



REDUCING FOOD WASTE

**A Guide for
South Carolina
Schools**



SC DEPARTMENT of
**ENVIRONMENTAL
SERVICES**

Office of
Solid Waste Reduction & Recycling

1-800-768-7348

des.sc.gov/recycle

Schools CAN reduce food waste.

Wasted food is **wasted resources**. Wasted food is **wasted nutrition**. The **most prominent single source of waste** for schools is **food**. Studies show nearly **25 percent or more** of a school's total waste stream is food. Schools can make significant reductions in their waste stream by following these steps.

- **Look for ways to upgrade planning, ordering, storing and preparing practices.**
- **Improve children's eating behaviors** (and reduce food waste) by using Smarter Lunchrooms strategies.
- **Consider Offer Versus Serve menu option.**
- **Set up share tables.**
- **Recover wholesome, uneaten food and donate it to people in need.**
- **Recycle discarded food in a composting program.**

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The cafeteria is another classroom. Schools not only have a special role in reducing, recovering and recycling food waste, but also in educating students about this issue. Helping students avoid wasting food teaches them about the environment, economics and personal responsibility.

Wasted food is not just a concern at school.

It is a national issue that has significant social, economic and environmental impacts and costs.

No one buys food with the intention of throwing it away. Food waste, however, is the No. 1 item thrown away accounting for nearly 22 percent of the nation's waste stream in 2014 according to the U.S. Environmental Protection Agency (EPA). It also is estimated that up to 40 percent of our food is never eaten – a loss valued at more than \$218 billion annually according to the Natural Resources Defense Council. At the same time, Feeding America reports that one in eight Americans nationwide struggles with hunger.

Strategies to Reduce Food Waste

Schools have opportunities to reduce food loss across the spectrum of their nutrition programs. Here are some strategies to consider recommended by the U.S. Department of Agriculture (USDA) and EPA.

- **Use Offer Versus Serve menu option.** (See page 5.)
- **Schedule recess before lunch** to reduce plate waste.
- **Extend lunch periods** from 20 to 30 minutes. This reduces plate waste by nearly one third.
- **Introduce share tables.** (See page 6.)
- **Complete production records** and use results for better meal planning.
- **Promote waste-free lunches.** (See page 7.)
- **Consider donation.** (See page 7.)
- **Set up composting programs.** (See page 7.)
- **Integrate Smarter Lunchrooms tips and recommendations.**
- **Order fresh produce deliveries at shorter intervals.**
- **Maintain First In, First Out (FIFO) system** of inventory rotation.
- **Use a Just in Time (JIT) system** of inventory and ordering.
- **Repurpose leftover or unsold food** that is still safe to eat.

Smarter Lunchrooms Movement

Smarter Lunchrooms produce less waste, higher participation, more satisfied students and increased consumption of important nutrient-rich foods.

Smarter Lunchrooms, which is housed at Cornell University and funded in part by the USDA, offers evidence-based strategies that nudge students to voluntarily select the healthiest food. Examples include:

- **Focus on fruit.** Whole fruit is more likely to be thrown away. Offer orange slices and apple quarters that are easier for students to eat. Sliced fruit can increase student consumption by more than 70 percent.
- **Vary the vegetable.** Always offer at least two vegetables on all service lines. More options increase the chance of a student finding at least one vegetable appealing.
- **Highlight the salad.** Salad bars and pre-packaged salads increase a student's consumption and are a great option for meeting meal pattern requirements.
- **Improve visibility.** Make popular items first in line and easy to reach. Use signs to highlight these items. This will help improve traffic flow and reduce wait time and allow students more time to eat – helping reduce food waste.
- **Enhance taste expectations.** Give food catchy names to increase interest in targeted food items. Calling green beans “supercharged green beans” may increase consumption by more than 30 percent.



Offer Versus Serve

The USDA recommends using Offer Versus Serve (OVS) as a strategy to encourage the consumption of nutritious food and reduce food waste in schools. OVS gives students the flexibility to make healthy choices during breakfast and lunch and allows them to decline some of the food offered.

The S.C. Department of Education and the S.C. Department of Environmental Services (SCDES) support the practice of OVS.

How does OVS work?

Each school district plans a menu that meets USDA's meal pattern requirements. Depending on how menus are planned in the school, a set number of food components/food items are offered.

Students must select a certain number of food components/food items during breakfast and lunch.

One selection must be one-half cup from either the fruit or vegetable component.

