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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: Proposed rule

SUMMARY: This rule proposes to amend the National School Lunch Program and School Breakfast Program regulations consistent with amendments made in the Healthy, Hunger-Free Kids Act of 2010 (HHFKA). The HHFKA requires that the Secretary promulgate proposed regulations to establish nutrition standards for foods sold in schools other than those foods provided under the Child Nutrition Act of 1966 (CNA) and the Richard B. Russell National School Lunch Act (NSLA). The HHFKA amends the CNA, requiring that such standards shall be consistent with the most recent Dietary Guidelines for Americans and that the Secretary shall 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, a la carte sales and any other exclusions determined by the Secretary). The HHFKA also amended the NSLA to require that schools participating in the National School Lunch Program make potable water available to children at no charge in the place where lunches are served during the meal service. These proposed 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.

DATES: Online comments submitted through the Federal eRulemaking Portal on this proposed rule must be received on or before (insert date that is 60 days from Federal Register publication of this rule). Mailed comments on this rule must be postmarked on or before (insert date that is 60 days from publication of this rule).

Comments on Paperwork Reduction Act requirements: Comments on the information collection requirements associated with this rule must be received by (insert date that is 60 days from Federal Register publication of this rule).

ADDRESSES: The Food and Nutrition Service (FNS) invites interested persons to submit comments on this proposed rule. Comments may be submitted by either of the following methods:

- Federal eRulemaking Portal: Comments on the provisions in this rule must be received on or before (insert date that is 60 days after publication in the Federal Register) to be assured of

consideration. 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: Mailed comments on the provisions in this rule must be postmarked on or before (insert date that is 60 days after publication in the Federal Register) to be assured of consideration and should be sent to Julie Brewer, Chief, Policy and Program Development Branch, Child Nutrition Division, Food and Nutrition Service, P.O. Box 66874, Saint Louis, MO 63166.

All submissions received in response to this proposed 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: Julie Brewer, 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 rule sets forth proposed provisions to implement sections 203 and 208 of Public Law 111–296, the Healthy, Hunger-Free Kids Act of 2010 (HHFKA) for schools that participate in the National School Lunch Program (NSLP) and the School Breakfast Program (SBP). This rule proposes to amend the NSLP and SBP regulations consistent with amendments made in the HHFKA. The HHFKA requires that the Secretary promulgate proposed regulations to establish nutrition standards for foods sold in schools other than those foods provided under the Child Nutrition Act of 1966 (CNA) and the Richard B. Russell National School Lunch Act (NSLA). The HHFKA specifies 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 HHFKA requires 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, a la carte sales and any other exclusions determined by the Secretary). These proposed 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 proposed in this rule represent minimum standards that local educational agencies, school food authorities and schools would be required to meet. State agencies and/or local schools would have the discretion to establish their own standards for non-

program foods sold to children should they wish to do so, as long as such standards are consistent with the final minimum standards. This rule also proposes to codify a provision of the HHFKA that requires schools participating in the NSLP to make free potable water available to children in the place lunches are served during meal service.

Summary of Major Provisions

In formulating the proposal, USDA considered the Institute of Medicine's (IOM) 2007 Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth report, and reviewed nutrition standards developed by other entities, including existing State and local standards, and voluntary standards developed by organizations such as the Alliance for a Healthier Generation (AHG). Rather than offer a single approach, the proposal offers alternatives in several areas and requests comment on the relative merits of each of the alternatives. (These are noted below.)

Food Requirements – Under the proposed rule, any food sold in schools must:

(1) Be either a fruit, a vegetable, a dairy product, a protein food, a "whole-grain rich" grain product (50% or more whole grains by weight or have whole grains as the first ingredient), or a combination food that contains at least ¼ cup of fruit or vegetable; or

(2) Contain 10% of the Daily Value (DV) of a nutrient cited as a public health concern in the 2010 Dietary Guidelines for Americans (DGA) (calcium, potassium, vitamin D, or fiber).

Additionally, foods sold must meet a range of calorie and nutrient requirements:

- Total fat must be ≤35% of calories; saturated fat must be <10% of calories; and trans fat must be 0g as stated on the label. Exemptions are provided for reduced fat cheese; nuts and nut butters without other ingredients and seafood with no added fat.

- Snack items shall contain ≤200 milligrams of sodium. For entrée items, sodium levels must be ≤480 milligrams per portion, for non-NSLP/SBP entrée items.
- For total sugar levels the proposal includes two alternatives: one is ≤35% of calories and the other is ≤35% of weight. Exemptions are provided for fruits and vegetables packed in juice or extra-light syrup and for certain yogurts.
- Snack items have a limit on calories of ≤200 calories per portion. Non- NSLP/SBP entrée items have a calorie limit of ≤350 calories.

The proposal includes two alternatives to exempt one set of foods from the food requirements – NSLP/SBP entrees and side dishes sold a la carte. The first alternative would subject NSLP/SBP menu items only to the fat and sugar standards with no restrictions regarding timeframes for the service of such items sold a la carte. The second alternative would exempt any menu item served as part of the NSLP or SBP, subject to specific timeframe restrictions as outlined in the proposed rule (the day that they are served in a meal or within 4 operating days of service).

Beverage requirements

Under the proposal, all schools may sell plain water, plain low fat milk, plain or flavored fat-free milk and milk alternatives permitted by NSLP/SBP, and 100% fruit/vegetable juice. Portion sizes of milk and juice vary by the age of students. Elementary schools may sell up to 8-ounce portions. Middle schools and high schools may sell up to 12-ounce portions.

Beyond this, the proposal offers additional beverage options in high schools. These include 20 ounce servings or less for calorie-free, flavored and/or unflavored carbonated water and other

calorie-free beverages that comply with the Food and Drug Administration (FDA) standard of <5 cals/serving.

Additionally, the proposal would allow 12 ounce servings of other beverages within a specified calorie limit. The proposal offers two alternatives for this limit. The first is ≤ 40 cals/8 oz serving (or ≤ 60 cals/12 oz serving), and the second is 50 cals/8 oz serving (or 75 cals/12 oz serving).

Such beverages shall not be available in the meal service area during the meal service periods.

Accompaniments – The proposal requires accompaniments to be pre-portioned and offered only when food is sold. In addition, accompaniments must "fit" within the nutrient profile of the food that they accompany.

Fundraisers –The sale of food items that meet the proposed nutrition requirements at fundraisers would not be limited in any way under the proposed rule. However, the law permits USDA to allow for a limited number of fundraisers to sell food and beverage items that do not meet the proposed nutrition requirements. Because of the wide variety of options available with regard to the frequency of fundraiser exemptions, the proposed rule includes two alternative approaches that provide discretion to State agencies in determining the frequency with which such fundraising activities may take place, and requests other suggestions. The proposed standards would not apply to non-school hours, weekends and off-campus fundraising events.

Costs and Benefits

The principal benefit of the proposed rule is improvement in public health. The primary purpose of the proposed rule is to ensure that competitive foods are consistent with the most recent DGA, 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 particular policy concern because the relevant 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.

We anticipate the proposed 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, which are also not quantifiable at the present time, may also be realized by the nutrition standards in the proposed 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.

The proposed 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. Upon implementation of the rule, students will face new food choices from these sources. The new choices will meet standards for calories, 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 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 proposed rule, these State programs offer the closest "real-world" analogue to the proposal.

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 this 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 included in the proposed rule examines the possible effects of the proposed rule on school revenues from competitive foods, the administrative costs of complying with the rule and the benefits to school children.[1] 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.

Background

This rule sets forth proposed provisions to implement sections 203 and 208 of Public Law 111–296, the Healthy, Hunger-Free Kids Act of 2010 (HHFKA), which set conditions on schools that participate in programs authorized under NSLA and the CNA. The largest of these programs are the National School Lunch Program (NSLP) and the School Breakfast Program (SBP). NSLP is available to over 50 million children each school day; an average of 31.8 million children per day received a reimbursable lunch in Fiscal Year (FY) 2011. In that same FY, SBP served an average of 12.1 million children daily. Schools that participate in the NSLP and SBP receive Federal reimbursement and USDA Foods (donated commodities) for lunches that meet program requirements. The level of Federal support provided varies by the household income of the participating child, with the highest reimbursements to schools for meals provided free to the children eligible for such meals.

Availability of Water During the Meal Service

[1] For simplicity and because the consumption of competitive foods at breakfast is relatively low compared to the consumption of competitive foods at lunch, we model the shift from competitive foods to program meals as one that takes place at lunchtime only. SNDA-III found that competitive foods were consumed by 29 percent of NSLP non-participants during the lunch period in SY 2004-2005 (Gordon, et al., 2007, vol. 2, table VI.9, p. 196), but that competitive foods were consumed by just 5 percent of SBP non-participants during the breakfast period (vol. 2, table VII.9, p. 264).

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

There are a variety of ways that schools can choose to implement this requirement. For example, schools can offer water pitchers and cups on lunch tables, a water fountain, or a faucet that allows students to fill their own bottles or cups with drinking water. Whatever method is chosen, the water must be available without restriction in the location where meals are served.

While potable water is required to be made available to students, it is not considered part of the reimbursable meal, and students are not required to take water. There is no separate funding available for this provision and reimbursement may not be claimed. However, reasonable costs associated with providing potable water would be an allowable cost to the non-profit school food service account. Please note that this proposed rule would also apply to afterschool snack service claimed through the NSLP. In addition, while the statute does not specifically require that potable water be served in the School Breakfast Program, the availability of water during all meal services is encouraged.

The Department recognizes that some food service areas and/or procedures may require significant changes to properly implement this provision, and guidance has been provided to State agencies to use with schools. The Department issued an implementation memorandum entitled "Child Nutrition Reauthorization 2010: Water Availability During National School Lunch Program Meal Service," SP 28-2011, on April 14, 2011, and participated in the Food Research and Action Center's webinar, "Strategies for Success: Making the Most of the New School Water and Milk Requirements," on May 24, 2011. On July 12, 2011, SP 28-2011 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 website at http://www.fns.usda.gov/cnd/governance/policy.htm.

State agencies and local school food authorities are reminded that schools were required to comply with this provision not later than the beginning of School Year 2011-12. This nondiscretionary requirement is included in this proposed rule as an amendment to §210.10(a)(1).

Nutrition Standards for Food Sold in Schools in Competition with School Meals

Federal child nutrition programs play a critical role in providing nutritious, balanced meals to children and promoting healthy lifestyles. Major strides have been made in recent years to improve the quality of meals served to children through Federal child nutrition programs. Despite this significant progress, however, considerable work remains to be done to improve children's diets. Available research has consistently shown that the diets of children in the U.S. do not meet current national dietary recommendations for nutrition and health. Overall, children today have diets that are low in fruits, vegetables, whole grains, and dairy foods and high in sodium, fat and added sugars. The 2010 DGA recommend that Americans increase their consumption of whole grains, but according to the U.S. Department of Health and Human Services (DHHS) report, Healthy People 2010, only 7 percent of children ages 2 to 19 years currently meet this recommendation.

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, in addition

to nutrition and physical activity, has become a major public health concern in the U.S.[2] 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).

Available health research[3] shows a strong association between obesity and other chronic diseases, including cardiovascular disease, hypertension, and diabetes. Cardiovascular disease is the leading cause of death in America, resulting in 500,000 annual deaths. Risk factors for cardiovascular disease occur with much greater frequency among obese children than they do among normal weight children. One quarter of children ages 5 to 10 show early warning signs for heart disease, such as elevated blood pressure or high cholesterol.

This and other evidence indicates a need to improve the diets of children. Since a significant portion of calories consumed by children takes place at school, improving the nutritional profile of all foods sold in school beyond Federally-reimbursable meals is critical to improve the diets and overall health of American children more generally, and to ensure that more children from

[2] HealthyPeople.gov. "Nutrition, Physical Activity, and Obesity. Available at http://healthypeople.gov/2020/LHI/nutrition.aspx?tab=data

[3] See, for example, *Preventing Childhood Obesity: Health in the Balance* by Jeffrey P. Koplan, Catharyn T. Liverman, and Vivica A. Kraak (Editors), Committee on Prevention of Obesity in Children and Youth, Washington, DC: The National Academies Press, 2005.

all income levels adopt the kind of healthful eating habits and lifestyles that will enable them to live healthier, more productive lives.

Section 208 of the HHFKA amended Section 10 of the CNA providing the Secretary new authority to establish nutrition standards for all foods and beverages sold outside of the Federal child nutrition programs in schools. Specifically, the HHFKA amended the CNA to require that the Secretary promulgate proposed regulations to establish nutrition standards for foods sold in schools other than those foods provided under the CNA and the NSLA. The provisions specify 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.

The provisions further stipulate that such standards be consistent with the most recent DGA and that the Secretary consider authoritative scientific recommendations for nutrition standards; existing school nutrition standards, including voluntary standards for beverages and snack foods and 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, a la carte sales and any other exclusions determined by the Secretary).

Prior to enactment of the HHFKA, the Secretary's authority to regulate the types of foods sold in schools was limited to meal pattern requirements for meals served under NSLP and SBP and other foods sold in the food service areas during meal periods. Restrictions on the sale of foods of minimal nutritional value (FMNV) in food service areas during meal periods are found at 7 CFR 210.11 and 220.12 and Appendix B to parts 210 and 220. The term "food service areas" means any place where school meals are being served or consumed, including classrooms and multipurpose rooms that double as cafeterias during meal periods. The Secretary did not

have authority to establish regulatory requirements for foods sold in other areas of the school campus or at other times during the school day.

While meals provided through the Federal school meal programs must meet certain nutritional requirements, schools may also provide foods and beverages outside of these programs, such as a la carte items in the school cafeteria as well as those sold through vending machines, school stores, school fundraisers, and snack bars. These foods are commonly referred to as "competitive foods" because they are sold in competition with foods offered in school meal programs. The requirement that local educational agencies have local school wellness policies, pursuant to Section 9A of the NSLA, 42 USC 1786b, was initially established in the Child Nutrition and WIC Reauthorization of 2004, P.L. 108-265, and further strengthened by section 204 of the HHFKA. As part of local wellness policies, schools are encouraged to establish their own standards for competitive foods. In many cases, school food authorities have been very successful in increasing the number of healthy offerings in the area of competitive food sales and developing standards for the sale of such foods and beverages in schools; however, implementation of such policies has been varied. Likewise, voluntary certification initiatives, such as USDA's HealthierUS School Challenge (HUSSC) and the Healthy Schools program of the Alliance for a Healthier Generation, set criteria for competitive foods and beverages when schools offer them, but not all schools participate.

The goal of both the changes to the nutrition requirements for NSLP and SBP meals required by the HHFKA and contained in the final rule, Nutrition Standards in the National School Lunch and School Breakfast Programs, (77 FR 4088, *January* 26, 2012) , and the standards for competitive foods outlined in this proposed rule is to improve the health and well being of the Nation's children, increase consumption of healthful foods during the school day and to create an

environment that reinforces the development of healthy eating habits.

This proposed rule includes standards for both foods and beverages sold in schools outside of the Federal child nutrition programs, in accordance with the intent of the HHFKA. Specifically, the HHFKA clearly directs the Secretary to consider authoritative scientific recommendations (which include those for both food and beverages) as well as existing State, local and other voluntary standards for beverages and snack foods. All such standards include beverage standards. In addition, the Secretary's authority to set standards with regard to reimbursable meals has historically included beverages, so it is reasonable to believe that in extending this authority to other foods sold in schools, Congress intended to include beverage standards.

