

Nutrition Evaluation of the Emergency Meals-to-You Program (eMTY)

Healthy
Eating
Research

Technical Report | June 2022



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Healthy Eating Research convened an advisory committee of 13 individuals with expertise in rural food access, food policy, and nutrition. The advisory committee provided input on the evaluation design, analysis of data, and reporting of findings.

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Executive Summary

Over the summer of 2020, the United States Department of Agriculture (USDA) Emergency Meals-to-You (eMTY) program provided meals to rural children in households with lower incomes through home-delivered boxes of shelf-stable food. The program was run by the Baylor Collaborative on Hunger and Poverty in partnership with Chartwells K12, PepsiCo Food for Good, and McLane Global. Every two weeks, a box containing food for 10 breakfasts and 10 lunches—enough for two weeks—was delivered to the student’s home or to a centralized location when necessary. The meals were planned to meet the USDA Summer Food Service Program (SFSP) nutrition standards. In total the eMTY program delivered over 37 million meals to the homes of over 275,000 rural children in 43 states.

Evaluation Questions

An evaluation of the nutritional quality of the eMTY program was carried out by the University of Minnesota Nutrition Coordinating Center (NCC) in partnership with Healthy Eating Research, a national program of the Robert Wood Johnson Foundation.

Analyses were carried out to address three evaluation objectives:

1. To determine whether and to what extent meals delivered through the eMTY program complied with required USDA SFSP nutrition standards.
2. To examine the extent to which the menus met USDA National School Lunch Program (NSLP) and School Breakfast Program (SBP) nutrition standards.
3. To examine the extent to which the meals aligned with key dietary recommendations in the 2015-2020 Dietary Guidelines for Americans as measured using the Healthy Eating Index-2015 (HEI-2015), a composite index score ranging from 0-100 with higher scores indicating healthier meals.



Findings

Key Findings on the Nutritional Quality of the eMTY Menus

To what extent did meals comply with SFSP nutrition standards?

- All of the menus from the four eMTY program distribution sites fully met the SFSP nutrition standards for breakfast.
- Lunch menus less consistently met SFSP nutrition standards. Compliance with lunch standards was all or mostly observed for fluid milk and whole or enriched grain/bread, but menus inconsistently met requirements for fruits, vegetables, and meat/meat alternatives.

To what extent did meals comply with SBP and NSLP nutrition standards?

- None of the menus met all of the nutrition standards for SBP and NSLP meals.
- eMTY program menus were not required to comply with SBP and NSLP nutrition standards; however, saturated fat, sodium, and trans fat limits were met by substantial proportions of weekly menus.
- Food-based requirements, such as fruit and vegetable, were less frequently met, largely because menus included a type of food that did not meet requirements or did not provide the minimum amount of food required.

To what extent did the meals align with key dietary recommendations in the 2015-2020 Dietary Guidelines for Americans as measured using the Healthy Eating Index-2015 (HEI-2015)?

- The mean total HEI-2015 scores were calculated for weekly breakfast and lunch menus provided by each food distribution site; results ranged across the four sites (see HEI Scores, next page).
- All of the distribution sites scored well for the total fruits, whole fruits, whole grains, dairy, refined grains, and sodium components.
- Scores tended to be low across sites for the total vegetables and greens and beans categories.
- These scores are generally worse (or lower) than recent national assessments of the nutritional quality of meals served through the school breakfast and lunch programs.¹
- However, the mean total HEI-2015 scores across the breakfast and lunch menu provided by each distribution site were significantly higher than the average score for the diets of U.S. children aged 6-17.²

Findings indicate that during the summer of 2020, eMTY menus were fully consistent with SFSP nutrition standards for breakfast; however, standards for lunch were less consistently met. This is largely because most menus did not regularly meet the requirement that each meal contain two or more types of fruits or vegetables and weekly menus sometimes failed to include the required amount of meat/meat alternatives at every meal.

Though there was no requirement that menus meet SBP and NSLP nutrition standards, the research team chose to also evaluate alignment of the menus with these standards as the eMTY program was part of the COVID-19 emergency response to reductions in school meal access due to pandemic-related school closures. Menus consistently met some of the SBP and NSLP standards, such as limits on saturated fat, sodium, and trans fat, but generally the eMTY boxes were less healthy than meals children would have received via the NSLP and SBP had schools been in session.

As a measure of the extent to which the menus provided foods that align with key recommendations in the Dietary Guidelines for Americans, HEI-2015 total and components scores (i.e., fruits, vegetables, whole grains, and dairy) were calculated. Higher total scores indicate greater consistency with dietary recommendations. The total HEI score averages for weekly lunch menus were higher than those of weekly breakfast menus, but scores for both weekly lunch and breakfast menus were found to be lower (or less healthy) than total HEI-2015 scores for meals served via the NSLP and SBP in 2014-2015. The overall nutritional quality of the eMTY menus, as measured using the HEI-2015 score, generally exceeded the average nutritional quality of the diet of American children.

HEI Scores

| Meal | eMTY HEI Scores ^a | Comparison Scores |
|-----------|------------------------------|-------------------|
| Breakfast | 63.4 – 88.9 | 81.5 ^b |
| Lunch | 54.9 – 60.9 | 71.3 ^b |
| Overall | 63.9 – 87.1 | 53 ^c |

^a Mean HEI-2015 scores across breakfast and lunch menus for the week (across sites)

^b Mean HEI-2010 scores for SBP and NSLP school meals collected during SY 2014-2015.

^c Mean HEI-2015 score for the diets of US children aged 6-17 years

Future Directions

The eMTY program filled a major gap during the COVID-19 pandemic by providing nutritious meals to children living in rural areas; evaluations of the program offer an important opportunity to identify strategies for improving future iterations of the program. Specific considerations to improve the nutritional quality of menus include increasing the amounts of fruits and vegetables, whole grains, fat-free (i.e., skim) milk, and calories, while decreasing the amount of fruit juice and 2% or whole milk.

Further research is needed to examine the nutritional quality, accessibility, cost-effectiveness, and waste of the eMTY program in comparison to other USDA summer meal programs, such as the Summer Food Service Program, Summer EBT, Grab and Go School Meals, and other non-congregate meal service options. Unlike these other options, eMTY offers a unique opportunity to provide home-delivered meals to children living in rural areas who may otherwise face barriers to accessing safe and reliable food while school is not in session. For the eMTY program to scale up and serve as a primary mechanism for providing nutritious foods to children living in rural areas, changes need to be made to improve the nutritional quality of the menus to be comparable to what children would otherwise consume in school through the SBP and NSLP programs.



Introduction

Over the summer of 2020 the Emergency Meals-to-You (eMTY) program provided meals via shelf-stable boxes of food to children in rural communities across the nation living in lower income households. Every two weeks, a box containing 10 breakfasts and 10 lunches was delivered to the student's home (or to a centralized location when necessary) using the U.S. Postal Service or another package delivery service. In total, the eMTY program delivered over 37 million meals to the homes of over 275,000 rural children in 43 states during the summer of 2020.

The eMTY program was funded by the United States Department of Agriculture (USDA) and was led by the Baylor Collaborative on Hunger and Poverty (BCHP) in partnership with three vendors — Chartwells K12, PepsiCo Food for Good, and McLane Global. These vendors were responsible for planning the menus for the meals included in each box and assembling and shipping the boxes to participants. The distribution characteristics, including number of sites, boxes, and participants, are provided in **Table 1**.

Table 1:
Distribution characteristics of eMTY vendors

| Vendor | Distribution Sites | Number of Boxes | Number of Participants |
|------------------|--------------------|-----------------|------------------------|
| McLane Global | 2 | 1,334,390 | 176,324 |
| Chartwells K12 | 2 | 263,657 | 48,390 |
| PepsiCo for Good | 1 | 341,138 | 53,649 |

The vendors were required to follow USDA Summer Food Service Program (SFSP) meal pattern requirements, but were also allowed to take into consideration pandemic-related meal pattern waivers (e.g., allowing flexibilities when certain items were difficult to find). A dietitian at the Baylor Collaborative on Hunger and Poverty reviewed the menus to confirm compliance with SFSP nutrition standards, though food product information important to this review [such as the Child Nutrition (CN) label, which is a standardized food crediting statement from USDA often on product labels of items commonly purchased for use in child nutrition programs] was not always available.

This evaluation of the nutritional quality of the menus was carried out by the University of Minnesota Nutrition Coordinating Center (NCC) in partnership with Healthy Eating Research, a national program of the Robert Wood Johnson Foundation. Healthy Eating Research convened an advisory committee of thirteen individuals with expertise in rural food access, nutrition policy, and nutrition. The advisory committee provided input on the evaluation design, analysis of data, and reporting of findings.

eMTY Program

The Summer Food Service Program (SFSP) is a federally funded, state-administered program that reimburses operators who serve free, nutritious meals and snacks to children in income-eligible areas when school is not in session.³ Low population density, limited availability of transportation, and limited meal sites have been reported as moderate to severe challenges for enrolling SFSP sites in rural communities. Consequently, the Meals-to-You (MTY) program, which began as a pilot program in 2019, was developed to provide summer meals to rural children in lower income households who lack access to SFSP sites.

The MTY program was dramatically expanded in the spring of 2020 as part of the emergency response to reductions in school meal access due to pandemic-related school closures. School districts were eligible to participate in this expanded iteration of the program, known as the Emergency Meals-to-You (eMTY) program, if they: (1) participated in the National School Lunch Program (NSLP); (2) had at least 50% of students eligible for free or reduced-priced meals (this requirement was covered if the school district participated in the Community Eligibility Provision, a meal service option that allows schools located in high-poverty areas to serve universal free breakfast and lunch); (3) were slated to be closed for at least four weeks; and (4) fell under USDA's designation of rural. If a school district was not eligible, but there were schools within the district that met the above criteria, then the school district could apply on behalf of those schools.

