed in competitive foods while providing exceptions for certain fruit and vegetable snacks and yogurt. After considering arguments in favor of each of these standards, USDA adopted the sugar by weight standard for the interim final rule.

Administrative burden and product availability were among the factors that weighed most heavily in this decision. Commenters who favored the 35 percent by weight standard argued that

- It was consistent with standards already in place through voluntary programs such HUSSC and the Alliance for a Healthier Generation.
- Sugar is commonly reported by weight by industry and others,

- Calculators for sugar by weight already exist to aid school food service professionals in their calculations,
- The sugar as a percent of calories standard would negatively affect food service revenues; and
- Sugar by weight allows greater flexibility in the products available to students.

The first four of these points suggest that the sugar by weight standard will be less costly to implement for both the schools and industry that have already invested in that standard. Schools that are new to competitive food reform will also benefit from the sugar by weight standard to the extent that industry has already developed products designed to meet the demand of HUSSC schools and schools that follow Alliance guidelines.

The alternate percent of calories standard, by contrast, would have added to some schools' cost of compliance with the rule. It would have been most disruptive and potentially costly to schools that have already established relationships with suppliers and distributors who provide the schools with products intended to meet the sugar by weight standard.

The net effect on industry of choosing the weight standard over the calorie standard is unclear. Manufacturers and distributors that have already invested in supplying schools with products that meet the sugar by weight standard may realize the greatest immediate benefit. Comments from representatives of the vending industry point to that industry's voluntary efforts to support schools that follow Alliance guidelines on competitive foods, and urged USDA to adopt standards consistent with those guidelines. The interim final rule's sugar standard, in combination with some of the other changes to the rule, aligns the rule with more of the existing products that meet the sugar by weight and other Alliance guidelines. Manufacturers as well as distributors of such products may see additional demand once all schools implement the rule.

Not all sectors of the food industry favored the sugar by weight standard. Compared to the alternate sugar as a percent of calories standard, the weight standard may be more difficult to meet for sugar-sweetened products with low moisture content, where the ratio of fat to sugar may mean the difference between compliance and noncompliance. Because a gram of fat has more than twice as many calories as a gram of sugar, snack products and desserts with a relatively high fat content (from nuts or chocolate, for example) may be less likely to meet the interim final rule's weight-based sugar standard although they might have met the alternative calorie-based standard.36 Where product reformulation is an option, manufacturers of non-compliant snacks may choose to incur those costs.

Naturally Occurring Ingredients and Fortification

Competitive foods that do not satisfy one of the interim final rule's food group requirements may be sold in school if they contain at least 10 percent of the daily value of one of several nutrients of concern (i.e., calcium, potassium, vitamin D, and fiber), but only through June 2016. Beginning July 1, 2016 this criterion will be obsolete and may not be used to qualify an item as an allowable competitive food.

The primary alternative considered by USDA was the proposed rule's handling of nutrients of concern. The proposed rule would have allowed products that met the 10 percent threshold, but only through the use of naturally occurring ingredients. In addition, the proposed rule would have made this option permanent.

USDA's decision to modify the proposed rule provision was driven primarily by concerns other than cost or administrative burden. However, in the critical early months of implementation, the interim final rule offers one administrative cost advantage relative to the proposed rule. Because the 10 percent threshold need not be met with only naturally occurring ingredients, the interim final rule potentially allows a number of existing fortified foods to be sold as competitive foods. This may reduce costs and positively impact SFA competitive food revenues by ensuring the widest availability of compliant products during a 24-month transition to an entirely food-based set of standards.

Low Calorie Beverages in High Schools

The proposed rule offered two alternatives for public comment on lower-calorie beverages for high school students. The first would have permitted up to 40 calories per 8 fl oz serving (and 60 calories per 12 fl oz). The second would have allowed up to 50 calories per 8 fl oz serving (and 75 calories per 12 floz). The higher 50 calorie limit would have permitted the sale of national brand sports drinks in their standard formulas. The lower 40 calorie limit would have allowed only reduced-calorie versions of those drinks. The interim final rule adopts the lower 40 calorie limit as the better alternative to limit the consumption of added sugar in beverages sold in school, and to further advance the public health goals of the

This decision was driven by the health benefits of the lower calorie standard. Although the 40 calorie standard in the interim final rule does not go as far as recommended by some public health groups, it will have a substantial effect on the types of sweetened beverages offered in high schools.³⁷ In particular, the 40 calorie standard falls below the sugar content of popular sports drinks in their standard formula.

Food and foodservice industry representatives, as well as some school administrators, favored the higher calorie

³⁵ FNS will provide guidance to ensure that State policies are consistent with the legislative requirement that exemptions for fundraisers are "infrequent" (Pub. L. 111–296).

³⁶ Certain varieties of trail mix, granola bars, and whole grain cookies sometimes fall into this group. Two examples from the USDA's National Nutrient Database for Standard Reference (release 24) are product IDs 25056 (chocolate coated granola bar) and 18533 (iced oatmeal cookie).

³⁷ Both the standard adopted for the interim final rule as well as the 50 calorie alternative, would end the sale of sweetened beverages in elementary and middle schools.

limit. The beverage industry has invested in developing and marketing products that meet the Alliance for a Healthier Generation's 66 calorie per 8 fl oz guideline, and may have been better positioned to meet a 50 calorie standard than the interim final rule's 40 calorie standard. There may be fewer products currently available that meet or can be reformulated to meet the interim final rule standard. If so, then the immediate transition to the interim final rule may be more challenging for manufacturers, distributors, and vending machine operators, as well as SFAs, student organizations, and other non-SFA school groups that rely on the sale of such beverages. However, while some businesses may face a reduced market for their products, at least in the short term, manufacturers and distributors of competing lower calorie products have an opportunity to increase sales.

Caffeinated Beverages

Consistent with IOM recommendations, the proposed rule required that beverages served to elementary and middle school students be caffeine free or include only small amounts of naturally occurring caffeine. The proposed rule, however, did not put caffeine restrictions on products for high school students; a departure from the IOM guidelines. Many of the comments from health professionals and school officials expressed concern about the effects of large amounts of caffeine on adolescents and suggested that the Department either disallow caffeinated beverages at the high school level entirely, or at least provide some guidelines for caffeine limits. After considering these comments, and because of the lack of an accepted standard for caffeine consumption by high school-aged students, USDA retains the proposed rule standard. The interim final rule retains maximum flexibility for high schools, allowing the continued sale of beverages containing caffeine. At the same time, in response to concerns expressed by health professionals, USDA encourages schools to consider the high caffeine content of beverages such as energy drinks before considering their sale. To the extent that caffeinated products generate revenue for schools, the interim final rule will have a lesser economic impact on SFAs and other school groups than the primary alternative considered by USDA.

Appendix B

Regulatory Impact Analysis

Agency: Food and Nutrition Service, USDA.

Title: Nutrition Standards for All Foods Sold in School.

Nature of Action: Interim Final Rule.
Need for Action: Section 208 of the
Healthy, Hunger-Free Kids Act of 2010
requires the U.S. Department of Agriculture
(USDA) to establish science-based nutrition
standards for all foods sold in schools during
the school day, outside the school meal
programs. The standards in this interim final
rule are intended to complement USDA's
efforts to ensure that all foods sold at
school—whether provided as part of a school
meal or sold in competition with such
meals—are aligned with the latest dietary

recommendations. The standards will work in concert with recent improvements in school meals to support and promote diets that contribute to students' long-term health and well-being. The standards will support efforts of parents to promote healthy choices for children, at home and at school.

Affected Parties: All parties involved in the operation and administration of programs authorized under the National School Lunch Act or the Child Nutrition Act that operate on the school campus during the school day. These include State education agencies, local school food authorities, local educational agencies, schools, students, and the food production, distribution, and service industry.

Abbreviations:

DGA Dietary Guidelines for Americans FDA Food and Drug Administration FMNV Foods of Minimal Nutritional Value FY Fiscal Year GAO Government Accountability Office HHFKA Healthy, Hunger-Free Kids Act IOM Institute of Medicine Local Educational Agency NSLP National School Lunch Program SBP School Breakfast Program SFA School Food Authority SLBCS-II School Lunch and Breakfast Cost Study II SNDA-III School Nutrition Dietary Assessment III SNDA-IV School Nutrition Dietary Assessment IV School Year

Contents

- I. Introduction
 - A. Overview

Agriculture

- B. Background
- C. Baseline Competitive Food Revenue D. Previous Recommendations and
- D. Previous Recommendations and Existing Standards

USDA United States Department of

- 1. Institute of Medicine Recommendations
- $2.\ Voluntary\ Standards$
- 3. Competitive Food Standards in Five Largest States
- II. Development of Federal Standards III. Response to Comments
 - A. Concerns about Reduced SFA Revenue
 - B. Relative Contribution of Competitive Food Revenue to SFA Finances
 - C. Impacts on School Food Vendors and Manufacturers
- D. Financial Impacts on Non-SFA School Groups
- E. Effects on School Foodservice Administration
- F. Health Benefits
- IV. Cost—Benefit Analysis
- A. School Revenue Effects
- 1. Existing Research on Revenue Effects
- 2. Estimating School Revenue Changes
- B. Impacts on Participating Children and Families
- C. Administrative Costs
- D. Industry Effects
- E. Distributional Effects
- 1. Revenues and Grade Level
- 2. Low-Income Students
- F. Benefits
- G. Limitations and Uncertainties
- 1. Limitations in Available Research

- 2. Prices of Competitive Foods
- 3. State and Local Support of Reimbursable Meals
- 4. Student Response to New Standards
- 5. Industry Response
- 6. SFA and School Compliance
- 7. School Participation in Federal Meal Programs
- 8. Food and Labor Costs

IV. Alternatives

- A. Exemption for Reimbursable Meal Entrées and Side Dishes
- B. School-Sponsored Fundraisers
- C. Total Sugar
- D. Naturally Occurring Ingredients and Fortification
- E. Low Calorie Beverages in High Schools
- F. Caffeinated Beverages
- VI. Accounting Statement
- VII. References

I. Introduction

A. Overview

There has been increasing public interest in the rising prevalence of overweight and obesity in the United States, particularly among children. The school nutrition environment is a significant influence on children's health and well-being. Recent studies have shown that children typically consume between 26 and 35 percent of their total daily calories at school, and as much as 50 percent for children who participate in both school lunch and breakfast programs (Fox 2010; Guthrie, et al., 2009).

In response to these concerns, the Healthy Hunger-Free Kids Act (HHFKA) of 2010 required USDA to establish science-based nutrition standards for all foods sold in schools during the school day. The standards are intended to complement the Department's efforts to ensure that *all* foods sold at school—whether provided as part of a school meal or sold in competition with such meals—are aligned with the latest dietary recommendations.

The interim competitive food standards will work in concert with recent improvements in school meals to support and promote diets that contribute to students' long-term health and well-being. Congress highlighted the relationship between school meal improvements and standards for other school foods, noting that the prevalence of "unhealthy [competitive] foods in our schools not only undermines children's health but also undermines annual taxpayer investments of over \$15.5 billion in the National School Lunch and School Breakfast Programs" (Senate Report 111–178, p. 8).

The benefits sought through this rulemaking focus on improving the food choices that children make during the school day. A growing body of evidence tells us that giving school children healthful food options will help improve these choices. A recent, comprehensive, and groundbreaking assessment of the evidence by the Pew Health Group and Robert Wood Johnson Foundation (2012) concluded that:

- A national competitive foods policy would increase student exposure to healthier foods and decrease exposure to less healthy foods, and
- Increased access to a mix of healthier food options is likely to improve the mix of

foods that students purchase and consume at school (Pew, RWJF, 2012, p. 61).³⁸

Researchers for Healthy Eating Research and Bridging the Gap, Robert Wood Johnson Foundation-sponsored research programs examining environmental influences on youth diets and obesity, concluded that strong policies that prohibit or restrict the sale of unhealthy competitive foods and drinks in schools improve children's diets and reduce their risk for obesity (Healthy Eating Research and Bridging the Gap, 2012, p. 3).

Because setting national standards will change the range of food products sold in schools, they may affect the revenues schools earn from these foods, as well as participation in school meals. The evidence on the overall impact of competitive food standards on school revenues is mixed. However, a number of schools implementing such standards have reported little change, and some increases, in net revenues.³⁹

B. Background

Children generally have two options for school food purchases: (1) Foods provided under the National School Lunch Program (NSLP), the School Breakfast Program (SBP) or other child nutrition programs authorized under the National School Lunch Act or the Child Nutrition Act, and (2) competitive foods purchased à la carte in school cafeterias or from vending machines at school. NSLP is available to over 50 million children each school day; an average of 31.6 million children per day ate a reimbursable lunch in fiscal vear (FY) 2012.40 Additional children are served by the Child and Adult Care Food and the Summer Food Service Programs that operate from NSLP and SBP participating schools. While meals served through these programs are required to meet nutritional standards based on the most recent Dietary Guidelines for Americans (DGA), competitive foods are subject to far fewer Federal dietary standards. Existing regulations address only the place and timing of sales of foods of minimal nutritional value

The sale of food in competition with Federal reimbursable program meals and snacks is widespread. In school year (SY) 2009–2010, 86 percent of all schools—and 90

percent or more of middle and high schools-offered à la carte foods at lunch. Vending machines were available in 37 percent of all schools, including 13 percent of elementary schools, 67 percent of middle schools, and 85 percent of high schools (Fox, et al., 2012, Volume 1, p 3-32).42 Revenues from competitive foods, however, are far smaller on average than revenues from USDA-funded school meals. In SY 2005-2006, an average 84 percent of public school food authority (SFA) revenue was derived from reimbursable school meals, from a combination of USDA subsidies, State and local funds, and student meal payments. The remaining 16 percent was derived from nonreimbursable food sales (USDA 2008, p xii).43 Half of secondary school students consume at least one snack food per day at school, an average of 273 to 336 calories per day. This amount is significant considering that an extra 110 to 165 calories per day may be responsible for rising rates of childhood obesity (Fox et al. 2009, Wang et al. 2006).

Many observers, including parents and military leaders, have expressed concerns about the competitive foods available to children at school (Gordon, et al., 2007; Christeson, Taggart, and Messner-Zidell, 2010; Christeson, et al., 2012). In response, a number of States have implemented competitive food standards. In 2004, GAO reported that 21 States had created standards that went beyond existing Federal standards. In 2010, the School Nutrition Association reported that the number of States with competitive food policies had increased to 36.44 45 In a 2012 assessment of competitive

food standards across the U.S., the Centers for Disease Control and Prevention (CDC) reported that 39 States had established competitive food policies as of October 2010 (CDC, 2012, p. 6). ⁴⁶ Finally, a 2012 study conducted for FNS found that at least half of States had competitive food standards for foods sold à la carte, in vending machines, in school stores, and in snack bars, and almost half had nutrition standards for foods sold in bake sales (Westat, 2012, p., 5–25).

The Pew Health Group and Robert Wood Johnson Foundation recently reviewed data on the types of snack foods and beverages sold in secondary schools via vending machines, school stores, and snack bars. 47 The data were extracted from a biennial assessment from the CDC that uses surveys of principals and health education teachers to measure policies and practices across the nation. Key findings show:

 The availability of snack foods in secondary schools varies tremendously from state to state, and this variation is likely the result of a disparate patchwork of policies at the state and local levels. Fewer than five percent of school districts have food and beverage policies that meet or exceed the

• "Under this patchwork of policies, the majority of our nation's children live in states where less healthy snack food choices are readily available (p. 3)."

2010 Dietary Guidelines for Americans.

Overall, the availability of healthy snacks such as fruits and vegetables is limited. The vast majority of secondary schools in 49 states *do not* sell fruits and vegetables in snack food venues (Pew Health Group, 2012).

C. Baseline Competitive Food Revenue

As shown in Table 1, we estimate that overall revenue in SFAs will be about \$35 billion to \$37 billion each fiscal year between 2015 and 2018.⁴⁸ Overall revenue includes the value of Federal reimbursements for NSLP and SBP meals,⁴⁹ student payments, and State and local contributions. These estimates are derived from the relationship between Federal reimbursements and total SFA revenue estimated in the School Lunch and Breakfast Cost Study (SLBCS–II) (USDA 2008).

USDA's most recent budget projections forecast a total of \$16.8 billion in Federal meal reimbursements in FY 2014. We use

³⁸The Pew Health Group and the Robert Wood Johnson Foundation publication is a formal Health Impact Assessment (HIA), prepared in accordance with North American HIA Practice Standards and National Research Council Guidelines. The HIA reviewed and synthesized exiting research findings on the potential impacts on children's health and the effects on school revenue as a result of competitive school food policies. The researchers also conducted interviews with experts in the public health community, academia, industry, educators, school administrators, parents, and students.

³⁹ See Pew, RWJF, 2012, chapter 4, for a recent review of the literature on the revenue impacts of State and local competitive food policies.

⁴⁰ http://www.fns.usda.gov/pd/slsummar.htm.

⁴¹ FMNV include carbonated beverages, water ices, chewing gum, hard candy, jellies and gums, marshmallow candies, fondant, licorice, spun candy, and candy-coated popcorn. The current policy restricts the sales of FMNV during meal service in food service areas. See 7 CRF 210.11.

⁴² SNDA–IV found the top five most commonly offered à la carte lunch items were milk, juice and water, snacks, fruit, and vegetables. For vending machines, the most commonly offered items were juice and water, other beverages (for example, carbonated and energy drinks, coffee and tea, etc.) snacks, and baked goods.

⁴³ These revenue figures are averages. Some SFAs receive substantially greater shares of total revenue from competitive foods. Schools at or above the 75th percentile in terms of percent of revenue from competitive foods generated an average 34 percent of total revenue from competitive foods. Those at or above the 90th percentile generated an average 40 percent of revenue from competitive foods.

⁴⁴ GAO-04-673. April 2004. The GAO identified 23 States, but 2 of the 23 had only created committees to assess competitive food issues. The report considered both timing of competitive foods sales and the types of products offered. In terms of timing, of the 21 States with competitive food policies, 14 limited access to competitive foods at times associated with meal periods, 5 limited competitive food sales during the entire school day, and 2 States varied the standards by the type of school. In terms of the types of foods, 6 of the 21 States limited access to all competitive foods, 8 limited access only to FMNV, and 7 States limited selected competitive foods. Seventeen of the States limited access at all grade levels, while the remaining 4 States had policies that applied only to selected schools. GAO also found that within States, individual schools and districts had policies that were stricter than the State standards.

⁴⁵ Similar to the GAO report, a report from the School Nutrition Association (SNA) indicates 23 States had competitive food policies on or before 2004. There is at least one difference among the States identified by GAO and those identified by SNA, but it is not clear how many other discrepancies may exist.

⁴⁶ Two of these States had not established standards at the time of the report's publication, though legislation in both States requires the establishment of standards. CDC included State laws, regulations, and policies enacted or passed since October 2010. We use the term policy to generically refer to all three.

⁴⁷ "Out of Balance: A Look at Snack Foods in Secondary Schools across the States," The Pew Health Group and the Robert Wood Johnson Foundation (2012). The report examines data contained in N.D. Brener et al., "School Health Profiles 2010: Characteristics of Health Programs Among Secondary Schools in Selected U.S. 21 Sites," U.S. Department of Human Services, Centers for Disease Control and Prevention (2011).

⁴⁸ The FY 2014 baselines in Table 1 are partial year figures; they include revenues from July 2014, the effective date of the rule's competitive food standards, through the end of the fiscal year.