Alternative approaches to several of the proposed provisions are described in the preamble of this rulemaking and presented in the proposed regulatory language, in order to solicit public comment on their merits. Please note that the order in which these alternatives are presented is not intended to indicate a preferred approach.

Considerations

As previously indicated, the nutrition standards established by the Secretary must be consistent with the most recent DGA, which, for the purposes of developing this proposed rule, are the 2010 Dietary Guidelines for Americans released on January 31, 2011. The guidelines are available at http://www.cnpp.usda.gov/DietaryGuidelines.htm. In developing the competitive food standards, the Secretary is also directed by the HHFKA 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 entitled Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth (available at: http://www.cdc.gov/HealthyYouth/nutrition/standards.htm).

In addition, the Department conducted a broad review of nutrition standards developed by other entities. These included USDA's 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 that have been developed by various organizations such as the National Alliance for Nutrition and Activity and the Alliance for a Healthier Generation.

The Department also 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. Input gathered from these various sources has served to assist the Department in formulating the standards and options proposed in this rule. The practical application of the competitive food nutrition standards in school settings was a key consideration for all of the proposed standards. Additionally, over 4,400 schools to date have been recognized through the HUSSC initiative and have adopted strong competitive foods policies as part of their application for recognition. The HUSSC criteria for competitive food policies is based on IOM recommendations that promote offering competitive food items that are limited in calories and low in total fat, trans fat, saturated fat, sugar, sodium, and that also limit the types and portion sizes of beverages that can be sold in competition with the reimbursable meal.

This proposed rule is predicated on the principle that the present and future health and well-being of school-age children is profoundly affected by dietary intake and the maintenance of a

healthy weight. Schools contribute to current and lifelong health and dietary patterns and are uniquely positioned to model and reinforce healthful eating behaviors in partnership with parents, teachers, and the broader community. The practice of food sales in competition with Federally-reimbursable program meals and snacks is widespread. In school year (SY) 2004-2005, 82 percent of all schools – and 92 percent of middle and high schools – offered a la carte foods at lunch. Vending machines were available in 52 percent of all schools and 26 percent of elementary schools, 87 percent of middle schools and 98 percent of high schools (Gordon, et al., 2007; SNDA-III, Volume 1, pp 102-114). Because all foods and beverages available on the school campus represent significant opportunity for the intake of calories and foods and nutrients encouraged by the DGA, competitive food standards should be designed to meet such nutrition recommendations.

Nutrition standards for all foods and beverages sold in schools should be considered in the context of new meal patterns for the Federal school meal programs and the goals of improving the nutrition environment of our Nation's schools. The intent of this proposal is to support the federally- reimbursed school nutrition programs as the major source of foods and beverages offered at school and to ensure that all foods and beverages sold on the school campus during the school day will contribute to an overall healthful eating environment. These proposed standards do not exclude any of the USDA NSLP/SBP Meal Pattern food components or the DGA subgroups as long as the product meets the general standards proposed for allowable competitive foods. It is intended that these standards for competitive foods be simple in order to encourage the inclusion of the "Foods and Nutrients to Increase" identified in the 2010 DGA, and that the standards be practical for application at the school or district level.

The proposed standards and the proposed exceptions to the standards include numerous areas of consensus and/or consistency among the various source recommendations that were reviewed. In addition, there are a number of areas where existing recommendations and/or voluntary or State/local standards vary considerably in their specific approach to issues. We carefully considered each of these. As a result, where appropriate in these areas, the Department has proposed two or more options for implementing standards and is interested in receiving comments on which of these options best achieves the objectives of the DGA while considering the practical application of standards in a school setting.

Definitions

The HHFKA stipulates that the nutrition standards for competitive food shall 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. Therefore, for the purpose of implementing section 208 of the HHFKA, this rule includes proposed definitions for "competitive food", "school campus" and "school day".

There are many definitions of "school day" currently utilized by schools across the country. In almost every instance, such definitions apply to the instructional day, rather than to the availability of food or meal services in schools during the school day. The definitions proposed in this rule deal exclusively with the application of the proposed competitive food standards and are intended to have no impact whatsoever on any definition of instructional day or school campus that is established by a State or a local educational agency or school for other purposes. Competitive food is proposed to be defined as all food and beverages sold to students on the School campus during the School day, other than those meals reimbursable under programs

authorized by the NSLA and the CNA. School day is proposed to be defined, for the purpose of competitive food standards implementation, as the period from the midnight before, to 30 minutes after the end of the official school day. Finally, School campus is proposed to be defined, for the purpose of competitive food standards implementation, as all areas of the property under the jurisdiction of the school that are accessible to students during the school day.

The intent of the proposed definitions of school day and school campus is to provide simple and straightforward criteria to ensure that food that does not meet the standards outlined in this proposed rule is not sold to students on the school campus during the school day. Given the many activities, programs and schedules established by schools, it is not possible to specify in regulations a precise time for the start of the school day; therefore, this rule proposes that the sale of competitive food to students be prohibited from the midnight before, to 30 minutes after the end of the official school day (i.e., instructional day). Competitive food, school day, and school campus are defined in §210.11(a).

In addition, §210.11(b)(4) of this rule proposes that these nutrition standards for competitive foods apply to any program operating in the school on the school campus during the school day that is serving meals reimbursed under any program authorized under the NSLA or the CNA. Foods that do not meet the nutrition standards outlined in this proposal should not be available for sale to students on the school campus during the school day.

Nutrition Standards for Foods and Beverages

The standards proposed in this rule represent minimum standards that local educational agencies, school food authorities and schools must meet. State agencies and/or local schools have the discretion to establish their own competitive food standards should they wish to do so,

as long as such standards are consistent with the final minimum standards. This option is included in §210.11(b)(1) of the proposed rule. Competitive food standards apply to all age groups of students. Additionally, the proposed rule includes separate standards for foods and beverages.

General Nutrition Standards for Competitive Foods

The IOM in their report entitled Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth categorized food and beverages into two tiers, based on the extent of their consistency with the DGA. Tier 2 foods are not relevant to this proposal since such foods are those recommended to only be served to high school students after the school day. Tier 1 foods and beverages are consistent with "foods to be encouraged" as defined in the DGA and are the basis for many of the provisions of this proposed rule. IOM Tier 1 foods are defined as fruit, 100% fruit and vegetable juices, vegetables, whole grains and related combination products, and nonfat and low-fat dairy products and NSLP food items that are part of the reimbursable meal that are also sold a la carte that meet fat and sugar limits outlined in the IOM report. This proposed rule is generally consistent with the IOM standards and the DGA in that it permits the sale of Tier 1 foods as well as additional foods containing a significant amount of one of the four nutrients of public health concern, and/or fruits/vegetables.

To be an allowable competitive food in schools, an item shall:

(1) Meet all of the proposed competitive food nutrient standards; and

(2) Be a grain product that contains 50 percent or more whole grains by weight or have whole grains as the first ingredient or be one of the non-grain main food groups as defined by the

2010 DGA: a fruit, vegetable, dairy product, protein food (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.); or

(3) Contain 10 percent of the Daily Value (DV) of a naturally occurring nutrient of public health concern from the DGA (e.g., calcium, potassium, vitamin D or dietary fiber); or

(4) Be a combination food that contains at least ¼ cup of fruit or vegetable.

This proposal stipulates that, in cases in which water is the first ingredient listed for a food item, the second ingredient must be one of the above. Below is a brief summary chart depicting the proposed standards contained in this rule. A thorough discussion of each standard follows.

Proposed Competitive Foods Standards		
Food/ Nutrient	**Standard**	**Exemptions to the Standard**
General Standard for Competitive Food	To be allowable, a competitive FOOD item must: (1) meet all of the proposed competitive food nutrient standards; and (2) be a grain product that contains 50% or more whole grains by weight or have whole grains as the first ingredient or be one of the non-grain main food groups: a fruit, vegetable, dairy product, protein food (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.), or (3) contain 10% of the Daily Value (DV) of a naturally occurring nutrient of public health concern (i.e., calcium, potassium, vitamin D or dietary fiber) or; (4) be a combination food that contains at least ¼ cup of fruit or vegetable. If water is the first ingredient, the second ingredient must be one of the above.	• Fresh, frozen and canned fruits and vegetables with no added ingredients except water or, in the case of fruit, packed in 100% juice or extra light syrup, exempt from all proposed nutrient standards.
NSLP/SBP Entrees and Side Dishes Sold A la Carte	**Alternative A1*:*** NSLP/SBP entrees and side dishes sold a la carte exempt from all standards except the fat and sugar standards (≤35% of total calories from fat or ≤35% of calories or weight from total sugar (See Alternative C1 and C2)) ***;*** **or** **Alternative A2:** NSLP/SBP entrees and side dishes (except grain based dessert products) sold a la carte exempt from all standards. ***Alternatives B1and B2 describe two approaches to the timing of service associated with this exemption.***	

Proposed Competitive Foods Standards		
Food/ Nutrient	**Standard**	**Exemptions to the Standard**
Grain Items	Acceptable grain products must include 50% or more whole grains by weight or have whole grains as the first ingredient.	
Total Fats	Dietary fat per portion as packaged: ≤35% of total calories from fat per portion as packaged.	• Reduced fat cheese; • Nuts and seeds and nut/seed butters. Exemption does not extend 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.; • Products consisting of only dried fruit with nuts and/or seeds with no added nutritive sweeteners or fat; • Seafood with no added fat.
Saturated Fats	• <10% of total calories per portion as packaged.	• Reduced fat cheese
Trans Fats	• Zero grams of trans fat per portion as packaged (≤ 0.5 g per portion).	
Sodium	• Snack and side items***:*** **≤200 mg** sodium per portion as packaged for non NSLP/SBP snack items; • Entrée items: ≤480 mg sodium per portion for non-NSLP/SBP entrée items.	

Proposed Competitive Foods Standards		
Food/ Nutrient	**Standard**	**Exemptions to the Standard**
Total Sugars	• **Alternative C1:** ≤35% of calories from total sugars in foods; or • **Alternative C2:** ≤ 35% of weight from total sugars in foods.	• Fresh, frozen and canned fruits/vegetables with no added sweeteners except for fruits packed in 100% juice or extra light syrup; • Dried whole fruits/vegetables, dried whole fruit/vegetable pieces; and dried dehydrated fruits/vegetables with no added nutritive sweeteners. • Lowfat/nonfat yogurt with less than 30 grams of sugar per 8 ounces.
Calories	• ≤200 calories per portion as packaged including any added accompaniments such as butter, cream cheese, salad dressing etc. for non NSLP/SBP snack items and side dishes sold a la carte; • ≤350 calories for non NSLP/SBP entrée items sold a la carte.	
Accompaniments	• Use of accompaniments should be limited when food is sold to students in school. All accompaniments shall be pre-portioned and must be included in the nutrient profile as a part of the 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. No caffeine restriction for high school students.	

Proposed Competitive Foods Standards		
Food/ Nutrient	**Standard**	**Exemptions to the Standard**
Beverages	Elementary School • No caffeinated beverages; • Plain water (no size limit); • Low fat milk, plain (≤8 oz); • Non fat milk, plain or flavored (≤8 oz), including nutritionally equivalent milk alternatives as permitted by the school meal requirements; and • 100% fruit/vegetable juice (≤8 oz). Middle School • No caffeinated beverages; • Plain water (no size limit); • Low fat milk, plain (≤ 12 oz); • Non fat milk, plain or flavored (≤ 12 oz) including nutritionally equivalent milk alternatives as permitted by the school meal requirements; and • 100 % fruit/vegetable juice (≤ 12 oz). High School • Plain water (no size limit); • Low fat milk/plain (≤ 12 fl. oz.); • Non fat milk, plain or flavored (≤12 fl. oz.), including nutritionally equivalent milk alternatives as permitted by the school meal requirements; • 100% fruit/vegetable juice (≤12 fl. oz.); • Calorie-free, flavored and/or unflavored , caffeinated or non-caffeinated carbonated water allowed (≤20fl. oz), but <u>not</u> during the meal service periods; • Other calorie free caffeinated or non-caffeinated beverages that comply with the FDA standard of less than 5 kcals/serving. (≤20 fl. oz.), allowed, but <u>not</u> during the meal service periods; and • **Alternative D1**: Other caffeinated or non-caffeinated beverages (≤ 40 calories/8 oz serving or ≤60 calories /12 oz serving) in ≤ 12 oz servings allowed, but not during the meal service periods; or • **Alternative D2**: Other caffeinated or non-caffeinated beverages (≤ 50 calories/8 oz or ≤75 calories /12 oz serving) in ≤12 oz servings, but not during the meal service periods.	

The following discussion outlines the nutrition standards for allowable competitive foods as proposed in this rule at §210.11.

General Exemption of NSLP and SBP Entrees and Side Dishes

This rule proposes two alternatives by which any menu item (both entrees 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, with the exception of grain based dessert products which must meet all standards in order to be served.

The first alternative (A1) would align such an exemption with the IOM recommendations related to NSLP and SBP menu items. If items are served in the reimbursable meal, they would be exempt from all of the proposed nutrition standards except they would still have to meet the limits on fat and sugar. As discussed later in this preamble, the proposed limit for fat is ≤35% of total calories from fat per portion as packaged. For sugar, two alternatives are proposed: Alternative C1: ≤35% of calories from total sugars in foods; or Alternative C2: ≤ 35% of weight from total sugars in foods. The purpose of including this alternative for meals is to ensure that the improvements that will result from the updated nutrition standards would not be undermined.

The second alternative (A2) would exempt all menu items provided as part of the NSLP or SBP reimbursable meal from the proposed competitive food standards, with the exception of grain based dessert products which must meet all standards in order to be served. For this alternative, the rule also proposes two alternatives for comment with regard to the frequency of allowable sale of the NSLP/SBP menu items as competitive foods which are described as Alternatives (B1) and (B2) below. These NSLP/SBP menu items would have to be served in the same or smaller portion sizes as in the NSLP or SBP to be allowable. In general, the proposed

exemption for NSLP/SBP menu items supports the new school meal patterns and the concept of school meals as being healthful.

The first alternative proposed regarding the frequency of allowable service of the exempted NSLP/SBP menu items (B1) would allow an exemption to the proposed nutrient standards for competitive foods for NSLP and SBP menu items on the same day that the items were served in the school meals program. While this may limit flexibility for the school food service and prevent the service of some leftover entrees and/or side dishes during the menu cycle, this option would alleviate concerns regarding the frequency with which particular food items are available.

The second alternative (B2) would allow an exemption to the proposed nutrient standards for competitive foods for NSLP and SBP menu items served within four operating days of service in the programs. This option provides an increase in flexibility for the school food service.

The Department seeks comments on these alternatives, identified at Alternatives B1and B2 in §210.11(c)(3) of the proposed rule.

Naturally Occurring Nutrients

One of the general standards proposed in this rule is that, in order to be allowable, food items must contain 10% of the Daily Value (DV) of a naturally occurring nutrient of public health concern: calcium, potassium, vitamin D, and dietary fiber. Including the 10% DV as a method to determine the foods that may be sold in schools encourages consumption of these nutrients.

The Department is interested in receiving comments from the public as to whether or not food items that contain only naturally occurring nutrients should be allowed in this rule, or whether food items to which specific nutrients of concern have been added should also be allowable.