A student was eligible for eMTY if they were eligible for free or reduced-price meals at a school that was participating in eMTY. The school district had to apply and be accepted into the program before a student could enroll. To serve younger family members

that were not yet in school, if one child in the household was eligible, then all children ages 1-18 living in the household could participate. Each child in a participating household received a box every two weeks with food for 10 breakfast and 10 lunch meals. In some cases, where timely shipping was a challenge (e.g., Alaska), boxes were sent weekly.

The foods in the boxes, which were shelf stable, were designed to create meals that would meet the SFSP nutrition standards. The number and portion size of food items in the boxes were the same regardless of the age of the child receiving the box. However, separate menu plans (food boxes) were available for children with special dietary requirements. These included gluten-free boxes and boxes that accommodated the eight major food allergens (i.e., eggs, fish, milk, peanuts, shellfish, soy, tree nuts, wheat). Accommodations were also made for religious preferences, sensory issues, restricted sodium, and no meat.

Nutrition Evaluation of the eMTY Program

In this report we present findings from an evaluation of the nutritional quality of the meals delivered through the eMTY program. Menu plans for children with special dietary requirements were not included in this evaluation. A separate evaluation was carried out by a research team at Urban Institute to evaluate other dimensions of the program, such as participant satisfaction.⁴

Experiences and Impacts From the 2020 Meals-to-You Program

Conducted by Urban Institute, this separate evaluation assessed program participation, the program's impact on food security, and program satisfaction for the MTY and eMTY programs. A few findings highlighted in the report include: 1) the 2020 eMTY and Summer Meals to You programs reached participants across 43 states and Puerto Rico; 2) MTY meals reduced food insecurity, with bigger impacts observed for households living in more rural zip codes; and 3) 88% of participants reported being satisfied with the selection of food in the eMTY boxes. About half of participants reported having issues with the program. This was largely because 40% of participants reported receiving boxes damaged through the shipping process. Shipping was one of the greatest challenges of the program.

This nutrition evaluation addresses three questions (see **Evaluation Questions**).

| Evaluation Questions | |
|--|--|
| Evaluation Question 1: To what extent did meals delivered through the eMTY program comply with USDA SFSP nutrition standards? | Outcome measures and design: Classification of weekly breakfast and lunch menus for each vendor as meeting or not meeting SFSP nutrition standards (all standards and meal-component-specific requirements). |
| Evaluation Question 2: To what extent did meals delivered through the eMTY program align with USDA National School Lunch Program (NSLP) and School Breakfast Program (SBP) nutrition standards? | Outcome measures and design: Classification of weekly breakfast and lunch menus for each vendor as meeting or not meeting SBP and NSLP nutrition standards (all standards and meal-component-specific requirements) using the 2019 standards, with modification for the use of one set of standards for all grade levels. |
| Evaluation Question 3: How well did the meals delivered through the eMTY program align with key dietary recommendations in the 2015-2020 Dietary Guidelines for Americans? | Outcome measures and design: Calculation of Healthy Eating Index-2015 (HEI-2015) total and component scores for weekly menus for each vendor. |

Methods

Overview

A sample of representative weekly breakfast and lunch menus were identified for each food vendor and were entered into the 2020 version of the University of Minnesota Nutrition Coordinating Center's Nutrition Data System for Research (NDSR) to calculate their food and nutrient content. The NDSR data were used to address each research question. Findings are reported separately for each food vendor (including by site for McLane Global, which had different sets of menus for each of its distribution sites, McLane Global-Houston and McLane Global-Riverside).

Sampling and Menu Creation

There was substantially different information available about menus and the foods in the boxes sent by each vendor. Consequently, a different approach was needed and used for each vendor for sampling and creating representative weekly menus.

McLane Global-Houston and McLane Global-Riverside

McLane Global distributed boxes from two distribution sites: Houston and Riverside. Each site had different sets of box inventories (set of foods in a box to provide 10 breakfast and lunch meals for a child). The McLane Global-Houston site had a total of 145 different box inventories used throughout the summer, while the McLane Global-Riverside site had a total of 57. For the McLane Global-Houston site, two box inventories were randomly selected for each week meals were distributed, with only one included for weeks with just one inventory (n=38 box inventories). For the McLane Global-Riverside site, one box inventory was randomly selected per distribution week (n=12 box inventories).

The box inventories for both McLane Global sites provided detailed information about each food item included in the box (i.e., brand/type of food, package size, and number of packages included) (see **Appendix 1** for sample inventory). However, the items were not pre-assigned to a menu of breakfast and lunch meals. Consequently, it was necessary to create two one-week menus based on the items in each box inventory. When creating two detailed one-week menus for McLane Global sites, the SFSP nutrition standards were used as a guide in distributing specific foods across days. Through this process, foods and amounts were distributed across meals and days with the aim of designing menus that meet the SFSP nutrition standards. Consideration was also given to meeting SBP and NSLP standards, but the first priority was ensuring the menus met the SFSP nutrition standards if possible.

Chartwells K12

Chartwells K12 had two distribution sites, and their boxes were designed around one standard two-week menu used throughout the summer. The standard menu provided basic information for each breakfast and lunch meal included in the boxes (see **Appendix 2** for the Chartwells K12 standard menu). For most menu items, the type of food detail needed to assess nutritional quality and whether the food met nutrition standards was not provided. For example, the breakfast menu item "cereal-assorted" did not specify the exact type of breakfast cereal provided or the amount. Chartwells K12 was asked to provide additional detail for menu items along with the proportions of assorted items provided throughout the summer (e.g., brands of cereal and the proportion of each brand sent throughout the summer). This information was used to create a standard menu that included the needed level of food detail (e.g., brand of cereal and amount) and a balance of brands/types that reflect the proportions distributed throughout the summer.

When creating two detailed one-week menus for Chartwells K12, the SFSP nutrition standards were used as a guide in distributing specific foods across days. Through this process, foods and amounts were distributed across meals and days with the aim of designing menus that meet the SFSP nutrition standards. Consideration was also given to meeting SBP and NSLP standards, but the first priority was ensuring the menus met the SFSP nutrition standards if possible.

PepsiCo Food for Good

PepsiCo Food for Good had one distribution site that used four standard menus for preparing eMTY boxes throughout the summer (see **Appendix 3** for a sample box menu). The standard menus provided detailed information for each breakfast and lunch menu included in the boxes, though in some cases the specific variety of food provided was not specified. For menu items in which the specific variety was not specified (e.g. Malt-O-Meal cereal bowls), each iteration of the food (e.g., Marshmallow Mateys, Cinnamon

Toasters, Honey Nut Scooters) was included in the menu in a rotation.

The SFSP nutrition standards were used as a guide in constructing weekly menus with sufficient detail for entry into NDSR. Through this process, foods and amounts were distributed across meals and days with the aim of designing menus that met the SFSP nutrition standards. Consideration was also given to meeting SBP and NSLP standards, but the first priority was ensuring the menus met the SFSP nutrition standards if possible.

Entry of Menu Items Into NDSR for Nutrient and Food Group Analysis

Before entering menus into NDSR for nutrient and food group analysis, vendor product nutrition information [Nutrition Facts panel, ingredient statement, and Child Nutrition (CN) label information] was sought for each menu item. Using this information, University of Minnesota Nutrition Coordinating Center (NCC) staff determined whether a food item in NDSR with the same or a similar food name was a match for the menu item from a nutritional perspective. If nutrient values for key nutrients (kilocalories, protein, carbohydrate, saturated fat, dietary fiber, added sugars, sodium) were outside of established tolerances (**Appendix 4**), an NDSR User Recipe was created so that only products with a close-matching nutrient profile would be used in estimating the food and nutrient content of menus.

When entering menus into NDSR, CN label information was entered as a "note code" for each food so that manufacturer-provided CN label information could be utilized in determining whether menus met food-based nutrition standards. If CN information was not available for a food, the CN amount(s) were estimated by NCC staff based on the product's ingredient statement and USDA criteria for CN labeling.

Data Analyses

Analyses were carried out separately by vendor for Chartwells K12 and PepsiCo Food for Good menus and by both vendor and site for McLane Global (McLane Global-Houston and McLane Global-Riverside). All analyses were carried out using SAS statistical software version 9.4 (Cary, NC).



Summer Food Service Program Nutrition Standards

Each weekly menu was classified as meeting or not meeting all of the SFSP nutrition standards (Appendix 5) for a meal and each specific meal requirement.⁵ See Figure 1 for a comparison of meal patterns between NSLP and SFSP. “Creditable” refers to the amount and type of foods that may be counted towards meeting the meal pattern requirements for a reimbursable meal or snack. In addition to the SFSP nutrition standards described in the figure, creditable amounts of grains/bread must be whole grain or enriched for both breakfast and lunch, creditable meat/meat alternatives cannot have more than half of the creditable amount being nuts or seeds for lunch; and across a week, fruit and vegetable juices may be used to meet no more than half of the creditable amount of fruit or vegetable for lunch.

Using the classification results, the number and percent of weekly menus meeting SFSP nutrition standards and meal component requirements were calculated for each set of vendor menus.

