



Added Sugars in School Meals and Competitive Foods
U.S. Department of Agriculture
Food and Nutrition Service
A Report to Congress
May 2022

Background

This report responds to the Consolidated Appropriations Act, 2021 (P.L. 116-260, H.Rept. 116-446), which directs the U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS) to provide a report on the amount of added sugars in school meals. As directed, this report highlights the proportion of meals and competitive foods that would meet an added sugars standard consistent with the 2015–2020 Dietary Guidelines for Americans (DGA), i.e., that no more than 10 percent of calories from the meal or competitive food item come from added sugars.¹

Currently, there is no standard for total sugars or added sugars in meals served through the National School Lunch Program (NSLP) or School Breakfast Program (SBP), called “reimbursable meals.”² All other foods and beverages sold in schools during the school day (for example, in vending machines or a la carte in the cafeteria), known as “competitive foods,” must follow the Smart Snacks in Schools standards.³ These items must have less than 35 percent of total weight from sugar, but there is no standard for competitive foods related to added sugars or added sugars as a percentage of calories.⁴

The 2020-2025 DGA recommend limiting added sugars to less than 10 percent of calories per day.⁵ An analysis of Centers for Disease Control and Prevention (CDC) data from 2011-2016 found that school

¹ It is important to note that the DGA recommendation on limiting added sugars reflects an individual’s dietary intake across an entire day. As such, an individual could meet the DGA recommendation despite consuming a meal or single food item that contains more than 10 percent of calories from added sugars. For the purposes of this report, the added sugars content of school meals and competitive foods are compared to a threshold of 10 percent of calories, as directed by Congress.

² Current nutrition standards published in 2012 are based on the 2010-2015 DGA, in which there was no quantitative recommendation for limiting added sugars. Requirements that limit calories per meal are intended to minimize discretionary calories from saturated fat and added sugars.

³ *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*. 7 CFR Parts 210 and 220. Federal Register, Vol. 81, No. 146. July 29, 2016.

⁴ Ibid.

⁵ U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020.

children ages five to eighteen years consumed on a given day 14 percent of calories from added sugars.⁶ Analysis of FNS data showed that at breakfast on school days, 62 percent of all school-age children ate a meal in which more than 10 percent of calories came from added sugars, and 47 percent did so at lunch, regardless of participation in school meal programs.⁷ Overconsumption of added sugars makes it difficult for individuals to achieve a healthy dietary pattern within calorie limits.⁸ Minimizing consumption of added sugars is particularly important for younger school children (ages five through eight) who have fewer calories available for other types of foods after meeting food group and nutrient needs with nutrient-dense foods.⁹

Key Findings

- Ninety-two percent of schools prepared breakfasts with 10 percent or more of calories from added sugars.
- Sixty-nine percent of schools prepared lunches with 10 percent or more of calories from added sugars.
- The main source of added sugars in both school breakfasts and school lunches was flavored fat-free milk, which contributed 29 percent of the added sugars in breakfasts and 47 percent in lunches.
- Of the 10 competitive food items most commonly served a la carte at breakfast, six include varieties that exceed the DGA recommendation for percentage of calories from added sugars.
- Of the 10 food items most commonly served a la carte at lunch, four include varieties that exceed the DGA recommendation for calories from added sugars.

Methods

The findings in this report are based on data from the FNS School Nutrition and Meal Cost Study (SNMCS). In School Year (SY) 2014-2015, SNMCS collected NSLP and SBP menu data from a nationally representative sample of 1,207 schools as well as competitive foods data from a nationally representative sample of 858 schools.¹⁰

The findings related to reimbursable meals are based on analysis published in the journal *Nutrients*.¹¹ SNMCS collected detailed nutrient information on foods served as part of reimbursable school breakfasts and lunches over the course of a week, including levels of added sugars and calories. The method used to estimate the added sugars content in school breakfasts and lunches gives greater weight to menu items that were prepared in larger quantities, generally reflecting the popularity of the

⁶ Unreleased USDA report using 2011–2016 National Health and Nutrition Examination Survey (NHANES) data to examine the relationship between estimated program participation, diet quality, indicators of nutrition and health, food consumption patterns, and nutrient intakes.