 $^{^{49}}$ estimates prepared for the FY 2014 President's Budget

findings from the SLBCS-II about the relationship between Federal meal reimbursements and overall SFA revenue to derive an estimate of \$32.5 billion in SFA revenue in FY 2014, and then adjust this upward for HHFKA impacts 50 to a total of \$34.4 billion in SFA revenue in that year.

Our estimate of competitive food revenues under current policies and practices also uses SLBCS-II 51, which showed that SFA competitive food revenue accounted for 15.8 percent of overall SFA revenue prior to HHFKA. For FY 2014, we begin with the estimated \$32.5 billion in SFA revenue that excludes the effects of HHFKA on Federal meal reimbursements and student payments for program meals and competitive foods. For FY 2014, that implies baseline SFA

competitive food revenues of \$5.1 billion.⁵² We add an estimated \$1.3 billion increase in competitive food revenue from HHFKA Section 206 to get an adjusted \$6.5 billion in SFA competitive food revenue.53

To estimate the proportions of these revenues generated by à la carte sales and vending machines, we use SNDA-III data to show that about 98.3 percent of SFA competitive food revenue was generated by sales of à la carte foods; virtually all of the rest, 1.7 percent, was generated by vending machine sales.54

Data from SNDA-III indicate that 95 percent of competitive food revenue accrues to SFA accounts; just five percent of competitive food revenue accrues to non-SFA student, parent and other school group

accounts.55 Our estimate of competitive food revenue generated by these groups in FY 2014 is \$270 million.⁵⁶ If none of the competitive food revenue raised by non-SFA school groups comes from à la carte, then à la carte sales accounted for roughly 93 percent (= 0.98×0.95) of total SFA and non-SFA competitive food revenue.

We inflate these figures for 2015 through 2018 based on the assumptions in the President's Budget. Because the rule will take effect in July 2014, the start of SY 2014-2015, we reduce the FY 2014 figures in Table 1 to include only the last three months of the fiscal year—about 14 percent of the full-year figures.⁵⁷

TABLE 1—BASELINE COMPETITIVE FOOD AND OVERALL SFA REVENUE

	Fiscal Year (millions)					
	2014*	2015	2016	2017	2018	Total
Baseline SFA revenue (all sources)	\$4,781	\$35,039	\$35,713	\$36,436	\$37,273	\$149,243
Baseline competitive food revenue	\$935	\$6,923	\$7,091	\$7,282	\$7,432	\$29,663
SFA revenue	\$897	\$6,649	\$6,812	\$7,000	\$7,143	\$28,501
à la carte	882	6,536	6,697	6,881	7,022	28,017
vending and other sources	15	113	116	119	121	485
Other school group revenue	\$38	\$274	\$278	\$283	\$289	\$1,162
à la carte	0	0	0	0	0	0
vending and other sources	38	274	278	283	289	1,162

^{*}The FY 2014 figures include July-September only which is 13.9 percent of the FY 2014 full year estimate.

Other school groups generate their competitive food revenue from periodic fundraisers, vending machines, snack bars, and school stores. These groups include student clubs, parent teacher organizations, or parent organizations supporting sports, music, and other enrichment activities. Much of the non-SFA competitive food revenue is controlled by school principals for special school events, sports, or general fundraising.

Given the implementation of Section 206 and significant State and local school food initiatives adopted since SY 2004-2005, our baseline estimate of competitive food

50 The estimated increase in SFA revenues in

2014 from these provisions is \$581 million for

competitive food revenue, for a total increase of

about \$1.9 billion. See 76 Federal Register 35301-

⁵¹ For purposes of this analysis we assume that

the revenue generated from competitive food sales

has increased at the same rate as the growth in SFA

revenue from reimbursable paid lunches. For years

after FY 2012, we assume that baseline competitive

food revenue will increase at the same rate as the

reimbursable paid lunches contained in the FY

53 HHFKA Section 206 is a competitive food

pricing reform designed to ensure that revenues

to their share of SFA food costs. Section 206 is

foods with revenue from reimbursable meals.

required to raise prices charged to students for

generated from competitive foods are at least equal

intended to correct a historic subsidy of competitive

Where necessary to meet this requirement, SFAs are

competitive foods. The \$1.3 billion adjustment for

Section 206 in this paragraph is USDA's estimate

 $52 \$32.5 \text{ billion} \times 15.8\% = \$5.1 \text{ billion}.$

projected increase in SFA revenue from

reimbursable meals, and \$1.3 billion for

35318, especially p. 35305.

2014 President's Budget.

revenue generated by other school groups is uncertain.

D. Previous Recommendations and Existing Standards

Although HHFKA established Federal authority for comprehensive nutrition standards for all foods in school, efforts to define and implement such standards have been underway for a number of years. Our analysis briefly describes these activities to provide additional context for the interim final rule.

1. Institute of Medicine Recommendations

In 2005, Congress directed CDC to commission the Institute of Medicine (IOM) to develop a set of nutrition standards for competitive school foods (House Report 108-792). Nutrition Standards for Foods in Schools: Leading the Way toward Healthier Youth is the result of the work done by the IOM and contains its recommendations for nutrient and other standards. The committee began by identifying a set of guiding principles based on the premise that maintaining a healthy weight is important for children and noting the important role that schools play in children's lives. These

 $^{56}\,\mathrm{Because}$ other school groups do not generate

revenue from à la carte sales, we start with the SFA

revenues. See 76 Federal Register 35301-35318, Table 2.

third School Nutrition Dietary Assessment Study,

Note that SNĎA–III may underestimate other school group revenues to the extent that these groups share in revenue from school stores that sell food or engage in separate fundraising events. SNDA-III reports that 44 percent of schools allow student group fundraisers, but 75 percent of those schools tend to hold them less than once per week. Just 14 percent of schools operated snack bars or school stores that might generate revenue for non-SFA school groups. For this reason, we believe that our estimates capture the larger share of revenue raised by these groups. According to SNDA-III's principals' surveys, 44 percent of schools sold competitive foods in vending machines and through periodic fundraisers in SY 2004-2005. Just 11 percent of schools sold competitive foods in school stores, and just 3 percent sold competitive foods in school snack bars. See Gordon, et al., 2007, vol. 1, pp. 77-79.

of the net impact of those price increases on SFA

 $^{^{54}\,\}mbox{ERS}$ analysis of unpublished data from the SNDA-III, (Gordon, et al., 2007).

competitive food revenue excluding our estimate of the SFA competitive food revenue increase from HHFKA, which is almost entirely from à la carte sales. Our FY 2014 competitive food baseline for 55 ERS analysis of unpublished SNDA-III data. other school groups is therefore: [(\$32.5 billion \times 15.8 percent) ÷ 0.95] × .05 = \$270 million. ⁵⁷ The FY 2014 figures in Table 1 are 13.9 percent of our full year FY 2014 estimates. 13.9 percent is

the ratio of paid reimbursable lunches served from July through September 2012 to the number of paid reimbursable lunches served from October 2011 through September 2012. We use paid reimbursable lunches, rather than total lunches or total Federal reimbursements, as the best proxy (among available administrative data) for the share of competitive foods purchased in the last three months of the fiscal year. An unpublished ERS analysis of SNDA-III data found that schools with the greatest share of children eligible for paid meals generate far more competitive food revenue than schools with higher percentages of free or reduced-price eligible children. For SFA revenue, the figure in Table 1 is equal to \$34.4 billion × 13.9 percent, or \$4.8 billion.

principles then guided the IOM in advocating that all foods available in schools be required to meet nutrition standards (IOM, 2007a, p. 3).

The committee set out its recommendations, first arguing that Federal nutrition programs be the primary source of foods and beverages at school and second, that nutrition standards based on the Dietary Guidelines for Americans (DGA) be implemented for all foods and beverages offered to all school-age children (IOM, 2007a). These recommendations were followed by a discussion of a two-tier system consisting of foods and beverages to be encouraged (Tier 1) and a second tier consisting of snack foods that do not meet Tier 1 criteria but still meet the recommendations for fats, sugars, and sodium set forth in the DGA. Following the IOM recommendations, à la carte entrées would be required to be on the NSLP menu and meet Tier 1 criteria with two exceptions: the amount of allowed sodium would increase from 200 milligrams (mg) to no more than 480 mg, and the 200 calorie limit imposed on Tier 1 foods would not apply; à la carte entrées would have to meet the calorie content of comparable NSLP entrée

2. Voluntary Standards

USDA's HealthierUS School Challenge (HUSSC), and the Alliance for a Healthier Generation's Healthy Schools Program offer two models of voluntary standards adopted by many schools across the country.

HUSŠC began in 2004 as a way to promote healthier school environments through nutrition and physical activity, with four award levels: bronze, silver, gold, and gold of distinction. HUSSC includes standards for competitive foods that are similar to the standards in the proposed rule. At all award levels, competitive foods and beverages must meet the following standards:

- No more than 35 percent of calories from total fat (excluding nuts, seeds, nut butters and reduced-fat cheese),
- \bullet Less than 0.5 grams (g) trans fats per serving, 58
- No more than 10 percent saturated fat (reduced-fat cheese is exempt),
- Total sugar at or below 35 percent by weight (includes naturally occurring and added sugars. Fruits, vegetables, and milk are exempt),
- Portion sizes may not exceed the serving size of the food served in school meals and no other competitive foods may exceed 200 calories (as packaged).
- Only lowfat or nonfat milk and USDA approved alternative dairy beverages may be offered,
- Milk serving size is limited to 8-fluid ounces.
- 100 percent fruit and vegetable juices with no sweeteners or non-nutritive sweeteners, and
- Water that is non-flavored, nonsweetened, non-carbonated, non-caffeinated, without non-nutritive sweeteners is allowed.

Variable standards, depending on award level, include:

- For bronze and silver awards, competitive food standards apply to foods sold in the meal service area during meal periods.
- For gold and gold of distinction awards, competitive food standards apply anywhere in the school and at any time during the school day.
- For bronze, silver, and gold awards, sodium cannot exceed 480 mg for snack foods or 600 mg for entrées.
- For gold of distinction awards, sodium cannot exceed 200 mg for snack foods or 480 mg for entrées.

By May 2013, over 6,500 schools in 49 States and the District of Columbia had become certified HUSSC schools, and all of these schools, regardless of award level, have already moved at least part way to the interim competitive food standards.⁵⁹

Similar to HUSSC, the Alliance for a Healthier Generation's Healthy Schools Program is comprised of schools that voluntarily adopt Alliance competitive food standards. According to an Alliance fact sheet, 60 the competitive food standards are:

- No more than 35 percent of calories from total fat,
- No more than 10 percent of calories from saturated fat,
 - 0 g trans fat,
- No more than 35 percent sugar by weight,
- No more than 230 mg sodium for snacks and no more than 480 mg sodium for dairy products, soups, and vegetables with dips, and
- Graduated calories for elementary, middle and high schools (150, 180, and 200 calories, for elementary, middle, and high schools respectively).

The Alliance for a Healthier Generation also recommends schools serve whole grain products; fresh, canned, or frozen fruit (in fruit juice or light syrup); and non-fried vegetables. As with the HUSSC schools, the more than 15,000 schools currently participating in the Alliance for a Healthier Generation program have also moved their competitive food standards towards those in the interim final rule.⁶¹

3. Competitive Food Standards in Five Largest States

The five States with the largest numbers of students enrolled in NSLP-participating schools are California, Florida, Illinois, New York, and Texas. These States account for 37 percent of all students enrolled nationally in NSLP participating schools (18.9 million students). All five of these States have had some level of school competitive food

policies in place since 2004 or earlier. Thus, school districts in these States have already confronted some of the challenges of transitioning students toward improved competitive foods and have dealt with the consequences of changes in overall revenues.

In California, elementary children may purchase only milk (2% or less), soy, rice, other nondairy milk, fruit or vegetable juices that are at least 50 percent juice with no added sweeteners, and water with no added sweeteners. Generally, foods must not have more than 35 percent of calories from fat, 10 percent of calories from saturated fat, 0 calories from trans fat, and no more than 35 percent sugar by weight. Foods must also have no more than 175 calories per individual food item. Nuts, nut butters, seeds, eggs, cheese packaged for individual sale, fruit, vegetables that have not been deep fried, and legumes are also allowed for purchase. These standards apply regardless of the time of day.

Secondary school children may purchase water, milk (2% or less), soy, rice, and other nondairy milk, fruit and vegetable drinks that are at least 50 percent juice, and electrolyte replacement beverages with no more than 42 g of added sweetener per twenty fluid ounces. Snack items must be no more than 250 calories per item and à la carte foods may have no more than 400 calories per entrée and no more than four g of fat per 100 calories. Entrées from NSLP meals are also allowed. These standards are in place from 30 minutes before the school day through 30 minutes after the school day (California Education Code sections 49430–49436).

Florida does not allow any competitive food sales on elementary school campuses during the day and does not allow competitive foods from vending, school stores, and other food sales in secondary schools until an hour after the last lunch period. Carbonated beverages are allowed for high school students if 100 percent fruit juices are also available where those beverages are sold but may not be sold where breakfast or lunch is being served or eaten (Florida Administrative Code 6A–7.0411).

Illinois policy on competitive foods applies only to grades eight and below, for foods sold during the school day, with the exception of foods that are sold as part of a reimbursable meal or sold within the food service area. Allowable beverages include water, reduced fat, lowfat, and nonfat milk; rice, nut, or soy reduced-fat milk; fruit and vegetable drinks that are at least 50 percent fruit juice; and yogurt or ice-based smoothie drinks with fewer than 400 calories that are made with fresh or frozen fruit or fruit drinks containing at least 50 percent fruit juice.

Foods that are allowed to be sold outside food service areas or within food service areas other than during meal service must have no more than 35 percent of calories from fat and 10 percent of calories from saturated fat, no more than 35 percent sugar by weight, and may not contain more than 200 calories per serving. Nuts, seeds, nut butters, eggs, cheese packaged for individual sale, fruits or non-fried vegetables, or lowfat yogurt products are also allowed (Illinois Administrative Code Title 23 section 305.15).

New York State broadly restricts the sales of FMNV and "all other candy" from the

⁵⁸ Current rules allow manufacturers to report a product has "zero grams" of trans fat as long as there are less than 0.5 g trans fat per serving. See 21 CFR Part 101.62.

⁵⁹ FNS HealthierUS School Challenge at http://www.fns.usda.gov/tn/healthierus/index.html. A nutrition standards chart is available at http://www.fns.usda.gov/tn/healthierus/award chart.pdf.

⁶⁰ Alliance for a Healthier Generation School Competitive Food Guidelines. Available at http:// www.k12.wa.us/ChildNutrition/SchoolWellness/ School_Comp_food_guidelinest.pdf.

⁶¹ School participation numbers are from the Healthy School Program, Alliance for a Healthier Generation Web site. https://schools.healthier generation.org/how_it_works/program_overview/ healthy schools program in your state/.

beginning of the school day through the end of the last scheduled meal period (New York Education Code section 915). New York's State Education Department, however, allows competitive food standards to be set at the district level (DiNapoli, 2009) and New York City, for example, has adopted standards that are much more rigorous than the State-level standards.

Competitive food sales standards within New York City schools apply to food sales from the beginning of the school day through 6 p.m. weekdays. Students can sell New York State Department of Education approved foods in schools any time during the day, as long as the sale occurs outside of the school cafeteria. PTAs can hold a monthly fundraiser during the day with non-approved food items as long as the sale occurs outside the cafeteria and complies with standards set in the Chancellor's Regulations. Allowed beverages include water or low-calorie drinks without artificial flavors or colors with 10 calories per eight ounces for elementary and middle schools and 25 calories per eight ounces in high schools. Lowfat and nonfat milk are also allowed (New York Education Code section 915).

New York City has also implemented nutrition standards for all foods sold in vending machines in city facilities, including schools. Accordingly, New York City requires that all foods in vending machines meet the following per-package requirements: ≤ 200 calories, ≤ 7 g fat, ≤ 2 g saturated fat, ≤ 200 mg sodium, ≤ 10 g sugar, and ≥ 2 g fiber for grain or potato-based items (Kessler, Walcott, and Farley, 2013). In addition, snack vending

machines are not permitted in schools with students in pre-kindergarten through fifth grade. For students above grade five, competitive foods (from other than vending machines) must have no more than 35 percent of calories from fat (nuts and nut butters are exempt), less than 10 percent of calories from saturated fat, and 0.5 g or less of trans fat; no more than 35 percent of calories from sugar (fruit products with no added sugar are exempt), less than 200 total calories, may not exceed 200 mg sodium, and grain-based products must contain at least two grams of fiber per serving (New York City, 2010). 62

Texas State policy does not allow the sale of FMNV until after the end of the last scheduled class period in any grades. All schools must offer fruits and vegetables daily at all points of service and the fruits and vegetables must be fresh whenever possible. Frozen and canned fruits (in natural juice, water, or light syrup where possible) may also be served.

Individual food items may not contain more than 23 g of fat per serving, with the exception that once per week one food with 28 g (1 ounce) of fat per serving is allowed. Schools must eliminate deep-fat frying as a method of on-site preparation for foods served as part of reimbursable school meals, à la carte, snack lines, and competitive foods. Servings of potatoes may not exceed three ounces, may be offered no more than once per week, and students may only purchase one serving at a time. Baked potato products (wedges, slices, whole, new potatoes) that are produced from raw potatoes and have not

been pre-fried, flash-fried or par-fried in any way may be served without restriction.

All schools must offer two percent, lowfat, or nonfat milk at all points where milk is served. Elementary schools must serve only milk, unflavored water and 100 percent fruit and or vegetable juice. In secondary schools, beverages must contain no more than 30 g sugar per eight fluid ounces (Texas Administrative Code Title 4 sections 26.1–26.9).

While none of these States have policies that match all of the standards in the interim final rule, California, Illinois, and New York City meet several. California meets the interim standards for total, saturated, and trans fats and sugar. Illinois meets interim standards for calories, total and saturated fat, and sugar. New York City meets interim standards for total, saturated, and trans fats, sodium, and sugar. On the other end of the spectrum, Texas only provides a standard for total fat (though it is more restrictive than the interim final rule), and Florida does not set specific nutrient standards.

Table 2 provides a summary description of a number of existing sets of nutrition standards that are already in place. These include the two voluntary programs discussed previously: the *HealthierUS Schools Challenge* and the Alliance for a Healthier Generation's *Healthy Schools Program*. We have also outlined the standards in effect in four of the five States with the largest numbers of students enrolled in NSLP-participating schools.⁶³

TABLE 2—CURRENT COMPETITIVE FOOD STANDARDS 64

Nutrition standards (per serving)	Healthier U.S. schools* (gold of distinction level)	Alliance for a healthier genera- tion	California	Illinois **	New York City***	Texas
Snack calories	≤200	≤150 (elementary) ≤180 (middle) ≤200 (high)	≤175 (elementary) ≤250 (secondary)	≤200	≤200.	
Entrée calories	= NSLP serving size.		≤400 (secondary).			
Snack sodium Entrée sodium		≤230 mg			≤200 mg.	
Sugar	≤35% by weight	≤35% by weight	≤35% by weight	≤35% by weight	≤35% by calories.	
Total fat	≤35%	≤35%	≤35%	≤35%	≤35%	≤23 g
Saturated fat	<10%	<10%	<10%	<10%	<10%.	Ü
Trans fat	<0.5 g	0%	0%	0%	<0.5 g.	
	8 oz 1% or less	1% or less (must meet calorie standards above).	2% or less		1% or less	2% or less
Juice	6 oz 100% juice		50% juice	50% juice		100% juice

^{*}HUSSC has four levels—bronze, silver, gold, and gold of distinction. The nutrition standards for all levels are the same with the exception of sodium. For bronze through gold, the sodium standard is ≤ 480 mg for non-entrées and ≤ 600 mg for entrées.

