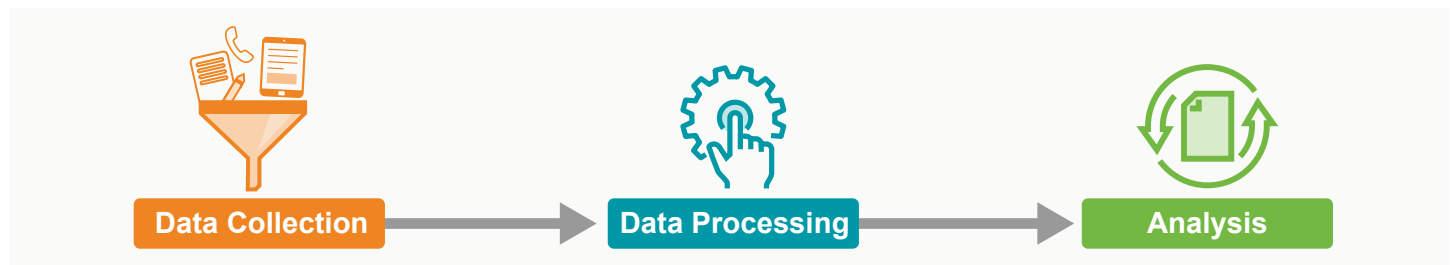


School Nutrition and Meal Cost Study

Methods Used to Examine Nutritional Characteristics of School Meals

This fact sheet describes the methods used in the School Nutrition and Meal Cost Study (SNMCS) to collect, process, and analyze data to examine nutritional characteristics of school meals. The study examined a number of nutritional characteristics, including:

- Types of foods offered
- Average calorie, nutrient, and USDA food group content
- Nutritional quality, based on the Healthy Eating Index-2010
- Compliance with updated nutrition standards

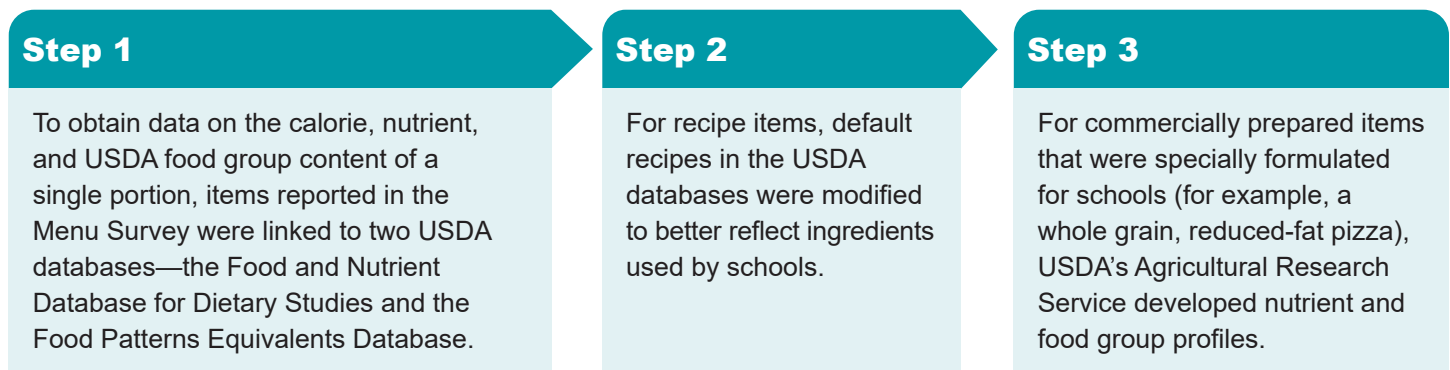


Data Collection

A Menu Survey collected information from school nutrition managers about the foods provided in reimbursable breakfasts and lunches each day during one week. This included, for each menu item:

- Food description, portion size, and recipe
- Number of portions prepared and served
- How the food contributed to meal pattern requirements
- How the food was offered on the menu (for example, a cheese stick was offered with an entree salad)

Data Processing



Final analysis samples

Lunch: 1,207 schools/weekly menus
5,701 daily menus

Breakfast: 1,111 schools/weekly menus
5,265 daily menus

Analysis

A key analysis examined the extent to which school meals complied with updated nutrition standards that were phased in over several years beginning in school year (SY) 2012-2013. Data for the SNMCS were collected in SY 2014-2015, the first year all standards were in effect.

The standards include daily meal pattern requirements that specify minimum amounts of food to be offered in lunches. To assess compliance with these standards, each school's daily menu was compared to individual requirements.

Daily meal pattern requirements for lunch: minimum amounts required

					
Grades	Fruits (cups)	Vegetables (cups)	Grains (ounce equivalents)	Meats/Meat Alternates (ounce equivalents)	Fluid Milk (cups)
K-5	½	¾	1	1	1
6-8	½	¾	1	1	1
9-12	1	1	2	2	1

The standards also include weekly meal pattern requirements, restrictions on specific types of food, and weekly targets for calories, saturated fat, and sodium. Information about methods to assess compliance with these requirements is available in study reports and a webinar (link provided below).

Examples of assessing compliance with daily meal pattern requirements for lunch

Example 1

If a menu offered choices—for example, 2 entrée options—each choice had to meet the relevant requirement. For a menu to be compliant, the smallest amount offered had to meet or exceed the minimum requirement.

Grains: Minimum requirement: 2 ounce equivalents (oz eq)


Turkey sandwich
(2 oz eq)
(smallest amount offered)

OR


Spaghetti and meatballs
(2.5 oz eq)



Daily menu is compliant


Turkey sandwich
(2 oz eq)

OR


Spaghetti and meatballs
(1.5 oz eq)
(smallest amount offered)



Daily menu is not compliant

Example 2

For fruits and vegetables, the compliance assessment also considered the number of servings students could take as part of their meal.

Fruits: Minimum requirement: 1 cup
Number of servings students could take: 2


Canned peaches
(1/2 cup)


Fresh strawberries
(1/2 cup)


Orange slices
(1/2 cup)



Daily menu is compliant

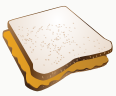
Example 3

For some meal components, the compliance assessment also had to consider situations where menu items were offered together.

Meats/Meat Alternates: Minimum requirement: 2 oz eq


Pizza
(2.5 oz eq)

OR


Peanut butter sandwich
(1 oz eq)

+


Cheese stick
(1 oz eq)

(smallest amount offered)



Daily menu is compliant

For more information

More information on the methods used to examine the nutritional characteristics of school meals is available in the SNMCS methods report as well as Volume 2 of the SNMCS final report. To access reports, instruments, and webinars, visit: www.fns.usda.gov/school-nutrition-and-meal-cost-study.

To request access to public-use datasets, email: OPSDDataRequest@usda.gov.