⁷ Fox, M. K., Gearan, E. C., & Schwartz, C. (2021). Added sugars in school meals and the diets of school-age children. *Nutrients*, 13(2). <https://doi.org/10.3390/nu13020471>

⁸ *Dietary Guidelines for Americans, 2020-2025*, 41

⁹ *Dietary Guidelines for Americans, 2020-2025*, 87

¹⁰ U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support (2019). *School Nutrition and Meal Cost Study: Study Design, Sampling, and Data Collection*. By Eric Zeidman, Nicholas Beyler, Elizabeth Gearan, Nikkilyn Morrison, Katherine Niland, Liana Washburn, Barbara Carlson, David Judkins, Lindsay LeClair, Michele Mendelson, Tara Wommack, Justin Carnagey, Maureen Murphy, and Andre Williamson. Project Officer: John Endahl. Alexandria, VA.

¹¹ *Nutrients*

various menu items among students. Similarly, the method used to identify sources of added sugars in school meals accounts for the frequency with which the food was offered in school meals, so foods that were more commonly offered in school meals contribute more to the estimate of the added sugars served.

SNMCS collected data on the availability of certain competitive food items through a la carte sales in cafeterias during mealtimes; in vending machines; in school stores; at snack bars, food carts, and kiosks; through fundraisers; and through any other sources present in schools. Vending machines are not included in the analysis of elementary or middle schools because there were not enough schools selling items in this venue to allow for reliable estimates.¹²

SNMCS did not collect detailed data about competitive foods items, such as the variety (i.e., flavor, sweetened or unsweetened), nutrient information, or serving size. As a result, we do not know whether, in some or all schools, the item offered may be a diet or unsweetened version, which affects the estimated level of added sugars. Calorie and nutrient content for competitive foods were estimated using the USDA Food and Nutrient Database for Dietary Studies and the Food Patterns Equivalent Database, which contain nutrient values for several different varieties of many food items. In some cases, the analysis used a “not further specified” option (for example, “Yogurt, not specified as to type of milk or flavor”) because the SNMCS data did not include the details necessary to select a more specific option. For items with different varieties, such as sweetened and unsweetened, a range of added sugars levels is provided in the tables below (e.g., 0 - 95 percent of calories from added sugars).

School Meal Program Findings

Added sugars in reimbursable school breakfasts

On average, added sugars accounted for 17 percent of calories in school breakfasts across a school week. This translates to an average of 88 calories from added sugars in each school breakfast.¹³ Of the daily breakfast menus evaluated, 14 percent had less than ten percent of calories from added sugars.

Ninety-two percent of schools prepared breakfasts with more than 10 percent of calories from added sugars (Table 1). Low poverty and mid-low poverty schools, defined respectively as schools with less than or equal to 25 percent or between 25.1 and 50 percent of students eligible for free or reduced-price school meals, were significantly more likely than high poverty schools to serve meals exceeding the 10 percent threshold for added sugars (95 percent for both groups versus 87 percent). Schools with a majority white student body were significantly more likely than majority Hispanic or diverse schools to do so (97 percent versus 84 percent and 89 percent respectively). There were no significant differences by school level (i.e., between elementary, middle, and high schools) in the percentage of schools that served meals with ten percent or more of calories from added sugars at breakfast.

¹² Ten percent of elementary schools and 44 percent of middle schools sold any food or beverage items in vending machines (see Figure 1 below).

¹³ School breakfasts contain between 350 and 600 calories, depending on the grade level.

Table 1: Schools preparing meals with 10 percent or more of calories from added sugars.

Percentage of Schools		
	Breakfast	Lunch
All schools	92.2	69.1
School Type		
Elementary	90.8	74.8 ^{a,b}
Middle	93.9	65.8 ^c
High	94.5	56.8
School Poverty Level		
Low poverty	95.3 ^d	67.2
Mid-low poverty	95.3 ^e	72.7
Mid-high poverty	92.8	66.3
High poverty	87.3	69.6
School Racial/Ethnic Composition		
Majority white	96.5 ^{f,g}	71.8
Majority Black	90.2	63.1
Majority Hispanic	84.2	63.5
Diverse	88.5	68.4

Superscript letters indicate a statistically significant difference ($p < 0.05$) in the percentage of schools exceeding the 10 percent threshold for the following subgroups: ^a Elementary versus middle. ^b Elementary versus high. ^c Middle versus high. ^d Low poverty versus high poverty. ^e Mid-low poverty versus high poverty. ^f Majority white versus majority Hispanic. ^g Majority white versus diverse

The main source of added sugars in school breakfasts was flavored fat-free milk, which contributed 29 percent of the added sugars in breakfasts (Table 2). Other major sources of added sugars in school breakfasts included sweetened cold cereals (13 percent), condiments and toppings (including syrup, jelly, and jam; 12 percent), muffins and sweet/quick breads (7 percent), and granola and breakfast bars (5 percent).