Modified School Breakfast Program and National School Lunch Nutrition Standards

Each weekly menu was classified as meeting or not meeting a modified set of SBP and NSLP nutrition standards (Appendix 6). Modified standards were developed because eMTY menus were designed to meet SFSP nutrition standards, which are the same for all grade levels. In contrast, some SBP and NSLP nutrition standards differ by grade level (K-5; grades 6-8; grades 9-12). For nutrition standard requirements that vary by grade level, the most liberal criteria were applied across all grades. For food categories and nutrients with a minimum requirement that differs across grade levels (e.g., fruits and vegetables), the lowest required amount across grade levels was used to determine whether a menu met the requirement. For food categories and nutrients with an upper limit that varied across grade levels, the highest value across grade levels was used as the criterion for determining whether a menu met the requirement.

The 2019 SBP and NSLP nutrition standards⁶ — which stipulate that at least one-half of the grains offered weekly be whole grain-rich and include the Target 1 sodium standard — were utilized in developing the modified standards (see Appendix 6).

Figure 1. Meal Pattern Differences between Selected USDA Child Nutrition Programs

| Meal Program | | | |
|--------------------------|--|---|---|
| Food Group | NSLP | SBP | SFSP |
| Bread & Grains | 10z eq Whole grain requirements | 1 slice bread 1 roll ¼ c cold cereal ½ c cooked cereal Whole grain requirements (at least ½ of the provided grains have to be whole grain-rich) | 1 slice bread 1 roll ½ c rice ½ c pasta No minimum whole grain requirements |
| Milk | 8oz Restrictions on fat content and flavoring | 8oz Restrictions on fat content and flavoring (must be fat-free or 1% milk) | 8oz No restrictions on fat content or flavoring |
| Vegetables | ¾ cup | 1 cup Vegetables can count towards fruit credit. Fruit and vegetable juices may meet no more than ½ of the requirement. Limits on starchy vegetables | ¾ cup |
| Fruit | ½ cup Subgroup requirements for vegetables | ½ cup | ¾ cup Vegetables and fruit are a single component; no subgroup requirements |
| Meat & Meat Alternatives | 2oz meat 2oz cheese 1 egg 8oz yogurt ½ c beans | 2oz meat 2oz cheese 1 egg 8oz yogurt ½ cup beans May substitute for grains up to 3 times per week if 1 creditable amount per day grain criteria is met | 2oz meat 2oz cheese 1 egg 8oz yogurt ½ c beans |
| Sodium | Sodium restrictions with phased targets | Sodium restrictions with phased targets | No sodium restrictions or requirements |
| Calorie Restrictions | Grades K-5, 6-8, 9-12 Calorie ranges based on grade level | Calorie ranges based on age level | Sponsors can adjust calories based on age, as desired |
| Sugar | No sugar restrictions or requirements | No sugar restrictions or requirements | No sugar restrictions or requirements |

The nutrition standards for SBP and NSLP are modified over time. Meal pattern differences have been simplified in this table. Complete information on current standards can be found in sources provided above.

Healthy Eating Index 2015 (HEI-2015)

The HEI-2015 is an index developed to evaluate the extent to which a person’s dietary intake or a set of foods (e.g., menus) align with key food and nutrient recommendations in the 2015-2020 Dietary Guidelines for Americans.⁷ The index is composed of a total of 13 index components; nine are foods for which adequate consumption is recommended (adequacy components), and four are foods and nutrients for which limited consumption is recommended (moderation components) (Appendix 7). Total scores may range from 0-100, with a higher score indicating closer alignment with dietary recommendations. Higher scores on each set of index components also indicate better alignment with recommended intake related to the component.

For this evaluation, HEI-2015 total and component scores were calculated for each week of menus using the simple HEI scoring algorithm method.⁸ With this method, component scores for each weekly menu were calculated by first summing the relevant food group equivalents and nutrients across the five menu days (e.g., calculating total 1 cup equivalents of dairy and total energy across all menu days) and then calculating the ratios on which scoring is based (e.g., calculating 1 cup equivalents of dairy per 1,000 kcals). Scoring for each component was then assigned based on scoring criteria described in Appendix 7. The total HEI score for each weekly menu was calculated by summing the scores of each of the 13 index components.

Using the simple HEI scoring algorithm method for each weekly menu, total and component scores were calculated for each meal type (breakfast and lunch) and across both meal types.

Mean (SD), minimum, and maximum HEI-2015 total and component scores for weekly menus for each vendor were calculated so that variation in the nutritional content of weekly menus within and across food vendors could be described.



Results

Summer Food Service Program Nutrition Standards

All of the weekly breakfast menus for each vendor met the SFSP nutrition standards for breakfast (**Table 2**), which require the inclusion of three meal components—fruits or vegetables, whole or enriched grains/breads, and fluid milk.

With respect to lunch menus, all of the menus from Chartwells K12 met all of the SFSP nutrition standards, which require the inclusion of four meal components—fruit or vegetable, whole or enriched grains/breads, meat/meat alternate, and fluid milk. The other vendors had varying proportions of menus meeting all SFSP standards (**Table 2**).

Table 2:
The number and percent of weekly menus for McLane Global-Houston (n=76), McLane Global-Riverside (n=24), Chartwells K12 (n=2) and PepsiCo Food for Good (n=8) that met Summer Food Service nutrition standards and food specific requirements

| | McLane Global-Houston n (%) | McLane Global-Riverside n (%) | Chartwells K12 n (%) | PepsiCo Food for Good n (%) |
|-----------------------|--------------------------------|----------------------------------|-------------------------|--------------------------------|
| Breakfast | | | | |
| Fruit or vegetable | 76 (100) | 24 (100) | 2 (100) | 8 (100) |
| Grains/breads | 76 (100) | 24 (100) | 2 (100) | 8 (100) |
| Fluid milk | 76 (100) | 24 (100) | 2 (100) | 8 (100) |
| Met all standards | 76 (100) | 24 (100) | 2 (100) | 8 (100) |
| Lunch | | | | |
| Fruit or vegetable | 57 (75) | 21 (88) | 2 (100) | 8 (100) |
| Grains/breads | 76 (100) | 24 (100) | 2 (100) | 6 (75) |
| Meat/meat alternative | 38 (51) | 7 (29) | 2 (100) | 8 (100) |
| Fluid milk | 76 (100) | 24 (100) | 2 (100) | 8 (100) |
| Met all standards | 28 (37) | 5 (21) | 2 (100) | 6 (75) |

There was some variation in compliance with specific requirements for McLane Global and PepsiCo:

- All menus for all vendors met the fluid milk requirement.
- Compliance was also high for the grains/breads requirements.
- The fruit or vegetable requirement was met for all or most of each vendor's menus. The menus that did not meet this requirement failed to do so because two or more kinds of fruits or vegetables were not included in every lunch.
- All of the Chartwells K12 and PepsiCo Food for Good menus met the meat/meat alternative requirement. In contrast, a substantial proportion of McLane Global Houston and McLane Global Riverside menus failed to meet this standard because the required creditable amount of meat/meat alternative was not included in all lunches on a menu.

Modified National School Breakfast and Lunch Nutrition Standards (2019 version)

As described earlier, eMTY menus were not required to comply with SBP or NSLP nutrition standards. Nonetheless, it is important to understand the extent to which menus for the eMTY program designed to meet SFSP nutrition standards might also meet some SBP and NSLP nutrition requirements.



Table 3:
The number and percent of weekly menus for McLane Global-Houston (n=76), McLane Global-Riverside (n=24), Chartwells K12 (n=2) and PepsiCo Food for Good (n=8) that met USDA School Breakfast Program and School Lunch Program nutrition standards and food/nutrient specific requirements

| | McLane Global-Houston n (%) | McLane Global-Riverside n (%) | Chartwells K12 n (%) | PepsiCo Food for Good n (%) |
|-----------------------|-----------------------------------|-------------------------------------|-------------------------|-----------------------------------|
| Breakfast | | | | |
| Fruit or vegetable | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Grains/breads | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Fluid milk | 50 (66) | 4 (17) | 0 (0) | 4 (50) |
| Calories | 0 (0) | 0 (0) | 1 (50) | 0 (0) |
| Saturated Fat | 61 (80) | 6 (25) | 2 (100) | 6 (75) |
| Sodium target 1 | 76 (100) | 24 (100) | 2 (100) | 8 (100) |
| Trans fat | 76 (100) | 24 (100) | 2 (100) | 8 (100) |
| Met all standards | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Lunch | | | | |
| Fruit | 76 (100) | 24 (100) | 1 (50) | 8 (100) |
| Vegetable | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Dark green vegetable | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Red orange vegetable | 11 (14) | 14 (58) | 0 (0) | 0 (0) |
| Legumes | 0 (0) | 0 (0) | 0 (0) | 0 (0) |
| Grains/breads | 19 (25) | 2 (8.3) | 0 (0) | 0 (0) |
| Fluid milk | 50 (66) | 4 (17) | 0 (0) | 4 (50) |
| Meat/meat alternative | 1 (1) | 0 (0) | 0 (0) | 0 (0) |
| Calories | 63 (83) | 16 (67) | 2 (100) | 8 (100) |
| Saturated fat | 58 (76) | 5 (20) | 2 (100) | 5 (63) |
| Sodium target 1 | 73 (96) | 17 (71) | 2 (100) | 8 (100) |
| Trans fat | 57 (75) | 17 (71) | 2 (100) | 8 (100) |
| Met all standards | 0 (0) | 0 (0) | 0 (0) | 0 (0) |

SBP Nutrition Standards

As shown in **Table 3**, none of the vendors' menus fully met the modified SBP standards. However, compliance was high for some of the specific requirements for some of the vendors.

- Most of the McLane Global-Houston, Chartwells K12, and PepsiCo Food for Good menus met the saturated fat requirement.
- All menus for all vendors met the sodium and trans fat requirements. The sodium target specifies that the meal should contain no more than 640 mg of sodium, and menus tended to contain substantially less than this requirement

All or most menus across vendors failed to meet the other SBP requirements.