For example, if only naturally occurring nutrients were specified, a product may be formulated to have 10% calcium by including ingredient(s) in the product formulation that are naturally high in calcium such as non-fat dry milk solids, or cheese. Obviously, the ingredient(s) used and the amount needed would vary depending on the product and may not be feasible for some products, but the nutrients from these ingredients would be included in meeting the 10% DV level. Using this method would not allow the addition of the discrete nutrient (many forms exist for the addition of calcium to food, such as tricalcium phosphate, calcium citrate malate, calcium lactate, etc.) to count toward meeting the 10% DV requirement. The rationale to limit the products to the naturally occurring nutrients is to limit the consumption of products to which specific nutrients of concern have been added and encourage consumption of whole foods or foods closer to their whole state as encouraged by the DGA. One concern with this approach is that schools may not be able to recognize when a specific nutrient of concern has been added to a product or when the nutrient is naturally occurring. Fortifications are often not highlighted on the label and the nutrient facts panel does not currently make any distinction between naturally occurring nutrients and those nutrients available in a food through fortification. This requirement may be found in §210.11(c)(2)(iv) of the proposal.

Combination Foods

Since many of the foods available to students contain a combination of ingredients, for the purposes of this proposal, combination foods are defined as products that contain two or more components that represent two or more of the recommended food groups as specified in the DGA (fruit, vegetable, dairy, protein or grains). This proposed definition may be found at §210.11(a)(4).

Fruits and Vegetables

To be consistent with both the DGA and the IOM recommendations, this rule proposes that fresh, frozen and canned fruits and vegetables with no added ingredients except water or, in the case of fruit, packed in 100 percent juice or extra light syrup, be exempt from all the nutrient standards included in this rule. According to the DGA, fruits and vegetables are nutrient dense; greater consumption of such foods in the diet is encouraged. This provision is included at §210.11(d) of this proposed rule.

Grain Items

This rule proposes that acceptable grain products must include whole grains. To qualify as an allowable competitive food, grain products shall meet at least one the following criteria as well as meet all of the proposed nutrient standards:

(1) Contain 50% or more whole grains by weight; or

(2) Have whole grains as the first ingredient.

This standard is consistent with the DGA recommendations, the NSLP meal pattern standards and the HUSSC whole grain requirement. It is also practical because it can be easily identified by reading a product label. This provision is included at §210.11(e)

Total Fats

To qualify as an allowable competitive food, this proposal specifies that not more than 35 percent of the total calories per portion as packaged shall be derived from fat. Nuts and seeds, peanut and other nut butters, seafood, and reduced fat cheese would be exempt from this

standard. This standard is identical to the IOM recommendation for total fats. However, the Department is proposing to allow the following exemptions to the total fat limitation. Please note that requirements and exemptions other than total fat mentioned below are discussed later in this preamble under the applicable section.

(1) Reduced fat cheese is exempt from the total fat and saturated fat standard, but subject to the trans fat, calorie, sugar and sodium standards. The exemption for reduced fat cheese is based primarily on the availability of lower fat cheeses that children find palatable and the recognition that reduced fat cheese is a source of calcium, a nutrient of concern, and contributes to overall bone health. In addition, this exemption is consistent with voluntary standards that have been reviewed during the course of developing this proposal.

(2) Nuts and seeds and nut/seed butters are exempt from the total fat standard, but subject to the saturated fat, trans fat, calorie, sugar, and sodium standards. This exemption does not extend 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. This exemption from the total fat standard allows the inclusion of nuts and seeds within reasonable calorie amounts. Without such an exemption, nuts and seeds could not be sold alone without being combined with some other product like added sugars or refined grain, which is not the intent of these competitive food nutrition standards. Nuts, seeds and nut/seed butters are nutrient-dense, good sources of monounsaturated and polyunsaturated fatty acids, some of which are essential, and are sources of many vitamins and minerals, as well as dietary fiber. In addition, ensuring the allowance of nuts and seeds provides a shelf stable, vegetarian-friendly protein source.

(3) 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 and sugar standard; but are subject to the saturated fat, trans fat, calorie and sodium standards, for reasons similar to those cited above. In addition, dried fruit has the same nutritional benefits of fruits and will assist in helping children meet their daily fruit requirements.

(4) Seafood with no added fat is exempt from the total fat requirement in order to increase omega- 3 fatty acids; but still subject to the proposed sugar, saturated fat, trans fat, calorie and sodium standards.

In summary, reduced fat cheese, nuts, seeds and nut/seed butters and dried fruit are popular food items among school-aged children and can make a positive contribution to overall health, especially since these food items must meet the other nutrient standards proposed. These provisions may be found at §210.11(f).

Saturated Fats

To qualify as an allowable competitive food, it is proposed that less than 10% of the total calories per portion of a food be derived from saturated fats. Cheese is exempt from the total fat and saturated fat standard if it is reduced fat cheese, as discussed above. However, such reduced fat cheese products remain subject to the proposed calorie, trans fat, sugar and sodium standards outlined in this rulemaking. This standard is also consistent with the DGA and may be found in §210.11(g) of this proposed rule.

Trans Fats

It is proposed that allowable competitive foods contain zero grams trans fat per portion as packaged (not more than 0.5 g per portion). This standard is identical to the IOM and DGA recommendations and may be found in §210.11(h) of this proposed rule.

Total Sugars

This proposed rule provides two alternatives for comment regarding total sugars in foods. Alternative C1 requires that in order to be considered an allowable competitive food item, no more than 35% of calories shall be derived from total sugars in foods. This is identical to the recommendation made by the IOM. Alternative C2 requires that allowable competitive food items shall not contain more than 35% of their weight from total sugars in foods. This standard was included in a number of voluntary standards that were reviewed during the development of this proposed rule. The calculations associated with these two alternatives differ. Generally, when sugar by weight is utilized, foods with a higher percentage of calories from total sugar would be allowable as competitive foods in schools. This may also result in an increase in the number/types of foods which may be sold in schools, particularly with regard to dairy products such as ice cream. The Department requests comment on these alternatives.

In addition, ideally, the sugar standard would apply to the added sugars in foods, since added sugars are identified in the 2010 DGA as a food component to reduce. However, because the Nutrition Facts label does not differentiate between added and naturally occurring sugars in foods and beverages, a standard limiting total sugars is the most reasonable standard. Regardless of which measure (total sugars by weight or calories) is utilized, this proposed rule includes the following exemptions to this requirement:

(1) Dried whole fruits or vegetables; dried whole fruit or vegetable pieces; and dried dehydrated fruits or vegetables with no added nutritive sweeteners are exempt from the sugar standard, but are subject to the calorie, total fat, saturated fat, trans fat and sodium standards;

(2) 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 and sugar standard, but are subject to the calorie, trans fat, saturated fat and sodium standards; and

(3) Flavored and unflavored nonfat and low-fat yogurt with no more than 30 grams of total sugars per 8 ounce serving are exempt from the sugar standard, but are subject to the calorie, total fat, saturated fat, trans fat and sodium standards.

The exemption from the total sugar standard proposed in items (1) and (2) above has been made since those food items are nutrient dense and contribute to total intake of fruit and vegetables, which has been identified in the 2010 DGA as a food group targeted for increased consumption. Since the water has been removed from dried products during processing, it is more calorically dense than fresh fruits and vegetables. For this reason, the calorie standards are proposed to apply to dried fruits and dried vegetables as well as dried fruits mixed with nuts and/or seeds. We acknowledge that for certain dried fruit products, the addition of nutritive sweeteners may be necessary for processing and palatability (i.e. cranberries). Therefore we are requesting feedback from commenters on whether the standard should include specific dried fruit products that require nutritive sweeteners in the total sugars exemption.

The proposed sugar standards are found in §210.11(i).

Sodium

This rule proposes that allowable entrée items contain no more than 480 mg sodium per portion as served. This standard is identical to the IOM recommendation for entrees.

For purposes of this proposed rule, an entrée item is proposed to be defined in §210.11(k) as an item that includes only the following three categories of main dish food items:

(1) A combination food of meat or meat alternate and whole grain-rich bread (for example, turkey sandwich, peanut butter on grain-rich bread, pizza with whole grain-rich crust, hot dog or hamburger on a grain-rich bun, a bean and cheese burrito, nachos with chili and cheese);

(2) A combination food of vegetable or fruit and meat or meat alternate (for example, chef's salad, fruit and cheese platter, chicken vegetable stir-fry); or

(3) A meat or meat alternate alone (e.g., fish filet, Salisbury steak, seafood, egg or chicken) with the exception of yogurt, low-fat or reduced fat cheese, nuts, seeds and nut or seed butters. This exception is being proposed since yogurt, cheese, nuts, seeds and nut or seed butters alone are generally considered to be snack or dessert items, not entrée items.

The Department is proposing that allowable snack items contain no more than 200 mg of sodium per portion as packaged. This standard reflects the IOM recommendation with regard to snack items.

In addition, as previously discussed, this rule proposes to exempt any items sold as part of the school meal during specified periods from all or most (except total fat and sugar) competitive food standards (§210.11(c)(3)). The proposed sodium standards are found in §210.11(j) and (k).

Calories

This rule proposes that, to be considered allowable, snack items shall contain no more than 200 calories per portion as packaged including any added accompaniments such as butter, cream

cheese, salad dressing etc. A la carte snack items/side dishes served in the same or smaller portion size as served in the NSLP or the SBP during specific periods would be exempt from this calorie restriction.

This proposed rule stipulates that entrée items sold a la carte shall contain no more than 350 calories per portion as served and meet all of the other nutrition standards specified.

However, consistent with the sodium standard exemption, this rule proposes to exempt entrée items from this calorie requirement if the entrée items sold a la carte are NSLP or SBP entrees that are to be offered during specific periods as part of the reimbursable school meal and are served in the same or smaller portion size as offered in the NSLP or SBP (§210.11(c)(3)). The proposed calorie standards are found in §210.11(j) and (k).

Caffeine

This rule proposes that competitive foods and beverages served to elementary and middle school-aged children must be caffeine-free, with the exception of trace amounts of naturally occurring caffeine substances. This standard is consistent with the IOM recommendation. In the IOM report, it was concluded that although there may be some benefits associated with caffeine consumption among adults, offering foods and beverages containing significant amounts of caffeine to school aged children was not appropriate due to the potential for adverse effects, including physical dependency and withdrawal. Caffeine is not proposed to be restricted for high school-aged students. Given the practical realities and market for caffeinated beverages enjoyed by high school aged students, it was not deemed practical to restrict caffeinated beverages for this age group. However, the Department does request comments on this exception for high school students. This proposed provision may be found at §210.11(l).

Beverages

In developing proposed standards for beverages sold in competition with school meals, the Department is proposing standards for allowable beverage types that are consistent with the IOM recommendations for elementary and middle school students, but which allow a greater variety of beverages for sale to high school students. Specifically, calorie-free, flavored and/or carbonated water, and low-calorie (less than 40 or 50 calories per 8 ounces) beverages are allowed for high school students, but not allowed for elementary or middle school students. This approach recognizes 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. Given those circumstances, the Department considers it reasonable to provide high school students a broader range of choices, while still limiting those choices to those which are more nutrient dense and/or lower in calories than other options. Elementary and middle school students may develop healthier habits because of this limitation.

The proposed rule also specifies allowable beverages and maximum portion sizes for such beverages. The proposed beverage standards provide consistent sizes for each age group.

The proposed beverage requirements are:

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);
- 100% fruit/vegetable juice (not more than 12 fluid ounces);
- Calorie-free, flavored and/or carbonated water (not more than 20 fluid ounces) allowed, but not in the meal service area during meal service periods;
- 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 allowed, but not in the meal service area during meal service periods; and
- Other beverages in ≤ 12 oz servings allowed, but not in the meal service area during the meal service periods. Two alternatives are proposed. The first (D1) would allow 40 calories per

8 ounce serving of beverages (or no more than 60 calories per 12 ounce serving of such beverages) for high school students. The second (D2) would allow 50 calories per 8 ounce serving of beverages (or no more than 75 calories per 12 ounce serving of such beverages) for high school students. The slightly higher calorie limit would allow a broader range sports drinks to be purchased.

The beverage standards proposed in this rule are consistent with most currently established voluntary standards regarding the types of beverages sold to students on campus during the school day. However, the package/container sizes for 100% juice and milk as proposed in this rule are larger than those recommended by the IOM in its report on nutrition standards for food in schools (IOM did not recommend allowing any amount of other caloric beverages aside from juice and milk). The amounts of 100% juice and milk proposed for elementary and middle schools are also higher than the voluntary standards set by the Alliance for a Healthier Generation.

The American Academy of Pediatrics recommends limiting 100 percent juice for children 7 to 18 years old to 8 to 12 ounces per day. Under the interpretation of the new meal pattern requirements there is no juice limit per day but rather per week. The Dietary Guidelines Advisory Committee Report states that limited and inconsistent evidence suggests that for most children, intake of 100 percent fruit juice is not associated with increased fat, when consumed in amounts that are appropriate for age and energy needs of the child. The DGA 2010 recommends that most of one's fruit choices should be whole or cut-up fruit, rather than juice, for the benefits that dietary fiber provides.

Most children 9 years and older consume less than one cup of milk per day. While allowing package sizes for milk up to 12 ounces for secondary school students does contribute extra calories, it also provides children with needed calcium, vitamin D and potassium and could help move children's consumption of Dairy foods closer to dietary recommendations.

As indicated previously, the rationale behind the approach taken in this proposed rule is the practical recognition of current packaging practices.

However, the Department realizes that there would be an increase in calories and added sugars incurred by allowing larger package sizes and welcomes public comments on the proposed beverage amounts.

These proposed provisions are found in §210.11(b)(2) and §210.11(m).

Fundraisers

School-sponsored fundraisers are recognized as reasonable enhancements to the school community as well as a method of financing some important school-sanctioned activities for students. The sale of food items that meet the proposed nutrition requirements (as well as the sale of non-food items) at fundraisers would not be limited in any way under the proposed rule. 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. Further, the proposed standards would not apply to food or beverages sold on school grounds, during school hours at "a limited number" of school fundraisers. The determination of what constitutes "a limited number" will be decided by the state agencies under one of two alternative approaches. It is expected that state agencies will ensure that the frequency of such fundraisers on school grounds, during school hours does not reach a level to impair the

effectiveness of nutrition requirements described in this rule. With respect to other non-exempted fundraising activities during the school day (including fundraising through vending machines, school stores, snack bars, a la carte sales, and other similar activities as determined by the Secretary), the food and beverage items sold must meet the proposed nutrition standards for competitive foods.

The Department is especially interested in obtaining input from the public on this particular provision. This proposed rule includes two alternative approaches to exemptions to the competitive food standards for school-sponsored fundraisers, as well as a request for other suggestions from commenters. In addition, since the Department does not have detailed data regarding fundraising activities at schools, especially with regard to the types, frequency, restrictions during meal time, etc., that have been established by schools, commenters may also wish to provide input in this area.

The first alternative is to allow State agencies the discretion to establish limitations on the number of exempt fundraisers that may be held during the school year. The second alternative is to allow State agencies to set exempt fundraising frequency standards, subject to USDA approval.

Suggested timeframes from commenters for the conduct of exempt fundraisers in schools are also welcome. The two alternative approaches discussed above are included in §210.11(b)(5).