^{**} Illinois standards apply only to grades 8 and below.

***New York City standards apply to 5th grade and above. Competitive foods are not allowed for younger school children in New York City.

There are City-wide standards for foods in vending machines that are not included.

 $^{^{\}rm 62}\,\rm These$ city-level food standards became effective in February of 2010 and are different than the State-level standards.

 $^{^{63}}$ Florida is not included in this summary table because it does not identify nutrient standards.

Instead, it bans competitive food sales on elementary school campuses during the school day and does not allow competitive foods from vending, school stores, and other food sales in secondary schools until an hour after the last lunch period.

 $^{^{64}}$ Many of the standards provide exemptions for nuts, nut butters, seeds, and fruits, etc. Those exemptions are not shown in the table.

II. Development of Federal Standards

Section 208 of the HHFKA requires USDA to establish science-based nutrition standards for all foods and beverages sold on school campuses during the school day, which are identified in this interim final rule. These standards must be consistent with the most recent DGA and authoritative scientific recommendations (Pub. L. 111–296). At the same time, in developing the rule FNS reviewed existing, currently implemented State and local school nutrition and voluntary standards to promote practicality and ease of implementation and considered comments from the public on the proposed rule.

The interim final rule improves the competitive food options available to students by replacing less healthy items with appropriately sized entrées, side dishes, and snacks that emphasize foods from the food groups that are the basis of a healthy diet, consistent with the DGA. In this way, the rule is designed to help ensure the success of school meal standards introduced in July 2012. However, the rule does not prescribe a specific set of competitive foods, nor does it establish targets for particular food groups. Instead, the rule puts students in a position to make their own healthy choices, and encourages the development of healthy habits for life.

The rule establishes guidelines for all foods sold outside of school meal programs on the school campus at any time during the school day. The school day for purposes of this rule extends from midnight to 30 minutes past the end of the official school day. Although some organizations and individuals who submitted comments on the proposed rule suggested we extend this definition of the school day to capture additional after school events, the interim final rule maintains the proposed rule definition. The school campus includes all areas under jurisdiction of the school that are accessible to students.

The preamble to the interim final rule describes how its provisions differ from those of the proposed rule. The preamble also describes the reason for changes relative to the proposed rule. What follows is a brief summary of the interim final rule provisions without further discussion of those changes.

- Competitive foods and beverages must meet the nutrition standards specified in the interim final rule. A special exemption is allowed for foods and beverages that do not meet competitive food standards for the purpose of conducting infrequent schoolsponsored fundraisers. Such exempt fundraisers must not take place more than the frequency specified by the State agency. Exempted fundraiser foods or beverages may not be sold in competition with school meals in the food serving area during the meal service.
- NSLP/SBP entrées sold à la carte are exempt from the rule's nutrient standards if sold on the day that they are offered as part of a reimbursable meal or the following school day.

- To be allowable, a competitive food must
 Meet all of the competitive food nutrient standards; and
- O Be a grain product that contains 50 percent or more whole grains by weight or have as the first ingredient a whole grain; or
- O Have as the first ingredient one of the non-grain major food groups: fruits, vegetables, dairy products, or protein foods (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.); or
- $^{\circ}$ Be a combination food that contains $^{1}\!/_{4}$ cup of fruit and/or vegetable; or
- For the period through June 30, 2016, contain 10 percent of the Daily Value of a nutrient of public health concern based on the most recent Dietary Guidelines for Americans (i.e., calcium, potassium, vitamin D or dietary fiber). Effective July 1, 2016, the criterion in this paragraph is obsolete and may not be used to qualify as a competitive food; and
- If water is the first ingredient, the second ingredient must be one of the food items above.
- Fresh, canned, and frozen fruits or vegetables with no added ingredients except water, or in the case of fruit, packed in 100 percent juice, extra light, or light syrup are exempt from the interim final rule's nutrient standards. Canned vegetables that contain a small amount of sugar for processing purposes are also exempt.
- Competitive foods must contain 35 percent or less of total calories from fat per item as packaged or served. Exemptions to the total fat standard are granted for reduced fat cheese and part-skim mozzarella cheese, nuts, seeds, nut or seed butters, products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat, and seafood with no added fat.
- Competitive foods must contain no more than 10 percent of total calories from saturated fat per item as packaged or served. Exemptions to the saturated fat standard are granted for reduced fat cheese and part skim mozzarella cheese, nuts, seeds, nut or seed butters, and products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat.
- Competitive foods must have 0 g of trans fat per portion as packaged.
- Sodium content in snacks is limited to 230 mg per item as packaged or served. In July 2016, the sodium standard will move to 200 mg per portion. Entrée items must have no more than 480 mg of sodium per item as packaged or served, unless they meet the exemption for NSLP/SBP entrée items.
- Total sugar must be no more than 35 percent of weight. Exemptions are provided for dried whole fruits or vegetables; dried whole fruit or vegetable pieces; dried dehydrated fruits or vegetables with no added nutritive sweeteners; and dried fruits with nutritive sweeteners that are required for processing and/or palatability purposes.
- Snack items and side dishes served à la carte must have no more than 200 calories per item as packaged or served, including accompaniments such as butter, cream cheese, salad dressing, etc. Entrée items sold à la carte must contain no more than 350 calories unless they meet the exemption for NSLP/SBP entrée items.

- Accompaniments must be included in the nutrient profile as a part of the item served (technical assistance will be provided).
- Elementary and middle school foods and beverages must be caffeine free with the exception of naturally occurring trace amounts.
- Allowable beverages for elementary students are limited to plain water (carbonated or uncarbonated), lowfat milk (unflavored) and nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and full strength fruit or vegetable juices and full strength fruit and vegetable juice diluted with water or carbonated water. All beverages must be no more than eight ounces with the exception of water, which is unlimited.
- Allowable beverages for middle school students are limited to plain water (carbonated or uncarbonated), lowfat milk (unflavored) and nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and full strength fruit or vegetable juice and full strength fruit or vegetable juice diluted with water or carbonated water. All beverages must be no more than 12 ounces, with the exception of water (which is unlimited).
- · Allowable beverages for high school students are limited to plain water (carbonated or uncarbonated), lowfat milk (unflavored) and nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and full strength fruit or vegetable juice and full strength fruit and vegetable juice diluted with water or carbonated water. Milk and milk equivalent alternatives and fruit or vegetable juice must be no more than 12 ounces. Calorie-free, flavored water, with or without carbonation, and other calorie free beverages that comply with the FDA requirement of less than five calories per 8 ounce serving (or less than or equal to 10 calories per 20 fluid ounces) in no more than 20 ounce servings. Beverages of up to 40 calories per eight fluid ounce (or 60 calories per 12 fluid ounce) in no more than 12 ounce servings are also allowed. There is no ounce restriction on water. Beverages containing caffeine are also permitted. Allowable beverages are available in the food service area and elsewhere without restriction

III. Response to Comments

The proposed rule generated more than 247,000 comments. While most of these were focused primarily on the rule itself, a significant portion touched on issues addressed in the Regulatory Impact Analysis. Many addressed the implications for SFA and other school group revenues, some focused on the effects on industry, and others discussed the impacts on students. Many commenters, regardless of their concern for the revenue impacts of the rule, expressed sentiments that were captured in recent research conducted by the University of Illinois Institute for Health Research and Policy. Specifically, SFA and industry officials as well as organizations devoted to

⁶⁴ Many of the standards provide exemptions for nuts, nut butters, seeds, and fruits, etc. Those exemptions are not shown in the table.

public health are interested in "doing the right thing" for student health (Bassler, et al., 2013, p. 16). At the same time, the impact on revenues is a concern for SFAs, other school groups, and businesses. Some of these comments also provided additional information for use in the analysis (see Section IV). What follows is a discussion of the major themes in comments that addressed costs, benefits, and other impacts on affected parties.

A. Concerns About Reduced SFA Revenue

The majority of the commenters that addressed SFA finances were concerned that the rule's competitive food standards will reduce school revenue. Generally, the commenters focused on popular existing products that do not meet the proposed standards and will no longer be allowed for sale in à la carte lines, vending machines, or school stores. Both SFA and industry officials expressed concern that the new standards will reduce variety and limit choices. These officials fear that students, especially older students, will respond by purchasing fewer competitive foods and beverages at school.

While representatives from some food industry groups indicated that relatively few of the snack foods now marketed to schools meet the proposed rule standards, other food industry commenters highlighted the work they have done in recent years, in cooperation with schools and non-school interest groups, to provide healthier school food alternatives. One major manufacturer noted that it has introduced more than 50 new products and is continuing to work on new product formulations and packaging. This manufacturer contributed to efforts by schools to earn HUSSC "Gold of Distinction" designations; schools that have earned Gold of Distinction status have competitive food standards that meet or exceed the standards in the interim final rule.

USDA acknowledges these efforts by schools and the food industry and recognizes the value in adopting existing or emerging standards to the extent that they facilitate the success of Federal regulations in making school food offerings more consistent with the DGA. To that end, USDA made several changes to the proposed rule which:

- Increase sodium limit on snacks and non-program side dishes from 200 mg per portion as packaged to 230 mg (through June 2016).
- Exempt nuts and nut butters from the rule's total and saturated fat standards,
- Exempt part skim mozzarella cheese from the total and saturated fat standards,
- Allow full strength juice with added water (or carbonated water), and
- Allow fruit packed in light syrup
 In addition, the interim final rule adopts
 the proposed rule's 35 percent by weight
 standard for sugar over the alternate 35
 percent of calories standard.

Each of these changes further aligns the interim final rule with existing NSLP requirements, voluntary HUSSC standards, Alliance for a Healthier Generation, and IOM guidelines. The effect of these changes is to increase the number of already available healthy products, many already for sale in

schools that meet interim regulations. This will tend to reduce the risk that SFAs will lose revenue due to the lack of readily available, market-tested products that meet interim final rule standards.⁶⁵

The proposed rule would have prohibited the sale of beverages other than milk, plain water, and 100 percent fruit and vegetable juice in the cafeteria during meal service periods. Many SFA professionals commented on this restriction, noting that allowing these beverages to be sold in other parts of the school campus would disadvantage SFAs relative to other school groups who raise revenue from the sale of these beverages at meal times. These commenters strongly supported removing the "time and place" restriction. Restricting the sale of these beverages in the meal service area, while allowing them elsewhere on campus, had the potential to discourage some high school students from even entering the cafeteria at lunch time and considering a reimbursable meal as an option. Other commenters expressed concern with the mixed message sent by the proposed rule which identifies a group of beverages as healthy options for older students, but prohibits students from purchasing them in the cafeteria at meal times. As a direct response to these comments, the interim final rule removes the proposed rule's time and place restriction.

Other commenters argued that the competitive food standards will reduce SFA revenues as students replace in-school purchases with food from home or food purchased off campus. USDA recognizes both of these risks to SFA revenue. In the case of revenue lost to off-campus purchases. however, the risk is limited to relatively few, mostly upper-grade schools. SNDA-III found that 11 percent of all schools and 25 percent of high schools in SY 2004-2005, had open campus policies (Gordon, et al., 2007, vol. 1, pp. 77-79, pp. 96-100). SNDA-IV, conducted in SY 2009–2010, found that only five percent of all schools and 19 percent of high schools had an open campus policy (Fox, et al., 2012; Volume 1, p. 3-29). To the extent that the changes mentioned above increase the variety of snacks and side dishes that meet Federal standards, schools should be able to retain more of their existing competitive food sales, and lose fewer sales to food brought from home or purchased off campus.

A third outcome mentioned by commenters is that some students will turn to reimbursable school meals. The American Public Health Association (APHA) made this point, citing a study that found that students in schools with beverage vending machines were 3.5 times more likely to buy lunch from vending machines than to purchase a school lunch. The APHA concluded that as a result, "fewer children consume meals at school that meet nutrition standards and have proven health benefits, and schools receive less cash and commodity support through the

federal school meal programs" (APHA comment, April 9, 2013, p. 4).

Peer-reviewed studies offer additional support for this conclusion. Researchers routinely find that competitive food revenue losses following adoption of State or local nutrition standards are at least partially offset by increases in reimbursable meal revenue (see, for example, Wharton, Long, and Schwartz, 2008; Guthrie, Newman, Ralston, Prell, and Ollinger, 2012; Healthy Eating Research and Bridging the Gap, 2012; Bassler, et al., 2013).

B. Relative Contribution of Competitive Food Revenue to SFA Finances

The impact analysis for the proposed rule noted that SFAs received 16 percent of their revenue from competitive food sales on average. This figure is from USDA's school year 2005-2006 School Lunch and Breakfast Cost Study—II (USDA 2008). Comments from representatives of school districts with relatively few free or reduced-price eligible students argued that competitive food revenue accounts for a far bigger share of such districts' food service budgets, and that many rely on competitive food revenue to break even. Other comments indicated that competitive food sales subsidize reimbursable meals in their districts. And several commenters indicated that implementation of the proposed rule would prompt their districts to leave the Federal school meal programs.

We recognize that 16 percent is the average share of SFA revenue from competitive foods and that there is considerable variation across school districts. Some schools, especially those that serve few free or reduced-price meals, may see substantial reductions in competitive food revenue after implementation of Federal standards, at least in the short term. But even districts in this category tend to generate a significant share of their revenue from reimbursable meals. For example, data from the SLBCS-II shows that SFAs whose share of revenue from competitive foods puts them in the top quartile of all districts generated nearly as much from USDA subsidies 66 as they did from competitive foods in SY 2005-2006. USDA subsidies combined with student payments for program meals generated 60 percent of total SFA revenue in those districts; revenue from competitive foods accounted for 34 percent of the total. Even in SFAs whose reliance on competitive food revenue places them at or above the 90th percentile, USDA subsidies and student payments for program meals accounted for more than half of SFA revenue, while competitive food sales contributed just over 40 percent.67

These figures are not meant to understate the potential revenue challenge of

⁶⁵ The Alliance for a Healthier Generation maintains a list of products that meet Alliance guidelines as a resource to schools. The National Automatic Merchandising Association (NAMA) maintains its own list of products that meet Alliance standards as a resource for vending machine operators and other NAMA members.

⁶⁶ Reimbursement for program meals and the value of USDA Food (commodity) assistance accounted for 30 percent of these SFAs' budgets. Student payments for reimbursable meals added another 31 percent. Revenue from competitive foods contributed 34 percent.

⁶⁷ The figures for SFAs at or above the 90th percentile are based on a small sample and are subject to greater error than the mean values reported for all SFAs in the SLBCS–II.

implementing nutrition standards for school foods for SFAs that rely heavily on competitive food revenue. But they do indicate that Federal subsidies and student payments for program meals are at least as important as competitive food sales in the great majority of SFAs.⁶⁸ FNS is committed to working with the States to facilitate successful implementation of competitive food reform, ensuring that students have access to the healthiest food choices and guaranteeing that the revenue generated from reimbursable meals continues to make an important contribution to the finances of all SFAs.

Elsewhere in this subsection we describe steps taken by FNS, in response to public comments, that better align the rule with standards already embraced by schools through their own competitive food policies, and by the industry groups that make and market those foods to schools. But it is also important to recognize, as a number of commenters observed, that the certainty of national standards has its own independent value. Uniform and definite standards are likely to encourage industry to invest additional resources in new product development.

The school market is important to industry as well as to school foodservice administrators, especially in districts that generate the most revenue from competitive food sales. In those districts, local vendors, distributors, and foodservice management companies will continue to compete for school contracts after the rule's implementation, and can be expected to work creatively to maintain student sales and the value of their own investments. These firms' success will depend in large part on the availability of appealing new products. Their success will also be aided by the efforts of industry associations and public interest organizations that have invested in the development of toolkits and other resources to assist local businesses and their school customers. The rule takes effect 12 months after publication, which gives industry, interest groups, and schools added time to prepare for implementation. In addition, USDA's decision to issue an interim rather than a final rule will provide another opportunity for review to ensure the rule's success.

C. Impacts on School Food Vendors and Manufacturers

Commenters representing various sectors of the food industry expressed concern that the proposed rule would reduce their sales to

schools. Much of this concern was expressed by or on behalf of small vendors, distributors, and manufacturers. The National Automatic Merchandising Association (NAMA) noted that some small vending machine operators generate most or all of their revenue from sales to schools. NAMA expressed support for the goals behind USDA's proposed rule, but urged USDA to modify its proposal by adopting standards already embraced by the vending machine industry through one of its voluntary healthy snack programs. NAMA indicated that adoption of competitive food standards aligned with the industry's "Fit Pick" program would reduce the impact on small businesses "on both the revenue and expense sides." NAMA's "Fit Pick" standards for calories from fat, calories from saturated fat, percent of sugar by weight, total calories per serving, and sodium per serving match the guidelines developed by the Alliance for a Healthier Generation. NAMA urged USDA to adopt the Alliance guidelines for those nutrients, guidelines that both "the industry and schools are familiar with," in order to create "a simpler and more costeffective implementation process." USDA recognizes that substantive competitive food standards present the vending industry with new challenges. USDA also recognizes that small vending machine operators may have fewer resources available than large firms to manage the transition to the new standards. In response to concerns expressed by several of these small businesses, by industry groups such as NAMA, and by school foodservice administrators, USDA modified its proposed rule standards on sugar and sodium per serving to match the Alliance guidelines.69 Additional product exemptions from the total fat and saturated fat requirements also move the rule closer to the Alliance guidelines.⁷⁰ These changes are intended to reinforce the investment already made by the vending industry, and to help guarantee the industry's successful contribution to a healthier competitive school food environment.

Other food industry commenters, primarily food producers and trade associations, urged delay in the implementation of new standards to allow time for costly product development and reformulation. Some commenters also pointed to the need to allow time for student acceptance of reformulated products, particularly those with reduced sodium levels. Commenters from industry associations recommended delays of 18-36 months-between issuance of final standards and implementation. In response, we note that the standards contained in the interim final rule will take effect in July 2014, a full year after publication. USDA expects that the vear between issuance of final standards and implementation will lessen the risk of revenue loss by industry and SFAs due to limited availability or variety of appealing foods that meet the new standards. At the

same time, USDA's decision to more closely align some of the rule's nutrient standards with Alliance guidelines ensures that a long list of familiar products already marketed to schools will be available for sale on implementation. Finally, comments from some producer groups recognize the rule's emphasis on fruits, vegetables, whole grains, and lowfat dairy as an opportunity to expand their presence in schools with their existing product lines. This further reduces the risk that schools will be unable to offer a sufficient variety of products that meet the interim final rule requirements.

D. Financial Impacts on Non-SFA School Groups

Other school groups, i.e., school bands, parent teacher groups, and school clubs, earn revenue through the sale of competitive foods in vending machines, school stores, and fundraisers. Some commenters expressed concern that those organizations rely heavily on the sale of foods that do not meet the proposed requirements. Other commenters wrote that the rule would eliminate funding for student organizations. Other commenters noted the importance of lunchtime food sales outside the cafeteria by student groups. In all of these cases, the commenters were concerned with the continued viability of these organizations without revenues from competitive foods.

The National Confectioner's Association pointed out that their products are often sold in fundraisers conducted outside of the school day and off school grounds. School group revenues from those sales are not impacted by the rule, as it places no restrictions on sales that occur away from school or more than 30 minutes after the school day. Sales through vending machines and school stores, or non-exempt fundraisers held on the school campus are, however, required to meet the same standards as other competitive foods.