- The fruit or vegetable requirement was generally not met because one creditable amount was not included in meals and fruit juices were generally included in an amount greater than half of the requirement.
- The grains/breads requirement was not met because menus included less than seven creditable amounts across a week.
- Fluid milk standards were generally not met because the milk provided was not fat-free or skim (2% or whole milk were provided).
- Most menus failed to meet the requirement for calories (350-600 kcal/meal on average) because the average energy per meal across a week was below 350 kcals/meal

NSLP Nutrition Standards

Akin to the modified SBP findings, none of the vendors' menus fully met the modified NSLP nutrition standards (**Table 3**). However, some of the food/nutrient specific requirements were met by a substantial proportion of menus.

- Notably, most or all of each vendor's menus met the modified NSLP requirements for calories, sodium, and trans fat.
- Some vendors had a modest to high proportion of menus that met fruit, red-orange vegetable, and saturated fat requirements.

There were several reasons why standards were not met.

- The fruit requirement was generally not met because fruit juices composed more than half of the requirement.
- The requirements for vegetables, grains/breads, and meat/meat alternatives were generally not met because the minimum required daily or weekly amounts were not provided. However, there were some menus that did not meet the meat/meat alternatives requirement because the amount provided exceeded the upper limit for weekly creditable amounts.
- The fluid milk requirement was often not met because the milk provided was not fat-free or skim (2% or whole milk were provided, which were allowable per COVID-19 waivers authorized by USDA).
- Menus that failed to meet the calorie requirement generally did not meet this requirement because the average kcal/meal across a week were below the minimum threshold for this nutrient (< 550 kcal/meal). There were only two menus that failed to meet the calorie requirement because the average kcal/meal across a week exceeded the upper limit of the weekly calorie requirement range (>850 kcal/meal).

Healthy Eating Index 2015 Scores

- As a measure of the extent to which the menus provided foods that align with key recommendations in the Dietary Guidelines for Americans, HEI-2015 total and components scores were calculated. Total HEI Scores are made up of 13 index component scores, 9 of which are adequacy components where consumption is encouraged (e.g., fruits, vegetables, whole grains) and 4 are moderation components where limiting consumption is recommended (e.g., sodium, added sugars, saturated fat). The HEI-2015 total score may range from 0-100, with a higher score indicative of greater consistency with dietary recommendations. Component scores may range from 0-5 to 0-10 depending on the component, with higher scores indicative of greater consistency of the menu with the index component (Appendix 7).
- The mean HEI-2015 total scores for each vendor for breakfast, lunch, and across both meals (i.e., overall) are provided in Table 4. To summarize, total HEI score averages for weekly breakfast menus ranged from 54.9 to 60.9 across the sets of vendor menus. Total HEI score averages for weekly lunch menus ranged from 63.4 to 88.9 across the sets of vendor menus. Total HEI score averages across breakfast and lunch menus ranged from 63.9 to 87.1. For comparison, the total HEI-2010 scores for NSLP lunch and SBP breakfast were found to be 71.3 and 81.5, respectively, in the School Nutrition and Meal Cost study carried out in the 2014-2015 school year.¹ The average total HEI-2015 score for the diets of U.S. children aged 6-17 was 53 in 2013-2014.

Table 4:
HEI-2015 total scores for weekly breakfast, lunch, and across breakfast and lunch menus for McLane Global-Houston, McLane Global-Riverside, Chartwells K12 and PepsiCo Food.

| | McLane Global-Houston | | McLane Global-Riverside | | Chartwells K12 | | PepsiCo Food for Good | |
|-----------|------------------------|-------------|-------------------------|-------------|------------------------|-----------|------------------------|-------------|
| | Mean (SD) ^a | Range | Mean (SD) ^a | Range | Mean (SD) ^a | Range | Mean (SD) ^a | Range |
| Breakfast | 60.9 (7.6) | 54.7 - 65.4 | 56.9 (2.7) | 53.6 - 61.9 | 54.9 (0.8) | 54.3-55.5 | 60.9 (1.3) | 59.4 - 63.5 |
| Lunch | 75.0 (10.1) | 44.2 - 92.4 | 63.4 (9.7) | 52.1 - 84.4 | 81.1 (4.6) | 77.9-84.4 | 88.9 (5.3) | 79.4 - 95.3 |
| Overall | 76.2 (8.3) | 53.9 - 92.1 | 63.9 (8.2) | 53.2 - 79.8 | 81.8 (3.0) | 79.6-83.9 | 87.1 (4.6) | 79.4 - 92.0 |

^a Across breakfast and lunch for week

The mean HEI-2015 component scores for each vendor for breakfast, lunch, and across meals are provided in **Appendices 8-11**. There were some similarities and some differences across the menus with respect to index components for which scores tended to be high (good) and low (poor).



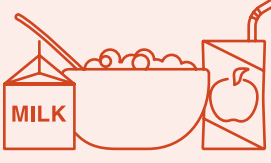







- Uniformly high (good) scores were found for the total fruits, whole fruits, whole grains, dairy, refined grains, and sodium index components.
- In contrast, uniformly low (poor) mean scores were found for the total vegetable component.
- The greens and beans and fatty acids component scores were low for three of the four sets of vendor menus.
- Both the McLane Global-Houston and McLane Global-Riverside menus had mean scores that were low for total protein foods, whereas the Chartwell K12 and PepsiCo Food for Good menus had mean scores that were the maximum for this index component.
- McLane Global-Riverside had the only set of menus with a low score for the seafood and plant protein index component, whereas the other sets of menus had maximum or close to maximum scores for this component.
- Chartwells K12 had the only set of menus with a poor mean score on the added sugars component (3.1 out of 10 possible points), whereas the other sets of menus had substantially higher mean scores indicative of greater compliance with recommended limits on added sugar in the diet (7.9-9.7). However, it's important to note that SFSP, SBP, and NSLP do not currently have an added sugars limit, so this was just considered for the HEI calculations.
- The McLane Global-Riverside set of menus had a moderate mean score for the saturated fat index component (5.6 out of 10 possible points), whereas the other sets of menus had higher scores indicative of greater compliance with the recommended limit on saturated fat intake (7.6-8.6).



Three menus that had total HEI-2015 scores of 90 or greater are presented to illustrate the types of foods included in menus in close alignment with Dietary Guidelines for Americans recommendations (**Table 5 and Appendix 13**). **Table 5** demonstrates McLane Global-Houston's menu, which has the highest HEI-2015 score and is in full compliance with the SFSP standards. The other two exemplar menus are provided in **Appendix 13**. These menus have a number of commonalities:

- All three include a balance of fruits, vegetables, whole grains, dairy and protein foods.
- All three menus include low-fat dairy and protein sources that are lean or plant-based.
- Some foods containing added sugars are included in the menus (e.g., sweetened breakfast cereal, sweetened applesauce, chocolate milk) but these sugary foods are included sparingly and balanced with foods that contain no or little added sugars (e.g., lightly sweetened breakfast cereal, canned pineapple in juice pack, plain milk).

Table 5:
McLane Global-Houston Menu that had a total Healthy Eating Index Score of 92 and fully met Summer Food Service Nutrition Standards

| | Breakfasts | Lunches |
|-------|---|---|
| Day 1 |  <p>1% milk 8 fl oz Apple juice 4.23 fl oz RTE^a cereal whole-grain rich, sweetened ^b, 1 oz</p> |  <p>1% milk 8 fl oz Vegetable & fruit juice blend 6.75 fl oz Applesauce, unsweetened 4.1 oz Granola, 1 oz Canned beans with wieners, 7.5 oz</p> |
| Day 2 |  <p>1% milk 8 fl oz Apple juice 4.23 fl oz RTE^a cereal whole-grain rich, sweetened ^b, 1 oz</p> |  <p>1% milk 8 fl oz Vegetable & fruit juice blend 6.75 fl oz Applesauce, unsweetened 4.1 oz Granola, 1 oz Canned beans with wieners, 7.5 oz</p> |
| Day 3 |  <p>1% milk 8 fl oz Apple juice 4.23 fl oz RTE^a cereal whole-grain rich, sweetened ^b, 1 oz</p> |  <p>1% milk 8 fl oz Vegetable & fruit juice blend 6.75 fl oz Applesauce, unsweetened 4.1 oz Granola, 1 oz Soy nuts, roasted, salted, 1 oz Chicken-flavored rice dinner, 4.6 oz</p> |
| Day 4 |  <p>1% milk 8 fl oz Apple juice 4.23 fl oz RTE^a cereal whole-grain rich, sweetened ^b, 1 oz</p> |  <p>1% milk 8 fl oz Vegetable & fruit juice blend 6.75 fl oz Applesauce, unsweetened 4.1 oz Granola 1 oz Soy nuts, roasted, salted, 1 oz Chicken-flavored rice dinner, 4.6 oz</p> |
| Day 5 |  <p>1% milk 8 fl oz Apple juice 4.23 fl oz RTE^a cereal whole-grain rich, sweetened ^b, 1 oz</p> |  <p>1% milk 8 fl oz Vegetable & fruit juice blend 6.75 fl oz Applesauce, unsweetened 4.1 oz Pretzels, hard, salted 1 oz Chickpeas, roasted, salted, 1 oz</p> |

^a RTE acronym for ready-to-eat

^b Sweetened defined as > 6 grams of added sugars per 1 ounce; lightly sweetened defined as < 6 grams of added sugars per 1 ounce



Summary And Conclusions

Limitations

There are several limitations of the analyses worth noting. First, the research team had to construct their own menus in most cases. The eMTY program utilized three separate food vendors that all used different approaches to assembling the menus and food boxes. With substantially different information available about menus and the foods in the boxes sent by each vendor, a different approach was needed and used for each vendor for sampling and creating representative weekly menus.