Regardless of the approach ultimately adopted by the Department in a final rule, it is important to note that individual States and/or school districts may implement more restrictive competitive food standards, including those related to the frequency with which exempt fundraisers may be held in schools.

As stated above, this rule does not propose standards for frequency of school-sponsored fundraisers that provide foods or beverages that meet the nutrition standards for competitive foods. The limitations in this rule would deal only with those school-sponsored fundraisers that are exempt from the competitive food nutrition standards. However, the proposal does prohibit the sale of specially exempted fundraiser foods and beverages during the school meal service so as not to compete with the school meal.

Other Proposed Standards

Accompaniments

To reduce the added sodium, fats and sugars in food available and served to students during the school day, it is proposed that the use of accompaniments be limited when food is sold to students in school. All accompaniments shall be pre-portioned and must be included in the nutrient profile as a part of the item served as well as meet all of the proposed standards. For example, dressings served with salads, butter or jelly on muffins, cream cheese with a bagel and garnishes shall be pre-portioned in amounts appropriate to ensure that the competitive food standards are met and shall be included in the nutrient profile of the item. The Department seeks comment on the impact that such a requirement may have on competitive food service in schools. This proposed provision is found in §210.11(n).

Foods of Minimal Nutritional Value (FMNV)

This rule requires that all food and beverages available and served to students meet the specific standards for competitive foods outlined in this proposed rule. It is no longer necessary, therefore, to retain the more narrowly defined standards for food of minimal nutritional value

included in the current regulations. Accordingly, the proposal would remove the definition of "food of minimal nutritional value" from 7 CFR part 210 and the definition of "foods of minimal nutritional value" from 7 CFR part 220, and make other conforming changes in both of these parts.

Summary of General Impacts of the Proposed Competitive Food Standards

As proposed in this rule, all food and beverage products are subject to each of the proposed competitive food standards, with some specific exemptions for food items to be encouraged. Many existing products, particularly those encouraged by the Dietary Guidelines, would be available without restriction under these standards. Many products that would not meet these standards under current product formulations and package sizes could meet the standards with changes to product packaging size or product formulation. In some cases, necessary formulation changes would be relatively modest (e.g., adding or increasing whole grains in certain products), while in others, more significant changes would be required in order for a product to meet the competitive food standards. Some products may also be able to meet the standards by modifying packaging; for example, reducing existing single-serving packages to meet calorie or sodium requirements. Finally, there are some products, such as those in which sugar is the primary ingredient, for which it is unlikely that changes could modify the product in a way that would allow the product to comply with the competitive food standards. Such products include soft drinks that contain sugar and/or caffeine (proposed to be restricted for elementary and middle school students), candy and other confections, whole milk, jams, jellies, certain dessert items as well as certain fruit products that contain added sugars.

Snack foods such as chips and other bagged snack items would most likely be most impacted by the proposed sodium, calorie and fat standards, as well as the requirement that the item contain 50% or more whole grains, or have its first ingredient be a whole grain or other food to encourage as recommended by the DGA. As currently packaged, many baked tortilla chips, reduced fat corn chips and baked potato chips would meet the proposed standards and would be allowed. However, other snack products as currently packaged and formulated, such as regular corn chips, cheese puffs and many flavored popcorn snack items would not meet the standards.

Grain based dessert items such as cookies, snack bars, pastries and cakes would likely be most impacted by the proposed grain, sugar, fat, and calorie standards. As currently packaged, many low-fat granola bars could be sold, while many cereal bars, cookies, and snack cakes currently contain too much sugar to meet the proposed standards. A number of other popular products, such as certain sweet snack crackers, may be able to meet the standards if such items are reformulated to increase the amount of whole grains they contain.

Fruit-based products with relatively limited amounts of added sugar or other products would be allowed. For example, some frozen fruit treats have water and fruit as their first ingredients and are below the sugar limits. However, many other fruit snacks and fruit beverages that have added ingredients would be limited by sugar and calorie limits. For example, nearly half of the calories contained in most gummy fruit snack and fruit roll-up type products are derived from sugar. Similarly, many frozen fruit popsicles or sorbet products have water and sugar as their first ingredients and, as such, would not meet the proposed standards. .

Dairy snack products are most impacted by the proposed fat, sugar, and sodium standards included in this rule. Some frozen dairy products, puddings, etc, as currently formulated would

meet the proposed standards, while others would not. However, most low fat/nonfat yogurt products will meet the standards due to the total sugar exemption proposed in this rule.

In addition, low fat cheeses are proposed to be exempt from the fat standards, and many lower-sodium cheese products would qualify.

Beverages, other than milk, would be limited by calorie and caffeine standards. While regular soda would not be allowed, diet sodas would be permitted in high schools in 20 oz. containers. Zero calorie versions of sport drinks or fitness waters would also be allowed in high schools in 20 oz. portions, as would 12 oz. portions of sports drinks or other beverages with 40 calories per 8 oz. (Alternative D1) or 50 calories per 8 oz (Alternative D2)In evaluating the impacts of this proposed rule, the Department has also considered the impacts of these changes on the vendors that supply food items, including competitive food items, to schools for sale outside of the Federal school meal programs. The proposed rule may require a number of SFA's to significantly change the food items that are offered for sale on school grounds. However, from the date of publication of this proposed rule, SFA's and their vendors will have significant time to prepare for this transition. Further, while it is anticipated that this regulation will eventually improve the nutritional options offered to students, the Department estimates overall direct impact on the sales of food items in the U.S. would be very limited. Currently, the Department estimates that the sale of competitive foods in schools may represent less than one percent of all food shipments from U.S. food manufacturers. Notwithstanding this initial analysis, the Department is specifically seeking comments on impacts of the proposed rule on the U.S. food industry, including small businesses, beyond what is discussed above and on ways these impacts can be minimized consistent with the purposes of section 10 of the Child Nutrition Act of 1966.

Recordkeeping and Monitoring Requirements

This rule proposes to impose recordkeeping requirements on local educational agencies regarding the implementation of these proposed nutrition standards in areas under their jurisdiction that are outside of the control of the school food service operation. The competitive food nutrition standards apply throughout the school campus and apply to all food available for sale to students outside of the reimbursable school meals at any venue available to students for the purchase of food, such as school stores, vending machines, concession stands, fundraising events held on campus, snack bars, etc. It is the responsibility of school food authorities to ensure and document that foods sold by the school food service to students during the meal service periods in meal service areas meet the proposed competitive food standards. However, since these competitive food standards apply to foods sold throughout all of the venues available in the schools (other than reimbursable meals), the responsibility for demonstrating compliance with these competitive food requirements must also include the local educational agency, as defined in §210.2 of the current NSLP regulations, as well. This proposed rule provides that local educational agencies shall require that, at a minimum, receipts, nutrition labels or product specifications be maintained by those designated as responsible for competitive food service at the various venues in the schools in order to ensure and document compliance with the competitive food requirements for the foods and beverages available to be sold to students at these venues. FNS will provide technical assistance and guidance as necessary to State agencies and local educational agencies in this regard. This proposed provision may be found at §210.11(b)(3).

It is proposed that State agencies be responsible for monitoring compliance with the requirements of the competitive food nutrition standards through a review of local educational agency records documenting compliance with these requirements. This requirement has been included in §210.18(h)(7) as part of the general areas of State agency administrative review responsibilities. As with other program violations, if a State agency determines during an administrative review that violations of the competitive food standards have occurred, corrective action plans would be required to be submitted to the State agency by the local educational agency and school food authority. FNS will consider any further actions that may be associated with continued noncompliance with competitive food standards, among other program violations, in a forthcoming proposed rule implementing Section 303 of the HHFKA, Fines for Violating Program Requirements.

PROCEDURAL MATTERS

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 proposed 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). It has been certified that this rule will have a significant economic impact on a substantial number of small entities.

The requirements established by this proposed rule will apply to school districts, which meet the definitions of "small governmental jurisdiction" and "small entity" in the Regulatory Flexibility Act. An Initial Regulatory Flexibility Act analysis is included in the preamble.

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 to State, local, or Tribal governments, in the aggregate, or to 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. This rule does not contain Federal mandates (under the regulatory provisions of Title II of the UMRA) that impose costs on State, local, or Tribal governments or to the private sector of $100 million or more in any one year. This rule is, therefore, not subject to 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 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 proposal would require a new collection. The new provisions in this rule which would increase burden hours, affect the information collection requirements that will be merged into the National School Lunch Program, OMB Control Number #0584-0006, expiration date 5/31/2012. The current collection burden inventory for the National School Lunch Program is 12,181,012. These changes are contingent upon OMB approval under the Paperwork Reduction

Act of 1995. When the information collection requirements have been approved, FNS will publish a separate action in the Federal Register announcing OMB's approval.

Comments on the information collection in this proposed rule must be received by [insert date that is 60 days from date of publication in the Federal Register].

Send comments to the Office of Information and Regulatory Affairs, OMB, Attention: Desk Officer for FNS, Washington, DC 20503. Please also send a copy of your comments to Jon Garcia, Program Analysis and Monitoring Branch, Child Nutrition Division, 3101 Park Center Drive, Alexandria, VA 22302. For further information, or for copies of the information collection requirements, please contact Lynn Rodgers-Kuperman at the address indicated above. Comments are invited on: (1) whether the proposed collection of information is necessary for the proper performance of the Agency's functions, including whether the information will have practical utility; (2) the accuracy of the Agency's estimate of the proposed information collection burden, including the validity of the methodology and assumptions used; (3) ways to enhance the quality, utility and clarity of the information to be collected; and (4) ways to minimize the burden of the collection of information on those who are to respond, including use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology.

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

Title: 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.

OMB Number: 0584-NEW

Expiration Date: Not Yet Determined

Type of Request: New Collection

Abstract: This rule sets forth proposed provisions to implement sections 203 and 208 of Public Law 111-296, the Healthy, Hunger-Free Kids Act of 2010 (HHFKA), enacted December 13, 2010.

Section 203 of the HHFKA amends section 9(a) of the Richard B. Russell National School Lunch Act by requiring that schools participating in the NSLP make potable water available to children at no charge in the place where lunches are served during the meal service. This is a nondiscretionary requirement of the HHFKA, effective October 1, 2010.

Section 208 of the HHFKA amends Section 10 of the Child Nutrition Act of 1966 (42 U.S.C. 1779) to give the Secretary of Agriculture new authority to establish nutrition standards for all foods and beverages sold outside of the Federal school meal programs on the campus of schools during the school day. The CNA as amended by the HHFKA requires that the Secretary promulgate proposed regulations to establish science-based nutrition standards for foods sold in schools other than those foods provided under the CNA and NSLA.

Those participating in the SBP also participate in the NSLP, thus the burden associated with the SBP will be carried in the NSLP. The average burden per record and the annual burden hours for recordkeeping are explained below and summarized in the charts which follow. In addition, provisions under sections 203 and 208 of the HHFKA do not contain new reporting requirements.

Recordkeepers for this Proposed Rule: State Agencies (SAs) (57) and School Food Authorities (SFAs) (20,858) and Schools (101,747)

Estimated Number of Recordkeepers for this Proposed Rule: 122,662

Estimated Number of Records per Recordkeeper for this Proposed Rule: 1.033457

Estimated Total Annual Records: 126,766

Estimated Average Burden Hours Per Record: 7.31217

Estimated Total Annual Burden Hours on Recordkeepers for this Proposed Rule: 926,935

ESTIMATED ANNUAL BURDEN FOR 0584-NEW, NUTRITION STANDARDS FOR ALL FOODS SOLD IN SCHOOL

7 CFR 210

Recordkeeping						
	Section	Estimated Number of Record-keepers	Records per Record-keeper	Average Annual Records	Average Burden per Record	Annual Burden Hours
SAs shall ensure that the LEA complies with the nutrition standards for competitive foods and retains documentation demonstrating compliance.	7 CFR 210.18(h)(7)	57	73	4,161	0.25	1,040
LEAs and SFAs shall be responsible for maintaining records documenting 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 for Proposed Rule		122,662		126,766	7.3122	926,935

7 CFR 210.15 and 7 CFR 210.20 require that, to participate in the National School Lunch Program, school food authorities and State agencies must maintain records to demonstrate compliance with Program requirements. 7 CFR 210.23 further requires that State agencies and school food authorities maintain records for a period of 3 years.

SUMMARY OF BURDEN (OMB #0584-NEW)	
TOTAL NO. RECORDKEEPERS	122,662
AVERAGE NO. RECORDS PER RECORDKEEPER	1.033457
TOTAL ANNUAL RECORDS	126,766
AVERAGE HOURS PER RECORD	7.31217
TOTAL BURDEN HOURS FOR PART 210 WITH PROPOSED RULE	13,107,947
CURRENT OMB INVENTORY FOR PART 210	12,181,012
DIFFERENCE (NEW BURDEN REQUESTED WITH PROPOSED RULE)	926,935

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 Governments

Executive Order 13175 requires Federal agencies to consult and coordinate with Tribes on a government-to-government basis on policies that have Tribal implications, including regulations, legislative comments or proposed legislation, 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 2, 2011
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.

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. Currently, FNS provides regularly scheduled quarterly consultation sessions as a venue for collaborative conversations with Tribal officials or their designees.

Regulatory Impact Analysis Summary

As required for all rules that have been designated as significant by the Office of Management and Budget, a Regulatory Impact Analysis (RIA) was developed for this proposal. A summary is presented below. The full RIA is published as part of the Docket on www.regulations.gov.

Need for Action

The proposed 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.

Benefits

The primary purpose of the proposed 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 well-being. 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 one-third of U.S. children and adolescents now considered overweight or obese (Beydoun and Wang

2011[4]), 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.[5] 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.[6] Further, there are direct economic costs due to childhood obesity: $237.6 million (in 2005 dollars) in inpatient costs[7] and annual prescription drug, emergency room, and outpatient costs of $14.1 billion.[8]

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:

[4] Beydoun, M.A. and Y. Wang. 2011. Socio-demographic 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.

[5] 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.

[6] 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.healthyeatingactivecommunities.org/downloads/

[7] 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.

[8] 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.

- Taber, Chriqui, and Chaloupka (2012[9]) 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[10]) 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 overweight or obese students, or lower rates of increase in student BMI" (Healthy Eating Research and Bridging the Gap, 2012, p. 3[11]).

A recent, comprehensive, and groundbreaking assessment of the evidence on the importance of competitive food standards conducted by the Pew Health Group concluded

[9] 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.

[10] 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.

[11] 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

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.[12]

Costs

The proposed 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, pending provisions of the final rule regarding occasional exemptions, through in-

[12] 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%20Report%20062212_WEB%20FINAL-v2.pdf.

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 52 percent of all schools and 26 percent of elementary schools, 87 percent of middle schools, and 98 percent of high schools (Gordon, et al., 2007; Volume 1, pp 102-114).

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 long-term 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 proposed 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 proposed rule. While these vary in their impact on overall school food revenue, each scenario's estimated impact is relatively small (+0.4 percent to -0.7 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, for the reasons discussed in the preamble, 7 CFR parts 210 and 220 are proposed to be 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 proposed to be 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 paragraphs (a)(1)(i) and (a)(1)(ii) by adding a new sentence at the end of the each paragraph.

The additions read as follows:

§210.10 Nutrition standards and menu planning approaches for lunches and requirements for afterschool snacks.