Some commenters suggested that food sales may not be the best option for raising funds. A comment from the State Director of Child Nutrition Programs for North Carolina pointed out that while school groups rely on fundraisers for important revenue, there are many non-food alternatives that can generate revenue without incurring the potential risk of "food-borne illness by well-intended groups that may not be sufficiently trained to prepare and serve potentially hazardous foods" (Harvey, 2013, p. 2). The National PTA, Nemours, a children's health organization, and others also discussed alternative ways for school groups to generate revenue, e.g., walk-a-thons; no-bake bake sales; selling school logo items such as clothing, pens, pencils, and book covers; custom-labeled bottles of water; and book

Another line of comments expressed support for the proposed rule's general requirement that non-exempt fundraisers comply with the same standards that apply to SFAs. These commenters are concerned that even a limited exemption for occasional fundraisers establishes a loophole that threatens the rule's public health goals and student participation in the reimbursable meals program. Some suggested that exempt

⁶⁸ The percentages cited above are based on data collected in SY 2005-2006, several years prior to the SY 2011-2012 implementation of competitive food pricing reforms. At that time, SFA revenues from reimbursable meals tended to subsidize the prices charged for a la carte and other nonreimbursable foods (USDA 2008, Exhibits 7–2 and 7-9). Eliminating the price advantage of competitive foods will, all else equal, increase the appeal of reimbursable meals relative to competitive foods. This rule will further level the playing field by eliminating snack foods of poor nutritional quality as an alternative to program meals. Both of these reforms are expected to increase the contribution of reimbursable meal revenues to SFA budgets.

 $^{^{69}\,} The$ interim final rule's 230 mg sodium limit per portion, as packaged, will drop to 200 mg on July 1, 2016.

⁷⁰The Alliance's per-serving calorie guidelines for elementary and middle schools are more restrictive than the calorie standards in the interim final rule. Products that meet the Alliance calorie guidelines also meet the interim final rule

fundraisers should be allowed only outside school hours.

The proposed rule offered two options for infrequent school-sponsored fundraisers that do not have to meet the rule's competitive food standards. The first would allow State agencies to set limits on the number of exempt fundraisers allowed during the year. The second option would require USDA approval of those State agency plans. USDA adopted the less restrictive option, allowing States to set limits on frequency without USDA review. This option reduces the estimated administrative burden of the rule. It also allows individual States, not USDA, to determine how best to balance the interests of SFA officials and child nutrition advocates, who tend to favor more restrictive rules for exempt fundraisers, against the interests of student organizations and industry groups that depend on the revenue from those sales.

E. Effects on School Foodservice Administration

School foodservice directors, foodservice staff, State officials, and foodservice management companies expressed concern about the administrative burden that the proposed rule would place on SFAs. Some commenters were particularly concerned that implementation of competitive food standards would occur before schools have fully adjusted to the administrative challenges of the new lunch and breakfast meal patterns. Others pointed to the burden of identifying whether foods meet the rule standards and noted that that burden would impose ongoing costs as new products are introduced and as kitchen staff develop new recipes. Recordkeeping and monitoring of compliance by non-SFA groups engaged in fundraising also raised concern among foodservice administrators over their need to train and potentially oversee non-SFA staff. USDA acknowledges that the rule imposes new administrative costs on SFA and LEA staff. However, the administrative burden of establishing and documenting compliance with the new standards is necessary to ensure that students realize the benefits of a healthier school food environment. In addition, some of the comments indicated a preference for additional time to implement the standards. USDA does commit to providing the necessary guidance to SFAs and LEAs to clarify their respective documentation and recordkeeping responsibilities.

F. Health Benefits

Some commenters questioned the potential health benefits of the proposed rule, suggesting that school children will not buy healthy snacks but will instead bring food from home or go off campus to buy the foods they want. While some students may refuse to buy healthy snacks that comply with Federal standards, others may respond positively to newly available healthy snacks. The immediate goals of the interim final rule are to encourage healthy eating habits by students who might respond to such encouragement, make healthy snacks an option for students who desire it, reinforce parents' efforts to encourage healthy eating,

and support the investment that schools are making in a healthier meals program. The longer-term benefits of achieving these goals are "improved dietary intake[s] and the long-term health of millions of children across the country" (Lavizzo-Mourey, 2013, p. 4).

The National Education Association Health Information Network summed up the need for standards, writing, "[g]iven the high childhood obesity rates in the United States and the important role foods and beverages available for sale in school play in children's diet, it is imperative that competitive foods are held to high standards, as are school meals" (Howley, 2013, p. 2). The American Heart Association discussed hypertension and the benefits of restricting sodium in diets and noted that children are at risk for developing "heart disease and elevated blood pressure at an earlier age now because an estimated 97% of them currently consume too much salt" (Arnett, 2013).

Some of the students who submitted comments expressed interest in making healthy food choices a part of their lifestyles, and that requires healthy options in school. The rule's competitive food standards will contribute to a school environment that supports these students' efforts to eat healthier. Other commenters criticized USDA for substituting government rules for lessons that ought to be learned at home. A number of parents expressed approval that the healthy environments they were creating in their homes, especially with regard to healthy eating behaviors, would be "supported and encouraged" at school.

Although some commenters expressed skepticism that the rule could deliver on its promised health benefits, and others criticized the rule as too intrusive on student and school decision-making, few commenters, if any, took issue with the goal of improving the health of American schoolchildren. USDA modified the proposed rule in response to comments that expressed concerns about cost, revenue impacts, and administrative practicality, in order to facilitate successful implementation of the rule and realize its full potential health benefits.

IV. Cost-Benefit Analysis

The rule requires schools to improve the nutritional quality of foods offered for sale to students outside of the Federal school lunch and school breakfast programs.

The key benefit sought through this interim final rule is to improve the food choices that children make during the school day. By helping to ensure that *all* foods sold at school—those provided as part of a school meal or sold in competition with such meals—are aligned with the latest dietary recommendations, the rule should also improve the mix of foods that students purchase and consume at school.

Although the complexity of factors that influence overall food consumption and obesity prevent us from defining a level of dietary change or disease or cost reduction that is attributable to the rule, there is evidence that standards like those in the rule will positively influence—and perhaps directly improve—food choices and consumption patterns that contribute to

students' long-term health and well-being, and reduce their risk for obesity.

Any rule-induced benefit of healthier eating by school children would be accompanied by costs, at least in the short term. Healthier food may be more expensive than unhealthy food—either in raw materials, preparation, or both—and this greater expense would be distributed among students, schools, and the food industry. Moreover, students who switch to lesspreferred foods and beverages could experience a utility loss. If students do not switch to healthier foods, they may incur travel or other costs related to obtaining their preferred choices from a location less convenient than school. Regardless of student response, the proposed rule would also impose administrative costs on schools and their food authorities.

Additional effects of the rule may include transfers of food sales revenue to or from school food authorities. Such effects would be correlated with health outcomes.

A. School Revenue Effects

Changing the mix of competitive foods offered by schools will likely change student expenditures on those foods, with potential implications for school food service revenues. It may also change the extent to which students purchase reimbursable school meals, resulting in changes in amounts transferred from USDA to schools (via SFAs) and from students to SFAs for reduced price and paid meals.

This analysis examines a range of possible responses of students and schools, and resulting changes in school revenue, based on the experience of States, school districts, and schools with similar standards. The analysis incorporates research findings published since publication of the proposed rule and it reflects input provided by school foodservice administrators and other interested parties who submitted comments. While evidence on the overall impact of competitive food standards on school revenues is mixed, a number of schools implementing such standards have reported little change, and some have seen increases in revenues.71 Our analysis illustrates a number of different possible revenue impacts that could result, all of which are relatively small (+0.5 percent to -1.3 percent).⁷² By way of comparison, USDA has previously estimated that the combined effect of the other school food service revenue provisions included in HHFKA are expected to increase overall school food revenue by roughly six percent.73 The combined estimated effect of

⁷¹ Throughout this analysis we rely on data collected by researchers from a number of studies. In most cases, financial impacts are described in terms of "revenues" gained or lost; those studies did not collect the data necessary to compare changes in revenues from the sale of competitive foods compared to changes in costs of acquiring those foods for sale.

⁷² These figures are intended to illustrate possible national level net effects. As noted by interested parties who submitted comments on the proposed rule, relatively modest national net impacts do not preclude greater positive or negative effects in individual SFAs.

⁷³ http://www.fns.usda.gov/cnd/Governance/regulations/2011-06-17.pdf.

these rules is thus a net increase in SFA revenue.

1. Existing Research on Revenue Effects

Students who currently purchase competitive foods will adjust their behaviors in a number of ways in response to Federal standards. Some students will accept the new competitive food offerings. Some will not and will turn instead to the Federal reimbursable meals programs. Other students will replace school food purchases with food from home. And, where the option exists, students may spend their competitive food dollars off campus. Student responses, in turn, will depend on the ability of schools, food manufacturers, and the foodservice industry to offer appealing choices.

It is instructive to begin with a review of studies and evaluations of existing State and local standards. While none of the existing standards are fully aligned with the provisions of the interim final rule, they offer the best available insight into the likely consequences of the rule on school revenues and costs.

A number of studies have looked at the effects of implementation of nutrition standards on school food service revenues in a handful of States:

- A series of studies examined California's Linking Education, Activity and Food (LEAF) pilot program (Woodward-Lopez et al 2005a; Vargas et al 2005). Among 16 high schools that received LEAF grants to implement competitive food standards adopted by California, 13 reported increases in total food service revenues, usually through increased reimbursable meal sales that offset a concurrent decrease in à la carte sales. Net income increased in three of the five sites that provided data on expenditures, and fell at the other two sites. It is not clear how much of the observed effects are solely due to the changes in competitive food standards because the pilot schools received grants ranging from about \$200,000 to \$740,000 for a 21 month implementation period 74 (Center for Weight and Health, 2005).
- A related assessment of the impact of California's legislated nutrition standards reports that 10 of 11 schools that reported financial data experienced increases of more than five percent in total food and beverage revenue after implementation (Woodward-Lopez et al. 2010). Among the five schools that provided data for non food service sales of competitive foods and beverages (primarily from vending machines), four experienced a decrease in revenue of more than five percent and one experienced a modest increase.
- An estimated 80 percent of surveyed principals in West Virginia reported little or no change in revenues after implementation of a state policy requiring schools to offer healthier beverages and restrict low nutrient dense foods and soda (West Virginia University, 2009).
- Pilot projects in Connecticut and Arizona report, in some cases, increased food sales, increased meal participation, and no significant change or loss in food service

revenue (Long, Henderson, and Schwartz, 2010; Arizona Healthy School Model Policy Implementation Pilot Study, 2005).

- Green Bay, Wisconsin officials reported that "[w]hen low-nutrient foods were removed from à la carte lines and replaced with healthful alternatives, daily à la carte revenue decreased by an average of 18 percent. However, the decreased emphasis on à la carte sales prompted a 15 percent increase in school meal participation! The revenue generated by the additional school meals more than doubled the lost à la carte revenue. Therefore, bottom-line dollars for school foodservice have increased overall" (USDA, et al., 2005, p. 98).
- South Carolina's Richland One District "reported losing approximately \$300,000 in annual à la carte revenue after implementing [competitive food] changes, [but] school lunch participation and subsequent federal reimbursements increased by approximately \$400,000 in the same year" (GAO 2005, p. 43).
- Wharton, Long, and Schwartz (2008) reviewed "the few available" revenue-related articles and studies focused on healthier competitive food standards and determined that the ". . . data suggest that most schools do not experience any overall losses in revenue" after implementing healthier standards (p. 249).
- Most studies have assessed the impact of nutrition policies in the immediate post-implementation period. A recent effort examined longer-term impacts. Comparing revenue data over three years from 42 middle schools in five States, half of which adopted healthier competitive food standards, Treviño et al. (2012) found no difference and concluded that providing healthier food options is affordable and does not compromise school food service finances.

The Pew Health Group addressed the issue of revenue changes due to healthier competitive foods in its recent Health Impact Assessment (HIA). After analyzing the relationship between State policies and school-related finances, Pew researchers concluded that:

When schools and districts adopted strong nutrition standards for snack and à la carte foods and beverages, they generally did not experience a decrease in revenue overall. In most instances, school food service revenues increased due to higher participation in school meal programs. However, in some cases, school districts experienced initial declines in revenue when strengthening nutrition standards. The HIA concluded that, over time, the negative impact on revenue could be minimized—and in some cases reversed—by implementing a range of strategies (Pew, RWJF, 2012, p. 4).

Similarly, after reviewing the evidence, the National Center for Chronic Disease Prevention and Health Promotion at CDC concluded that "[w]hile some schools report an initial decrease in revenue after implementing nutrition standards, a growing body of evidence suggest that schools can have strong nutrition standards and maintain financial stability" (CDC, Implementing Strong Nutrition Standards for Schools: Financial Implications, p. 2).

A 2013 report by the Illinois Public Health Institute studied the experience of eight U.S.

school districts that implemented "strong" competitive food standards without negative financial consequences.75 The standards adopted by these districts, whether on their own initiative or in response to State mandates, are comparable to USDA's interim final rule standards. The study's purpose was to learn from districts that successfully implemented strong standards without financial loss, not to determine the success rate among all districts that implemented similar standards. Nevertheless, among 27 districts that imposed strong competitive food standards (from a national sample of 622 districts selected for a broader study of school wellness policies) food service directors in 12 of those districts perceived no negative financial impact. Although competitive food profits generally declined in these districts, overall food service profits increased or remained stable, due largely to increased participation in the school meal programs. Only three of the 27 districts reported losing money.⁷⁶

While the existing research suggests that the national impact of competitive food standards is likely to be relatively modest, there is substantial variation in the experience and results to date. The information available indicates that many schools have successfully introduced competitive food reforms with little or no loss of revenue. In some of those schools, losses from reduced sales of competitive foods were fully offset by increases in reimbursable meal revenue. In other schools, students responded favorably to the healthier options and competitive food revenue increased or remained at previous levels.

But not all schools that adopted or piloted competitive food standards fared as well. A number of SFA and school officials who submitted comments on the proposed rule indicated that they suffered significant reductions in competitive food revenue following adoption of local or State imposed standards. Others noted that their schools depend on competitive food revenue to balance their foodservice budgets, and that even a moderate decrease in competitive food revenue will be difficult to absorb. Some officials, particularly those with relatively few free or reduced-price eligible students, noted that USDA's analysis of possible revenue effects from the proposed rule did not adequately address their situation. These

⁷⁴Receipt of grant money may have contributed to these schools' successful implementation of competitive food reforms.

 $^{^{75}\,\}mathrm{The}$ authors selected districts that both implemented and enforced clear standards for particular foods and/or nutrients. "To identify possible districts, 'strength' scores were computed for the competitive food provisions included in each district's policy for each grade level of applicability-middle and high school. Scores represented strong standards for vending machines AND à la carte lines AND school stores in terms of specific and required limits on fats and sugars in foods, bans on regular soda, other sugar-sweetened beverages (SSBs) (other than sports drinks), and 2% or whole fat milk. All school districts that allowed the sale of any candy, energy drinks, soda, or other SSBs (not including sports drinks) were categorically excluded from the selection process." (Bassler, et al., 2013, p. 11)

⁷⁶ One district reported no competitive food sales at all. The remaining 11 districts either failed to return the researchers' screening questionnaire, or chose not to participate in the study.

officials indicated that even if the overall average impact at the national level is modest, some SFAs will experience far bigger revenue losses.

The updated impact analysis presented below attempts to capture wider variation in potential SFA revenue outcomes than the proposed rule analysis, and give greater attention to the downside risk of significant revenue losses. At the same time, the analysis incorporates data that has been made available since preparation of the proposed rule analysis that offers additional support for the conclusion that revenue effects are likely to be modest over the long term in most SFAs.

2. Estimating School Revenue Changes

To assess the impacts of the interim final rule on school revenue, we reviewed the evidence summarized above, identified three scenarios for student behavior, and estimated the revenue changes that could result. Each of these scenarios is meant to illustrate one reasonable response to competitive food nutrition standards. The actual response of students, and the impact on SFAs, will likely include some mix of all three. In addition, the experience of States and SFAs that have already imposed their own competitive food standards makes clear that each of these scenarios can result in revenue impacts of varying size.

- Scenario 1: Relatively high student acceptance of new competitive foods, thereby allowing schools to maintain existing competitive food sales.
- Scenario 2: Lower competitive food sales with fully offsetting increases in school meal participation.
- Scenario 3: Lower competitive food sales with partially offsetting increases in school meal participation.

We assume that the percentage change in NSLP participation ($\Delta \hat{L}$) following implementation of competitive food standards will be directly related to the percent change in competitive food purchases (ΔCF), since a portion of competitive food purchases are for lunch consumption. We assume that the change in competitive food revenue occurs largely from students whose response to new standards takes the form of increased or decreased demand, and that all other students maintain previous levels of purchasing.⁷⁷ Students who do not buy the new options are assumed to behave as if competitive foods were not available, and we model their behavior using the effect of competitive foods availability on NSLP participation as measured by Gordon, et al. (2007). Gordon, et al. (SNDA III, vol. 2, p. 117) estimate that the NSLP participation rate was 4.6 percentage points higher in schools that did not offer competitive foods during mealtimes compared to those that did. We scale this result by the percentage change in competitive food sales potentially brought about by the interim final rule (ΔCF) and, in order to express ΔL as a percentage (rather than percentage point) change, divide by the

baseline NSLP participation rate, estimated in the SNDA–III to be 61.7 percent.⁷⁸ $\Delta L = \Delta CF \times (-4.6/61.7)$.

The value of comparing changes in competitive food revenue to changes in NSLP revenue is limited to the extent that costs per dollar of gross revenue from the two sources differ. Although we do not have the data necessary to estimate profit margins on competitive foods, we expect that margins on NSLP meals and à la carte items, the most important subgroup of competitive foods, are similar.

Scenario 1: High Student Acceptance of New Competitive Foods

For this scenario, we look to the experience of schools and school districts that have maintained or increased competitive food sales after introduction of healthier standards. With relatively modest efforts to engage students in developing standards and to promote healthier choices, these schools have demonstrated that student demand for healthier competitive foods can be maintained or increased.

Most competitive food revenue is generated by sales of à la carte foods. If competitive food revenue continues to be driven largely by à la carte sales, and the transition to healthier school meals (and, by extension, healthier à la carte items) is well under way prior to the implementation of competitive food standards, then the incremental effect of those standards on competitive food revenue in the short term could be relatively small.

Under this scenario, we assume a modest five percent increase (beginning in SY 2016–2017 following no change in the first full school year after implementation) in competitive food revenue after the initial transition to healthier competitive foods. We choose five percent to match the minimum competitive food revenue increase recorded by three of ten schools in the California Healthy Eating Active Communities study (Woodward-Lopez, et al., 2010).

Given that many schools have already adopted competitive food standards, we then adjust our five percent assumption to account for the effects already experienced by those schools. While we cannot precisely quantify these costs and revenue impacts, our review of the standards in place in the four largest States and the nation's largest school district provides a basis for adjusting the assumption: We reduce all of our estimates by 20 percent. After the 20 percent adjustment, we estimate an increase in competitive food revenues of four percent ($\Delta CF = 4.0$).