Added sugars in reimbursable school lunches

On average, added sugars accounted for 11 percent of calories in school lunches across the school week. This reflects an average of 75 calories from added sugars in each school lunch.¹⁴ Of the daily lunch menus evaluated, 42 percent contained less than 10 percent of calories from added sugars.

Sixty-nine percent of schools prepared lunches with more than 10 percent of calories from added sugars (Table 1). Elementary schools were more likely than either middle or high schools to exceed the 10 percent threshold for added sugars (75 percent versus 66 percent and 57 percent, respectively). Middle schools were more likely than high schools to do so (66 percent versus 57 percent). There were no significant differences by school poverty level or racial/ethnic composition in the percentage of schools that served lunches with greater than ten percent of calories from added sugars at lunch.

¹⁴ School lunches contain between 550 and 800 calories, depending on the grade level.

The largest source of added sugars in school lunches was flavored fat-free milk, which contributed 47 percent of the added sugars in lunches (Table 2). The only other food group to contribute more than 5 percent of added sugars in school lunches was condiments and toppings (9 percent).

Table 2: Top 10 sources of added sugars in school breakfasts and lunches.

Breakfast Food Items	Percentage Contribution to Total Added Sugars	Lunch Food Items	Percentage Contribution to Total Added Sugars
Flavored fat-free milk	29.0	Flavored fat-free milk	46.9
Sweetened cold cereal	13.0	Condiments and toppings	9.0
Condiments and toppings	11.8	Flavored 1% milk	3.2
Muffins and sweet/quick breads	7.3	Breads, rolls, bagels, and other plain breads	2.7
Granola bars and breakfast bars	5.0	Canned peaches	2.4
Toaster pastries	4.3	Cookies, cakes, brownies	2.3
Pancakes, waffles, and French toast	3.8	Sandwich with breaded meat, poultry, or fish	2.1
Crackers, croutons, and pretzels	3.6	Juice	1.8
Cinnamon buns	2.8	Black, baked, and other beans	1.8
Yogurt, low-fat/fat-free	2.8	Hamburgers and similar beef/pork sandwiches	1.8

Competitive Foods Findings

“Competitive foods” are any foods and beverages sold during the school day on the campus outside of the school meal programs (e.g., NSLP, SBP).¹⁵ Competitive foods may be offered through a la carte sales in school cafeterias during breakfast or lunch, or through other venues, such as vending machines, school stores, snack bars, food carts/kiosks, and fundraisers.

In SY 2014-15, based on data from SNMCS, the majority of schools had at least one source of competitive foods available to students (Figure 1). The most common source of competitive foods was a la carte sales in the school cafeteria during meal times (in 87 percent of schools for lunch and 56 percent for breakfast). Vending machines were available in 30 percent of all schools and much more common in high schools (in 71 percent of schools) than in middle schools (44 percent) or elementary schools (10 percent). Alternative food sources—school stores, snack bars, food carts, kiosks, bake sales, fundraisers, or other sources—were the least common sources of competitive foods, available in 24 percent of all schools.

Tables 3 and 4 show the frequency with which schools offer foods in specific categories at breakfast and lunch, respectively.

¹⁵ 7 CFR §210.11

Figure 1: Schools offering competitive foods at various venues.