Students are made aware of choices at each serving line through signs. This helps students to build healthy meals. In addition, school nutrition staff members are trained to help students select the required food components/ food items in the quantities needed for lunch and breakfast.

What are the food components offered?

FOOD COMPONENTS*	FOOD ITEMS**
Fruit	Apples, bananas, peaches, oranges
Vegetable	Corn, lima beans, sweet potatoes, spinach
Meat/Meat Alternative	Baked chicken, eggs, hot dogs, sausage, turkey
Grain	Biscuit, cereal, cornbread, toast
Milk	Fat-free flavored milk, 1 percent milk, skim milk

* A Food Component is one of five food groups that make up a school meal.

** A food item is a specific food offered within the five food components. For example, grilled chicken on a bun is one food item with two of the five food components (meats/meat alternatives and grains).



OVS Breakfast, [youtube.com/watch?v=kQshUFybOAA&t=10s](https://www.youtube.com/watch?v=kQshUFybOAA&t=10s)

OVS Lunch, [youtube.com/watch?v=GUQz-nQ-vEU](https://www.youtube.com/watch?v=GUQz-nQ-vEU)

Videos provided by SCDE's Office of Health and Nutrition.

When is OVS used?

USDA requires OVS during lunch in high schools (grades 9-12) but it is optional at lunch in elementary, junior high and middle schools and during breakfast for all grade levels including high schools.

What are the benefits OVS?

- A variety of food items can be offered on the school menu.
- Students eat more fruits and vegetables because they pick what they like.
- Students get the nutrients needed to succeed in the classroom.
- Students learn about healthy eating.
- It reduces food waste.



Share Tables

Share tables are an innovative strategy to reduce the amount of wasted food and encourage the consumption of food served.



Students can place specific food and beverage items that they choose not to eat or drink on a designated table or cart. This provides an opportunity for other students to take additional helpings of these items at no cost to them.

Here are some basic recommendations when considering a share table.

- **Build a team** (e.g., cafeteria staff, teachers) to carefully plan and secure support for this initiative.
- **Follow all federal and state food safety requirements.**
- **Train staff.** Promote the program.
- **Establish clear guidelines with students and staff** for items that may or may not be shared. (See below.)
- **Include a sign with clear instructions on the table.**

It is recommended that faculty or staff monitor this process.

What items are allowed on a share table?

ITEMS	EXAMPLES
Non-Temperature Controlled, Pre-Packaged Products	<ul style="list-style-type: none"> • Cereal Packs • Crackers • Drinks • Food Bars 
Wrapped Fruits and Vegetables	<ul style="list-style-type: none"> • Apples • Peaches • Pears
Fruits with Thick Skins	<ul style="list-style-type: none"> • Bananas • Oranges
Temperature-Controlled, Pre-Packaged Products (allowed, but must be placed in a refrigerator, cooler or ice bath)	<ul style="list-style-type: none"> • Cheese • Milk 

The monitor should inspect any food or beverage to make sure it has not been opened or partially consumed and the original packaging is in sound condition.

The USDA offers additional information on share tables, donation and minimizing wasted food. Please visit fns.usda.gov/use-share-tables-child-nutrition-programs.

Did you know?

- The USDA, SCDES and the S.C. Department of Education (SCDE) **encourage** share tables (pictured below) and food donation.
- Schools that donate food are protected from liability under federal legislation (**Bill Emerson Good Samaritan Food Donation Act**) as well as South Carolina legislation.

See **Resources and Contact Information** on the back cover.



Donation

Even with careful meal planning and production practices, schools can have excess food from time to time.

Schools that have unexpected prepared food or other unwanted food surplus **may donate this food** to food banks, food pantries, homeless shelters and other similar nonprofit organizations.

Here are some basic recommendations when considering donating food.

- **Follow all federal and state food safety requirements.**
- **Don't assume food can't be donated.** Some shelters and food banks take prepared food, produce and processed goods.
- **Meet with a local nonprofit organization to clarify the best methods for food recovery.**
- **Determine how food will arrive at the charitable organization.** Will volunteers pick it up? Set up the best day and time that works for cafeteria staff.
- **Unwanted items from share tables also may be donated.**
- **All potentially donated food should be stored separately** in a container labeled "Food for Donation" and dated.

By donating, students learn not to throw away food and that it can be used by someone in need.

Waste-Free Lunches

With careful planning, families and students can do their part to reduce waste at school by packing a waste-free lunch.