(a) * * *

(1) * * *

(i) ***** ***** ***** Schools shall make potable water available to children at no charge in the place where lunches are served during the meal service.

(ii) * * * Schools shall make potable water available to children at no charge in the place where afterschool snacks are served during the afterschool snack service.

* * * * *

(4) Section 210.11 is proposed to be revised to read as follows:

§210.11 Competitive food service and standards.

(a) Definitions. For the purpose of this section:

(1) 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;

(2) 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;

(3) 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; and

(4) 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.

(b) General requirements for competitive food.

(1) State agencies and/or local educational agencies shall 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) The sale of otherwise allowable calorie-free and low calorie, flavored and/or carbonated water as provided in paragraphs (m)(3)(vi), (m)(3)(vii), and (m)(3)(viii) of this section in food service areas during the meal service is prohibited.

(3) 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. School food authorities shall be responsible for maintaining records documenting compliance with these standards in meal service areas during meal service periods. The local educational agency shall be 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 available to be sold to students at these venues during the school day as required by this part. At a minimum, such records shall include receipts, nutrition labels and/or product

specifications for the items available for sale to students on the school campus during the school day.

(4) The nutrition standards for the sale of competitive food outlined in this section shall 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.

(5) Fundraiser restrictions. Food and beverage items sold during the school day shall meet the nutrition standards for competitive food as required in this part. A special exemption shall be allowed for the sale of food and/or beverages that do not meet the competitive food nutrient standards as required in this section for the purpose of conducting a school-sponsored fundraiser. Such specially exempted fundraisers shall not take place more than:

(i) Alternative E1: the frequency specified by the State agency during such periods that schools are in session; or

(ii) Alternative E2: the frequency specified by the State agency and approved by USDA 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 foods.

(1) 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.

(2) 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 main food groups: fruit, vegetable, dairy product or protein foods (meat, beans, poultry, seafood, eggs, nuts, seeds, etc.); or

(iv) 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); or

(v) Be a combination food that contains ¼ cup of fruit or vegetable; and

(vi) If water is the first ingredient, the second ingredient must be one of the food items in (c)(2)(i), (c)(2)(ii), (c)(2)(iii), (c)(2)(iv) or (c)(2)(v) of this section.

(3) Exemptions.

(i) Alternative A1: All menu items provided as part of the NSLP or SBP reimbursable meal are exempt from these competitive food standards with the exception of the standards established for total fat and sugar, as specified. Grain based dessert products must meet all standards in order to be served. Such menu items shall be served in the same or smaller portion sizes as in the NSLP or SBP to be allowable; or

(ii) Alternative A2: All menu items provided as part of the NSLP or SBP reimbursable meal are exempt from these competitive food standards, with the exception of grain based dessert products which must meet all standards in order to be served. Such menu items shall be served in the same or smaller portion sizes as in the NSLP or SBP to be allowable, and must meet the timeframe exemptions specified in paragraph (4) of this section.

(4) Exemptions.

(i) Alternative B1: Exemptions to these nutrition requirements include side dishes (other than grain based dessert items) and entrée items sold a la carte in accordance with the requirements of paragraph (3)(ii) [Alternative A2] that are NSLP or SBP meal items that are offered on the same day as part of the reimbursable school meal. Such side dishes and entrée items must be offered in the same or smaller portion size as offered in the NSLP or SBP and meet the standards specific to the NSLP and SBP; or

(ii) Alternative B2: Exemptions to these nutrition requirements include side dishes (other than grain based dessert items) and entrée items sold a la carte in accordance with the requirements of paragraph (3)(ii) [Alternative A2] that are NSLP or SBP meal items that are offered within four operating days of their service as part of the reimbursable school meal during the current menu cycle. Such side dishes and entrée items must be offered in the same or smaller portion size as offered in the NSLP or SBP and meet the standards specific to the NSLP and SBP.

(d) Fruits and vegetables. 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, are 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 shall meet all of the other nutrient standards included in this section.

(f) Total fat.

(1) The total fat content of a competitive food shall be not more than 35 percent of total calories from fat per portion as packaged.

(2) Exemptions to this requirement include the following:

(i) Reduced fat cheese is exempt from the total fat and saturated fat standard, but subject to the required trans fat, calorie, sugar and sodium standards;

(ii) Nuts and Seeds and Nut/Seed Butters are exempt from total fat standard, but subject to the required saturated fat, trans fat, calorie, sugar and sodium standards. This exemption does not extend 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 and sugar standards, but subject to the required saturated fat, trans fat, calorie and sodium standards; and

(iv) Seafood with no added fat is exempt from the total fat requirement in order to increase omega-3 fatty acids in diets as recommended by the 2010 DGA; but subject to the required sugar, saturated fat, trans fat, calorie and sodium standards.

(g) Saturated fat.

(1) The saturated fat content of a competitive food must be less than 10 percent of total calories per portion, except as specified in paragraph (g)(2).

(2) Reduced fat cheese is exempt from the total fat and saturated fat standards, but subject to the calorie, trans fat, sugar and sodium standards.

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

(i) Total sugars.

(1) Alternatives.

(i) Alternative C1: Total sugars contained in a competitive food item must be not more than 35 percent of calories per portion.

(ii) Alternative C2: Total sugars contained in a competitive food item must be not more that 35 percent of weight per portion.

(2) Exemptions to this requirement are:

(i) Dried whole fruits or vegetables; dried whole fruit or vegetable pieces; and dried dehydrated fruits or vegetables with no added nutritive sweeteners are exempt from the sugar standard, but subject to the calorie, total fat, saturated fat, trans fat and sodium standards;

(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 and sugar standards, but subject to the calorie, trans fat, saturated fat and sodium standards; and

(iii) Flavored and unflavored nonfat and low-fat yogurt with no more than 30 grams of total sugars per 8 ounce serving is exempt from the sugar standard, but subject to the calorie, total fat, saturated fat, trans fat and sodium standards.

(j) Calorie and sodium content for snack items and side dishes sold a la carte. Snack items and side dishes sold a la carte other than those exempt from the competitive food nutrition standards as provided in §210.11(c)(3) shall have not more than 200 calories and not more than 200 mg of sodium per portion as served, including the calories and sodium contained in any added accompaniments such as butter, cream cheese, salad dressing etc., and shall meet all of the other nutrient standards for non entrée items.

(k) Calorie and sodium content for entrée items sold a la carte.

(1) An entrée item is defined as an item that is either:

(i) A combination food of meat or meat alternate and whole grain-rich/bread; 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.

(2) Entrée items sold a la carte other than those exempt from the competitive food nutrition standards as provided in §210.11(c)(3) shall contain no more than 350 calories and 480 mg. of sodium per portion as served and meet all of the other nutrient standards in this section.

(l) Caffeine. Foods and beverages available to elementary and middle school-aged students shall be caffeine-free, with the exception of trace amounts of naturally occurring caffeine substances.

(m) Beverages.

(1) Allowable beverages for elementary school-aged students shall be limited to:

(i) Plain water (no size limit);

(ii) Low fat milk, plain (no more than 8 fluid ounces);

(iii) Non fat milk, plain or flavored (no more than 8 fluid ounces);

(iv) Nutritionally equivalent milk alternatives as permitted in §210.10 and §220.8 (no more than 8 fluid ounces); and

(v) 100 percent fruit/vegetable juice (no more than 8 fluid ounces).

(2) Allowable beverages for middle school-aged students shall be limited to:

(i) Plain water (no size limit);

(ii) Low fat milk, plain (no more than 12 fluid ounces);

(iii) Non fat milk, plain or flavored (no more than 12 fluid ounces);

(iv) Nutritionally equivalent milk alternatives as permitted in §210.10 and §220.8 (no more than 12 fluid ounces); and

(v) 100 percent fruit/vegetable juice (no more than 12 fluid ounces).

(3) Allowable beverages for high school-aged students shall be limited to:

(i) Plain water (no size limit);

(ii) Low fat milk, plain (no more than 12 fluid ounces);

(iii) Non fat milk, plain or flavored (no more than 12 fluid ounces);

(iv) Nutritionally equivalent milk alternatives as permitted in §210.10 and §220.8 (no more than 12 fluid ounces);

(v) 100 percent fruit/vegetable juice (no more than 12 fluid ounces);

(vi) Calorie-free, flavored and/or carbonated water (no more than 20 fluid ounces), except that such beverages shall not be available or served to students in the food service area during the meal service period;

(vii) No more than 20 fluid ounce servings of other beverages that comply with the Food and Drug Administration requirement for bearing a "calorie free" claim of less than 5 kcals/serving, except that such beverages shall not be available or served to students in the food service area during the meal service period; and

(viii) Alternative D1: No more than 12 fluid ounce servings of other beverages that contain no more than 40 calories per 8 fluid ounce serving or 60 calories per 12 fluid ounce serving, except that such beverages shall not be available or served to students in the food service area during the meal service period; or

(ix) Alternative D2: No more than 12 fluid ounce servings of other beverages that contain no more than 50 calories per 8 fluid ounce serving or 75 calories per 12 ounce serving, except that such beverages shall not be available or served to students in the food service area during the meal service period.

(n) Accompaniments. The use of accompaniments shall be limited when competitive food is sold to students in school. All accompaniments to a competitive food item shall be pre-portioned and the ingredients of such accompaniments must be included in the nutrient profile as a part of the food item served and shall meet all of the nutritional standards for competitive food as required in this section.

5. In §210.18, a new paragraph (h)(7) is proposed to be added to read as follows:

§210.18 Administrative reviews.

*** * * * ***

(h) * * *

(7) Compliance with competitive food standards. The State agency shall ensure that the local educational agency complies with the nutrition standards for competitive foods and retains documentation demonstrating compliance with the competitive food service and standards outlined in §210.11.

6. Appendix B to Part 210 is removed and reserved.

PART 220 – SCHOOL BREAKFAST PROGRAM

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

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

2. In §220.2,

(a) the definition of "Foods of minimal nutritional value" is removed; and

(b) the definition of "Competitive foods" is removed.

3. Section 220.12 is proposed to be revised as follows:

§220.12 Competitive food services.

Competitive food services shall comply with the requirements specified in §210.11 of this chapter.

4. Appendix B to Part 220 is proposed to be removed and reserved.

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Kevin W. Concannon Date
Under Secretary
Food, Nutrition, and Consumer Services

Initial Regulatory Flexibility Analysis – Proposed Rule

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.

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.

Reasons That Action Is Being Considered: This rule sets forth proposed 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 and beverages 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.

Objectives of, and Legal Basis for, the Proposed Rule: As stated above, the legal basis for the proposed rule are the amendments made to the CNA by HHFKA. The objectives of this rule are to establish nutrition standards for all foods 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 school-aged children.

Number of Small Entities to Which the Proposed Rule Will Apply: This proposed rule directly regulates the 55 State education agencies and 2 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 districts, school food authorities, schools and others that prepare and sell foods other than those provided as reimbursable school lunches and breakfasts (such as à la carte food sales, vending machines, or other competitive food venues). 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:

- Nearly 101,000 schools and residential child care institutions (RCCIs) participate in NSLP. These include more than 90,000 public schools, 6,000 private schools, and about 5,000 RCCIs. A majority of those institutions also provide competitive foods through à la carte menus, vending, school stores, snack bars, fundraisers, or some combination of venues. 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.

- School Food Authorities (SFAs) earn competitive food revenues primarily through à la carte sales, but may also earn revenues from vending machine sales, school stores, snack bars, and other outlets.

- Manufacturers, wholesalers, and distributors, including vending machine operators, are not regulated by the proposed rule, but are indirectly affected. Of this group, vending operators with machines in primary and secondary schools may be the most affected. Vending businesses tend to have few employees; 76 percent of companies that operated for the entire year in 2007 employed fewer than 10 people.[13] Vending machines in primary and secondary schools make up just two percent of vending industry sales.[14]

- Food service management companies (FSMCs) that prepare school meals or menus under contract to SFAs may be indirectly affected by the proposed rule in that they may also prepare foods for the á la carte menu. Thirteen percent of public school SFAs contracted with FSMCs in school year (SY) 2004–2005.[15] Of 23,000 food service contractors that operated for the full year in 2007, 86 percent employed fewer than 100 workers.[16]

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[13] Vending machine operators are described by "NAICS" code 454210. The code does not account for all vending machine businesses and data is not available to assess the proportion of vending machine businesses in schools. The statistics by establishment size are from the U.S. Census Bureau, 2007 Economic Census. Table 2, "Employment Size of Establishments for the U.S." on http://www.census.gov/econ/industry/ec07/a454210.htm.

[14] The vending industry estimates that primary and secondary schools accounted for 2.2 percent ($1 billion out of $45.6 billion) of total vending machine sales in 2008. Census of the Industry 2009, Vending Times, http://www.vendingtimes.com/Media/Sites-AdministratorsSiteNavigation/VendingTimes_Census2009.pdf

[15] U.S. Department of Agriculture, Food and Nutrition Service, Office of Research, Nutrition and Analysis, School Nutrition Dietary Assessment Study-III, Vol. I, 2007, p. 34 http://www.fns.usda.gov/ora/MENU/Published/CNP/FILES/SNDAIII-Vol1.pdf

[16] Census Bureau, 2007 Economic Census, NAICS 72231. Table 2, "Employment Size of Establishments for the U.S." on http://www.census.gov/econ/industry/ec07/a72231.htm

Projected Reporting, Recordkeeping and Other Compliance Requirements: The analysis below covers only those organizations impacted by the proposed rule that were determined to be small entities.

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 current student demand for competitive foods with new options that meet the proposed rule standards, then there may be no change in competitive food sales or competitive food revenue. And although the evidence base is limited, it suggests that many SFAs and other school groups have successfully introduced competitive food reforms with little or no loss of revenue, and in a few 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. At one end of this range, we calculate that a four percent increase in competitive food revenues would result in a +0.4 percent increase in school food revenue over five years. At the other end of the range, we calculate that the standards in the proposed rule could reduce competitive food revenue by an estimated 4.8 percent, resulting in an overall decrease in school food revenues of -0.7 percent over five years. (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 were often fully offset by increases in reimbursable meal revenue as students redirected 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 final regulations for Sections 205 and 206 of HHFKA. These provisions will ensure that the revenue from competitive food sales is aligned with their cost.[17] The requirements of Section 206 are estimated to increase competitive food revenue by 35 percent, while the scenarios presented here anticipate a competitive food revenue loss of no more than 4.8 percent. The combined effect of both provisions remains a net increase in SFA competitive food revenue under all of these scenarios.[18]

It is also worth noting that USDA estimates that just over 98 percent of SFA competitive food revenue is generated by sales of à la carte foods and "many foods are only offered à la carte when available as part of a reimbursable meal" (SNDA-III, p. 119).[19] Under regulations that took effect July 1, 2012, school meals are currently required to meet new nutrition standards. Because the school meal standards are similar to those proposed for competitive foods, many of

[17] Federal Register, Vol. 76, No. 117, pp. 35301-35318

[18] 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.

[19] SNDA III: www.fns.usda.gov/Ora/menu/Published/CNP/FILES/SNDAIII-Vol1.pdf.

the foods served à la carte will meet the standards in the final competitive food rule before it takes effect. For other entrées and side dishes served as part of a reimbursable meal, the proposed rule would provide a limited exemption from competitive food requirements. In addition, the new school meal nutrition standards will provide an opportunity for schools and for industry to adjust to the new requirements before the competitive food standards take effect. In addition, at least 39 States currently have competitive food policies, the majority of which exceed existing Federal standards. In these States, industry may already have made a number adjustments to the products offered for sale.