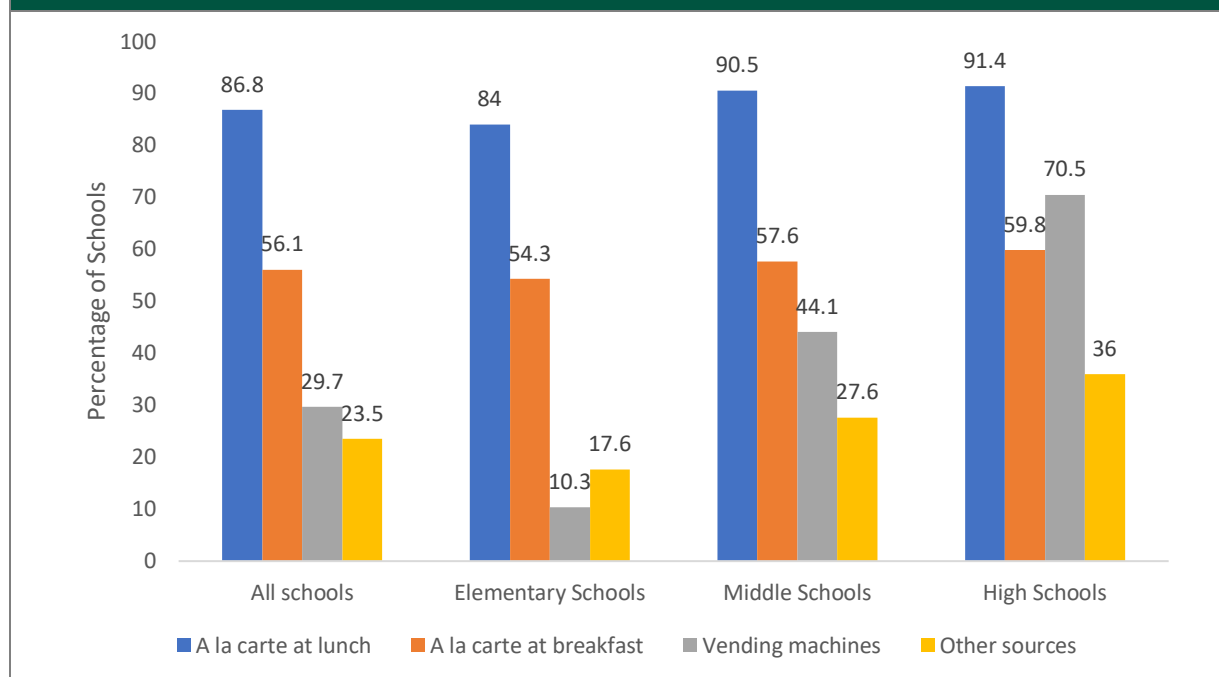


Table 3: Foods and beverages offered a la carte at breakfast.

Food Category	Percentage of Schools			
	All Schools	Elementary Schools	Middle Schools	High Schools
Beverages				
Milk	49.2	47.6	50.2	52.9
100 Percent Juice or Water	34.9	28.7	39.7	47.7
Other Beverages	7.0	2.1	4.1	22.6
Foods				
Fruit	28.3	22.6	34.4	39.0
Vegetables	2.0	1.7	1.3	3.5
Bread or Grain Products	25.3	21.3	28.8	33.6
Meat and Meat Alternates (including yogurt)	18.5	15.4	18.8	26.8
Entrees	15.0	11.5	17.0	23.0
Baked Goods/Desserts	9.9	5.3	13.6	19.4
Frozen or Dairy Desserts	2.8	1.2	3.3	6.7
Snacks	11.5	6.6	14.7	22.4
Other A la Carte Items	0.4	0.1	0.0	1.3

Table 4: Foods and beverages offered a la carte at lunch.

Food Category	Percentage of Schools			
	All Schools	Elementary Schools	Middle Schools	High Schools
Beverages				
Milk	73.3	71.7	74.5	76.4
100 Percent Juice or Water	48.4	36.8	63.5	67.4
Other Beverages	14.6	5.0	11.3	43.2
Foods				
Fruit	42.0	34.2	51.2	55.7
Vegetables	38.2	30.0	49.7	51.1
Bread or Grain Products	27.4	20.0	37.0	39.6
Meat and Meat Alternates	33.6	24.5	44.9	48.9
Entrees	40.0	28.7	54.4	59.0
Baked Goods/Desserts	30.0	20.5	42.2	45.7
Frozen or Dairy Desserts	27.2	21.7	34.6	36.1
Snacks	41.0	29.3	58.1	58.7
Other A la Carte Items	1.9	1.9	1.2	2.8

Per the Smart Snacks in Schools standards,¹⁶ implemented in SY 2014-15, competitive foods (with the exception of dried fruit) must have less than 35 percent of weight from total sugars (i.e., including both added and naturally occurring sugars). Allowable beverages include plain water, unflavored 1 percent or fat-free milk or milk alternatives, and 100 percent fruit or vegetable juice. High schools may sell other flavored and/or carbonated beverages within calorie restrictions. There is no standard for competitive foods related to added sugars or added sugars as a percentage of calories because when Smart Snacks in Schools standards were established information about added sugars was not yet available on Nutrition Facts labels.¹⁷

The tables in the next sections (Tables 5 through 8) provide the added sugars levels for the most common foods found across competitive foods venues, i.e., a la carte during breakfast, a la carte during lunch, vending machines, and other sources. Similar tables by school level are available in Appendix A.