Waste-free lunches also reduce costs in the long run. Here are some basic suggestions:

- **Choose a reusable bag** and bring your daily portions in reusable containers.
- **Choose reusable utensils.**
- **Consider avoiding disposable bottles, cans and boxes.** Choose a reusable bottle made of non-BPA plastic or stainless steel.
- **Skip individually packaged snacks** and buy items in bulk.
- **Only pack what can be eaten** or saved as a snack.



Composting

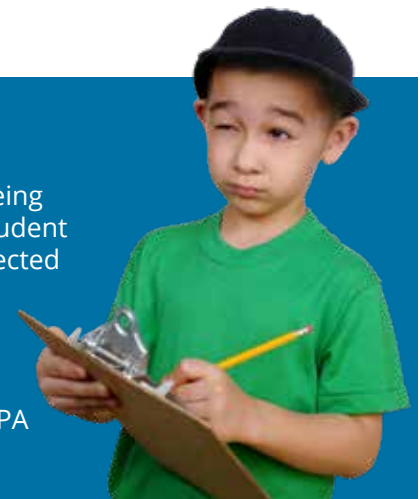
Best practices, share tables, donation and waste-free lunches will reduce but not eliminate food waste.

Schools can set up composting programs **to target any remaining food waste.**

See "Composting: A Guide for South Carolina Schools" at des.sc.gov/compost for more information.

Student Food Waste Audit

Student food waste audits are a quick way to learn how much food is being wasted, what kinds of food and why. Doing an audit – which requires student volunteers – also helps make students aware of the issue. The data collected from an audit can help schools develop strategies to not only reduce food waste, but also find ways to encourage students to eat more nutritious meals. For schools that are interested, a "Guide to Conducting Student Food Waste Audits: A Resource for Schools" is available at usda.gov/oce/foodwaste. It is a publication of the USDA, EPA and the University of Arkansas.



Don't Waste Food SC

Don't Waste Food SC is a collaborative campaign that brings together stakeholders from across the public and private sectors dedicated to sharing knowledge, coordinating resources and working together to help reduce food waste in South Carolina.



The campaign is designed to:

- **Increase awareness of the economic, environmental and social impacts of wasted food;** and
- **Inspire individuals, businesses, schools, communities and others to take action** through waste reduction, recovery and composting.

The campaign provides outreach material, technical assistance, recommended practices and other tools to stakeholders across the supply chain.

Stakeholders include farms, food banks, food rescue organizations, faith-based communities, local and state government, grocery stores, restaurants, hospitality facilities, **schools**, composters, haulers and others.

For more information about the campaign, please visit des.sc.gov/dwfs.

Don't Waste Food SC fact sheets and cards, posters and other other resources are available at des.sc.gov/dwfs. To receive printed copies, please call 1-800-768-7348.



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Did you know?

During the 2016-2017 school year, schools across South Carolina served about:

- **79 million lunches;**
- **Nearly 2 million breakfasts;** and
- **4.6 Million After-School Snacks.**

Wasted food also means wasted natural resources.

The growing, processing, packaging and transporting of food uses staggering amounts of land, water, energy, chemicals, labor and money – all lost if the food is not consumed.

SOURCE: SCDE



Resources & Contact Information

SCDES RESOURCES

Office of Solid Waste Reduction and Recycling

Telephone 1-800-768-7348
 Website des.sc.gov/recycle

Don't Waste Food SC

Website des.sc.gov/dwfsc

Farm to Institution

Website scfarmtoinstitution.com

S.C. Farmers' Markets and Roadside Markets Map

Website <https://gis.scdes.sc.gov/Farmersmarkets/mobile.html>

Take Action SC (K-12 curriculum supplement including food waste reduction lessons)

Website takeactionsc.org

OTHER SOUTH CAROLINA RESOURCES

SCDE Office of Health and Nutrition

Website ed.sc.gov/districts-schools/nutrition

Smarter Lunchrooms Movement

Website smarterlunchrooms.org

FOOD DONATION LIABILITY LEGISLATION & REGULATIONS

Bill Emerson Good Samaritan Food Donation Act

Website usda.gov/oce/foodwaste/resources/donations.htm

Retail Food Establishments: Regulation 61-25

Website <https://agriculture.sc.gov/>

S.C. Code of Laws - Title 15 - Chapter 74 - Liability Exemption for Donors of Food

Website scstatehouse.gov/code/t15c074.php

NATIONAL FOOD WASTE REDUCTION RESOURCES

EPA

Website epa.gov/sustainable-management-food

Feeding America

Website feedingamerica.org

USDA

Website usda.gov/oce/foodwaste



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