Second, when assessing the extent to which menus met SBP and NSLP standards, modified standards had to be developed as SBP and NSLP nutrition standards differ by grade level, while SFSP nutrition standards are the same for all grade levels. For nutrition standard requirements, the most liberal criteria were applied across all grade levels, while for food categories and nutrients with an upper limit that varied across grade levels, the highest value was used.

Another limitation is that this evaluation assessed the nutritional quality of the menus, but did not address how the food items were actually utilized in the home and who ate the food in the household. Therefore, little can be said about the impact of the eMTY program on participant diets. Rather, the results of this analysis are centered on the nutritional quality of the boxes alone.

Discussion

The eMTY program weekly menus consistently met SFSP nutrition standards for breakfast, but only occasionally met the SFSP nutrition standards for lunch. The failure to meet the lunch standards was driven by the absence of two or more kinds of fruits or vegetables at every lunch meal. In addition, the required amount of meat/meat alternative was not offered at every meal for some menus.

It is important to remember that vendors were required to follow SFSP meal pattern requirements, but were also allowed to take into consideration pandemic-related waivers, including a flexibility to provide meals that did not meet specified (i.e., non-emergency) meal pattern requirements. Similarly, COVID-19 related supply chain disruptions may have contributed to a failure to operationalize menus that universally met SFSP nutrition standards for lunch, as many food items intended for the eMTY program faced procurement barriers and were not able to be secured for meal boxes. The need to rely on shelf-stable prepackaged foods available in the marketplace could have also been a contributing factor. These potential explanations are speculative, as the underlying reasons were not examined in this evaluation.

eMTY Program menus were not required to comply with SBP and NSLP nutrition standards, and unsurprisingly none met all these standards. Nonetheless, a substantial proportion of the weekly menus met the saturated fat, sodium, and trans fat requirements. Food-based requirements were met less frequently. Reasons for not meeting requirements typically related to providing a type of a food that did not meet requirements (e.g., serving 2% or whole milk instead of fat-free or 1% milk) or not providing the minimum amount of food required (e.g., serving fewer than eight creditable amounts of grain across a week).

The mean total HEI-2015 scores for weekly breakfast (54.9-60.9) and lunch (63.4-88.9) menus provided by vendors in the eMTY program tended to be somewhat lower than the HEI-2010 scores for SBP breakfast (71.3) and NSLP lunch (81.5) menus as reported in the School Nutrition and Meal Cost study carried out in the 2014-2015 school year.¹ But, it is difficult to compare values because different versions of the HEI index were used (HEI-2010 versus HEI-2015) and the evaluations were carried out in different years (2014-2015 school year versus summer of 2020) and different contexts (a non-emergency setting versus the COVID-19 pandemic). The mean total HEI-2015 scores across the breakfast and lunch menus provided by each vendor (63.9-87.1) exceeded the average total HEI-2015 score for the diets of U.S. children aged 6-17 (53).²

Uniformly high (good) HEI-2015 component scores across sets of food vendor menus were found for the total fruits, whole fruits, whole grains, dairy, refined grains, and sodium index components. In contrast, scores tended to be low (poor) across vendors for the total vegetables and greens and beans index components.

Conclusion

Findings indicate that during the summer of 2020, eMTY menus were mostly consistent with USDA SFSP nutrition standards. Though there was no requirement that menus meet SBP and NSLP nutrition standards, some requirements in the standards were consistently met. The overall nutrition quality of the menus as measured using the HEI-2015 score indicated the menus generally provided meals that exceed the average nutritional quality of the diet of American children.

Future Directions

The eMTY program offered largely nutritious meals to more than 270,000 children living in rural areas when they were at greatest risk of hunger and food insecurity and could not access school-based foods. Because of this, and ongoing challenges faced by millions of school-age children living in rural communities, it is important to understand lessons learned from the implementation of this program and opportunities to improve the nutritional quality of the foods in the boxes for possible future iterations of the program.

If this type of program were to be used in the future, the following considerations should be made to improve the nutritional quality of menus:

- Increase the amounts of fruit and vegetables for breakfast and lunch menus, and decrease the inclusion of fruit juice for both breakfast and lunch menus.
- Increase the amount of whole grains for breakfast and lunch menus.
- Increase the use of fat-free or skim milk at breakfast and lunch and reduce or eliminate the use of 2% or whole milk.
- Increase the total calories of the menus for breakfast to ensure minimum SBP requirements are met.

USDA could provide vendors with a series of sample menus, or a list of products meeting SFSP or NSLP/SBP nutrition standards, and help to identify “healthier” choices (based on HEI score of individual items) for inclusion. Additional content could be included in the boxes for families with guidance on how best to utilize the box components to meet dietary recommendations.

eMTY was just one program utilized during the COVID-19 pandemic to increase the availability of meals to school-aged children. When considering future directions and opportunities, it's important to examine the nutritional quality, accessibility, and cost-effectiveness of the eMTY program alongside other programs such as the Summer Food Service Program, Summer EBT, Grab and Go School Meals, and other non-congregate meal service options.

The first important note is that there were significant supply chain disruptions during this time that limited access to various foods and food types. To address this, USDA Food and Nutrition Service offered waivers of meal pattern requirements that enabled programs to adapt menus. It's likely that school-based programs such as SFSP, Grab and Go, or in-person school meals during this period may not have met their own traditional program standards. Furthermore, USDA Food and Nutrition Service offered non-congregate meal service waivers, which allowed meals to be served off-site and in non-group settings. Unlike SFSP and Grab and Go, eMTY offers a unique opportunity to provide home-delivered meals to children living in rural areas, who may otherwise face transportation or ancillary challenges to accessing safe and reliable food during summer months. Finally, food waste and association between nutritional quality and cost are two important elements that were not assessed in this study, but should be considered when examining the trade-offs and utility of each feeding program in an emergency setting.



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Appendices

1. **Sample McLane Global box inventory**
2. **Chartwells K12 standard box menu**
3. **Sample PepsiCo Food for Good box menu**
4. **Nutrient tolerances used to determine whether a food in NDSR was a sufficient match for a food item on eMTY menu**
5. **Summer Food Service nutrition standards**
6. **Modified School Breakfast Program and National School Lunch Program nutrition standards**
7. **Healthy Eating Index 2015 (HEI-2015) components and scoring standards**
8. **Mean HEI-2015 total and component scores for weekly breakfast, lunch, and across breakfast and lunch menus for McLane Global Houston menus**
9. **Mean HEI-2015 total and component scores for weekly breakfast, lunch, and across breakfast and lunch menus for McLane Global-Riverside menus**
10. **Mean HEI-2015 total and component scores for breakfast, lunch, and across breakfast and lunch menus for Chartwells K12 menus**
11. **Mean HEI-2015 total and component scores for weekly breakfast, lunch, and across breakfast and lunch menus for PepsiCo Food for Good menus**
12. **Exemplar menus**

Appendix 1: Sample McLane Global box inventory

Riverside
5000 Boxes
SO-048038

| Code | Component | Items/Box (2 Weeks) |
|----------------|--|---------------------|
| 041900079857 | 32oz Whole Milk | 5 |
| 076301860018 | 4.23oz Fruit Punch Juice | 5 |
| 076301860049 | 4.23oz White Grape Juice | 5 |
| 00774844125051 | 6.75oz 100% Very Berry Juice | 5 |
| 7.74844E+11 | 6.75oz 100% Apple Juice | 5 |
| 419 | 4oz Pineapple Toddbits in Juice | 6 |
| 78742157986 | 4oz Mixed Fruit in Grape Juice | 2 |
| 10734730639120 | 4oz Diced Pears in Pear Juice | 2 |
| 016000117686 | 1oz Frosted Corn Flakes | 2 |
| 016000319226 | 1oz Trix Cereal 25 Less Sugar Bowl PK | 4 |
| 016000319172 | 1oz Lucky Charms | 4 |
| 6828030402003 | 1oz Chocolate Bear Grahams | 4 |
| 073321560713 | 1oz Honey Belly Bears | 3 |
| 682830801158 | 1oz Savory Bites Wheat Crackers | 3 |
| 071846942991 | 15oz Pasta O's with Beef | 1 |
| G3001.QSHREDMZ | 1oz Mozzarella Chesse Shredded, Shelf Stable | 4 |
| 754361411283 | 14.5oz Spaghetti and Meatballs | 3 |

Appendix 2: Chartwells K12 standard box menu



10 Day Cycle Menu

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|--|---|---|--|--|
| Breakfast | | | | |
| Breakfast Muffin – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Ultimate Breakfast Round – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Breakfast Muffin – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Pop-Tart – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Cereal – assorted flavors 100% Fruit Juice & 8 fl oz Milk |
| Lunch | | | | |
| ½ Bag of Tortilla Chips with Salsa ½ Pkg. of Refried Beans, Fruit Cup (1), 8 fl oz Milk | 2 Peanut Butter Cups & 2 Packs of Graham Crackers ½ Pkg. of Mashed Potatoes, ½ Pkg. Sunflower Seeds, Dried Fruit (1), 8 fl oz Milk | ½ Bag of Tortilla Chips with Salsa ½ Pkg. of Refried Beans, Fruit Cup (1), 8 fl oz Milk | Can of Tuna with a Pack of Whole Grain Crackers Applesauce (1), Dried Fruit (2), 8 fl oz Milk | 2 Yogurts and a Pack of Whole Grain Crackers Applesauce (1), Sunflower Seeds (1), Raisins (3), 8 fl oz Milk |
| Day 6 | Day 7 | Day 8 | Day 9 | Day 10 |
| Breakfast | | | | |
| Cereal – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Ultimate Breakfast Round – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Cereal – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Pop-Tart – assorted flavors 100% Fruit Juice & 8 fl oz Milk | Cereal – assorted flavors 100% Fruit Juice & 8 fl oz Milk |
| Lunch | | | | |
| ½ Bag of Tortilla Chips with Salsa ½ Pkg. of Refried Beans, Fruit Cup (1), 8 fl oz Milk | Can of Tuna with a Pack of Whole Grain Crackers Applesauce (1), Dried Fruit (2), 8 fl oz Milk | 2 Peanut Butter Cups & 2 Packs of Graham Crackers ½ Pkg. of Mashed Potatoes, ½ Pkg. Sunflower Seeds, Dried Fruit (1), 8 fl oz Milk | ½ Bag of Tortilla Chips with Salsa ½ Pkg. of Refried Beans, Fruit Cup (1), 8 fl oz Milk | Can of Tuna with a Pack of Whole Grain Crackers Applesauce (1), Dried Fruit (2), 8 fl oz Milk |