Added sugars in competitive foods and beverages: A la carte breakfast

Fifty-six percent of all schools offered competitive foods a la carte during the breakfast period. Of the 10 competitive food items most commonly served, 6 come in varieties with 10 percent of more of calories from added sugars (Table 5). Varieties of these items – ready-to-eat breakfast cereal; canned fruit;

¹⁶ *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*, 7 CFR Parts 210 and 220, Federal Register Vol. 81, No. 146, July 29, 2016 [<https://www.federalregister.gov/documents/2016/07/29/2016-17227/national-school-lunch-program-and-school-breakfast-program-nutrition-standards-for-all-foods-sold-in>]

¹⁷ Because the Smart Snacks standards were new in SY 2014-2015, while some schools were already meeting them, many were not. As a result, more schools may have reduced sugar levels in competitive foods to meet the Smart Snacks requirements in the years since the data presented below were collected.

yogurt; pancakes, waffles, or French toast; dried fruit; and low-fat muffins – have between 10 percent and 67 percent of calories from added sugars. Ready-to-eat breakfast cereal and canned fruit were the most commonly available of the breakfast a la carte items with varieties that exceed the 10 percent threshold, each available in 19 percent of schools.¹⁸

Other food items that were sold over 10 percent of schools offering a la carte breakfast also come in varieties with 10 percent or more of calories from added sugars: regular and low-fat granola bars, cereal bars, or energy bars; low-fat doughnuts or cinnamon rolls; crispy rice cereal bars or treats; and low-fat pies, turnovers, or toaster pastries. Varieties of these items have between 13 and 29 percent of calories from added sugars.

Of the top five most common beverages sold a la carte at breakfast, two include varieties with 10 percent or more of calories from added sugars: flavored fat-free milk and bottled water (if a flavored variety) (Table 5). Flavored fat-free milk was available a la carte at breakfast in 36 percent of schools. Flavored low-fat (1 or 0.5 percent) milk, with 26 percent of calories from added sugars, also exceeds the 10 percent threshold and was available in 10 percent of schools.

Table 5: Added sugars level of most common competitive food items sold a la carte at breakfast.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
Flavored fat-free milk	33.7
100 percent fruit or vegetable juice	0.0
Unflavored fat-free milk	0.0
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Foods	
Fresh fruit	0.0
Ready-to-eat breakfast cereal	21.7
Canned fruit	54.4
Yogurt	44.8
Whole grain-rich breads, rolls, bagels, or tortillas	8.6
Pancakes, waffles, or French toast	4 - 10.2
Breakfast sandwich or breakfast burrito	3.4
Dried fruit	67.3
Low-fat muffins	38.1
Cheese	0.0

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Added sugars in competitive foods and beverages: A la carte lunch

Eighty-seven percent of schools offered competitive foods a la carte during the lunch period. Of the 10 food items most commonly served a la carte at lunch, 4 come in varieties with more than 10 percent of calories from added sugars: canned fruit; crispy rice cereal bars or treats; low-fat cookies; and low-

¹⁸ Canned fruits with no added ingredients except water, which are packed in 100% juice, extra light syrup, or light syrup are exempt from all NSLP and SBP nutrient standards. (*NSLP and SBP: Nutrition Standards for All Foods Sold in School*)

fat/reduced fat ice cream, frozen yogurt, or sherbet (Table 6). Varieties of these items have between 27 percent and 54 percent of calories from added sugars. The most commonly served of these items, canned fruit, was offered in 33 percent of schools during lunch.

Table 6: Added sugars level of most common competitive food items sold a la carte at lunch.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
Flavored fat-free milk	33.7
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
100 percent fruit or vegetable juice	0.0
Unflavored fat-free milk	0.0
Foods	
Fresh fruit	0.0
Vegetables	0.0
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Canned fruit	54.4
Crispy rice cereal bars or treats	29.0
Low-fat cookies	26.5
Pizza without meat	6.8
Low-fat/reduced-fat ice cream, frozen yogurt, or sherbet	0 - 52.0
Breaded chicken/turkey (nuggets, patties, strips, parts)	0.0
Whole grain-rich breads, rolls, bagels, or tortillas	8.6

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Other items found in over 10 percent of lunch a la carte venues may also include varieties with 10 percent or more of calories from added sugars: yogurt; fruit snacks (such as Fruit Roll-Ups or fruit leather); low-fat/reduced-fat granola bars, cereal bars, or energy bars; corn dogs; dried fruit; peanut butter sandwiches (including with jelly); frozen fruit bars or popsicles; barbecue sandwiches (including sloppy joes); low-fat/reduced-fat cakes, cupcakes, or brownies; and low-fat muffins. Varieties of these items have between 11 percent and 72 percent of calories from added sugars.