These case studies confirm the general NSLP participation effect described in

SNDA–III, suggesting that an increase in competitive food purchases after implementation of the proposed rule may come at the expense of NSLP participation. Because this scenario assumes a small increase in competitive food revenues, we estimate that SFAs will experience a slight (0.3 percent) decrease in school meal participation ($\Delta L = -0.3$).

We attribute 36 percent of the 0.3 percent change in the lunch participation to students who are eligible for free and reduced-price meals, and the other 64 percent to students who pay full price,79 based on unpublished results showing that 64 percent of competitive food purchases were made by students not eligible for free or reduced-price meals.80 Our analysis uses the relative proportions of free and reduced-price lunches projected by USDA for the FY 2014 President's Budget to divide the 36 percent into separate free and reduced price components. For FY 2012, the observed proportions were 60 percent and 9 percent for free and reduced price lunches, and 32 percent for paid.

Our estimated reduction in SFA revenue from free lunches is equal to the projected Federal subsidy for free lunches multiplied by our estimated reduction in free lunches served. The projected Federal per-meal subsidy is from the President's Budget. The reduction in free lunches is equal to 0.3 percent of the Budget's baseline number of all reimbursable lunches multiplied by our estimated share of free lunches (60 percent of 36 percent, from above).

We use similar logic to estimate the reduction in SFA revenue from reduced-price and paid lunches, except that we also include the lost value of student payments for those meals. For reduced-price lunches we use the 40 cent maximum charge allowed by the NSLA.⁸¹ For paid lunches we use the same projected average price per meal developed for the regulatory impact analysis for the rule to implement Sections 205 and 206 of HHFKA.⁸²

Federal reimbursements are necessarily lower than SFA revenues for the same meals since the SFA revenue includes student payments for meals served at reduced or full price. Our estimated reduction in Federal costs is the product of the estimated decrease in NSLP meals multiplied by projections of the value of the reimbursements for free, reduced price, and paid meals.⁸³ The net impact in schools whose experiences align with this estimate is an overall school food revenue (SFA and other school group revenue) increase of roughly 0.5 percent. Our estimated reduction in Federal payments is

⁷⁷ This is in contrast to the possibility that all students reduce their purchases by the same percentage.

⁷⁸ This relationship assumes that (1) the increase in NSLP participation must come from nonparticipants who bought competitive foods as part of lunch, (2) that the decrease in competitive food purchases occurs as a reduction in the number of students purchasing competitive foods while students still purchasing competitive foods do not change their behavior, and (3) the proportion of students who switch from purchasing competitive foods as part of lunch to NSLP participation is the same as the additional proportion of students who participate in NSLP in schools where competitive foods are not available.

⁷⁹ Paid, reduced price, and free NSLP meals each have some level of government subsidy, therefore even lunches that are "full price" are subsidized.

⁸⁰ Unpublished ERS analysis of SNDA-III data.

^{81 42} USC 1758(b)(9)(B).

 $^{^{82}\,\}mathrm{See}$ rule and RIA in Federal Register Vol. 76, No. 117, pp. 35301–35318. For SY 2014–2015 we use an average paid meal price of \$2.29.

⁸³ FNS projections of Federal reimbursements for free, reduced price, and paid lunches are those used to prepare the FY 2014 President's Budget, adjusted for changes for Sections 205 and 206 of HHFKA.

equal to roughly 0.2 percent of overall NSLP reimbursements.

Scenario 2: Lower Competitive Food Sales With Fully Offsetting Increases in School Meal Participation

School districts that have implemented strong competitive food standards without lasting adverse financial effects commonly report that increases in reimbursable meal participation and revenue offset reductions in revenue from competitive food sales. A 2013 compilation of case studies by the Illinois Public Health Institute reported offsetting reimbursable meal revenue in large and small districts, both urban and rural, in all regions of the country (Bassler, et al., 2013).84

"In spite of a perceived decline in competitive food profits, none of the food service directors [interviewed for the study] reported significant on-going financial concerns. In fact, when considering all food service accounts, as opposed to just competitive food revenues, profits either increased or stayed the same after implementation of stronger nutrition standards, with increases to food services accounts largely attributed to increased participation in the school meal program" (Bassler, et al., 2013, p. 18).

As discussed in Section IV.A. above, these districts were selected for study by the Illinois researchers precisely because they were able to implement strong standards without a negative impact on overall food service profits. The study was not designed to determine how common this experience is, although only a minority of districts that implemented strong standards reported a reduction in overall food service profits. One of the goals of the case studies was to identify the policies and practices that contributed to the districts' success. At least one food service industry representative commented that USDA's proposed rule analysis was based on the experience of schools whose voluntary standards may not have been comparable to the proposed rule. The Illinois Public Health Institute case studies suggest that implementation of strong competitive food standards—standards comparable to those contained in the interim final ruleneed not necessarily strain food service budgets.

Although overall food service profits remained stable, profits from competitive foods decreased on implementation of strong standards in all but one of the eight case study districts. Food service directors in five of the seven districts that reported decreases indicated that the initial drop in competitive food profits ranged from five to 20 percent. Two reported initial decreases in profits greater than 20 percent. In all but one district, initial decreases in competitive food

profits were followed by substantial though not complete recovery within a couple of years. For purposes of this scenario, we model a sustained 10 percent decrease in competitive food revenue for both SFAs and non-SFA school groups.

To adjust for States and school districts that have already adopted competitive food standards, we assume that 20 percent of the revenue impact has already been realized nationwide. That reduces the estimated 10 percent competitive food revenue loss to 8 percent ($\Delta CF = -8$).

As students reduce their competitive food consumption in search of alternatives, many turn to reimbursable meals. After implementation of changes to competitive food and school meal standards, many of the items offered à la carte (the largest component of SFA competitive food sales) will be identical to components offered in reimbursable meals. In this scenario, those most likely to turn away from competitive foods are also those who recognize that they may be able to get the same foods at lower price in an NSLP meal.

It is possible that students' economic circumstances will play a role in their decision to replace competitive foods with reimbursable meals. Once reimbursable meals and competitive foods are subject to comparable nutrition standards, and the difference between competitive foods and a reimbursable meal is reduced largely to price, increased participation in the reimbursable meals program may be particularly attractive to students who qualify for free or reduced-price benefits.

Districts with relatively few low-income students may have to rely more heavily on marketing and nutrition education to maintain or increase participation in the meal programs. In at least one of the higher-income districts in the Bassler study, these strategies were coupled with modest increases in full-price lunches.

For SFAs with a mix of competitive food and program revenue equal to the U.S. average, an eight percent reduction in competitive food revenue would be fully offset with a three percent increase in reimbursable meal revenue.

For other school groups, net revenues are driven by a different set of rules and opportunities. School group sales that are held off campus or after school hours are not subject to the interim final rule standards. In addition, the interim final rule provides for infrequent in-school fundraisers that permit the sale of foods that would not otherwise meet the new standards. And unlike SFAs, school groups need not depend on food sales to raise revenue; they may turn instead to non-food sales to compensate for reduced sales from competitive foods. 85 For these reasons, it may be reasonable to assume a smaller net reduction in overall revenue for school groups than for SFAs. At the same time, some groups may have little experience with non-food sales, and may find it more challenging than SFAs to fully offset their loss of competitive food revenue, at least in

the short term. For this scenario and for Scenario 3, then, we assume a net reduction of five percent in school group revenue.

Overall, the net impact on overall school food revenue (SFA and other school group revenue) under Scenario 2 is estimated at -0.04 percent. The estimated increase in Federal payments is roughly 2 percent of NSLP reimbursements.

Scenario 3: Lower Competitive Food Sales With Partially Offsetting Increases in School Meal Participation

The Illinois Public Health Institute case studies confirm what earlier researchers identified as strategies for successful implementation of competitive food reform (Bassler, et al., 2013). Successful districts commonly adopt a comprehensive strategy to maintain overall food service revenue, a strategy that focuses on reimbursable meals as well as competitive foods, rather than an approach designed to maintain each component's pre-reform share of revenue.

Like earlier studies, the Illinois study found that student engagement, involvement of cafeteria staff, cooperation from vendors, and leadership from food service directors, school boards, and district administrators were all important contributors to success. Specific strategies include ensuring a variety of healthy food options for students, introducing new foods gradually, marketing and packaging, nutrition education, appropriate pricing of competitive foods and reimbursable meals, and encouraging selection of healthy foods with small changes in cafeteria layout or displays. 86

These strategies, in various combinations, have proven successful in districts regardless of size, urban or rural status, and the percent of student enrollment certified for free and reduced-price meals. Because the same strategies will be available to districts whose implementation of the interim final rule will be their first step toward competitive food reform, we expect that most will implement the new standards without significant financial impact.

Nevertheless, some food service managers and at least one management company who submitted comments on the proposed rule analysis indicated that their own adoption of competitive food reforms coincided with decreases in competitive food sales without offsetting increases in reimbursable meal revenue. At least one commenter even pointed to decreases in reimbursable meal revenue, noting that some districts implemented competitive food reforms at the same time that they were adopting new NSLP meal patterns in SY 2012–2013.

There are reasons to expect that the experience of these districts is not a good predictor of how other districts will fare when they implement the interim final rule standards. One key difference is that the interim final rule will take effect in July 2014, two years after the effective date of revised NSLP meal patterns. This implementation lag means that students will have had time to adjust to a variety of healthier school foods before the introduction of competitive food standards.

⁸⁴ Unlike other studies cited in this analysis, the Bassler study focused on profits, rather than revenues. Citing USDA and other research, Bassler and colleagues point out that changes in net profits from reimbursable meals and competitive food sales are more meaningful than changes in net revenue, given that excess profits from reimbursable meals sometimes subsidize competitive food losses when costs are properly allocated across reimbursable meal and competitive food accounts, p. 95.

⁸⁵ Bassler, et al., 2013, confirms the viability of non-food sales as an alternate revenue source. See, for example, pp. 19 and 62.

⁸⁶ See also: USDA, et al., 2005; Pew, RWJF, 2012; Just and Wansink, 2009.

USDA believes that given the July 2014 implementation date, school districts and the food and food service industries will have time to continue developing a variety of healthy competitive food options that meet the standards. Both incremental change in the school food environment and a variety of healthy options are cited as factors in successful competitive food policy implementation.

Éven though we expect that implementing interim final rule standards in 2014 will prove less challenging than had we adopted comprehensive school meal and competitive food reforms in SY 2012–2013, we recognize that some districts will see a reduction in competitive food revenue that is not fully offset by increases in revenue from reimbursable meals.

As suggested by some commenters, this risk is perhaps greatest for districts with relatively few students certified for free or reduced-price meals. Two of the districts studied by the Illinois Health Institute reported relatively few free or reduced-price eligible students (just 22 percent and 35 percent of enrollment). One of these reported an initial 20 percent reduction in competitive food profit after implementation of new standards with some recovery over time.⁸⁷

For purposes of Scenario 3, a 20 percent reduction in competitive food revenue is an extreme outcome. This case study district has an open campus policy in its high schools, a policy shared by just 19 percent of U.S. high schools in SY 2009-2010 (Fox, et al., 2012; Volume 1, p. 3-4). Also, the study reported some recovery in competitive food revenue over time. Scenario 3 models an outcome where only a small fraction of the loss in competitive food revenue is offset with revenue from within the food service account. Since students have finite options for meals during the school day, a reduction in competitive food revenue near the extreme end of the case study findings (where reductions in competitive food profits were fully offset by profits on other food service

sales) is unlikely. We assume the more reasonable, but still substantial 10 percent reduction in SFA revenue that we used in Scenario 2. We also assume here, as we do in Scenario 2, that other school group revenue decreases by 5 percent.

Applying the same adjustment we used in the previous two scenarios for competitive food policies already implemented around the country, we assume a reduction in SFA competitive food revenue of 8 percent ($\Delta CF = -8$). With that reduction in competitive food revenue, our model of partially offsetting NSLP participation is 0.6 percent ($\Delta L = 0.6$).

Overall, Scenario 3 suggests a net decrease in school food revenue of roughly 1.3 percent, and an increase in Federal NSLP reimbursements of 0.4 percent.

B. Impacts on Participating Children and Families

Beyond revenue impacts to SFAs and other school groups, changes in food purchasing choices caused by the interim final rule will also have an economic effect on children and their families. The projected decreases in competitive food revenues represent reductions in spending by school children and their families on school-provided competitive foods. We do not have sufficient information to estimate increases or decreases in overall spending by students who find alternatives to school-provided competitive foods. Some students will spend less overall by replacing competitive foods consumption with free or reduced price school meals. A decrease in competitive food sales may also increase foods brought from home and/or foods purchased outside of schools. These imply revenue increases for food industries that sell foods brought from home and purchased outside the school setting.

The rule will not impact all students in the same way. For example, price and availability of competitive foods may differ by region of the country, constraining choices for some but not all students. For some

students, choices will be limited by their incomes. For other students, alternatives to competitive foods will be limited by school policy. For example, students at schools with open campuses may have more available competitive food options than students on closed campuses. However, taking advantage of that option has some cost in terms of time and perhaps money, resources that are not equally available to all students.88 Students on closed campuses lack the ability to leave school at lunch time, which may tend to minimize the differences in the competitive food choices available to students of different economic means. Faced with fewer opportunities to make poor food choices, students on closed campuses may benefit by choosing healthier competitive foods or reimbursable meals.

C. Administrative Costs

Under the interim final rule, LEAs and SFAs will be required to maintain records such as receipts, nutrition labels, and/or product specifications for food items that will be available to students on the school campus during the school day. The purpose of this documentation is to ensure that those foods comply with the competitive food standards. Thus, there will be recordkeeping costs associated with the interim final rule and these costs will occur at the State agency level, the SFA and LEA level, and at the school level. The estimated additional annual burden for recordkeeping under the proposed rule is 927,633 hours, divided among the State agencies (1,739 hours), LEAs and SFAs (417,160 hours), and schools (508,735) hours.89 Our estimate uses data from the Bureau of Labor Statistics on wages and salaries for State and local government employees and assumes no growth in burden hours over time. Wages are inflated using estimates from the 2014 President's Budget. 90 Note that the rule increases recordkeeping costs, but does not impose any new reporting requirements on State or local officials.

TABLE 3—ESTIMATE OF ADMINISTRATIVE COSTS FOR RECORDKEEPING FOR INTERIM FINAL RULE 91

Departure	Fiscal year (millions)							
Recordkeeping	2014	2015	2016	2017	2018	Total		
State Agencies	\$0.04 10.6 12.9	\$0.05 10.9 13.3	\$0.05 11.3 13.8	\$0.05 11.7 14.2	\$0.05 12.0 14.7	\$0.24 56.5 68.9		
Total	23.5	24.3	25.1	25.9	26.8	125.7		

It is also possible that some schools and LEAs may have additional costs due to the rule. For example, some schools may require new equipment such as vending machines to accommodate new products and package sizes. Additionally, schools and/or LEAs may

⁸⁷ Interestingly, though, district officials attributed that reduction primarily to their new standard's ban on soda sales. Relatively few districts will see a drop in competitive food profits for that reason: just 12 percent of U.S. schools, and 24 percent of high schools in the U.S. sold soda in school vending machines in SY 2009–2010 (Fox, et al., 2012; Volume 1, p. 3–47).

⁸⁸ Open campus policies are relatively uncommon. As we note in Section III.A., just 19 percent of high schools had open campus policies

in SY 2009–2010, down from 25 percent 5 years earlier. Open campus policies are rare among lower grades; just 1.9 percent of elementary schools, and 1.3 per cent of middle schools reported having such policies in SY 2009–2010 (Fox, et al., 2012, Vol. 1, p. 3–29).

⁸⁹ See the preamble of the rule for additional detail on these Paperwork Reduction Act estimates.

⁹⁰ We use wages and salaries for administrative employment in the state and local government sector from the Bureau of Labor Statistics'

[&]quot;Employer Cost for Employee Compensation" database (http://www.bls.gov/data/home.htm). For FY 2011, wages and salaries for these positions averaged \$23.52 per hour. We inflate these through FY 2016 with projected growth in the State and Local Expenditure Index prepared by OMB for use in the FY 2014 President's Budget.

 $^{^{91}}$ Table 3 estimates costs in nominal dollars. The same table, using constant 2013 dollars, appears in Section VI.

have contracts with vendors that will require modification which could result in some additional labor cost. Those costs are not estimated here because we lack sufficient information on how many schools or LEAs could be affected and how those costs might be distributed among affected locations.

D. Industry Effects

Although they are not directly regulated by the proposed rule, food manufacturers and distributors will face changes in demand by schools and SFAs in response to the rule.

Manufacturers will face reduced school demand for some products and increased demand for others. Some food manufacturers may not have existing product lines that meet the interim final rule's requirements and may lose market share to other manufacturers. The impact of tightening the nutritional standards for food and beverages sold at public schools in the United States on food vendors is difficult to know ex-ante. It is likely that the elasticity of demand for food at schools is quite steep, implying that absent available alternatives, most consumption behavior will change aggregate sales by a small amount.

U.S. SFAs that participate in the NSLP purchased roughly \$8.5 billion in food in SY 2009–2010, including the value of USDA foods.92 That represents only about 1.3 percent of the \$644 billion worth of shipments from U.S. food manufacturers in 2010.93 FNS estimates that SFA revenue from competitive food equals about 20 percent of overall SFA revenue. If we assume that the ratio of food cost to revenue is consistent between competitive foods and other school foods, then SFA purchases of competitive foods totaled about \$1.7 billion in SY 2009-2010. That represents only about 0.3 percent of the \$644 billion worth of shipments from U.S. food manufacturers in 2010.

According to the 2007 Economic Census, about 23.4 percent of food manufacturing sales are by firms with 100 or fewer employees.94 If we assume that competitive food sales are distributed to firms in proportion to their share of overall sales, we can estimate that in 2010 figures, about \$400 million of competitive food sales is carried out by these small businesses, out of over \$150 billion in total sales by these firms.

Implementing nutrition standards for competitive foods will result in a more nutritious, and potentially more expensive, mix of foods offered. If we assume that the cost of these foods is, on average, seven percent higher under the new standards comparable to the estimated cost increase for school meals under updated nutrition standards—and that this increase will reduce demand for these foods comparably to school meals,95 we would expect to see a two

percent reduction in overall sales of competitive foods—about \$34 million of the \$1.7 billion in sales estimated for SY 2009-2010, with about \$8 million of these losses experienced by small business.

While data is not available to estimate the possible distributional effects across the food industry overall, research indicates that some of the marketplace changes that would be required under the interim standards are already taking place. Wescott et al. (2012), for example, found that between 2004 and 2009 the beverage industry reduced the number of calories shipped to schools by 90 percent, with a total volume reduction in full-calorie soft drinks of over 95 percent. In addition, in comments submitted in response to the proposed rule, representatives of the vending industry pointed to their own efforts to identify and market items to schools that comply with Alliance for a Healthier Generation guidelines. NAMA indicated that its members would incur lower costs if the proposed rule were aligned more closely with Alliance guidelines. On several items, USDA did align the interim final rule more closely with Alliance guidelines. Therefore, at least with respect to some products, many of the changes required by the rule have already taken place under existing selfregulation and State and local standards. And for other products, industry has positioned itself well to meet new demand from schools as they implement the new Federal standards.

Local vending machine operators may also face some changes to their current business model. Although the effect of the interim final rule on individual operators will vary, available industry and school data suggest that the effect on this industry group as a whole will be small. Vending machine sales made up a small percentage of total competitive food revenue in SY 2004-2005. We estimate that à la carte sales accounted for 93 percent of total competitive food revenue. The remaining seven percent is generated by a variety of alternate sources. Although vending machines are the most common of these alternate sources of competitive food revenue (they were found in 39 percent of schools in SY 2009-2010 (Fox, et al., 2012, vol. 1, p. 3-42)) they are not the only alternate source. Based on principals' reports, 13 percent of all schools had a school store that sold food and/or beverages (including snack foods) and 4 percent had a snack bar (Fox, et al., 2012, vol. 1, pp. 3-51-52).