Appendix 3: Sample PepsiCo Food for Good box menu

| | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|------------------------|-------------------------------|------------------------------------|------------------------------------|---|---------------------------------------|
| Breakfast Items | MOM Cereal Bowls | ZeeZee Berry Apple Crisp Bar | WG Apple Oatmeal Bar (apple) | MOM Cereal Bowls | MJM Grahams |
| | 4.23oz Veggie Juices | 4.23oz Fruit Juices | 4.23oz Veggie Juices | 4.23oz Fruit Juices | 4.23oz Veggie Juices |
| | 8oz 1% Milk - Chocolate | 8oz 1% Milk - Chocolate | 8oz 1% Milk | 8oz 1% Milk | 8oz 1% Milk |
| Lunch Items | GoGo Squeez Applesauce | Amazing Raisin Sour Lemon | Vblend Cherry Star | Vblend Wango Mango | Sun Splash 100% Vegetable Juice |
| | Cheese Cup, Cheddar | Bumble Bee Chicken Salad | SunButter | ZeeZee Hummus Cup, Taco | ZeeZee Bean Dips Cup |
| | Corn Strips Tortilla Chips | MJM Savory Bites | MJM Honey Grahams | MJM Savory Bites Wheat Cracker | Corn Strips Tortilla Chips |
| | Roasted Sunflower, TBD | Roasted Sunflower, TBD | Roasted Sunflower, TBD | Roasted Sunflower, Lightly Salted | Roasted Sunflower, TBD |
| | Red Gold Salsa | Farm&Orchard Paradise Punch | Crasins, TBD | Peaches Canned | Crasins, TBD |
| | 8oz 1% Milk - Chocolate | 8oz 1% Milk | 8oz 1% Milk | 8oz 1% Milk | 8oz 1% Milk |

Appendix 4: Nutrient tolerances used for determining whether a food in NDSR was a sufficient match for a food item on an eMTY menu

| Nutrient | Tolerance per serving ^a |
|---|------------------------------------|
| Calories | ± 30 kcals |
| Protein | ±3 grams |
| Carbohydrate | ±3 grams |
| Saturated Fat | ±3 grams |
| Added sugars or total sugars ^b | ±3 grams |
| Dietary Fiber | ±3 grams |
| Sodium | ± 50 milligrams |

^a The serving size is the amount declared on the product label as a serving.

^b If an added sugars amount was not available on the product label, total sugars was used for the tolerance instead.

Results

Appendix 5: Summer Food Service nutrition standards

| Breakfast | Daily Requirements | Weekly Requirements |
|-----------------------|---|---|
| Fruit or vegetable | >0.5 creditable amount ^a | |
| Grains/breads | >1.0 creditable amount ^b | |
| Fluid milk | >1.0 creditable amount ^c | |
| Lunch | Daily Requirements | Weekly Requirements |
| Fruit or vegetable | > .75 creditable amount ^a Two or more kinds of fruits and/or vegetables must be served ^d | Fruit and vegetable juices may meet no more than ½ of requirement |
| Grains/breads | >1.0 creditable amount ^b | |
| Meat/meat alternative | >1.0 creditable amount ^e No more than ½ of creditable amount may be nuts & seeds | |
| Fluid milk | >1.0 creditable amount ^c | |

a 1 creditable amount = 1 cup fruit or vegetable; 1 cup full strength fruit or vegetable juice.

b 1 creditable amount = 1 slice bread, 1 serving cornbread or biscuit or roll, ¾ cup cold cereal, ½ cup cooked cereal, ½ cup pasta, rice or grains (Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified).

c 1 creditable amount = 1 cup (8 fluid ounces) milk of any type served as a beverage or with cereal.

d Must be two or more different kinds of fruits or vegetables (e.g. apple & banana; orange & peas, etc.) in an amount that is creditable. May not be two different forms of the same fruit or vegetable (e.g. apple & applesauce).

e 1 creditable amount of meat/meat alternative specified as follows:

| | | |
|------------------------------|---------|--|
| Meat/meat alternative | 2 oz | lean meat or poultry or fish ¹ or |
| | 2 oz | alternate protein product or |
| | 2 oz | cheese or |
| | 1 large | egg or |
| | 1/2 cup | cooked dry beans or peas or |
| | 4 Tbsp | peanut or other nut or seed butter or |
| | 1 oz | nuts and/or seeds ² or |
| | 8 oz | yogurt ³ |

1 A serving consists of the edible portion of cooked lean meat or poultry or fish.

2 Nuts and seeds may meet only one-half of the total meat/meat alternate serving at each meal.

3 Yogurt may be plain or flavored, unsweetened or sweetened.

Appendix 6: Modified School Breakfast Program and National School Lunch Program nutrition standards

| Breakfast | Daily Requirements | Weekly Requirements |
|--|--|--|
| Fruit or vegetable | >0.5 creditable amount ^a | Fruit and vegetable juices may meet no more than ½ of the requirement. Starchy vegetables may be included only if 2 or more creditable non-starchy vegetables are included. |
| Grains/breads | >1.0 creditable amount ^b | 7-10 creditable amounts. At least ½ of the total creditable amount must be whole grain-rich. |
| <i>Meat/meat alternative ^c creditable amounts may substitute for grains up to 3 times per week if 1 creditable amount per day grain criteria is met</i> | | |
| Fluid milk | >1.0 creditable amount ^d | |
| Calories | | 350-600 kcal/meal (average) |
| Saturated fat | | < 10% kcal/meal (average) |
| Sodium target 1 | | < 640 mg/meal (average) |
| Trans fat | < 1 gram per serving for every menu item | |
| Lunch | Daily Requirements | Weekly Requirements |
| Fruit | >0.50 creditable amount ^a | Fruit juice may meet no more than ½ of requirement |
| Vegetable | >0.75 creditable amount ^a | Vegetable juice may meet no more than ½ of requirement |
| Dark green vegetable | | >0.50 creditable amount at least 1 time per week |
| Red orange vegetable | | >0.75 creditable amount at least 1 time per week |
| Legumes | | >0.50 creditable amount at least 1 time per week |
| Grains/breads | >1.0 creditable amount ^b | 4-6 creditable amounts At least ½ per week must be whole grain-rich |
| Meat/meat alternative | >1.0 creditable amount ^c No more than ½ of creditable amount may be nuts & seeds | 8-12 creditable amounts per week |
| Fluid milk | >1.0 creditable amount ^d | |
| Calories | | 550-850 kcal/meal (average) |
| Saturated fat | | < 10% kcal/meal (average) |
| Sodium target 1 | | < 1420 mg/meal (average) |
| Trans fat | < 1 gram per serving for every menu item | |

Appendix 6: Modified School Breakfast Program and National School Lunch Program Nutrition Standards (cont.)

a 1 creditable amount = 1 cup fruit or vegetable; 1 cup full strength fruit or vegetable juice.

b 1 creditable amount = 1 slice bread, 1 serving cornbread or biscuit or roll, ¾ cup cold cereal, ½ cup cooked cereal, ½ cup pasta, rice or grains (Breads and grains must be made from whole-grain or enriched meal or flour. Cereal must be whole-grain or enriched or fortified).

c 1 creditable amount meat/meat alternative as specified below:

| Meat/meat alternative | 2 oz | lean meat or poultry or fish ¹ or |
|-----------------------|---------|--|
| | 2 oz | alternate protein product or |
| | 2 oz | cheese or |
| | 1 large | egg or |
| | 1/2 cup | cooked dry beans or peas or |
| | 4 Tbsp | peanut or other nut or seed butter or |
| | 1 oz | nuts and/or seeds ² or |
| | 8 oz | yogurt ³ |

1 A serving consists of the edible portion of cooked lean meat or poultry or fish.

2 Nuts and seeds may meet only one-half of the total meat/meat alternate serving at each meal.

3 Yogurt may be plain or flavored, unsweetened or sweetened.

d 1 creditable amount = 1 cup (8 fluid ounces) fat-free or 1% milk served as a beverage or with cereal. Includes fat-free or 1% flavored milks.