As in breakfast a la carte venues, of the top five most common beverage items sold a la carte at lunch, flavored fat-free milk and bottled water were the two that include varieties with 10 percent or more of calories from added sugars (Table 6). Fifty-five percent of schools offered flavored fat-free milk a la carte at lunch. Also, flavored low-fat (1 or 0.5 percent) milk (26 percent of calories from added sugars) and sports drinks (up to 85 percent of calories from added sugars) were sold in 17 percent and 11 percent of schools, respectively.

Added sugars in competitive foods and beverages: Vending machines

The presence of vending machines varied by school level. Ten percent of elementary schools, 44 percent of middle schools and 71 percent of high schools offered competitive foods in vending machines.

Across school levels, of the 10 food items most commonly offered in vending machines, 4 include varieties that exceed the DGA recommendation for added sugars (Table 7). Varieties of these items – crispy rice

cereal bars or treats; regular and low-fat granola bars, cereal bars, or energy bars; and fruit snacks (such as Fruit Roll-Ups or fruit leather) – have between 22 percent and 72 percent of calories from added sugars. Vending machines offering crispy rice cereal bars or treats and regular granola, cereal, or energy bars were most common, found in eight and seven percent of schools, respectively.

Other items found in over 10 percent of vending machines also come in varieties with 10 percent or more of calories from added sugars: regular pies, turnovers, or toaster pastries; candy or gum; and regular and low-fat cookies. Varieties of these items have between 17 percent and 70 percent of calories from added sugars.

Table 7: Added sugars level of most common competitive food items sold in vending machines.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Sports drinks or energy drinks (such as Gatorade, PowerAde, Red Bull or Monster Energy)	0 - 85.3
Diet carbonated soft drink (diet soda/pop)	0.0
100 percent fruit or vegetable juice	0.0
Juice drinks and other sweetened drinks (such as cranberry drink, fruit blends, Hi-C, lemonade, punch, iced tea)	0 - 72.5
Foods	
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Crispy rice cereal bars or treats	29.0
Regular granola bars, cereal bars, or energy bars	22.1
Low-fat/reduced-fat granola bars, cereal bars, or energy bars	25.6
Popcorn	0.0
Fruit snacks (such as Fruit Roll-Ups or fruit leather)	72.3
Regular chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Other types of crackers (including animal crackers)	5.3
Nuts and/or seeds (such as almonds, peanuts, sunflower seeds, or trail mix)	0.0
Hard pretzels	1.8

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Of the five most common beverage items sold in vending machines, three have varieties with 10 percent or more of calories from added sugars: flavored bottled water, sports or energy drinks, and juice drinks and other sweetened drinks (Table 7). Sixteen percent of schools had vending machines with energy or sports drinks, and eight percent had vending machines with juice drinks or other sweetened drinks.

Regular carbonated soft drinks, with 93 percent of calories from added sugars, were sold in 8 percent of schools.

Added sugars in competitive foods and beverages: Other sources

Competitive foods may also be offered in other venues, such as school stores, snack bars, and fundraisers. Overall, 24 percent of schools sold competitive foods in these types of venues, but the prevalence of these

varied by school level: other sources of competitive foods were in 18 percent of elementary schools, 28 percent of middle schools, and 36 percent of high schools.

Of the 10 food items most commonly sold in other venues, 5 come in varieties that contain more than 10 percent of calories from added sugars (Table 8). Varieties of these items – fruit snacks; regular and low-fat/reduced fat granola bars, cereal bars, or energy bars; crispy rice cereal bars or treats; and candy or gum – have between 22 percent and 72 percent of calories from added sugars. Of these, fruit snacks were the most common, offered in 39 percent of other venues.