Unlike SFAs other school groups cannot make up lost revenues through school meal sales. The proposed rule mitigates the impact of the proposed rule on such groups by providing an exception for occasional fundraisers that do not meet the proposed competitive food standards. Alternatively, these groups may explore fundraising options that include foods that do meet the proposed 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 proposed rule but may be affected indirectly in the sense that schools will need to purchase a different mix of foods to satisfy the requirements of the rule. However, many States have already adopted their own competitive food standards, and the food industry is already responding by producing a variety of products that meet current State as well as the proposed Federal standards. Consider, for example, that Wescott et al. (2012) 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.

Consistent with SBA guidance, which notes that "[t]he courts have held that the RFA requires an agency to perform a regulatory flexibility analysis of small entity impacts only when a rule directly regulates them" (SBA, p. 20),[20] we do not attempt to quantify the economic effect of the proposed rule on these industry groups. However, we briefly mention two industry groups that may be more directly affected by the rule than others.

(1) Vending.

Vending machine operators served an estimated 19,000 primary and secondary schools in the U.S. in 2008.[21] For 2008, the vending industry estimated that primary and secondary schools accounted for just two percent of total vending machine dollar sales. Both industry and U.S. Census 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 10 individuals according to the U.S. Economic Census.[22] The same source also finds that 37 percent of vending machine operators that operated for all of 2007 generated less than $250,000 in receipts, although those operators accounted for less than 3 percent of total revenue from this industry group.[23] Because of the relatively large number of small vending machine operators, some small vendors may be challenged by the changes contained in the proposed rule. Whether small or large, many vending machine operators will need to modify their product lines to meet the requirements of the rule.

(2) Food Service Management Companies.

[20] SBA, "A Guide for Government Agencies"
[21] VendingTimes.com, Census of the Industry, 2009 Edition. Automatic Merchandiser magazine, June/July 2011
[22] Data for NAICS code 454210, "vending machine operators." U.S. Census Bureau, http://www.census.gov/econ/industry/ec07/a454210.htm (accessed 11/13/2011)
[23] 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.

FSMCs are potentially indirectly affected by the proposed rule. FSMCs that provide à la carte foods to schools under contract to SFAs will need to provide foods that conform to the changes in the proposed rule. As with the SFAs, we anticipate that many of those costs will have already been incurred through changes in the school meal requirements.

Administrative Costs

The proposed 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, 101,000 schools, and 21,000 SFAs will total $124 million over five years (or about $245 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.[24] 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.[25] 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

[24] 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), pp. 73-77, 86-89.
[25] Unpublished ERS analysis of SNDA-III data.

right to leave the cafeteria during meal times. Generally, student mobility privileges increase with grade level.[26] 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. That increases to 48 percent of schools with 500 to 1,000 students and 78 percent of schools with more than 1,000 students.[27]

Federal Rules That May Duplicate, Overlap or Conflict with the Proposed Rule: FNS is unaware of any such Federal rules or laws.

Significant Alternatives: HHFKA requires USDA to establish standards that are consistent with the most recent Dietary Guidelines for Americans (DGA) using "authoritative scientific recommendations" (HHFKA section 208). The proposed rule standards reflect nutrition guidelines set forth in the 2010 DGA, by the National Academies' Institute of Medicine in *Nutrition Standards for Foods in Schools* (2007), standards already adopted by States and localities, and standards identified by other organizations.

The proposed rule reflects a considered balance among these guidelines. It is possible to derive an alternative, however, that would require fewer changes to allowed competitive foods. While different standards might reduce the cost of the rule for some regulated parties, there is little evidence that the economic costs of the rule fall disproportionately on the smallest SFAs,

[26] Ibid., p. 78
[27] Ibid., p. 88

schools, or other school groups within these schools. A rule less closely aligned with DGA and other scientific recommendations would not provide particular relief to these small entities, but may result in fewer improvements to the school nutrition environment and children's health.

USDA also considered a separate implementation schedule for small entities.[28] This may offer smaller schools and businesses more time to adjust to the new requirements. But because the majority of competitive food revenues come from à la carte sales, and because à la carte foods will be subject to the new school meal pattern requirements, many à la carte foods will already meet healthier food standards when the proposed competitive food rule becomes effective. While vending machines are not subject to the meal pattern standards, they are more commonly found in large schools: over three quarters of schools with more than 1,000 students have vending machines as compared to a third of schools with fewer than 500 students.[29] FNS determined, therefore, that the potential benefit of deferring implementation for smaller schools would not outweigh the potentially adverse impact of deferring important improvements to the school nutrition environment for all children.

[28] A more permissive compliance schedule for small entities is one of the alternative cited in SBA, ''A Guide for Government Agencies,'' p.35
[29] SNDA-III., p. 88

Regulatory Impact Analysis

Agency: **Food and Nutrition Service, USDA**

Title: **Nutrition Standards for All Foods Sold In School**

Nature of Action: Proposed 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. The standards proposed in this rule are 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 and best 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.

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
HHFKA	Healthy, Hunger-Free Kids Act
IOM	Institute of Medicine
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
SY	School Year
USDA	United States Department of Agriculture

Contents

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 proposed here are 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 and best dietary recommendations.

The proposed 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 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.

Researchers for Healthy Eating Research and Bridging the Gap, Robert Wood Johnson Foundation-sponsored research programs examining environmental influences on youth diets and obesity, have 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.

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.

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 31.8 million children per day ate a reimbursable lunch in fiscal year (FY) 2011. 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 (FMNV).[30]

The sale of food in competition with Federal reimbursable program meals and snacks is widespread. In school year (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 52 percent of all schools, and 26 percent of elementary schools, 87 percent of middle schools, and 98 percent of high schools (Gordon, et al., 2007; Volume 1, pp 102-114).[31] Revenues from competitive foods, however, are far smaller than revenues from USDA-funded school meals. In SY 2005-2006, approximately 84 percent of 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 non-reimbursable food sales (USDA 2008, p xii). Half of secondary school students consume at least one snack food

[30] 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.

[31] SNDA-III found the top five most commonly offered à la carte lunch items were milk, juice and water, snacks, baked goods, and mixed dishes (for example, salads, pizza, etc.). For vending machines, the top five most commonly offered items included juice and water, other beverages (for example, carbonated and energy drinks, coffee and tea, etc.) snacks, baked goods, and bread or grain products.

per day at school, an average of 273 to 336 calories per day. This amount is significant considering that an excess of 110 to 165 calories per day may be responsible for rising rates of childhood obesity (Fox *et al* 2009, Wang *et al* 2006, cited in Pew Health Group, 2012).

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.[32,33,34] More recently, the Centers for Disease Control and Prevention (CDC) reported that 39 States had established competitive food policies as of October 2010; in two of those States, legislation had recently passed to require competitive food standards, but neither State had yet defined specific standards.[35] A 2012 study conducted for FNS found that at least half of States had competitive food standards for foods sold in vending machines, à la carte, school stores, and snack bars, and almost half had nutrition standards for foods sold in bake sales (Westat, 2012, p., 5-25).

[32] 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.

[33] A recent study by Taber, et al. (2011), takes a broad look at State competitive food standards, utilizing CDC data to estimate effects of State policy changes between 2000 and 2006.

[34] 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.

[35] CDC included State laws, regulations, and policies enacted or passed since October 2010. We use the term policy to generically refer to all three.

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.[36] 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. This variation is likely the result of a disparate patchwork of policies at the state and local levels. Fewer than 5 percent of school districts have food and beverage policies that meet or exceed the 2010 Dietary Guidelines for Americans.
- "Under this patchwork of policies, the majority of our nation's children live in states where less healthy snack food choices are readily available."

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 $34 billion to $36 billion each fiscal year between 2015 and 2018. Overall revenue includes the value of Federal reimbursements for NSLP and SBP meals,[37] student payments, and State and local contributions. This estimate is derived from the relationship between Federal reimbursements

[36] "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).
[37] an estimate prepared for the FY 2013 President's Budget

and total SFA revenue estimated in the School Lunch and Breakfast Cost Study (SLBCS-II) (USDA 2008).

USDA's most recent budget projections forecasted a total of $16.0 billion in Federal meal reimbursements in FY 2014, exclusive of the effects of sections 205 and 206 of HHFKA on Federal reimbursements and competitive food revenue. We use findings from the SLBCS-II about the relationship between Federal meal reimbursements and overall SFA revenue to derive an estimate of $31.6 billion in SFA revenue in FY 2014, and then adjust this upward for HHFKA impacts[38] to a total of $33.5 billion in SFA revenue in that year.

Our estimate of competitive food revenues under current policies and practices also uses SLBCS-II[39], 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 $31.6 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 $5.0 billion.[40] We add an estimated $1.3 billion increase in competitive food revenue from HHFKA Section 206 to get an adjusted $6.3 billion in SFA competitive food revenue.

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.

[38] The estimated increase in SFA revenues in 2014 from these provisions is $581 million for reimbursable meals, and $1.3 billion for competitive food revenue, for a total increase of about $1.9 billion. See 76 Federal Register 35301-35318, especially p. 35305.

[39] 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 2010, we assume that baseline competitive food revenue will increase at the same rate as the projected increase in SFA revenue from reimbursable paid lunches contained in the FY 2013 President's Budget.

[40] $31.6 billion × 15.8% = $5.0 billion.

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.[41] Our estimate of competitive food revenue generated by these groups in the last three months of FY 2014 is $40 million.[42] 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 in SY 2004-2005.

We inflate these full-year figures for 2015 through 2018 based on the assumptions in the President's Budget. Because this analysis assumes that 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 15 percent of the full-year figures.[43]

[41] ERS analysis of unpublished data from the third School Nutrition Dietary Assessment Study (SNDA-III). Note that SNDA-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.

[42] Because other school groups do not generate revenue from à la carte sales, we start with the SFA 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 other school groups is therefore: [($31.6 billion × 15.8 percent) ÷ 0.95] × .05 = $263 million. The part year effect for the last three months of FY 2014 reduces that to $40 million.

[43] The FY 2014 figures in Table 1 are just 15.1 percent of our full year FY 2014 estimates. 15.1 percent is the ratio of paid reimbursable lunches served from July through September 2011 to the number of paid reimbursable lunches served from October 2010 through September 2011. 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 first 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 $33.6 billion x 15.1 percent, or $5.1 billion.

Table 1: Baseline Competitive Food and Overall SFA Revenue

	Fiscal Year (millions)					
	2014	**2015**	**2016**	**2017**	**2018**	**Total**
Baseline SFA revenue (all sources)	$5,062	$34,045	$34,694	$35,350	$36,451	$145,601
Baseline competitive food revenue	$993	$6,758	$6,921	$7,102	$7,296	$29,070
SFA revenue	$954	$6,492	$6,651	$6,828	$7,013	$27,938
à la carte	937	6,382	6,538	6,712	6,894	27,463
vending and other sources	16	110	113	116	119	475
Other school group revenue	$40	$266	$270	$274	$283	$1,132
à la carte	0	0	0	0	0	0
vending and other sources	40	266	270	274	283	1,132

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 revenue generated by other school groups is highly uncertain. We encourage reviewers of this proposed rule to offer

additional information that might improve these estimates through the regulatory comment process.

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 proposed 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* set forth its recommendations for nutrient and other standards. The committee first identified a set of guiding principles, recognizing that:

a. The present and future health and well-being of school-age children are profoundly affected by dietary intake and the maintenance of a healthy weight.
b. Schools contribute to current and lifelong health and dietary patterns and are uniquely positioned to model and reinforce healthful eating behaviors in partnership with parents, teachers, and the broader community.
c. Because … foods and beverages available on the school campus represent significant caloric intake, they should be designed to meet nutrition standards.
d. Foods and beverages have health effects beyond those related to vitamins, minerals, and other known individual components.

e. Implementation of nutrition standards for foods and beverages offered in schools will likely require clear policies; technical and financial support; a monitoring, enforcement, and evaluation program; and new food and beverage products (IOM, 2007a, p. 3).

The committee then identified its intentions:

- The federally reimbursable school nutrition programs will be the primary source of foods and beverages offered at school.
- All foods and beverages offered on the school campus will contribute to an overall healthful eating environment.
- Nutrition standards will be established for foods and beverages offered outside the federally reimbursable school nutrition programs.
- The recommended nutrition standards will be based on the *Dietary Guidelines for Americans*, with consideration given to other relevant science-based resources.
- The nutrition standards will apply to foods and beverages offered to all school-age children (generally ages 4 through 18 years) with consideration given to the developmental differences between children in elementary, middle, and high schools (IOM, 2007a, p. 3).

Finally, the Committee recommended a two-tier system: Tier 1 consisting of foods and beverages to be encouraged and Tier 2 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.

Under the IOM recommendation, 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 items.

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.

HUSSC 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% of calories from total fat (excluding nuts, seeds, nut butters and reduced-fat cheese),
- Less than 0.5 grams (g) trans fats per serving,[44]
- No more than 10% saturated fat (reduced-fat cheese is exempt),
- Total sugar must be at or below 35% 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 other competitive foods may not exceed 200 calories as packaged.

[44] 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.

- Only low-fat or fat-free milk and USDA approved alternative dairy beverages may be offered,
- Milk serving size is limited to 8-fluid ounces,
- Fruit and vegetable juices must be 100% full strength with no sweeteners or non-nutritive sweeteners, and
- Water that is non-flavored, non-sweetened, non-carbonated, non-caffeinated, without non-nutritive sweeteners is allowed.
- 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.

As of January 2013, almost 5,000 schools in 49 States and the District of Columbia were certified HUSSC schools, and all of these schools, regardless of award level, have already moved at least part way to the proposed competitive food standards.[45]

Schools that are a part of the Alliance for a Healthier Generation's Healthy Schools Program voluntarily adopt competitive food standards that require:

- No more than 35 percent of calories from total fat,

[45] 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.

- No more than 10 percent of calories from saturated fat,
- 0 g trans fat, and
- No more than 480 mg sodium.

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. The more than 14,000 schools currently participating in the Alliance for a Healthier Generation Healthy Schools Program have also moved towards the standards in the proposed rule.[46]

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 (18.7 million students). All five of these States have had school competitive food policies since 2004 or earlier. 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 any changes in overall revenues.

In *California*, elementary children may purchase only milk (2% or less), 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, and 0 calories from trans fat, and no more than 35 percent sugar by weight. Nuts, nut butters, seeds, eggs, cheese packaged for individual sale, fruit,

[46] School participation numbers are from the Healthy School Program, Alliance for a Healthier Generation website. http://www.healthiergeneration.org/schools.aspx.

vegetables that have not been deep fried, and legumes are also allowed for purchase. These standards apply regardless of the time of day.

Middle and high school children may purchase water, milk (2% or less), fruit and vegetable drinks that are at least 50 percent juice, and electrolyte replacement beverages with no more than 2.1 g of added sweetener per one fluid ounce. They may also purchase food items à la carte as long as the foods 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 (CSPI, 2007).

- *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 if 100 percent fruit juices are also available where those beverages are sold (CSPI, 2007).
- *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, 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 (CSPI, 2007).

- *New York* State broadly restricts the sales of FMNV and "all other candy" from the beginning of the school day through the end of the last scheduled meal period. 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 6:00 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, at 10 calories per eight ounces for elementary and middle schools and 25 calories per eight ounces in high schools. Lowfat (1%) and fat free milk are also allowed.