Appendix 7: Healthy Eating Index 2015 (HEI-2015) components and scoring standards¹

| Component | Maximum Points | Standard for Maximum Score | Standard for Minimum Score of Zero |
|---|----------------|--------------------------------------|--------------------------------------|
| Adequacy | | | |
| Total Fruits ² | 5 | >0.8 cup equivalent per 1,000 kcal | No fruit |
| Whole Fruits ³ | 5 | >0.4 cup equivalent per 1,000 kcal | No whole fruit |
| Total Vegetables ⁴ | 5 | >1.0 cup equivalent per 1,000 kcal | No vegetables |
| Greens & Beans ⁴ | 5 | >0.2 cup equivalent per 1,000 kcal | No dark green vegetables or legumes |
| Whole Grains | 10 | >1.5 ounce equivalent per 1,000 kcal | No whole grains |
| Dairy ⁵ | 10 | >1.3 cup equivalent per 1,000 kcal | No dairy |
| Total Protein Foods ⁴ | 5 | >2.5 ounce equivalent per 1,000 kcal | No protein foods |
| Seafood & Plant Proteins ^{4,6} | 5 | >0.8 ounce equivalent per 1,000 kcal | No seafood or plant proteins |
| Fatty Acids ⁷ | 10 | (PUFAs + MUFAs)/ SFAs >2.5 | (PUFAs + MUFAs)/ SFAs <1.2 |
| Moderation | | | |
| Refined Grains | 10 | <1.8 ounce equivalent per 1,000 kcal | >4.3 ounce equivalent per 1,000 kcal |
| Sodium | 10 | <1.1 grams per 1,000 kcal | >2.0 grams per 1,000 kcal |
| Added Sugars | 10 | <6.5% of energy | >26% of energy |
| Saturated Fat | 10 | <8% of energy | >16% of energy |

1 Intakes between the minimum and maximum standards are scored proportionally

2 Includes 100% fruit juice

3 Includes all forms except juice

4 Includes legumes (beans and peas)

5 Includes all milk products, such as fluid milk, yogurt, and cheese, and fortified soy beverages

6 Includes seafood; nuts, seeds, soy products (other than beverages), and legumes (beans and peas)

7 Ratio of poly- and mono-unsaturated fatty acids (PUFAs and MUFAs) to saturated fatty acids (SFAs)

Appendix 8: Mean HEI-2015 total and component scores for weekly breakfast, lunch, and across breakfast and lunch menus for McLane Global Houston menus

| | | Breakfast Mean (SD) | Range | Lunch Mean (SD) | Range | Overall Mean (SD) ^a | Range |
|---|--|---------------------|--------------------|--------------------|--------------------|--------------------------------|--------------------|
|  | Total Fruits (0-5) | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.1) | 4.6 - 5.0 | 5.0 (0.0) | 5.0 - 5.0 |
|  | Whole Fruits (0-5) | 0.0 (0.2) | 0.0 - 1.3 | 5.0 (0.0) | 0.0 - 5.0 | 5.0 (0.0) | 4.2 - 5.0 |
|  | Total Vegetables (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 2.1 (1.4) | 0.0 - 5.0 | 1.5 (1.0) | 0.0 - 4.4 |
|  | Greens & Beans (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 2.3 (2.1) | 0.0 - 5.0 | 2.0 (2.0) | 0.0 - 5.0 |
|  | Whole Grains (0-10) | 9.8 (0.7) | 5.8 - 10.0 | 5.4 (2.8) | 0.0 - 10.0 | 8.2 (1.9) | 4.0 - 10.0 |
|  | Dairy (0-10) | 10.0 (0.0) | 10.0 - 10.0 | 10.0 (0.1) | 9.2 - 10.0 | 10.0 (0.0) | 10.0 - 10.0 |
|  | Total Protein Foods (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 3.3 (1.7) | 0.0 - 5.0 | 2.5 (1.5) | 0.0 - 5.0 |
|  | Seafood & Plant Proteins (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 3.4 (2.0) | 0.0 - 5.0 | 3.1 (2.1) | 0.0 - 5.0 |
|  | Fatty Acids (0-10) | 0.2 (0.5) | 0.0 - 2.5 | 4.3 (3.4) | 0.0 - 10.0 | 3.0 (2.9) | 0.0 - 10.0 |
|  | Refined Grains (0-10) | 9.9 (0.4) | 7.5 - 10.0 | 8.8 (2.2) | 0.0 - 10.0 | 9.4 (1.5) | 0.8 - 10.0 |
|  | Sodium (0-10) | 10.0 (0.0) | 9.7 - 10.0 | 7.3 (2.8) | 0.0 - 10.0 | 8.4 (1.9) | 2.7 - 10.0 |
|  | Added Sugars (0-10) | 7.5 (1.1) | 5.8 - 10.0 | 9.8 (0.5) | 7.2 - 10.0 | 9.6 (0.6) | 7.1 - 10.0 |
|  | Saturated Fats (0-10) | 8.5 (2.5) | 2.8 - 10.0 | 8.4 (2.3) | 2.2 - 10.0 | 8.6 (2.1) | 2.5 - 10.0 |
| | Total Score^b (0-100) | 60.9 (7.6) | 54.7 - 65.4 | 75.0 (10.1) | 44.2 - 92.4 | 76.2 (8.3) | 53.9 - 92.1 |

^a Mean component score across breakfast and lunch for one week.

^b Total HEI scores are made up of 13 index component scores, 9 are adequacy components and 4 are moderation components.

Appendix 9: Mean HEI-2015 total and component scores for weekly breakfast, lunch, and across breakfast and lunch menus for McLane Global-Riverside menus

| | | Breakfast Mean (SD) | Range | Lunch Mean (SD) | Range | Overall Mean (SD) ^a | Range |
|---|--|---------------------|--------------------|-------------------|--------------------|--------------------------------|--------------------|
|  | Total Fruits (0-5) | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.1) | 5.0 - 5.0 | 5.0 (0.0) | 5.0 - 5.0 |
|  | Whole Fruits (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.0) | 4.8 - 5.0 |
|  | Total Vegetables (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 2.0 (1.7) | 0.0 - 4.4 | 1.4 (1.2) | 0.0 - 3.3 |
|  | Greens & Beans (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 1.0 (1.7) | 0.0 - 5.0 | 0.7 (1.2) | 0.0 - 3.7 |
|  | Whole Grains (0-10) | 9.2 (1.1) | 7.4 - 10.0 | 6.0 (2.5) | 0.0 - 10.0 | 7.7 (2.5) | 2.3 - 10.0 |
|  | Dairy (0-10) | 10.0 (0.0) | 10.0 - 10.0 | 9.9 (0.2) | 9.5 - 10.0 | 10.0 (0.0) | 10.0 - 10.0 |
|  | Total Protein Foods (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 1.9 (1.5) | 0.0 - 5.0 | 1.3 (1.0) | 0.0 - 3.6 |
|  | Seafood & Plant Proteins (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 1.2 (1.8) | 0.0 - 5.0 | 0.9 (1.5) | 0.0 - 5.0 |
|  | Fatty Acids (0-10) | 0.0 (0.0) | 0.0 - 0.0 | 1.3 (1.9) | 0.0 - 8.2 | 0.6 (1.3) | 0.0 - 5.4 |
|  | Refined Grains (0-10) | 9.9 (0.3) | 8.7 - 10.0 | 8.1 (2.5) | 3.5 - 10.0 | 8.7 (1.7) | 5.8 - 10.0 |
|  | Sodium (0-10) | 10.0 (0.0) | 10.0 - 10.0 | 6.3 (4.3) | 0.0 - 10.0 | 7.2 (3.6) | 1.7 - 10.0 |
|  | Added Sugars (0-10) | 7.7 (0.8) | 6.3 - 9.0 | 10.0 (0.1) | 9.8 - 10.0 | 9.7 (0.4) | 9.0 - 10.0 |
|  | Saturated Fats (0-10) | 5.1 (2.6) | 2.6 - 10.0 | 5.8 (2.4) | 0.6 - 10.0 | 5.6 (2.4) | 1.3 - 10.0 |
| | Total Score^b (0-100) | 56.9 (2.7) | 53.6 - 61.9 | 63.4 (9.7) | 52.1 - 84.4 | 63.9 (8.2) | 53.2 - 79.8 |

^a Mean component score across breakfast and lunch for one week.

^b Total HEI scores are made up of 13 index component scores, 9 are adequacy components and 4 are moderation components.

Appendix 10: Mean HEI-2015 total and component scores for breakfast, lunch, and across breakfast and lunch menus for Chartwells K12 menus

| | | Breakfast Mean (SD) | Range | Lunch Mean (SD) | Range | Overall Mean (SD) ^a | Range |
|---|--|---------------------|------------------|-------------------|------------------|--------------------------------|------------------|
|  | Total Fruits (0-5) | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.0) | 5.0-5.0 | 5.0 (0.0) | 5.0 - 5.0 |
|  | Whole Fruits (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 5.0 (0.0) | 5.0-5.0 | 5.0 (0.0) | 5.0-5.0 |
|  | Total Vegetables (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 3.0 (0.3) | 2.8-3.2 | 2.0 (0.1) | 1.9-2.1 |
|  | Greens & Beans (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 5.0 (0.0) | 3.2-5.0 | 4.8 (0.2) | 2.1-4.7 |
|  | Whole Grains (0-10) | 10.0 (0.0) | 10.0 - 10.0 | 5.7 (0.5) | 5.4-6.1 | 10.0 (0.0) | 10.0-10.0 |
|  | Dairy (0-10) | 10.0 (0.0) | 10.0 - 10.0 | 10.0 (0.0) | 10.0-10.0 | 10.0 (0.0) | 10.0 - 10.0 |
|  | Total Protein Foods (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 5.0 (0.0) | 5.0-5.0 | 5.0 (0.1) | 4.9-5.0 |
|  | Seafood & Plant Proteins (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 5.0 (0.0) | 5.0-5.0 | 5.0 (0.0) | 5.0-5.0 |
|  | Fatty Acids (0-10) | 0.2 (0.5) | 0.0 - 0.0 | 7.7 (1.0) | 7.0-8.4 | 4.7 (0.7) | 4.3-5.2 |
|  | Refined Grains (0-10) | 10.0 (0.0) | 10.0-10.0 | 10.0 (0.0) | 10.0-10.0 | 10.0 (0.0) | 10.0-10.0 |
|  | Sodium (0-10) | 10.0 (0.0) | 10.0-10.0 | 7.4 (1.3) | 6.5-8.4 | 8.8 (1.1) | 8.0-9.6 |
|  | Added Sugars (0-10) | 1.9 (0.0) | 1.9-1.9 | 3.8 (2.5) | 2.0-5.5 | 3.1 (1.6) | 2.0-4.2 |
|  | Saturated Fats (0-10) | 8.0 (0.7) | 7.5-8.5 | 8.5 (0.5) | 8.3-8.9 | 8.4 (0.1) | 8.3-8.4 |
| | Total Score^b (0-100) | 54.9 (0.8) | 54.3-55.5 | 81.1 (4.6) | 77.9-84.4 | 81.8 (3.0) | 79.6-83.9 |

^a Mean component score across breakfast and lunch for one week.

