



## STRATEGIES TO REDUCE FOOD WASTE IN SCHOOL MEAL PROGRAMS

To fully receive the nutritional benefits of school meals, students must eat the foods served. Student consumption of school meals may be influenced by a variety of factors including the amount of time students have to eat, meal quality, and the placement of recess in relation to the lunch period.

**This resource highlights some of the most effective strategies to help reduce, recover, and recycle food waste from school meals. Many of these strategies can also apply to other child nutrition programs.**

[“What You Can Do To Prevent Wasted Food” booklet](#) from USDA’s team Nutrition initiative discusses these strategies as well.

### Extend Time for Meals

A short duration for mealtime can be a barrier to meal consumption. In one study by the Harvard School of Public Health, schools that gave students more seated time to eat lunch (at least 25 minutes versus 20 minutes) had a 13% decrease in entrée waste, 12% decrease in vegetable waste, and 10% decrease in milk waste.<sup>i</sup>

### Use Offer Versus Serve

Offer Versus Serve (OVS) is a provision of the National School Lunch Program, School Breakfast Program, Summer Food Service Program, and the at-risk after school meals component of the Child and Adult Care Food Program that allows children to decline some of the food items offered in a reimbursable meal. The goals of OVS are to reduce food waste and costs, while ensuring children receive nutritious meals they want to eat. USDA’s [Offer Versus Serve Tip Sheet](#) offers guidance around OVS for school breakfast and lunch menu planning and meal service. There is also guidance available for [OVS in CACFP and SFSP](#).

### Engage Students

Taste tests can help identify the items that students like and dislike. Involving students in the menu planning process based on taste test feedback can increase the foods students are likely to eat, or at least are willing to try, and reduce food waste. Taste tests can help expose students to new recipes and menu items through smaller portions; reducing the risk of large amounts of waste the first few times an item is served. Respondents to a national survey of 489 school nutrition directors said that holding taste tests with students and redistributing uneaten, sealed foods were among the most effective ways to reduce food waste.<sup>ii</sup>

## Offer Culturally Diverse & Inclusive Menus

It is important for school meals to include foods that reflect the cultural and religious demographics of your school community. Offering more diverse and culturally appropriate school meals is a great way to connect with your students and show them you understand and celebrate who they are. It can also be a great way to increase participation and consumption.

## Schedule Recess Before Lunch

Research shows that moving recess before lunch can increase student consumption and decrease food waste. One study found that students ate 54% more fruits and vegetables when recess was offered before lunch. Based on data from different states, recess before lunch is considered best practice for its potential ability to increase consumption of school lunch and decrease plate waste<sup>iii</sup>.

## Improve Meal Quality

Meals that are visually appealing and flavorful are likely to boost student participation. A lack of excitement about meals can lead to food waste. Cooking from scratch, offering fresh produce, and accommodating cultural or regional food preferences are some ways to improve meal quality. Also, think about how colors, shapes, textures and packaging can boost visual impact.

## Use Share Tables

Share tables are stations where unopened and/or uneaten food and beverage items may be returned, if in compliance with local and state health and safety codes. These items are then available to other students. The items may also be used as part of a weekend backpack program, an in-school food pantry, or donated to a local non-profit organization (like a food bank or homeless shelter). Check state policy and review USDA's [The Use of Share Tables in Child Nutrition Programs memo](#).

## Save Food Items

Allowing students to save certain meal components for later in the day helps to ensure they receive the full nutritional benefits offered and helps to reduce food waste. CACFP at-risk afterschool sites and SFSP sites may allow children to take one vegetable, fruit, or grain item off-site. USDA's [Taking Food Components Offsite in the At-Risk Afterschool Component of the CACFP](#) and [Meal Service Requirements in the Summer Meal Programs](#) memos offer additional guidance.

## Donate Surplus Food

USDA strongly encourages schools to donate leftover food to appropriate non-profit organizations, provided this practice is not prohibited by state or local law. There are helpful resources available to schools, including USDA's [Guidance on Food Donation in Child Nutrition Programs memo](#) and the University of Arkansas' [Legal Guide to Food Recovery](#).

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i Amount of Time to Eat Lunch is Associated with Children's Selection and Consumption of School Meal Entrée, Fruits, Vegetables, and Milk. Journal of the Academy of Nutrition and Dietetics. Available [here](#).

ii School Meal Approaches, Resources, and Trends (SMART) Study. More information [here](#).

iii Impacts of Scheduling Recess Before Lunch in Elementary Schools: A Case Study Approach of Plate Wastes and Perceived Behaviors. The Journal of Child Nutrition & Management. Available [here](#).