Snack vending machines are not permitted in schools with students in pre-kindergarten through fifth grade. For students above grade five, competitive foods 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).[47]

- *Texas* State policy does not allow the sale of FMNV or any food or beverage that is not provided by school food service on elementary school campuses until after the end of the last scheduled class period (CSPI, 2007). Allowed beverages include milk (2% or less), water, and 100 percent vegetable or fruit juices. For middle schools, FMNV, candy, and carbonated beverages sales are not permitted until the last scheduled class. Twelve ounce containers of beverages, other than milk and FMNV, with no more than 30 g sugar per eight ounces are allowed. These beverages might include sports and fruit drinks and sweetened ice teas.

At the high school level, FMNV may be sold only after the last scheduled class. Sugared and carbonated beverages of no more than 12 ounces may be offered, but only 15 percent of vending machine slots or service points may be devoted to these beverages. In all grades, 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

[47] These city-level food standards became effective in February of 2010 and are different than the State-level standards considered in the State schools food report card (CSPI, 2007).

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. Fruit and/or vegetables must be offered daily on all points of service (CSPI, 2007).

While none of these States have policies that match all of the standards in the proposed rule, California, Illinois, and New York City meet several: California meets or exceeds the proposed standards for calories; total, saturated, and trans fats; and sugar. Illinois meets proposed standards for calories, total and saturated fat, and sugar. New York City meets proposed 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 proposed 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 in already in place. These include two voluntary programs: USDA's 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.[48]

[48] 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.

Table 2: Current Competitive Food Standards[49]

Nutrition Standards (per serving)	HealthierUS Schools (gold of distinction level)	Alliance for a Healthier Generation	California	Illinois*	New York City**	Texas
Calories	q 200 calories (snack) = NSLP serving size (entrée)	150, 180, and 200 (Snack only) (elementary, middle, and high school)	-- 400 calories per entrée (middle and high school)	-- --	q 200 calories (snack) --	-- --
Sodium	q 200 mg (snack) q 480 mg (entrée)	q 230 mg (snack) --	-- --	-- --	q 200 mg (snack) --	-- --
Sugar	q 35 % by weight	q 35 % by weight	q 35 % by weight	q 35 % by weight	q 35% of calories	
Total fat	q 35 %	q 35 %	q 35 %	q 35 %	q 35 %	q 23 g
Saturated fat	< 10%	< 10%	< 10%	< 10%	< 10%	--
Trans fat	< 5% (trans fat free)	0%	0%	0%	< 5% (trans fat free)	--
Milk	8 oz 1% or less	1% or less (must meet calorie	2% or less	--	1% or less	2% or less
Juice	6oz 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.

[49] 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 These standards must be consistent with the most recent DGA and authoritative scientific recommendations (HHFKA, 2010, p. 98). The proposed rule addresses all competitive foods and beverages sold on campuses throughout the school day. It is guided by the same principles that underlie the 2007 IOM recommendations. 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.

The proposed 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 proposed rule puts students in a position to make their own healthy choices, and encourages the development of healthy habits for life.

The proposed 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. The school campus includes all areas under jurisdiction of the school that are accessible to students.

- Schools may allow the sale of food that does not meet proposed rule standards for school-sponsored fundraisers at a frequency to be determined with the help of public comments on

the proposed rule. Exempted fundraiser foods may not be sold in competition with school meals.

- NSLP/SBP entrées and side dishes sold à la carte, with the exception of grain-based desserts which must always meet all nutrition standards, will be exempt from proposed rule standards subject to one of two alternatives. Alternative A1 would allow NSLP/SBP menu items that meet the proposed fat and sugar standards to be sold à la carte at any time. Alternative A2 would exempt NSLP/SBP entrées and side dishes from all standards if sold during menu cycles, with two alternate limitations (B1-B2) – that they can only be sold 1) on the day that they are served as part of a meal, or 2) within four operating days of the day they are served. USDA invites comments on these alternative standards.
- Competitive foods must meet all the proposed nutrient standards, and must:
  - contain 50 percent or more whole grains or have whole grains as the first ingredient or be one of the non-grain main food groups as defined by the 2010 DGA: fruit, vegetable, dairy product, 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 (e.g., calcium, potassium, vitamin D or dietary fiber), or
  - be a combination food that contains a half serving (1/4 cup) of a fruit or vegetable.

  If water is the food's first ingredient, the second ingredient must satisfy the standard 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 or extra light syrup, are exempt from the proposed rule's nutrient standards.

- Competitive foods must contain 35 percent or less of total calories from fat per portion as packaged. Exceptions from these fat standards are granted for reduced fat 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, seafood with no added fat.
- Competitive foods must contain no more than 10 percent of total calories from saturated fat, with the exception of reduced fat cheese.
- Competitive foods must have 0 g of trans fat.
- Sodium content in snacks is limited to 200 mg per portion as packaged for non-NSLP/SBP snack items. Non-NSLP/SBP entrée items must have no more than 480 mg of sodium per portion.
- Two alternative sugar standards are provided for comment. The first would limit total sugar to 35 percent of calories. The second would limit total sugar to 35 percent of weight. Under both alternatives, exceptions are provided for fresh, frozen, and canned fruits or vegetables with no added sweeteners except for fruits packed in 100 percent juice or extra light syrup, and dried whole fruits or vegetables, dried whole fruit or vegetable pieces, and dried dehydrated fruits or vegetables with no added nutritive sweeteners. Lowfat or nonfat yogurt with less than 30 g of sugar for eight ounces is also permitted.
- In general, competitive foods shall have no more than 200 calories per portion as packaged including accompaniments such as butter, cream cheese, salad dressing, etc. for snack items and side dishes sold à la carte. Entrée items sold à la carte shall contain no more than 350 calories.
- Accompaniments should be pre-portioned and must be included in the nutrient profile as a part of the item served and meet all the proposed standards.

- 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, low fat milk, nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and 100 percent fruit or vegetable juices. 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, low fat milk, nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and 100 percent fruit or vegetable juice. 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, lowfat milk, nonfat milk (including flavored), nutritionally equivalent milk alternatives (as permitted by the school meal requirements), and 100 percent fruit or vegetable juice. Milk and milk equivalent alternatives and fruit or vegetable juice must be no more than 12 ounces. Calorie-free, flavored and/or unflavored carbonated water and other calorie free beverages that comply with the FDA standard of less than five calories per serving must be no more than 20 ounces.
- Two alternative standards for low calorie beverages for high school students are provided for comment. The first alternative would allow beverages of up to 40 calories per 8 fl oz serving (or 60 calories per 12 fl oz). The second would allow up to 50 calories per 8 fl oz (or 75 calories per 12 fl oz). Both alternatives limit serving sizes to 12 fluid ounces or less. Beverages containing caffeine are permitted at times other than at meal service. There is no ounce restriction on water.

III. Cost – Benefit Analysis

The proposed 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. 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 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. 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 net revenues. Our analysis illustrates a range of possible revenue impacts, all of which are relatively small (+0.4 percent to -0.7 percent). 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.[50] The combined effect of that rule and this proposal is a net increase in SFA revenue.

The key benefit sought through this proposed 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 and best dietary recommendations, the rule should also improve the mix of foods that students purchase and consume at school.

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

In turn, though 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 proposed in the rule will positively influence – and perhaps directly improve – eating patterns that contribute to students' long-term health and well-being, and reduce their risk for obesity.

A. Existing Research on Revenue Effects

If the proposed standards are finalized and implemented, students who currently purchase competitive foods will adjust their behaviors in a number of ways in response. 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 proposed rule, they offer the best available insight into the likely consequences of the proposed 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 (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 provide data for non-food service sales of competitive foods and beverages, four experienced a decrease in revenue of more than five percent and one experience 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 "junk 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:

> [w]hen schools and districts adopted strong nutrition standards for snack and a 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 HIA, 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).

While the existing research suggests that any 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. These experiences vary so widely that they do not support a meaningful quantitative national estimate of the proposal's net impact on program costs and revenues.

B. Estimating School Revenue Changes

To assess the impacts of the proposed rule on school revenue, we reviewed the evidence summarized above and identified three scenarios for student behavior and estimated the revenue changes that could result:

- 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 (ΔL) 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.[51] 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). ΔL is then the product of ΔCF and the competitive foods availability effect ($CFAE$) divided by the baseline NSLP participation rate (PR):[52]

[51] This is in contrast to the possibility that all students reduce their purchases by the same percentage.
[52] This relationship assumes that (1) the increase in NSLP participation must come from non-participants 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

$$\Delta L = \Delta CF \times CFAE / PR$$

The value for *CFAE* is assumed to be –4.6 percentage points, based on the finding by Gordon, et al. (SNDA III, vol. 2, p. 117) 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. The national average participation rate measured in SNDA-III was 61.7 percent. 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.

We assume in our estimates that other school groups incur the same percentage change in competitive food revenue as SFAs. This assumption may not be realistic given the difference in the nature of the foods sold in occasional fundraisers, in vending machines, in snack bars, and in à la carte lines. However, given the importance of this revenue source for its sponsors, we expect that small or independent school groups will adapt in a manner that results in a revenue impact comparable to that experienced by the SFAs.

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

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.

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 complete prior to the publication 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 increase (five percent in SY 2015-2016 following no change in the first year of implementation) in competitive food revenue during 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).

We then account for the costs incurred by schools that have already adopted competitive food standards. 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 a lower bound adjustment: 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 (ΔCF = 4.0).

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 (ΔL = -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,[53] based on unpublished results showing that 64 percent of competitive food purchases were made by students not eligible for free or reduced-price meals.[54] Our analysis also utilizes the proportions of free, reduced-price, and paid lunches served projected by USDA for the FY 2013 President's Budget. For FY 2011, the observed proportions were 58, 8, and 33 percent for free, reduced price, and paid meals.

Using our estimate of a 0.3 percent decrease in NSLP participation, we estimate effects on school meal participation, SFA revenues from reimbursable meals, and Federal reimbursement costs.[55] 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.[56] The net impact in schools whose experiences align with this estimate is an overall school food revenue increase of roughly 0.4 percent.

Scenario 2: Lower competitive food sales with fully offsetting increases in school meal participation

[53] Paid, reduced price, and free NSLP meals each have some level of government subsidy, therefore even lunches that are "full price" are subsidized.
[54] Unpublished ERS analysis of SNDA-III data.
[55] Our baseline number of NSLP meals, like our baseline NSLP revenue, begins with FNS program projections prepared for the 2013 President's Budget. These are adjusted for the changes in lunches served as a result of the recently published rule to implement Sections 205 and 206 of the HHFKA. See rule and RIA in Federal Register, Vol. 76, No. 117, pp. 35301-35318.
[56] FNS projections of Federal reimbursements for free, reduced price, and paid lunches are those used to prepare the FY 2013 President's Budget, adjusted for changes for Sections 205 and 206 of HHFKA.

Evidence of the effects of nutrition standards on revenues from competitive foods and beverages for this estimate is drawn from a case study of Texas schools (Cullen and Watson, 2009).[57] USDA's analysis of the Texas data concluded that overall competitive food purchases declined by six percent. Assuming each purchase contributes roughly equivalently to revenues, this would suggest a six percent decline in revenue from competitive food sales. 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 six percent competitive food revenue loss to 4.8 percent (ΔCF = -4.8)

In this scenario, we model the effects of moderately high acceptance of competitive foods that meet proposed rule standards. 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 (ΔL = 2.0). The net impact in schools whose experiences align with this scenario is a small decrease in overall school food revenue of roughly -0.03 percent.

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 comparably healthy 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.

[57] The analysis that follows reflects the work of both the USDA's ERS and the FNS.

Scenario 3: Lower competitive food sales with partially offsetting increases in school meal participation

We illustrated above what could happen if competitive food revenue falls by 4.8 percent (ΔCF = -4.8) and schools experience a fully offsetting increase in school lunch participation. It is possible, however, that fewer students will opt for school meals, preferring to bring lunch from home or perhaps purchase foods from outside vendors. For Scenario 3 we maintain the reduction in competitive food revenue but suggest a lower increase in NSLP participation. If NSLP participation increases 0.36 percent (ΔL = 0.36), the net impact in schools whose experiences align with this estimate is a small decrease in overall school food revenue of roughly -0.7 percent.

C. Impacts on Participating Children and Families

Beyond revenue impacts to SFAs and other school groups, changes in food purchasing choices caused by the proposed 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; students at schools with closed campuses will have fewer options, but may benefit by choosing healthier foods as a result.

D. Administrative Costs

Under the proposed rule, local educational agencies (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 proposed 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 926,935 hours, divided among the State agencies (1,040 hours), LEAs and SFAs (417,160 hours), and schools (508,735) hours. 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 2013 President's Budget.[58] Note that there are no new reporting requirements in the proposed rule.

[58] We use wages and salaries for administrative employment in the state and local government sector from the Bureau of Labor Statistics' "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 2013 President's Budget.

Table 3. Estimate of Administrative Costs for Recordkeeping for Proposed Rule

Recordkeeping	Fiscal Year (millions)					
	2014	2015	2016	2017	2018	Total
State Agencies	$0.03	$0.03	$0.03	$0.03	$0.03	$0.14
SFAs and LEAs	$10.8	$11.1	$11.5	$11.9	$12.2	$57.4
Schools	$13.1	$13.5	$14.0	$14.5	$14.9	$70.0
Total	$23.9	$24.7	$25.5	$26.3	$27.2	$127.6

It is also possible that some schools and LEAs may have additional costs due to the proposed 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 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.

E. 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 proposed 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.[59] That represents only about 1.3 percent of the $644 billion worth of shipments from U.S. food manufacturers in 2010.[60] FNS estimates that SFA revenue from competitive food equals about 20 percent of overall SFA revenue (see Table 1). 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.[61] 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

[59] USDA School Food Purchase Study III, 2012.
[60] Bureau of Economic Analysis, Gross Domestic Product by Industry, data for NAICS 311 and 312, excluding animal foods, tobacco and alcoholic beverages (http: http://bea.gov/industry/xls/GDPbyInd_SHIP_NAICS_1998-2011.xls)
[61] Bureau of the Census, 2007 Economic Census (http://www.census.gov/econ/census07)/

demand for these foods comparably to school meals,[62] 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 proposed 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. Therefore, at least with respect to these products, many of the changes required by the proposed rule have already taken place under existing self-regulation and State and local standards, reducing the net impact of Federal standards relative to current conditions.

Local vending machine operators may also face some changes to their current business model. Although the effect of the proposed 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 52 percent of schools in SY 2004-2005 (Gordon, et al., 2007, vol. 1, pp. 96-100)) they are not the only alternate source. About 26 percent of schools offered competitive

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

food in school stores, snack bars, food carts, and occasional fundraisers (Gordon, et al., 2007, vol. 1, p. 101).

Vending and manual foodservice operators served 19,000 primary and secondary schools in 2008, which was down about 14 percent from 2006 (VendingTimes.com, p. 3).[63] Primary and secondary schools accounted for just 2.2 percent ($1 billion out of $45.6 billion) of total vending machine sales in 2008 (VendingTimes.com, p. 3).