^b Total HEI scores are made up of 13 index component scores, 9 are adequacy components and 4 are moderation components

Appendix 11: Mean HEI-2015 total and component scores for weekly breakfast, lunch, and across breakfast and lunch menus for PepsiCo Food for Good menus

| | | Breakfast Mean (SD) | Range | Lunch Mean (SD) | Range | Overall Mean (SD) ^a | Range |
|---|--|---------------------|--------------------|-------------------|--------------------|--------------------------------|--------------------|
|  | Total Fruits (0-5) | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.0) | 5.0 - 5.0 |
|  | Whole Fruits (0-5) | 0.0 (0.2) | 0.0 - 0.0 | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.0) | 4.9 - 5.0 |
|  | Total Vegetables (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 2.3 (0.4) | 1.8 - 3.0 | 1.6 (0.3) | 1.3 - 2.0 |
|  | Greens & Beans (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 2.5 (2.1) | 0.0 - 4.7 | 1.7 (1.4) | 0.0 - 3.3 |
|  | Whole Grains (0-10) | 9.9 (0.3) | 9.2 - 10.0 | 9.7 (0.7) | 7.9 - 10.0 | 9.9 (0.3) | 9.1 - 10.0 |
|  | Dairy (0-10) | 10.0 (0.0) | 10.0 - 10.0 | 10.0 (0.0) | 10.0 - 10.0 | 10.0 (0.0) | 10.0 - 10.0 |
|  | Total Protein Foods (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.0) | 5.0 - 5.0 |
|  | Seafood & Plant Proteins (0-5) | 0.0 (0.0) | 0.0 - 0.0 | 5.0 (0.0) | 5.0 - 5.0 | 5.0 (0.0) | 5.0 - 5.0 |
|  | Fatty Acids (0-10) | 1.3 (1.5) | 0.0 - 3.2 | 9.2 (1.5) | 6.0 - 10.0 | 8.4 (2.3) | 4.4 - 10.0 |
|  | Refined Grains (0-10) | 9.6 (0.4) | 9.0 - 10.0 | 10.0 (0.0) | 10.0 - 10.0 | 10.0 (0.0) | 10.0 - 10.0 |
|  | Sodium (0-10) | 10.0 (0.0) | 10.0 - 10.0 | 9.9 (0.3) | 9.1 - 10.0 | 10.0 (0.0) | 10.0 - 10.0 |
|  | Added Sugars (0-10) | 6.6 (2.1) | 3.1 - 9.3 | 8.2 (1.7) | 5.9 - 10.0 | 7.9 (1.9) | 5.6 - 10.0 |
|  | Saturated Fats (0-10) | 8.5 (1.6) | 6.6 - 10.0 | 7.1 (2.7) | 3.0 - 10.0 | 7.6 (2.4) | 4.3 - 10.0 |
| | Total Score^b (0-100) | 60.9 (1.3) | 59.4 - 63.5 | 88.9 (5.3) | 79.4 - 95.3 | 87.1 (4.6) | 79.4 - 92.0 |

^a Mean component score across breakfast and lunch for one week.

^b Total HEI scores are made up of 13 index component scores, 9 are adequacy components and 4 are moderation components.

Appendix 12: Exemplar menus

McLane Global-Houston Menu that had a Total Healthy Eating Index Score of 90 and fully met Summer Food Service Nutrition Standards

| | Breakfasts | Lunches |
|--------------|---|---|
| Day 1 | 1% Milk, 8 fl oz Fruit juice blend, 4.23 fl oz RTE cereal, whole-grain rich,lightly sweetened, 1 oz | 1% milk, 8 fl oz apple juice, 6.75 fl oz lemon flavored raisins, 1.4 oz pretzels, hard, salted, 1 oz chickpeas, roasted, salted, 1 oz |
| Day 2 | 1% Milk, 8 fl oz Apple juice, 4.23 fl oz RTE cereal, whole-grain rich,lightly sweetened, 1 oz | 1% milk, 8 fl oz apple juice, 6.75 fl oz lemon flavored raisins, 1.4 oz pretzels, hard, salted, 1 oz tuna salad, 2.9 oz |
| Day 3 | 1% Milk, 8 fl oz Grape juice, 4.23 fl oz RTE cereal, whole-grain rich, sweetened, 1 oz | 1% milk, 8 fl oz apple juice, 6.75 fl oz pineapple, canned, juice pack, 4.5 oz graham crackers, 1 oz chickpeas, roasted, salted, 1 oz |
| Day 4 | 1% Milk, 8 fl oz Grape juice, 4.23 fl oz RTE cereal, whole-grain rich, sweetened, 1 oz | 1% milk, 8 fl oz apple juice, 6.75 fl oz lemon flavored raisins, 1.4 oz graham crackers, 1 oz soy nuts, roasted, salted, 1 oz high protein granola, 1.5 oz |
| Day 5 | 1% Milk, 8 fl oz Fruit juice blend, 4.23 fl oz RTE cereal, whole-grain rich,lightly sweetened, 1 oz | 1% milk, 8 fl oz apple juice, 6.75 fl oz pineapple, canned, juice pack, 4.5 oz graham crackers, 1 oz soy nuts, roasted, salted, 1 oz tuna salad, 2.9 oz |

RTE acronym for ready-to-eat

Sweetened defined as > 6 grams of added sugars per 1 ounce

Lightly sweetened defined as < 6 grams of added sugars per 1 ounce

PepsiCo Food for Good Menu that had a Total Healthy Eating Index 2015 Score of 92 but did not fully meet Summer Food Service Nutrition Standards

| | Breakfasts | Lunches |
|--------------|---|--|
| Day 1 | 1% Milk, chocolate 8 fl oz Orange juice, 4.23 fl oz RTE cereal, whole-grain rich, sweetened, 1 oz | 1% Milk, chocolate 8 fl oz applesauce sweetened, 3.2 fl oz salsa, 3 oz tortilla chips, whole-grain rich, 1 oz sunflower seeds, roasted, salted, 1 oz cheese spread, 2 oz |
| Day 2 | 1% Milk, chocolate 8 fl oz Apple juice, 4.23 fl oz Oatmeal, whole-grain rich, 1.3 oz | 1% milk, 8 fl oz fruit punch juice, 6.75 fl oz raisins, 1.4 oz crackers, whole-grain rich, 1 oz chicken salad, 2.9 oz sunflower seeds, roasted, unsalted, 1 oz |
| Day 3 | 1% Milk, 8 fl oz Grape juice, 4.23 fl oz Granola bar, 1.2 oz | 1% milk, 8 fl oz vegetable & fruit juice blend, 4.23 fl oz dried cranberries, 1.16 oz graham crackers, 1 oz sunflower butter, with salt 1.1 oz sunflower seeds, roasted, unsalted, 1 oz |
| Day 4 | 1% Milk, 8 fl oz Cranberry juice, 4.23 fl oz RTE cereal, whole-grain rich, sweetened, 1 oz | 1% milk, 8 fl oz vegetable & fruit juice blend, 4.23 fl oz canned peaches, light syrup, 4.5 oz crackers, whole-grain rich, 1 oz hummus, 3 oz sunflower seeds, roasted, unsalted, 1 oz |
| Day 5 | 1% Milk, 8 fl oz Fruit juice blend, 4.23 fl oz Chocolate graham crackers, whole-grain rich, 1 oz | 1% milk, 8 fl oz vegetable & fruit juice blend, 4.23 fl oz canned peaches, light syrup, 4.5 oz crackers, whole-grain rich, 1 oz hummus, 3 oz sunflower seeds, roasted, unsalted, 1 oz |

RTE acronym for ready-to-eat

Sweetened defined as > 6 grams of added sugars per 1 ounce

Lightly sweetened defined as < 6 grams of added sugars per 1 ounce

Healthy Eating Research



Robert Wood Johnson Foundation

About Healthy Eating Research

Healthy Eating Research (HER) is a national program of the Robert Wood Johnson Foundation. Technical assistance and direction are provided by Duke University under the direction of Mary Story PhD, RD, program director, and Megan Lott, MPH, RDN, deputy director. HER supports research to identify, analyze, and evaluate environmental and policy strategies that can promote healthy eating among children and prevent childhood obesity. Special emphasis is given to research projects that benefit children and adolescents and their families, especially among lower-income and racial and ethnic minority population groups that are at highest risk for poor health and well-being and nutrition-related health disparities. For more information, visit www.healthyeatingresearch.org or follow HER on Twitter at [@HERResearch](https://twitter.com/HERResearch) or Instagram at [@HealthyEatingResearch](https://www.instagram.com/HealthyEatingResearch).

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