Table 8: Added sugars level of most common competitive food items sold in other sources.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
100 percent fruit or vegetable juice	0.0
Sports drinks or energy drinks (such as Gatorade, PowerAde, Red Bull or Monster Energy)	0 - 85.3
Juice drinks and other sweetened drinks (such as cranberry drink, fruit blends, Hi-C, lemonade, punch, iced tea)	0 - 72.5
Diet carbonated soft drink (diet soda/pop)	0.0
Foods	
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Popcorn	0.0
Fruit snacks (such as Fruit Roll-Ups or fruit leather)	72.3
Low-fat/reduced-fat granola bars, cereal bars, or energy bars	25.6
Crispy rice cereal bars or treats	29.0
Regular chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Candy or gum	0 - 69.9
Hard pretzels	1.8
Fresh fruit	0.0
Regular granola bars, cereal bars, or energy bars	22.1

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

As with vending machines, of the five most common beverage items sold in other venues, three include varieties with 10 percent of more of calories from added sugars: flavored bottled water, sports or energy drinks, and juice drinks and other sweetened drinks (Table 8). In addition, regular carbonated soft drinks, with 93 percent of calories from added sugar, and flavored fat-free milk, with 34 percent of calories from added sugars, were sold in about 20 percent of other sources for competitive foods.

Conclusion

This report uses data collected in the 2014-15 school year to provide a summary of the proportion of school meals and competitive foods that would meet a standard of less than 10 percent of calories from added sugars.

Ninety-two percent of schools prepared breakfasts with 10 percent or more of calories from added sugars, and 69 percent of schools prepared lunches that exceeded the ten percent threshold. The main

source of added sugars in both school breakfasts and school lunches was flavored fat-free milk, which contributed 29 percent of the added sugars in breakfasts and 47 percent in lunches.

Of the 10 competitive food items most commonly served a la carte at breakfast, 6 include varieties that contain 10 percent or more of calories from added sugars: ready-to-eat breakfast cereal; canned fruit; yogurt; pancakes, waffles, or French toast; dried fruit; and low-fat muffins. These items may have up to 67 percent of calories from added sugars. The most common of these items, canned fruit and ready-to-eat breakfast cereal, were each served in 19 percent of schools.

Of the 10 food items most commonly served a la carte at lunch, 4 include varieties that contain 10 percent or more of calories from added sugars: canned fruit; crispy rice cereal bars or treats; low-fat cookies; and low-fat/reduced fat ice cream, frozen yogurt, or sherbet. These items may have up to 54 percent of calories from added sugars. The most common of these items, canned fruit, was offered in 39 percent of schools.

Of the most common beverage items served a la carte at both breakfast and lunch, flavored fat-free milk, with 34 percent of calories from added sugars, was available in 36 percent of schools at breakfast and 55 percent of schools at lunch.

Appendix A

Table A.1: Added sugars level of most common competitive food items sold a la carte in elementary schools at breakfast.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
Flavored fat-free milk	33.7
100 percent fruit or vegetable juice	0.0
Unflavored fat-free milk	0.0
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Foods	
Fresh fruit	0.0
Ready-to-eat breakfast cereal	21.7
Canned fruit	54.4
Yogurt	44.8
Pancakes, waffles, or French toast	4 - 10.2
Whole grain-rich breads, rolls, bagels, or tortillas	8.6
Dried fruit	67.3
Breakfast sandwich or breakfast burrito	3.4
Eggs	0.0
Cheese	0.0

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Table A.2: Added sugars level of most common competitive food items sold a la carte in elementary schools at lunch.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
Flavored fat-free milk	33.7
Unflavored fat-free milk	0.0
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
100 percent fruit or vegetable juice	0.0
Foods	
Fresh fruit	0.0
Vegetables	0.0
Canned fruit	54.4
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Low-fat/reduced-fat ice cream, frozen yogurt, or sherbet	0 - 52.0
Low-fat cookies	26.5
Crispy rice cereal bars or treats	29.0
Whole grain-rich breads, rolls, bagels, or tortillas	8.6
Other types of crackers (including animal crackers)	5.3
Yogurt	44.8

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Table A.3: Added sugars level of most common competitive food items sold a la carte in middle schools at breakfast.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
Flavored fat-free milk	33.7
100 percent fruit or vegetable juice	0.0
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Unflavored fat-free milk	0.0
Foods	
Fresh fruit	0.0
Canned fruit	54.4
Ready-to-eat breakfast cereal	21.7
Yogurt	44.8
Whole grain-rich breads, rolls, bagels, or tortillas	8.6
Pancakes, waffles, or French toast	4 - 10.2
Low-fat muffins	38.1
Breakfast sandwich or breakfast burrito	3.4
Low-fat/reduced-fat granola bars, cereal bars, or energy bars	25.6
Dried fruit	67.3