These data suggest that the impact of the proposed 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 2004-2005 were also likely compliant or near-compliant with the proposed rule.[64]

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.[65] 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.[66] Some

[63] This figure is much smaller than the 52 percent of schools figure from SNDA-III. The vending industry data was gathered through a survey of vending machine operators, providers of coin-operated entertainment services, coffee-break service providers, and related industry subgroups.
[64] The SNDA-III data do not allow us to identify which other products in school vending machines are compliant with the proposed rule standards. Nor does 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 proposed 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 Gordon, et al., 2007, pp. 104-105.
[65] Data for NAICS code 454210, "vending machine operators." U.S. Census Bureau, http://www.census.gov/econ/industry/ec07/a454210.htm (accessed 11/13/2011).
[66] 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.

small vendors may be challenged by the changes contained in the proposed 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).

F. 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-III, high schools obtain almost three times as much revenue from competitive foods as do elementary schools; 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.[67] However as noted previously, revenues may drop more in terms of percentages at lower-income schools if low-income students are more price-sensitive than high-income students.[68] This difference is mirrored in the behavior of low 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 district-level 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.

[67] Unpublished ERS analysis of SNDA-III data.
[68] Woodward-Lopez, et al., 2010.

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.

G. Benefits

The proposed 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 and best 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 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.

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.[69] 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.,

[69] "Food Labeling: Calorie Labeling of Articles of Food in Vending Machines." NPRM. 2011.

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)[70] and annual prescription drug, 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).

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:

[70] 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.

- 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:

> [t]here 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 proposed 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.

H. 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. The published summaries of the pilot outcomes attribute all of the loss to reduced competitive food revenue and increases in the cost to schools of acquiring foods (NC GA 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 (NC GA 2011, p. 2 Atkinson letter).

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 proposed 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, if for no other reason than the new items do not have the same market share. However, to meet calorie or fat standards, manufacturers may simply reduce package sizes, e.g., replacing 16 ounce 100 percent juice drinks with four or eight 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 proposed rule. Even these limited studies are based on standards that are not exactly the same as the proposed 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 proposed 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). 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 proposed 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 12-oz containers could be sold in 8-oz or 4-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). Food service staff in California, however, also reported that more products are needed and that the costs of such products are frequently higher than those they replace (Woodward-Lopez, et al., 2005b).

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 less-nutritious competitive items. 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 proposed rule. The pressures on school revenue from high costs and limited availability could ease in the period between publication of proposed rule standards and the effective date of a final rule.

6. SFA and school compliance

Early studies on competitive food revenues indicate that not all schools have complied with existing State competitive food standards.[71] 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 proposed rule, the revenue impact of the rule will be lower. Each of our estimates assumes full compliance with the proposed rule.

7. School participation Federal meal programs

It is possible that some schools could choose to leave NSLP and SBP to avoid the new competitive food standards. Although some schools may realize significant losses in revenue from competitive foods, especially in the short term, we believe it is unlikely that many, if any, will choose to do so. On average, SFAs receive just 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).

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

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

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 proposed 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 will take effect prior to this competitive foods rule.[72] 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.

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

IV. Alternatives

A. Full Implementation of IOM Recommendations

We first consider a rule that adopts all of the IOM standards without change. The standards in the proposed rule were guided in large part by the IOM standards, but were also informed by other considerations. Thus, for example, the proposed rule allows a broader array of products in high schools than are included in the IOM standards. In addition, some of the IOM standards are more restrictive than those contained in the proposed rule, and it is possible that fewer currently available food products meet the standards.

The overall revenue effect on SFAs that lose competitive food sales depends on the extent to which students replace consumption of competitive foods with increased participation in the NSLP, an unknown that may vary according to characteristics of the student population (such as percent of children eligible for free or reduced price meals) or school policy (allowing students to leave campus at lunch time). Strong growth in NSLP participation, reported by some schools, would fully offset the reduction in competitive food receipts. However, lesser growth in NSLP participation allows for the possibility of substantial overall revenue losses.

B. Less Comprehensive Standards

A second alternative considered would place fewer restrictions on the types of competitive foods and beverages available to students. Under this scenario, students would likely have a wider range of options and, potentially, the choices available to students would contain more of the foods that they are already familiar with. This alternative increases the likelihood that there will be no net loss in competitive food revenue.

Less comprehensive competitive food standards could also have implications for children's health. The competitive food standards are crafted specifically because of concern about children's health and especially childhood obesity. Thus adopting less comprehensive standards could reduce the positive impact of the proposed standards on children's health.

C. Exemption for Reimbursable Meal Entrées and Side Dishes

As noted previously, many of the food items sold à la carte are entrées or snacks that are also served as part of a reimbursable meal. The proposed rule provides three alternative standards for NSLP menu items sold à la carte. The first would allow NSLP entrées and snacks to be sold any time as an à la carte food as long as they meet the fat and sugar standards in the proposed rule. The other two alternatives have to do with the menu cycle; providing NSLP entrée and snack items to be sold 1) on the same day they were served as part of a reimbursable meal, or 2) within four days of being served as part of a reimbursable meal.

The primary benefit of an exemption that is limited 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. This more limited exemption would also encourage students to consume a greater variety of foods, even if they choose foods consistently from the à la carte line. However, an exemption that is limited to entrées and side dishes on the current day's menu could complicate meal planning and preparation by denying schools the ability to serve leftover items on the next school day.

The primary benefit of an exemption within four operating days of its offering in an NSLP or SBP menu is that it would ease school planning and increase efficiency by allowing the service

of leftover items more flexibly. However, it could discourage variety in student consumption, and may tend to increase consumption of entrees higher than average in calories, fat, and sodium that in the school meals programs are balanced by other offerings during the week.

D. School-sponsored Fundraisers

The proposed rule offers two alternatives on exempt fundraisers. The first alternative is to allow State agencies to set the frequency of exempt fund raisers and the second is similar; State agencies would still set the frequency of exempt fund raisers, but subject to USDA approval. The proposed rule complements the Federal nutrition standards for reimbursable meals that take effect at the start of SY 2012-2013. Together, these reforms are designed to create the all-venue, day-long healthy school food environment recommended by IOM.[73] The consistency of the message on healthy eating conveyed to students through these measures is diminished by frequent exemptions for fundraisers. If a consistent message is more effective in influencing eating habits than an inconsistent message, then frequent fundraiser exemptions may reduce long-term student adherence to a diet consistent with the Dietary Guidelines. It is also important to note that current practice in many schools is quite limited. More than half of all schools, and 39 percent of high schools, never sold sweet or salty foods as fundraisers in SY 2004-2005.

The benefits of partial or full State discretion derive from State administrators' knowledge of what will prove most effective in their schools. State discretion may, for example, give rise to creative policies that encourage districts to move away from food-based fundraisers while allowing for a short transition period that recognizes individual districts' dependence on such

[73] For schools to "take full advantage of their unique position to model and reinforce healthy eating behaviors" competitive food policies must "consider foods and beverages offered in all venues and throughout the school day" (IOM 2007a, pp. 25-26).

revenue. Through this type of flexibility, it is possible that State discretion would ultimately result in fewer exempt fundraisers than would be the case under a uniform national standard.[74] However, the option that would give States full discretion over exempt fundraisers 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. A policy that does not limit the frequency of exempt fundraisers risks undermining the goals of Federal competitive food and reimbursable meal regulations.

Providing States with partial discretion over the frequency of exempt fundraisers could also potentially result in a modest increase in administrative costs at both the State and Federal levels. That option will require the development of policies on the acceptability of State standards, and procedures to administer the application and approval process.

E. Total Sugar

The proposed rule's alternative sugar standards for competitive foods would limit total sugar content to either 35 percent of calories or 35 percent of weight. Both standards would place a meaningful check on the amount of sugar allowed in competitive foods while providing exceptions for certain fruit and vegetable snacks and yogurt.

The calorie-based standard would be more restrictive than the weight-based standard for sugar-sweetened foods with high moisture content, such as ice cream and other frozen desserts.[75] The proposed rule's calorie-based standard would not disallow those foods, but for some

[74] States and local districts would be free, as well, to set policies that allowed fewer exempt fundraisers than a uniform national standard. However, only a policy of State discretion would allow relatively permissive local standards for a short transition period.
[75] Flavored milk is not subject to the proposed rule's total sugar standard.

individual products, the calorie-based standard would require that they contain less sugar than the weight-based standard for an identically sized serving.[76]

For products with low moisture content the ratio of fat to sugar is more critical. 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 disallowed under the proposed rule's weight-based sugar standard while meeting its calorie-based standard.[77]

F. Naturally Occurring Ingredients and Fortification

Competitive foods that do not satisfy one of the proposed rule's food group requirements may still be sold to students if they provide at least 10 percent of the daily value of a "naturally occurring" nutrient of concern: calcium, potassium, vitamin D, or dietary fiber. Naturally occurring nutrients are those found in non-fortified foods. As an example, the preamble to the rule lists dry milk solids, cheese, or rhubarb as naturally occurring sources of calcium. Processed foods that use these naturally calcium-rich foods as ingredients can meet the proposed rule's calcium standard. Processed foods that are only able to reach the 10 percent daily value for calcium through fortification with a non-food source would not meet the standard. The primary alternative to this provision is to allow fortification with non-food ingredients.

The Department believes that recognizing only naturally occurring nutrient sources is more consistent with the recommendation of the Dietary Guidelines that "nutrients should come primarily from foods" (USDA-HHS 2010, p. 49). A rule that does not credit the contribution of

[76] For example, 100 grams of ready-to-eat chocolate pudding (ID 19183 in the USDA National Nutrient Database for Standard Reference, release 24) contains 142 calories and 17.17 grams of total sugar. By weight, this product is 17.17 percent sugar, well under the proposed rule's 35 percent by weight standard. But 17.17 grams of sugar have 65 calories (at 3.8 calories per gram). That is 46 percent of the 142 total calories in this product, a figure that exceeds the proposed rule's 35 percent of calories standard (http://ndb.nal.usda.gov/).

[77] 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).

non-food sources to meeting the rule's ten percent standard for DGA nutrients of concern is also better aligned with IOM recommendations. IOM cites "[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).

Despite these benefits of a food-based approach, the Department recognizes that schools may be unable to distinguish products that satisfy the "naturally occurring" requirement from products that do not. At present, the contribution of food-based and non-food sources to the nutrient values on processed food nutrition labels are not shown separately. The practical effect of this limitation may be that schools will approve few competitive foods for sale on the basis of their calcium, potassium, vitamin D, or dietary fiber content alone. In an effort to exclude items that achieve targeted levels of these nutrients through non-food fortification, schools may disallow any item with non-food sources of these nutrients unless they also satisfy one of the proposed rule's food group requirements or other exemptions. A possible consequence is that the proposed rule will not contribute as effectively as intended to increasing student intake of these nutrients of concern.

It is unclear how cost might impact the mix of competitive foods offered for sale under these alternate provisions. If fortification with non-food sources of calcium, potassium, vitamin D, or dietary fiber is an inexpensive way for manufacturers to gain access to the school competitive food market, then a rule that allows non-food fortification may increase the variety and lower the cost of competitive food products available to students. At the same time, inexpensive fortified snacks and beverages may crowd out whole grains, fruits, vegetables, and dairy products.

G. Allowable Beverage Sizes in High Schools

The proposed rule would allow plain water, milk, nutritionally equivalent milk alternatives, and 100 percent fruit or vegetable juice to be sold to elementary, middle, and high school students outside of the meal service area. In addition to these, the proposed rule would allow schools to make certain calorie free and low calorie beverages available to high school students. ("Calorie free" and "low calorie" are FDA standards.[78]) At the high school level, the proposed rule would limit all calorie free beverages to 20 fluid ounces and low calorie beverages to 12 fluid ounce containers. The proposed rule places no size limit on containers of plain water.

H. Low Calorie Beverages

The proposed rule's alternative calorie limit for beverages for high school students would permit up to either 40 calories per 8 fl oz serving (and 60 calories per 12 fl oz) or 50 calories per 8 fl oz serving (and 75 calories per 12 fl oz). The higher 50 calorie limit would permit the sale of some national brand sports drinks in their standard formulas.[79] The lower 40 calorie limit would only allow the sale of reduced-calorie versions of those drinks. The 50 calorie alternative would open the door to a class of competitive beverages with great market strength and consumer appeal. Such a change might generate significant revenue for schools and student groups.

IOM specifically excludes sports drinks from both its Tier 1 and Tier 2 lists of beverages. However, IOM does recognize their value for student athletes engaged in prolonged physical activity for "facilitating hydration, providing energy, and replacing electrolytes" (IOM, 2007a, p.

[78] "Calorie free" may be used on a label for foods with fewer than 5 calories per "reference amount customarily consumed." Foods may be labeled "low calorie" if they contain no more than 40 calories per reference amount customarily consumed (21 CFR 101.60(b)).
[79] Nutrition labels on product websites for both Gatorade and Powerade show 50 calories per 8 fl oz serving.

11). In these limited circumstances, IOM would endorse the decision of an athletic coach to make such drinks available.

I. Caffeinated Beverages

Consistent with IOM recommendations, the proposed rule requires 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, does not restrict caffeinated products for high school students, which is a departure from the IOM guidelines. The Department invites comments on providing the exception for high school students.

V. 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.[80] 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:

[80] 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 final rule	$23.9	$24.7	$25.5	$26.3	$27.2	$127.6

Applying 7 and 3 percent discount rates to this nominal cost stream gives present values (in 2012 dollars):

	($ millions)					
	2014	**2015**	**2016**	**2017**	**2018**	**Total**
Total cost (present value, 7% discount rate)	$20.9	$20.1	$19.5	$18.8	$18.1	$97.4
Total cost (present value, 3% discount rate)	22.5	22.6	22.7	22.7	22.8	113.3

The annualized values in FY 2012 dollars of these discounted cost streams are computed with the following formula, where PV is the discounted present value of the cost stream ($97.4 in the illustration), *i* is the discount rate (7 percent), and *n* is the number of years beyond FY 2012 (6).[81]

[81] The Excel formula for this is PMT(rate, # periods, PV, 0, 1)

$$PV \div \left[\frac{1 - \frac{1}{(1+i)^{(n-1)}}}{i} + 1 \right]$$

$$97.4 \div \left[\frac{1 - \frac{1}{(1+0.07)^{(6-1)}}}{0.07} + 1 \right]$$

Benefits	**Outcome Scenario**	**Estimate**	**Year Dollar**	**Discount Rate**	**Period Covered**
Annualized Monetized ($millions/year)	n.a.	n.a.	n.a.	n.a.	FY 2014-2017
Qualitative: The rule will ensure that all foods sold to children in school during the school day will meet macronutrient and food group standards that are consistent with a healthy diet and are based on current nutrition science. The proposed rule will encourage the consumption of foods such as whole grains, fruit, vegetables, and dairy products that are low in fat and added sugar. By allowing only the sale of competitive foods that comply with Dietary Guidelines recommendations, this proposed rule aims to promote healthy eating habits.					
Costs	**Outcome Scenario**	**Estimate**	**Year Dollar**	**Discount Rate**	**Period Covered**
Quantitative: SFA and State educational agency administrative expenses to comply with the rule's reporting and recordkeeping requirements.					
Annualized Monetized ($millions/year)	**1-4**	$19.1	2012	7%	FY 2014-2017
		$20.3	2012	3%	
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 (+0.4 percent to -0.7 percent). The data are insufficient to assess the frequency or probability of schools experiencing any specific level of impact.					

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