Vending and manual foodservice operators served 18,000 primary and secondary schools in 2009, which was down about 17 percent from 2007 (VendingTimes.com, p. 4).96 Primary and secondary schools accounted for just 2.2 percent (\$930 million out of \$42.9 billion) of total vending machine sales in 2009 (VendingTimes.com, p. 4).

These data suggest that the impact of the interim final rule on the vending machine

industry as a whole will be limited. Just a small share of vending industry revenue is generated in primary and secondary schools. And, importantly, some of that revenue is generated from sales of foods that are already compliant with the proposed rule standards, such as 100 percent juice and bottled water. Other products found in school vending machines in SY 2009-2010 were also likely compliant or near-compliant with the proposed rule.97

Both industry and Census Bureau data indicate that most vending machine operations are small businesses. The majority of vending machine operators that operated for the entire year in 2007 (76 percent) employed fewer than ten individuals according to the U.S. Economic Census.98 About 37 percent of operators generated less than \$250,000 in receipts, although those operators accounted for less than three percent of total revenue from this industry group.99 Some small vendors may be challenged by the changes contained in the interim final rule. Whether small or large, many vending machine operators will need to modify their product lines to meet the

requirements of the rule.

Limited data from California suggests that the transition to healthier competitive foods can be managed, that healthier foods can be marketed successfully in schools, and that competitive food sales outside of the à la carte line need not decline. In the first year healthier competitive food policies under California Senate Bill 19 (2001), seven of ten pilot sites that were able to report such data saw per capita decreases in non-foodservice competitive food sales (Center for Weight and Health, UC Berkeley, 2005, p. 12). However, vending machine and/or school store revenue increased in two other sites (both high schools) which led researchers to conclude that "SB 19 compliant foods and beverages can be marketed successfully at the high school level" (Center for Weight and Health, UC Berkeley, 2005, p. 12).

As we discuss elsewhere in this document, the interim final rule provisions take effect one year after publication, giving industry time to modify their product lines. In addition, USDA has chosen to implement an interim final rule rather than a final rule, to

 $^{^{92}\,\}rm USDA$ School Food Purchase Study III, 2012. 93 Bureau of Economic Analysis, Gross Domestic Product by Industry, data for NAICS 311 and 312, excluding animal foods, tobacco and alcoholic beverages (http://bea.gov/industry/xls/GDPbyInd SHIP_NAICS_1998-2011.xls).

⁹⁴ Bureau of the Census, 2007 Economic Census (http://www.census.gov/econ/census07).

⁹⁵ See Gleason, "Participation in the National School Lunch Program and the School Breakfast Program," Am J Clin Nutr 61: 213S-220S.

 $^{^{\}rm 96}\,\rm This$ figure is much smaller than the 39 percent of schools figure from SNDA-IV. The VendingTimes' industry data was gathered through a survey of vending machine operators, providers of coin-operated entertainment services, coffeebreak service providers, and related industry subgroups.

⁹⁷ The SNDA-IV data do not allow us to identify which other products in school vending machines are compliant with the interim final rule standards. Nor do the data allow us to estimate revenue from vending machine sales of compliant products. Nevertheless, the list of foods found in school vending machines includes several categories of products, in addition to water and 100 percent juice, that are likely compliant with the interim final rule, or include specific products that are compliant. These include milk, other lowfat dairy products, certain low calorie beverages, snacks such as pretzels and reduced-fat chips, and even fruits and vegetables. See Fox, et al., 2012, pp. 3-47-48.

⁹⁸ Data for NAICS code 454210, "vending machine operators." U.S. Census Bureau, http:// factfinder2.census.gov/faces/nav/jsf/pages/guided_ search.xhtml (accessed 06/03/2013).

 $^{^{\}rm 99}\,\rm Ibid.$ Note that these statistics are for all vending machine operators in NAICS code 4545210, not just those that serve the school market. We do not know whether the concentration of small vending machine operators that serve the school market differs from the concentration of small operators in the industry as a whole.

allow an additional opportunity for public comment by all parties before the new standards take effect.

E. Distributional Effects

1. Revenues and Grade Level

Competitive food purchases and revenues are not equally distributed across schools. Elementary schools derive much less revenue from competitive foods than do secondary schools. They are typically smaller, much less likely to have vending machines, and usually serve a smaller assortment of à la carte items. According to SNDA-IV, middle and high schools obtain almost three times as much revenue from à la carte foods (the biggest source of school competitive food revenue) as do elementary schools (Fox, et al., 2012, Volume 1, p. 3-4); therefore, changes in competitive food standards will have a greater impact at the middle- and high-school levels than they will in elementary schools.

2. Low-Income Students

Differences in competitive food revenues by free and reduced-price meal participation, one indicator of whether schools serve primarily lower-income students, are even more dramatic. According to SNDA-III, schools serving at least one-third of their meals at full price to higher income students obtain more than seven times as much revenue from competitive food sales as schools serving a larger percentage of free and reduced-price (and hence lower-income) students.100 Ĝuthrie, et al. (2012) found that when considering competitive food revenue, schools with high percentages of students who qualify for free and reduced price meals were more likely to see revenues increase after the introduction of competitive food standards, due primarily to increases in meal participation. However as noted previously, revenues may drop more in terms of percentages at lower-income schools if lowincome students are more price-sensitive than high-income students. 101 This difference is mirrored in the behavior of high-income students. About two-thirds (64 percent) of competitive foods and beverages are selected by students who are not receiving free or reduced price meals.

Given these purchasing patterns, revenue losses would be substantial if students who previously bought competitive foods and beverages not allowed under the Federal standards simply stopped buying any foods. The revenue losses would be concentrated in secondary schools and schools serving higher proportions of non-poor students, i.e., students not eligible for free or reduced-price meals. However, case studies based on experience with established State- or districtlevel nutrition standards indicate that many students will substitute other competitive food and beverage purchases, or switch to purchasing USDA school meals. This would likely result in reducing revenue losses substantially. In predominantly low-income schools, students may be even more inclined to turn to reimbursable meals if not satisfied with competitive food options. For those

students, a free or reduced price meal may become the most attractive option.¹⁰²

Some of the greatest concern among school and SFA officials who commented on the proposed rule was expressed by those from districts with relatively few low-income students. These officials indicated that they rely heavily on competitive food revenue, and do not expect a significant shift to participation in the reimbursable meal programs by students who are dissatisfied with their new competitive food choices. Although the challenges faced by these districts may be different than those faced by less affluent districts, and the strategies for addressing those challenges may be different too, case studies offer some insight into how these districts can implement competitive food reform without an adverse financial

Finally, there is some suggestion that access to healthy foods in schools varies by the socio-economic standing of the school and its neighborhood (Tipler, 2010). Improved nutrition standards for competitive foods could lessen the nutrition gap among schools.

F. Benefits

The interim final rule is intended to help ensure that *all* foods sold at school—whether provided as part of a school meal or sold in competition with such meals—are aligned with the latest dietary recommendations. They will work in concert with recent improvements in school meals to support and promote diets that contribute to students long-term health and well-being. And they will support efforts of parents to promote healthy choices for children, at home and at school.

A growing body of evidence tells us that giving school children healthful food options will help them make healthier choices during the school day. In 2012, the Pew Health Group and the Robert Wood Johnson Foundation conducted an extensive Health Impact Assessment to evaluate potential benefits that could result from national standards for competitive foods sold in schools during the school day. They concluded that:

- A national competitive foods policy would increase student exposure to healthier foods and decrease exposure to less healthy foods, and
- Increased access to a mix of healthier food options is likely to change the mix of foods that students purchase and consume at school, for the better.

These kinds of changes in food exposure and consumption at school are important

influences on the overall quality of children's diets. While nutrition standards for foods sold at school may not on their own be a determining factor in children's overall diets, they are a critical strategy to provide children with healthy food options throughout the entire school day, effectively holding competitive foods to the same standards as the rest of the foods sold at school during the school day. This, in turn, helps to ensure that the school nutrition environment does all that it can to promote healthy choices, and help to prevent diet-related health problems. Ancillary benefits could derive from the fact that improving the nutritional value of competitive foods may reinforce schoolbased nutrition education and promotion efforts and contribute significantly to the overall effectiveness of the school nutrition environment in promoting healthful food and physical activity choices.

The link between poor diets and health problems such as childhood obesity are a matter of particular policy concern given their significant social and economic costs. Obesity has become a major public health concern in the U.S., second only to physical activity among the top 10 leading health indicators in the United States Healthy People 2020 goals.¹⁰³ According to data from the National Health and Nutrition Examination Survey 2007-2008, 34 percent of the U.S. adult population is obese and an additional 34 percent are overweight (Ogden and Carroll, 2010). The trend towards obesity is also evident among children; 33 percent of U.S. children and adolescents are now considered overweight or obese (Beydoun and Wang, 2011), with current childhood obesity rates four times higher in children ages 6 to 11 than they were in the early 1960s (19 vs. 4 percent), and three times higher (17 vs. 5 percent) for adolescents ages 12 to 19 (IOM, 2007b, p. 24). These increases are shared across all socio-economic classes, regions of the country, and have affected all major racial and ethnic groups (Olshansky, et al., 2005).

Excess body weight has long been demonstrated to have health, social, psychological, and economic consequences for affected adults (Guthrie, Newman, and Ralston, 2009; Wang, et al., 2008). Recent research has also demonstrated that excess body weight has negative impacts for obese and overweight children. Research focused specifically on the effects of obesity in children indicates that obese children feel they are less capable, both socially and athletically, less attractive, and less worthwhile than their non-obese counterparts (Riazi, et al., 2010). Further, there are direct economic costs due to childhood obesity; \$237.6 million (in 2005 dollars) in inpatient costs (Trasande, et al., 2009)104 and annual prescription drug,

 $^{^{100}}$ Unpublished ERS analysis of SNDA–III data. 101 Woodward-Lopez, et al., 2010.

¹⁰² See, for example, Bassler, et al., 2013, p. 17. "While many in the school community worry that stronger competitive food and beverage standards will disparately and negatively impact low-income districts, this was not the case in the districts studied here. As mentioned above, many of the districts found that reimbursable school meal program participation increased. Several respondents from low-income districts suggested that when most students participate in the free lunch program, the school does not rely on competitive food sales. Thus, a drop in competitive food sales is unlikely to have a significant impact on the financial status of districts with high rates of free- and reduced-price lunch participation."

¹⁰³ http://www.cdc.gov/nchs/healthy_people/hp2010/hp2010 indicators.htm

¹⁰⁴ Trasande, et al., 2009 report that between 1999 and 2005, hospitalizations related to obesity increased 8.8 percent among children ages 2 to 5, 10.4 percent among children 6 to 11, and 11.4 percent among children ages 12 to 19 after controlling for other factors.

emergency room, and outpatient costs of \$14.1 billion (Cawley, 2004).

Childhood obesity has also been linked to cardiovascular disease in children as well as in adults. Freeman, Dietz, Srinivasan, and Berenson (1999) found that "compared with other children, overweight children were 9.7 times as likely to have 2 [cardiovascular] risk factors and 43.5 times as likely to have 3 risk factors" (p. 1179) and concluded that "[b]ecause overweight is associated with various risk factors even among young children, it is possible that the successful prevention and treatment of obesity in childhood could reduce the adult incidence of cardiovascular disease" (p. 1175). In comments, the American Heart Association also discussed the fact that childhood obesity has resulted in problems of hypertension for people at younger ages and noted that America's children are at higher risk for heart problems and blood pressure problems due to the amounts of sodium in their diets.

It is known that overweight children have a 70 percent chance of being obese or overweight as adults. However, the actual causes of obesity have proven elusive (ASPE, no date). While the relationship between obesity and poor dietary choices cannot be explained by any one cause, there is general agreement that reducing total calorie intake is helpful in preventing or delaying the onset of excess weight gain.

There is some recent evidence that competitive food standards can improve children's dietary quality:

- Taber, Chriqui, and Chaloupka (2012) compared calorie and nutrient intakes for California high school students—with competitive food standards in place—to calorie and nutrient intakes for high school students in 14 States with no competitive food standards. They concluded that California high school students consumed fewer calories, less fat, and less sugar at school than students in other States. Their analysis "suggested that California students did not compensate for consuming less within school by consuming more elsewhere" (p. 455). The consumption of fewer calories in school "suggests that competitive food standards may be a method of reducing adolescent weight gain" (p. 456).
- A study of competitive food policies in Connecticut concluded that "removing low nutrition items from schools decreased students' consumption with no compensatory increase at home" (Schwartz, Novak, and Fiore, 2009, p. 999).
- Similarly, researchers for Healthy Eating Research and Bridging the Gap found that "[t]he best evidence available indicates that policies on snack foods and beverages sold in school impact children's diets and their risk for obesity. Strong policies that prohibit or restrict the sale of unhealthy competitive foods and drinks in schools are associated with lower proportions of overweight or obese students, or lower rates of increase in student BMI" (Healthy Eating Research, 2012, p. 3).

Pew Health Group and Robert Wood Johnson Foundation researchers noted that the prevalence of children who are overweight or obese has more than tripled in the past three decades, which is of particular concern because of the health problems associated with obesity. In particular, researchers found an increasing number of children are being diagnosed with type 2 diabetes, high cholesterol, and high blood pressure. These researchers further observed that children with low socioeconomic status and black and Hispanic children are at a higher risk of experiencing one or more of these illnesses (pp. 39–40, 56).

Their analysis also noted that:

There is a strong data link between diet and the risk for these chronic diseases. Given the relationship between childhood obesity, calorie consumption, and the development of chronic disease risk factors at a young age, this report proposes that a national [competitive food] policy could alter childhood and future chronic disease risk factors by reducing access to energy-dense snack foods in schools.

To the extent that the national policy results in increases in students' total dietary intake of healthy foods and reductions in the intake of low-nutrient, energy-dense snack foods, it is likely to have a beneficial effect on the risk of these diseases. However, the magnitude of this effect would be proportional to the degree of change in students' total dietary intake, and this factor is uncertain (p. 68).

In summary, the most current, comprehensive, and systematic review of existing scientific research concluded that competitive foods standards can have a positive impact on reducing the risk for obesity-related chronic diseases.

Because the factors that contribute both to overall food consumption and to obesity are so complex, it is not possible to define a level of disease or cost reduction that is attributable to the changes in competitive foods expected to result from implementation of the rule. USDA is unaware of any comprehensive data allowing accurate predictions of the effect of the interim requirements on consumer choice, especially among children. But to illustrate the magnitude of the potential benefits of a reduction in childhood obesity, based on \$237.6 million in inpatient costs and \$14.1 billion in outpatient costs, a one percent reduction in childhood obesity implies a \$143 million reduction in health care costs.

Some researchers have suggested possible negative consequences of regulating nutrition content in competitive foods. They argue that not allowing access to low nutrient, high calorie snack foods in schools may result in overconsumption of those same foods outside the school setting (although as noted earlier, the Taber et al. study concluded overcompensation was not evident among the California high school students in their sample). Some groups have expressed concerns that the focus on competitive foods is less on nutrition than obesity, thus regulating competitive foods may contribute to bodyweight and/or appearance issues and result in increasing body insecurity feelings among children. The focus on obesity may also increase the stigmatization of children who are perceived as being obese.

G. Limitations and Uncertainties

We conducted this analysis using available data; due to the limitations of these data,

there are some important qualifications to our analysis that should be noted. We discuss a few of these below.

1. Limitations in Available Research

Available research generally supports the notion that school food revenues will not necessarily be adversely affected by the implementation of healthier competitive food standards. Some schools or school districts, however, have seen revenue losses. Cullen and Watson (2009, p. 709) note that smaller districts might "have more barriers associated with the bidding and food contract process and availability of alternative products" relative to large districts. In addition, a five-month pilot program in North Carolina elementary schools saw decreases in competitive food sales with no offsetting increase in school meal participation (North Carolina General Assembly 2011). North Carolina's State Superintendent commented on the lack of available foods that met the pilot standards and although she stated that increases in the availability of appropriate replacements would likely improve the economic impact of the healthier food standards, she still had concerns that healthier products may never generate the revenue necessary to meet North Carolina school needs (NCGA 2011, p. 2 Atkinson letter).

Commenters also expressed two primary concerns in this regard. The first set of comments noted, as we have throughout this analysis, that the case study data are not generalizable, that is, those studies do not necessarily reflect the experiences of their schools. Some commenters requested that the standards not be implemented until broader studies could be conducted.

We are mindful of the comments that are concerned with the limitations of our data. We used the data available to us with the understanding that there would be a wide variation in impacts, and considerable uncertainty about which impacts would be most likely or frequent. We have also updated the scenarios based on experiences from more current case studies.

Finally, we are mindful that instituting competitive food standards and the effects on revenue will vary. It is possible that older students who are more accustomed to having less healthy options available will be less receptive to the changes than younger students. This combined with the increasing availability of products that do meet the standards and the increasing acceptance of a more healthful environment overall, will help to mitigate revenue losses in the long run.

2. Prices of Competitive Foods

We do not have actual prices paid for specific competitive food and beverage items. While we assume that competitive items meeting and not meeting the interim final rule standards contribute equally to revenues, this is uncertain. It is likely that reformulated versions of existing competitive foods will cost at least as much as foods currently available. However, to meet calorie or fat standards, manufacturers may simply reduce package sizes, e.g., replacing 16 ounce containers of full strength juice with eight or 12 ounce bottles. In those cases, there is little

reason to expect higher prices. Additionally, not all compliant foods will be close substitutes for existing foods, e.g., fruit drinks that are not 100 percent fruit juice may be replaced by bottled water at a similar or lower cost.

3. State and Local Support of Reimbursable Meals

Information on State and local payments in support of USDA school meals is not available. Some States and localities make payments that are tied to USDA school meal participation. If combined Federal, State, and local payments are greater (or less) than the costs of producing meals, SFAs would likely make lunch pricing decisions with a view toward optimizing their levels of Federal, State, and local subsidizes.

4. Student Response to New Standards

Only a few limited case studies assess possible behavior change that may occur in response to the interim final rule. Even these limited studies are based on standards that are not exactly the same as the interim final rule. The local conditions in which they take place may not match national conditions. Implementation of State standards may have been accompanied by other factors, such as nutrition education or promotion of school meals, which may have influenced outcomes. While we believe that the evidence we examined is generally consistent with the suggestion that new standards will be associated with purchases of healthier competitive foods and increased school meal participation, data limitations create considerable uncertainty about the size of these changes. We also lack information on changes in purchasing behavior over time. As students adjust to the new range of competitive options, their purchasing behavior could adapt, altering revenue patterns.

5. Industry Response

This analysis assumes that food manufacturers and vendors, SFAs, and other school groups that sell competitive foods and beverages will adapt their behaviors in response to the interim final rule. Studies of State and local changes in competitive food and beverage policies indicate that these behavioral changes will occur (Cullen and Watson, 2009; Wharton, Long, and Schwartz, 2008; Woodward-Lopez, et al., 2010; USDA 2005; Bassler, et al., 2013). We draw on this literature to estimate the possible effects of behavioral changes on competitive food and beverage revenues.