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Table A.4: Added sugars level of most common competitive food items sold a la carte in middle schools at lunch.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Flavored fat-free milk	33.7
100 percent fruit or vegetable juice	0.0
Unflavored fat-free milk	0.0
Foods	
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Vegetables	0.0
Fresh fruit	0.0
Canned fruit	54.4
Crispy rice cereal bars or treats	29.0
Pizza with meat	7.9
Pizza without meat	6.8
Low-fat cookies	26.5
Cheeseburger or hamburger	5.3
Low-fat/reduced-fat ice cream, frozen yogurt, or sherbet	0 - 52.0

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Table A.5: Added sugars level of most common competitive food items sold a la carte in high schools at breakfast.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
100 percent fruit or vegetable juice	0.0
Flavored fat-free milk	33.7
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Unflavored fat-free milk	0.0
Foods	
Fresh fruit	0.0
Ready-to-eat breakfast cereal	21.7
Canned fruit	54.4
Yogurt	44.8
Breakfast sandwich or breakfast burrito	3.4
Whole grain-rich breads, rolls, bagels, or tortillas	8.6
Low-fat muffins	38.1
Low-fat/reduced-fat granola bars, cereal bars, or energy bars	25.6
Pancakes, waffles, or French toast	4 - 10.2
Dried fruit (such as raisins or apricots)	67.3

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Table A.6: Added sugars level of most common competitive food items sold a la carte in high schools at lunch.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Unflavored low-fat (1 or 0.5 percent) milk	0.0
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Flavored fat-free milk	33.7
100 percent fruit or vegetable juice	0.0
Sports drinks or energy drinks (such as Gatorade, PowerAde, Red Bull or Monster Energy)	0 - 85.3
Foods	
Fresh fruit	0.0
Vegetables	0.0
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Canned fruit	54.4
Crispy rice cereal bars or treats	29.0
Pizza with meat	7.9
Cheeseburger or hamburger	5.3
Pizza without meat	6.8
Breaded chicken/turkey (nuggets, patties, strips, parts)	0.0
Low-fat cookies	26.5

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Table A.7: Added sugars level of most common competitive food items sold a la carte in high school vending machines.^a

Food Item	Percentage of Calories from Added Sugars
Beverages	
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^b
Sports drinks or energy drinks (such as Gatorade, PowerAde, Red Bull or Monster Energy)	0 - 85.3
Diet carbonated soft drink (diet soda/pop)	0.0
100 percent fruit or vegetable juice	0.0
Juice drinks and other sweetened drinks (such as cranberry drink, fruit blends, Hi-C, lemonade, punch, iced tea)	0 - 72.5
Foods	
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Crispy rice cereal bars or treats	29.0
Regular granola bars, cereal bars, or energy bars	22.1
Fruit snacks (such as Fruit Roll-Ups or fruit leather)	72.3
Other types of crackers (including animal crackers)	5.3
Low-fat/reduced-fat granola bars, cereal bars, or energy bars	25.6
Nuts and/or seeds (such as almonds, peanuts, sunflower seeds, or trail mix)	0.0
Popcorn	0.0
Regular chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Hard pretzels	1.8

^a We do not include analysis of competitive foods sold in vending machines in elementary or middle schools because there are not enough schools selling items in this venue to allow for reliable estimates.

^b Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.

Table A.8: Added sugars level of most common competitive food items sold in other high school venues.

Food Item	Percentage of Calories from Added Sugars
Beverages	
Bottled water (plain, flavored, or sparkling)	0 – 95.1 ^a
Sports drinks or energy drinks (such as Gatorade, PowerAde, Red Bull or Monster Energy)	0 - 85.3
100 percent fruit or vegetable juice	0.0
Diet carbonated soft drink (diet soda/pop)	0.0
Juice drinks and other sweetened drinks (such as cranberry drink, fruit blends, Hi-C, lemonade, punch, iced tea)	0 - 72.5
Foods	
Low-fat/reduced-fat/baked chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Low-fat/reduced-fat granola bars, cereal bars, or energy bars	25.6

Table A.8: Added sugars level of most common competitive food items sold in other high school venues.

Crispy rice cereal bars or treats	29.0
Fruit snacks (such as Fruit Roll-Ups or fruit leather)	72.3
Candy or gum	0 - 69.9
Popcorn	0.0
Hard pretzels	1.8
Regular chips (such as corn, potato, puffed cheese, tortilla, or snack mixes)	0.0
Regular cookies	25.3
Low-fat cookies	26.5

^a Ranges of added sugars levels are provided for items for which an unsweetened or less sweetened variety may be available. SNMCS did not collect detailed data on which variety of an item was offered.