

Strategies to Reduce Food Waste in Schools & Child Nutrition 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.

A combination of strategies to address these factors plus other interventions like marketing healthy choices, providing nutrition education, and offering cooking and gardening programs for students may be more effective together in increasing student consumption and reducing food waste.

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.



Extend Time for Meals

The short duration of school mealtime could be a barrier to student consumption. In one study by the Harvard School of Public Health, schools that gave students more 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.ⁱ Meal time could be addressed through federal, state, local, district or school policy.

Use Offer Versus Serve

Offer Versus Serve (OVS) is a provision of the National School Lunch Program (NSLP), School Breakfast Program (SBP), Summer Food Service Program (SFSP) and the at-risk after school meals component of the Child and Adult Care Food Program (CACFP) that allows children to decline some of the food 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 manual](#) offers guidance around OVS for NSLP and SBP 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.ⁱⁱ

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 percent more fruits and vegetables when recess was offered before lunch. Based on data collected in different states, recess before lunch is considered best practice for its potential ability to increase consumption of school lunch and decrease plate waste.ⁱⁱⁱ Additionally, recess before lunch is associated with a calm lunchroom and afternoon classroom environments.

Improve Meal Quality

Meals that are visually appealing and flavorful are likely to bolster 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. To learn more, review No Kid Hungry's [Optimizing Summer and Afterschool Meal Service](#), which provides tips to optimize the quality and presentation of meals to increase participation and minimize food waste.

Share Tables

Share tables are stations where children may return unopened and/or uneaten food and beverage items, if in compliance with local and state health and safety codes. These items are then available to other students who may want additional servings. 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](#).



This "[What You Can Do To Prevent Wasted Food](#)" [booklet](#) from USDA's

Team Nutrition initiative discusses ways to reduce, recover, and recycle food before it goes to waste. Get ideas for your school by reading tips for school nutrition professionals, teachers, parents, students, and school administrators.

Save Food Items

Allowing students to save certain school 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 Child and Adult Care Food Program](#) and [Meal Service Requirements in the Summer Meal Programs](#) memos offer additional guidance.

Donate Surplus Food

Schools have a special role in educating the next generation about the impact of food waste in the community and on the environment. Teach students that their unwanted food does not have to be thrown away and can be eaten by someone who is hungry. 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](#).

Conclusion

If food waste is an issue at your school or meals site, try a combination of these strategies. These strategies are inexpensive to implement yet effective to simultaneously reducing waste and encouraging consumption. Learn what works in the fight against childhood hunger and discover toolkits, case studies, hunger stats, issue briefs, reports and more at [BestPractices.NoKidHungry.org](#).

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](#).