This literature indicates that to a large extent, lost revenues from products that can no longer be sold in schools because of the interim final rule may be offset by increased purchases of products that are already widely available and purchased as competitive items (for example, bottled water) or by purchases of newly available, healthier products. In some cases changes are relatively simple. For example juices currently sold in 16-oz containers could be sold in 12-oz or 8-oz containers, as appropriate for grade level. In other cases, reformulations of existing products are already underway. Actions by State agencies and voluntary groups such as Alliance for a Healthier Generation have

already encouraged food manufacturers to develop new products for competitive food sales: 4-oz fruit bowls; nonfat, no-sugar added frozen yogurt; 4-oz frozen fruit bars; and reduced-fat and sodium pizza with whole grain crust (Alliance for a Healthier Generation, 2010). In a 2013 compilation of case studies, researchers note that some

". . . food service directors reported having difficulty finding foods and beverages that met the stronger nutrition standards for competitive foods and beverages in the early stages of implementation. However, they also reported that as time went on, vendors responded to the demand and more and more appealing items became available. As stronger standards begin to be implemented nationwide, the research team anticipates this trend will continue" (Bassler, et al., 2013, p. 20).

Establishment of Federal standards is likely to spur further product development and increased sales volume that may help to bring prices in line with those of lessnutritious competitive items. Comments from one beverage manufacturer noted that existing competitive food standards have already resulted in the company developing or reformulating products that meet or exceed the standards in the interim final rule. Because State and local experience to date has preceded the establishment of Federal standards, their results may overstate the challenges that schools will face in implementing the interim final rule. The pressures on school revenue from high costs and limited availability could ease in the 12month period between publication of the interim final rule and its effective date.

6. SFA and School Compliance

Early studies on competitive food revenues indicate that not all schools have complied with existing State competitive food standards. 105 This may be due, in part, to a lack of approved product choices, especially for early implementers. Compliance may be less of a challenge with national standards, especially as industry and students continue to adapt to State standards already in place. But, to the extent that schools fail to implement or fully enforce certain provisions of the interim final rule, the cost, benefit and revenue impacts of the rule will be lower. Each of our estimates assumes full compliance with the interim final rule.

7. School Participation in Federal Meal

7. School Participation in Federal Meal Programs

It is possible that some schools could choose to leave NSLP and SBP to avoid the new competitive food standards, and this possibility was reflected in some of the comments received on the proposed rule. Although some schools may realize significant losses in revenue from competitive foods, especially in the short term, we believe it is unlikely that many schools will choose to leave the Federal meals program. As noted previously, on average SFAs receive 16 percent of their total revenue from competitive foods; 84 percent of revenue is derived from Federal

reimbursements for NSLP and SBP meals, student payments, and State and local contributions tied to those meals (USDA, 2008). But even in SFAs with competitive food revenues that are greater than the average, e.g., SFAs in the 90th percentile for competitive food revenues, USDA subsidies and student payments for program meals still account for more than half of SFA revenue while competitive food sales amounted to less than half. 106

8. Food and Labor Costs

This analysis focuses on revenues in SFAs and other school groups. It does not address food and labor costs directly because few of the research reports and case studies report detailed cost information. One study (Treviño et al., 2012) that did report expenses and labor costs in addition to revenues found no statistically significant difference between intervention and control schools after the intervention schools implemented stronger competitive food standards. Although the differences were not statistically different, intervention schools were found to have higher excess revenue over expenses than the control schools (\$3.5 million versus \$2.4 million) (pg. 421).

Although we do not address costs directly, we expect that cost will have a limited effect on the net revenue of SFAs and other school groups. SFA competitive food revenue is derived primarily from à la carte sales. Under the interim final rule, à la carte items that are available as part of a reimbursable meal are deemed to meet the new standards and those items will be subject to new school meal standards under regulations that took effect July 1, 2012.107 To the extent that schools' à la carte lines are stocked with school meal entrées, side dishes, and beverages that are also available in reimbursable meals, much of the cost of providing healthier à la carte items will have been incurred before competitive food standards take effect.

This does not apply, of course, to à la carte items that are not components of a reimbursable meal or to items sold in vending machines or through other outlets; schools may incur higher costs to replace those items with items that meet this rule's standards. However, even for those foods, industry and schools will have had some time after implementation of new school meals standards to prepare. Some of the fixed costs of product development, contracting with new suppliers, developing recipes, and training kitchen staff will have already been incurred by industry and schools as they implement Federal school meal standards, easing pressure, perhaps, on prices and the administrative costs of complying with this competitive foods rule.

A number of SFA professionals commented that requiring accompaniments (e.g., salad dressings, catsups, etc.) to be preportioned would potentially add large additional costs (purchasing individual

¹⁰⁵ See, for example, SNDA–III, V. 1, 2007; Woodward-Lopez, et al., 2005b; Bullock, et al., 2010; Woodward-Lopez, et al., 2010.

¹⁰⁶The figures for SFAs at or above the 90th percentile are based on a small sample and are subject to greater error than the mean values reported for all SFAs in the SLBCS–II.

¹⁰⁷ The proposed school meal standards rule was published in January, 2011. See **Federal Register** Vol. 76, No. 9, p. 2494.

packets) or involve considerable labor for staff who had to pre-portion the accompaniments. In response to these concerns, the interim final rule eliminates the proposed pre-portioning requirement, which should result in labor and cost savings.

V. Alternatives

A. Exemption for Reimbursable Meal Entrées

The proposed rule presented two basic alternatives for the treatment of entrées and side dishes that are served as part of a reimbursable meal. Under the first alternative, these items could be served à la carte as long as they met the rule's fat and sugar standards that apply to all other competitive foods. Under the second alternative, NSLP entrées and sides (except grain-based desserts) would be exempt from all of the rule's competitive food requirements if served à la carte on same day that they are part of a reimbursable meal (alternative B1) or within four days of service as part of a reimbursable meal (alternative B2).

The interim final rule adopts a variation on the second alternative. Entrées (but not side dishes) served as part of a reimbursable meal will be exempt from the rule's competitive food requirements on the day they are served as part of the meal and the following day. Exempt entrées that are sold as competitive food must be offered in the same or smaller portion sizes as the NSLP and SBP, and with the same accompaniments.

The primary benefit of an exemption that is limited strictly to foods on the current day's menu is that those items could be offered à la carte no more often than they could be served in reimbursable meals without exceeding weekly NSLP or SBP restrictions on average calories, fat, or sodium. Such an exemption would also encourage students to consume a greater variety of foods, even if they choose foods consistently from the à la carte line. The interim final rule achieves these same goals while offering SFAs the ability to serve leftover entrées the next day, an important tool for menu planning and cost control.

The interim final rule provision offers somewhat greater administrative simplicity compared to the other alternative considered by USDA. That alternative would have required a nutrient analysis of reimbursable meal items before they could be sold à la carte in order to measure their compliance with the rule's fat and sugar standards.

B. School-Sponsored Fundraisers

The proposed rule offered two alternatives for establishing limits on the frequency of exempt fundraisers. One would have allowed States to set limits subject to USDA approval. The other would grant full discretion to the States.

After consideration of comments from interest groups and school officials, USDA opted to allow States to set their own limits on the frequency of exempt fundraisers without USDA review. 108 Full State

discretion should benefit from State administrators' knowledge of what will prove most effective in their schools. In addition, eliminating USDA review will reduce administrative costs at both the State and Federal levels. It may also encourage States to modify their policies, as needed, to address unanticipated problems. The time and administrative expense of USDA review might discourage fine-tuning of established policies.

The alternative considered by USDA would have given Federal administrators the opportunity to review State plans prior to implementation. Although Federal review would have entailed some cost, it may have resulted in little difference in the policies ultimately adopted. Nevertheless, State discretion entails some small risk that one or more States or school districts (if States use their discretion to leave the decision to local districts) will adopt standards that impose little or no restriction on the frequency of exempt fundraisers. At least some commenters expressed concern that State discretion will lessen the consistency that might have been achieved with USDA review. Ultimately, however, State administrators are, like USDA, committed to the success of competitive food reform. Whether success is measured by student well-being or the financial health of SFAs, it is in the interest of the States to set fairly narrow exemptions for infrequent fundraisers.

C. Total Sugar

The proposed rule solicited public comment on two alternate sugar standards for competitive foods. These would have limited total sugar content to either 35 percent of calories or 35 percent of weight. Both standards would have placed a meaningful check on the amount of sugar allowed in competitive foods while providing exceptions for certain fruit and vegetable snacks and yogurt. After considering arguments in favor of each of these standards, USDA adopted the sugar by weight standard for the interim final rule.

Administrative burden and product availability were among the factors that weighed most heavily in this decision. Commenters who favored the 35 percent by weight standard argued that

- It was consistent with standards already in place through voluntary programs such HUSSC and the Alliance for a Healthier Generation,
- Sugar is commonly reported by weight by industry and others,
- Calculators for sugar by weight already exist to aid school food service professionals in their calculations,
- The sugar as a percent of calories standard would negatively affect food service revenues, and
- Sugar by weight allows greater flexibility in the products available to students.

The first four of these points suggest that the sugar by weight standard will be less costly to implement for both the schools and industry that have already invested in that standard. Schools that are new to competitive food reform will also benefit from the sugar by weight standard to the extent that industry

has already developed products designed to meet the demand of HUSSC schools and schools that follow Alliance guidelines.

The alternate percent of calories standard, by contrast, would have added to some schools' cost of compliance with the rule. It would have been most disruptive and potentially costly to schools that have already established relationships with suppliers and distributors who provide the schools with products intended to meet the sugar by weight standard.

The net effect on industry of choosing the weight standard over the calorie standard is unclear. Manufacturers and distributors that have already invested in supplying schools with products that meet the sugar by weight standard may realize the greatest immediate benefit. Comments from representatives of the vending industry point to that industry's voluntary efforts to support schools that follow Alliance guidelines on competitive foods, and urged USDA to adopt standards consistent with those guidelines. The interim final rule's sugar standard, in combination with some of the other changes to the rule, aligns the rule with more of these existing products. Manufacturers as well as distributors of such products may see additional demand once all schools implement the rule.

Not all sectors of the food industry favored the sugar by weight standard. Compared to the alternate sugar as a percent of calories standard, the weight standard may be more difficult to meet for sugar-sweetened products with low moisture content, where the ratio of fat to sugar may mean the difference between compliance and noncompliance. Because a gram of fat has more than twice as many calories as a gram of sugar, snack products and desserts with a relatively high fat content (from nuts or chocolate, for example) may be less likely to meet the proposed rule's weight-based sugar standard although they might have met the alternative calorie-based standard. 109 Where product reformulation is an option, manufacturers of non-compliant snacks may choose to incur those costs.

D. Naturally Occurring Ingredients and Fortification

Competitive foods that do not satisfy one of the interim final rule's food group requirements may be sold in school if they contain at least 10 percent of the daily value of one of several nutrients of concern (i.e., calcium, potassium, vitamin D, and fiber), but only through June 2016. Beginning July 1, 2016 this criterion will be obsolete and may not be used to qualify an item as an allowable competitive food.

The primary alternative considered by USDA was the proposed rule's handling of nutrients of concern. The proposed rule would have allowed products that met the 10 percent threshold, but only through the use of naturally occurring ingredients. In addition, the proposed rule would have made this option permanent.

¹⁰⁸ FNS will provide guidance to ensure that State policies are consistent with the legislative requirement that exemptions for fundraisers are "infrequent" (Pub. L. 111–296)

¹⁰⁹ Certain varieties of trail mix, granola bars, and whole grain cookies sometimes fall into this group. Two examples from the USDA's National Nutrient Database for Standard Reference (release 24) are product IDs 25056 (chocolate coated granola bar) and 18533 (iced oatmeal cookie).

USDA's decision to modify the proposed rule provision was driven primarily by concerns other than cost or administrative burden. The interim final rule's long-term focus on foods that satisfy the rule's food group requirements is better aligned with IOM recommendations. IOM cited "[e]merging evidence for the health benefits of fruits, vegetables, and whole grains" that "reinforces the importance of improving the overall quality of food intake rather than nutrient-specific strategies such as fortification and supplementation" (IOM, 2007a, p. 41).

The proposed rule's requirement that only naturally occurring nutrients could satisfy its 10 percent of daily value threshold was viewed by commenters as impractical. It would be difficult for food service professionals to distinguish products that satisfied the naturally occurring requirement from products that did not. At present, the contribution of food-based and non-food sources to nutrient values are not shown separately on processed food nutrition labels. For that reason, the proposed rule's naturally occurring nutrient criterion offered only limited flexibility for schools.

In the critical early months of implementation, the interim final rule offers a more meaningful administrative cost advantage relative to the proposed rule. The interim final rule provision is intended to reduce costs by ensuring the widest availability of compliant products during a 24-month transition to an entirely food-based set of standards.

E. Low Calorie Beverages in High Schools

The proposed rule offered two alternatives for public comment on lower-calorie beverages for high school students. The first would have permitted up to 40 calories per 8 fl oz serving (and 60 calories per 12 fl oz). The second would have allowed up to 50 calories per 8 fl oz serving (and 75 calories per 12 fl oz). The higher 50 calorie limit would have permitted the sale of national brand sports drinks in their standard formulas. The lower 40 calorie limit would have allowed only reduced-calorie versions of those drinks. The interim final rule adopts the lower 40 calorie limit as the better alternative to limit the consumption of added sugar in beverages sold in school, and to further advance the public health goals of the

Leading public health organizations that submitted comments on the proposed rule tended to prefer the interim final rule standard to the proposed rule's higher calorie alternative. Many of the same organizations, however, would have preferred even stricter limits on sugar-sweetened beverages, a major source of discretionary calories in competitive school foods.

Schools, with strong support from the beverage industry, have largely eliminated

full-calorie carbonated drinks from school vending machines. But representatives from some public health groups point out that sports drinks remain widely available in schools, and they note that these products are an important contributor to excess added sugar intake by children. Data from USDA's SNDA studies indicate a modest reduction in the percent of high schools that offered sports drinks in vending machines from SY 2004-2005 to SY 2009-2010, although percentages remain high 110 The same studies show a more substantial reduction in high schools that offer sports drinks in à la carte lines. Adoption of the 50 calorie per 8 fl oz standard would have undermined the efforts of school administrators who are leaders in reducing the availability of sugary drinks in schools. Although the 40 calorie standard in the interim final rule does not go as far as recommended by some public health groups, it will have a substantial effect on the types of sweetened beverages offered in high $schools.^{111}$

Food and foodservice industry representatives, as well as some school administrators, favored the higher calorie limit. The beverage industry has invested in developing and marketing products that meet the Alliance for a Healthier Generation's 66 calorie per 8 fl oz guideline, and may have been better positioned to meet a 50 calorie standard than the interim final rule's 40 calorie standard. There may be fewer products currently available that meet or can be reformulated to meet the interim final rule standard. If so, then the immediate transition to the interim final rule may be more challenging for manufacturers, distributors, and vending machine operators, as well as SFAs, student organizations, and other non-SFA school groups that rely on the sale of such beverages. However, while some businesses may face a reduced market for their products, at least in the short term, manufacturers and distributors of competing lower calorie products have an opportunity to increase sales.

The interim final rule drops the proposed rule restriction on the sale of lower calorie beverages in the meal service area during a meal service. As discussed more fully in Section III.A., the proposed rule's time and place restriction would have put some SFA revenue at risk, and might have depressed the sale of reimbursable meals. The proposed rule restriction would also have sent a mixed message on the acceptability of the excluded

beverages. For these reasons, the interim final rule eliminates the restriction. Although the interim final rule provides greater flexibility to SFAs, greater choice to students, and reduces the risk to SFA revenue, the interim final rule provision has the potential to reduce the amount of milk consumed by high school students during meal times. USDA will monitor this after implementation and take those preliminary observations into consideration in the development of a final rule

F. Caffeinated Beverages

Consistent with IOM recommendations, the proposed rule required that beverages served to elementary and middle school students be caffeine free or include only small amounts of naturally occurring caffeine. The proposed rule, however, did not put caffeine restrictions on products for high school students; a departure from the IOM guidelines. Many of the comments from health professionals and school officials expressed concern about the effects of large amounts of caffeine on adolescents and suggested that the Department either disallow caffeinated beverages at the high school level entirely, or at least provide some guidelines for caffeine limits. After considering these comments, and because of the lack of an accepted standard for caffeine consumption by high school-aged students, USDA retains the proposed rule standard. The interim final rule retains maximum flexibility for high schools, allowing the continued sale of beverages containing caffeine. At the same time, USDA urges schools not to allow the sale of energy drinks, in response to concerns expressed by health professionals. To the extent that caffeinated products generate revenue for schools, the interim final rule will have a lesser economic impact on SFAs and other school groups than the primary alternative considered by USDA.

VI. Accounting Statement

As required by OMB Circular A–4, we have prepared an accounting statement showing the annualized estimates of benefits, costs and transfers associated with the provisions of this proposed rule.¹¹² As discussed throughout this impact analysis, available data do not allow us to develop point estimates of competitive food or reimbursable meal revenue effects with any certainty. For this reason, the only dollar figures presented in the accounting statement are those associated with Table 3's State agency, LEA, and school-level recordkeeping costs.

The accounting statement's cost figures are equal to the annualized, discounted sum of the estimated cost stream from Table 3:

¹¹⁰ In SY 2009–2010, 64 percent of high schools sold "energy and sports drinks" in vending machines. This is down from 78 percent in SY 2004–2005. (Gordon, et al., 2007, Volume 1, p. 104; Fox, et al., 2012, Volume 1, p 3–47)

 $^{^{111}}$ Both the standard adopted for the interim final rule as well as the 50 calorie alternative, would end the sale of sweetened beverages in elementary and middle schools.

¹¹² OMB Circular A–4 is available at www. whitehouse.gov/sites/default/files/omb/assets/ regulatory_matters_pdf/a-4.pdf.

	Fiscal year (\$ millions)					
	2014	2015	2016	2017	2018	Total
Total projected nominal cost of interim final rule	\$23.5	\$24.3	\$25.1	\$25.9	\$26.8	\$125.7

Applying 7 and 3 percent discount rates to this nominal cost stream gives present values (in 2013 dollars):

	Fiscal year (\$ millions)					
	2014	2015	2016	2017	2018	Total
Total cost (present value, 7% discount rate)	\$22.0 22.8	\$21.2 22.9	\$20.5 23.0	\$19.8 23.0	\$19.1 23.1	\$102.6 114.9

The annualized values in FY 2013 dollars of these discounted cost streams are computed with the following formula, where

PV is the discounted present value of the cost stream (\$102.6 in the illustration), i is the

discount rate (7 percent), and n is the number of years beyond FY 2013 (5).¹¹³

$$1 - \frac{1}{(1+0.07)^{(5-1)}} + 1$$
 = \$23.4

Benefits	Outcome scenario	Estimate	Year dollar	Discount Rate (%)	Period covered
Annualized Monetized (\$millions/year)	n.a.	n.a.	n.a.	n.a.	FY 2014–2018.

Qualitative: The rule will ensure that all foods sold to children in school during the school day will meet macronutrient and food group standards that are consistent with a healthy diet and are based on current nutrition science. The proposed rule will encourage the consumption of foods such as whole grains, fruit, vegetables, and dairy products that are low in fat and added sugar. By allowing only the sale of competitive foods that comply with Dietary Guidelines recommendations, this proposed rule aims to promote healthy eating habits.

Costs	Outcome scenario	Estimate	Year dollar	Discount rate (%)	Period covered.
-------	------------------	----------	-------------	-------------------	-----------------

Quantitative: SFA and State educational agency administrative expenses to comply with the rule's recordkeeping requirements (estimated here).

Additional costs (not estimated) include the potential higher costs to schools and to industry of acquiring or producing healthier competitive foods, the extra costs incurred by students to purchase higher priced competitive foods, and the costs incurred by students (including travel costs) in purchasing competitive foods off campus.

Qualitative: Net utility losses to students who lose access to favorite competitive foods and must switch to less preferred foods.

Annualized Monetized (\$millions/year)	1–3	\$23.4 24.4	2013 2013	7% 3%	FY 2014–2018.
Transfers	Outcome scenario	Estimate	Year dollar	Discount rate	Period covered

Qualitative: The changes in competitive foods offered by schools will likely result in changes in student expenditures on competitive foods (sold by SFAs and non-SFA school groups). It will also change the extent to which students purchase and consume reimbursable school meals, resulting in changes in amounts transferred from students to school food authorities, and from USDA to school food authorities, for reduced price and paid meals. We have modeled a number of potential scenarios based on available data to assess impacts of competitive food standards on overall school food revenue. While they vary widely, each scenario's estimated impact is relatively small (+0.5 percent to -1.3 percent). The data are insufficient to assess the frequency or probability of schools experiencing any specific level of impact.

VII. References

- Alliance for a Healthier Generation. Available at: http://www.healthier generation.org/companies.aspx?ID=3306
- Alliance for a Healthier Generation.
 Competitive Food Success Stories.
 Posted on University of Missouri
 Extension Web site (accessed 6/22/2012).
 http://extension.missouri.edu/healthy
 life/resources/policydevelopment/Food
 BevSuccessStories.pdf
- Alliance for a Healthier Generation. Key
 Strategies for Maintaining Revenue while
 Changing School Foods for the Better.
 Fall 2010. Available at: http://www.
 healthiergeneration.org/uploadedfiles/
 For_Schools/_New_Builder_Pages/
 Resources/10-2237.pdf
- Alliance for a Healthier Generation. Moving the Needle on Competitive Foods. Fall 2010. Available at: http://www.healthier generation.org/uploadedfiles/For_Schools/_New_Builder_Pages/Resources/10-2237.pdf.
- American Public Health Association.
 Electronic comment submitted to
 www.regulations.gov. Docket ID FNS—
 2011–0019–0001. April 9, 2013. APHA,
 800 I Street NW., Washington, DC 20001.
- Arnett, D.K. Comments on Proposed Rule Docket ID FNS–2011–0019. American Heart Association. April 9, 2013. AHA, 1150 Connecticut Ave. NW., Washington, DC 20036.
- ASPE, Health & Human Services. (No Date.) Childhood Obesity. Assistant Secretary for Planning and Evaluation, U.S. Department of Health & Human Services. Available at: http://aspe.hhs.gov/health/ reports/child_obesity.
- Bassler E.J., Chriqui J.F., Stagg K., Schneider L.M., Infusino K., Asada Y. 2013.
 Controlling Junk Food and the Bottom Line: Case Studies of Schools
 Successfully Implementing Strong
 Nutrition Standards for Competitive
 Foods and Beverages. Chicago, IL:
 Illinois Public Health Institute.
 Available: http://iphionline.org/2013/03/controlling-junk-food/.
- Beydoun, M.A. and Y. Wang. 2011. Sociodemographic disparities in distribution shifts over time in various adiposity measures among American children and adolescents: What changes in prevalence rates could not reveal. *International Journal of Pediatric Obesity*, 6:21–35. As cited in Food Labeling: Calorie Labeling of Articles of Food in Vending Machines NPRM. 2011. Preliminary Regulatory Impact Analysis, Docket No. FDA–2011– F–0171.
- Bullock, S.L., L. Craypo, SE. Clark, J. Barry, and SE. Samuels. 2010. Food and Beverage Environment Analysis and Monitoring System: A Reliability Study in the School Food and Beverage Environment. Journal of the American Dietetic Association, 110:1084–1088.
- Cawley, J. 2010. The Economics of Childhood Obesity. *Health Affairs*, 29:364–371. As cited in Food Labeling: Calorie Labeling of Articles of Food in Vending Machines NPRM. 2011. Preliminary Regulatory Impact Analysis, Docket No. FDA–2011– F–0171.

- Centers for Disease Control and Prevention. 2012. Competitive Foods and Beverages in U.S. Schools: A State Policy Analysis. Atlanta: U.S. Department of Health and Human Services. http://www.cdc.gov/ healthyyouth/nutrition/pdf/compfoods booklet.pdf
- Centers for Disease Control. (No Date).
 Implementing Strong Nutrition
 Standards for Schools: Financial
 Implications. Available at: http://www.
 cdc.gov/healthyyouth/nutrition/pdf/
 financial_implications.pdf. Accessed 11/
 6/2012.
- Center for Science in the Public Interest (CSPI), 2007. State School Foods Report Card 2007: A State-by-State Evaluation of Policies for Foods and Beverages Sold through Vending Machines, School Stores, À La Carte, and Other Venues Outside of School Meals. Available at: http://www.cspinet.org/2007school report.pdf. Access date, August 15, 2011.
- Center for Weight and Health, College of Natural Resources, and School of Public Health, University of California, Berkeley, 2005. *LEAF—Linking Education, Activity, and Food*, Pilot Implementation of SB 19 in California Middle and High Schools, Fiscal Impact Report.
- Christeson, W., A. D. Taggart, and S. Messner-Zidell. 2010. Too Fat to Fight. Mission Readiness: Military Leaders for Kids. Available at: http://cdn.mission readiness.org/MR_Too_Fat_to_Fight-1.pdf.
- Christeson, W., A. D. Taggart, S. Messner-Zidell, M. Kiernan, J. Cusick, and R, Day. 2012. Still Too Fat to Fight. Mission Readiness: Military Leaders for Kids. Available at: http://missionreadiness.s3. amazonaws.com/wp-content/uploads/ Still-Too-Fat-To-Fight-Report.pdf
- Cullen, K.W. and K.B. Watson. 2009. The Impact of the Texas Public School Nutrition Policy on Student Food Selection and Sales in Texas. *American Journal of Public Health*, 99:706–712.
- DiNapoli, T.P. 2009–MS–3. Nutrition in School Districts Across New York State. Office of the New York State Comptroller; Division of Local Government & School Accountability.
- Fox, M.K. 2010. Improving Food Environments in Schools: Tracking Progress. Journal of the American Dietetic Association, 110:1010–1013.
- Fox, M. K. et al., "Availability and Consumption of Competitive Foods in US Public Schools," Journal of American Dietetic Association 109 (2009): S57– S66.
- Freeman, D.S., W.H. Dietz, S.R. Srinivasan, and G.S. Berenson. 1999. The Relation of Overweight to Cardiovascular Risk Factors Among Children and Adolescents: The Bogalusa Heart Study. Pediatrics, 103:1175–1182.
- Gordon, A., M.K., Fox, M. Clark, R. Nogales, E. Condon, P. Gleason and A. Sarin. 2007. School Nutrition Dietary Assessment Study—III. US Department of Agriculture, Food and Nutrition Service, Alexandria, VA.
- Guthrie, J., C. Newman, and K. Ralston. 2009. USDA School Meal Programs Face New

- Challenges. Choices: The Magazine of Food, Farm, and Resource Issues, 24. Available at: http://www.choices magazine.org/magazine/print.php? article=83.
- Guthrie, J.F., Newman, C., Ralston, K., Prell, M., and Ollinger, M. 2012.
 Understanding School Food Service Characteristics Associated with Higher Competitive Food Revenues Can Help Focus Efforts To Improve School Food Environments. *Childhood Obesity*, 8:298–304.
- Harvey, L. Comments on Proposed Rule (RIN 0584–AE09). Public Schools of North Carolina, Department of Public Instruction. April 8, 2013.
- Healthy Eating Research and Bridging the Gap. 2012. Influence of Competitive Food and Beverage Policies on Children's Diets and Childhood Obesity. Available at http://www.healthyeating research.org/images/stories/her_research_briefs/Competitive_Foods_Issue_Brief_HER_BTG_7-2012.pdf.
- Healthy, Hunger-Free Kids Act. 2010. (Pub. L. 111-296) Available at: http:// www.gpo.gov/fdsys/pkg/PLAW-111publ296/pdf/PLAW-111publ296.pdf.
- Howley, N.L. National Education Association Health Information Network . Comment Letter Docket ID FNS–2011–0019–0019. April 9, 2013. NEA HIN, 1201 16th St. NW., Suite 216, Washington, DC 20036.
- House Report 108–792. 2004. Conference Report to Accompany H.R. 4818. Available at: http://www.gpo.gov/fdsys/ pkg/CRPT-108hrpt792/pdf/CRPT-108 hrpt792.pdf.
- IOM (Institute of Medicine). 2007a. Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth. Washington, DC: The National Academies Press.
- IOM (Institute of Medicine). 2007b. Progress in Preventing Childhood Obesity: How do we Measure Up? Committee on Progress in Preventing Childhood Obesity. J.P. Koplan, C.T. Liverman, V.I. Kraak, and S.L. Wisham, Eds. Washington, DC: The National Academies Press.
- Just, D.R. and B. Wansink. 2009. Smarter Lunchrooms: Using Behavioral Economics to Improve Meal Selection. Choices: The Magazine of Food, Farm, and Resource Issues, 24(3).
- Kessler, K., Walcott, D.M., Farley, T. 2013. New York City Mayor's Office. Comment Letter Docket ID FNS–2011–0019–0019. New York City, 10007.
- Lavizzo-Mourey, Řísa. 2013 Robert Wood Johnson Foundation. Comment letter Docket ID FNS–2011–0019–0019. St. Louis, MO, 63166
- Long, M.W., K.E. Henderson, and M.B. Schwartz 2010. Evaluating the Impact of a Connecticut Program to Reduce Availability of Unhealthy Competitive Food in Schools. *Journal of School Health* 80:478–486.
- National School Lunch Program: School Food Service Account Revenue Amendments Related to the Healthy, Hunger-Free Kids Act of 2010. Available at: http://www.fns.usda.gov/cnd/

- governance/legislation/SFArevenue_interimrule.pdf.
- The New York City Department of Education Wellness Policies on Physical Education and Nutrition. June 2010. Office of School Health, 2 Lafayette Street, 22nd Floor CN–25, New York, NY 10007.
- North Carolina General Assembly. 2011. Child Nutrition Programs Challenged to Meet Nutrition Standards, Maintain Participation, and Remain Solvent. Final Report to the Joint Legislative Program Evaluation Oversight Committee. Report Number 2011–06. October 12, 2011.
- Ogden, C.L. and M.D. Carroll. 2010.
 Prevalence of Overweight, Obesity, and
 Extreme Obesity among Adults: United
 States, Trends 1976–1980 through 2007–
 2008. National Center for Health
 Statistics, June 2010. As cited in Food
 Labeling: Calorie Labeling of Articles of
 Food in Vending Machines NPRM. 2011.
 Preliminary Regulatory Impact Analysis,
 Docket No. FDA–2011–F–0171
- Olshansky, S.J., D. J. Passaro, R.C. Hershow, J. Layden, B.A. Carnes, J. Brody, L. Hayflick, R.N. Butler, D.B. Allison, and D.S. Ludwig. 2005. A Potential Decline in Life Expectancy in the United States in the 21st Century. *The New England Journal of Medicine*, 352:1138–1145.
- Pew Health Group and Robert Wood Johnson Foundation. 2012. Heath Impact Assessment: National Nutrition Standards for Snack and a la Carte Foods and Beverages Sold in Schools. Available online: http://www.pewhealth.org/uploadedFiles/PHG/Content_Level_Pages/Reports/KS%20HIA_FULL%20 Report%20062212_WEB%20FINAL-v2.pdf.
- Pew Health Group and Robert Wood Johnson Foundation. (2012). Out of Balance: A Look at Snack Foods in Secondary Schools across the States. Retrieved November 7, 2012, from www.pewhealth.org/uploadedFiles/ KSHF_OutofBalance_WebFINAL 102612.pdf
- Riazi, A., S. Shakoor, I. Dundas, C. Eiser, and S.A. McKenzie. 2010. Health-related quality of life in a clinical sample of obese children and adolescents. Health and Quality of Life Outcomes, 8:134– 139.
- Senate Report 111–178—Healthy, Hunger-Free Kids Act Of 2010. Calendar No. 363. Available at http://thomas.loc.gov/cgibin/cpquery/?&r_n=sr178.111&dbname= cp111&&sel=TOC_14270&.
- School Nutrition Association. 2011.
 Summary of State School Nutrition
 Standards. Available at: http://
 www.schoolnutrition.org/uploadedfiles/
 school_nutrition/106_legislativeaction/
 policiesandregulations/summary#of
 #state#nutrition#standards#march
 #2010.doc. Access Date: June 28, 2011.
- Schwartz, M.B., S.A. Novak, and S.S. Fiore. 2009. The Impact of Removing Snacks of Low Nutritional Value from Middle Schools. *Health Education & Behavior*, 36:999–1011.
- Subchapter A—child nutrition programs: Part 210—National School Lunch Program section 210.11 of the NSLP regulations,

- p. 37. Available at: http://www.gpo.gov/fdsys/pkg/CFR-2011-title7-vol4/pdf/CFR-2011-title7-vol4-part210.pdf.
- Summary of State School Nutrition
 Standards. School Nutrition Association.
 March 2010. Available at: http://
 www.google.com/search?hl=en&source=
 hp&biw=1004&bih=612&q=state+
 competitive+food+standards&oq=state+
 competitive+food+standards&aq=f&
 aqi=&aql=undefined&gs_sm=e&gs_upl
 =1203197041013213110115115101188118
 1216.10116.
- Taber, D.R., J.F. Chriqui, and F. J. Chaloupka. 2012. Differences in Nutrient Intake Associated With State Laws Regarding Fat, Sugar, and Caloric Content of Competitive Foods. Archives of Pediatric & Adolescent Medicine, 166:452–458.
- Taber, D.R., J. Stevens, K.R. Evenson, D.S. Ward, C. Poole, M.L. Maciejewski, D.M. Murray, and R.C. Brownson. 2011. State Policies Targeting Junk Food in Schools: Racial/Ethnic Differences in the Effect of Policy Change on Soda Consumption. American Journal of Public Health, 101:1769–1775.
- Tipler, E. 2010. Childhood Obesity is a Social Justice Issue, Too. *Huffpost Living*. Available at: http://www.huffingtonpost.com/eric-tipler/childhood-obesity-is-a-so_b_518083.html. Access date: 2/8/2011.
- Trasande, L., Y. Liu, G. Fryer, and M. Weitzman. 2009. Trends: Effects of Childhood Obesity on Hospital Care and Costs, 1999–2005. *Health Affairs*, 28:w751-w760.
- Treviño, R.P., T. Pham, C. Mobley, J. Hartstein, L. El ghormli, and T. Songer. HEALTHY Study School Food Service Revenue and Expense Report. *Journal of School Health*, 82:417–423.
- U.S. Department of Agriculture, Food and Nutrition Service, Office of Research, Nutrition and Analysis, School Lunch and Breakfast Cost Study-II, Final Report, by Susan Bartlett, et al. Project Officer: Patricia McKinney and John R. Endahl. Alexandria, VA: 2008.
- U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, School Nutrition Dietary Assessment Study IV, Vol. I: School Foodservice Operations, School Environments, and Meals Offered and Served, by Mary Kay Fox, Elizabeth Condon, Mary Kay Crepinsek, et al. Project Officer, Fred Lesnett. Alexandria, VA: November 2012.
- U.S. Department of Agriculture, Food and Nutrition Service. HealthierUS Schools Challenge. Available at: http:// www.fns.usda.gov/tn/healthierus/ index.html.
- U.S. Department of Agriculture, Food and Nutrition Service. Interim Final Rule. 7 CFR Part 210. National School Lunch Program: School Food Service Account Revenue Amendments Related to Healthy, Hunger-Free Kids Act of 2010. Federal Register, Vol. 76 No. 117. June 17, 2011.
- U.S. Department of Agriculture, Food and Nutrition Service, U.S. Department of Agriculture; Centers for Disease Control

- and Prevention, U.S. Department of Health and Human Services; and U.S. Department of Education. FNS–374, Making It Happen! School Nutrition Success Stories. Alexandria, VA, January 2005
- U.S. Department of Agriculture and Health & Human Services. 2010. *Dietary Guidelines for Americans*. Available at: http://www.health.gov/dietaryguidelines/dga2010/dietaryguidelines2010.pdf.
- U.S. Government Accountability Office. 2004. School Programs: Competitive Foods are Available in Many Schools; Actions Taken to Restrict Them Differ by State and Locality. 2004. U.S. General Accounting Office. GAO-04-673.
- U.S. Government Accountability Office. 2005. SCHOOL MEAL PROGRAMS: Competitive Foods Are Widely Available and Generate Substantial Revenues for Schools. GAO-05-563.
- Vargas A, G. Woodward-Lopez, S. Kim, and P. Crawford. 2005. LEAF Cross-Site Evaluation: Report on Accomplishments, Impacts and Lessons Learned. Center for Weight and Health, University of California, Berkeley.
- Vending Times.com, Census of the Industry, 2010 Edition. http://www.vendingtimes. com/Media/E-CommerceProductCatalog/ Vending Times_Census 2010.pdf, accessed 06/04/2013.
- Wang, Y., M.A. Beydoun, L. Liang, B.
 Cabellero and S.K. Kumanyika. 2008.
 Will all Americans Become Overweight or Obese? Estimating the Progression and Cost of the US Obesity Epidemic.
 Obesity, 16: 2323–2330.
- Wang, Y., S. Gortmaker, A. Sobol, and K. Kuntz. 2006. Estimating the Energy Gap among US Children: A Counterfactual Approach, *Pediatrics* 118: e1721.
- Wescott R., B. Fitzpatrick, and E. Philips. 2012. Industry Self-Regulation to Improve Student Health: Quantifying Changes in Beverage Shipments to Schools. *American Journal of Public Health*, published online August 16, 2012
- West Virginia University/Robert C. Byrd Health Sciences Center/Health Research Center. 2009. Year One Evaluation: West Virginia Standards for School Nutrition, Executive Summary. Available at: http://www.hsc.wvu.edu/som/hrc/pdfs/ WVA_CN_ExecSumm_12%2023%20 web%20final.pdf.
- Westat. 2012 Special Nutrition Program Operations Study: A Description of the NSLP and SBP Program Operations at the SFA and State Levels. Second Draft First Year Report. October, 2012.
- Wharton, C.M, M. Long, M. Schwartz. 2008. Changing Nutrition Standards in Schools: The Emerging Impact on School Revenue. *Journal of School Health*, 78:245–251.
- Woodward-Lopez G., S. Kim, and P. Crawford. 2005a. LEAF Cross-Site Evaluation: Report on Food and Beverage Industry Response to SB 19. *Center for Weight and Health*, University of California, Berkeley.
- Woodward-Lopez, G., W. Gosliner, SE. Samuels, L. Craypo, J. Kao, and P.B.

Crawford. 2010. Lessons Learned from Evaluations of California's Statewide School Nutrition Standards. *American Journal of Public Health*, 100:2137–2145. Woodward-Lopez G., A. Vargas, S. Kim, C. Proctor, L. Hiort-Lorenzen Diemoz, and P. Crawford P. 2005b. LEAF Cross-Site Evaluation: Fiscal Impact Report. *Center* for Weight and Health, University of California, Berkeley.