



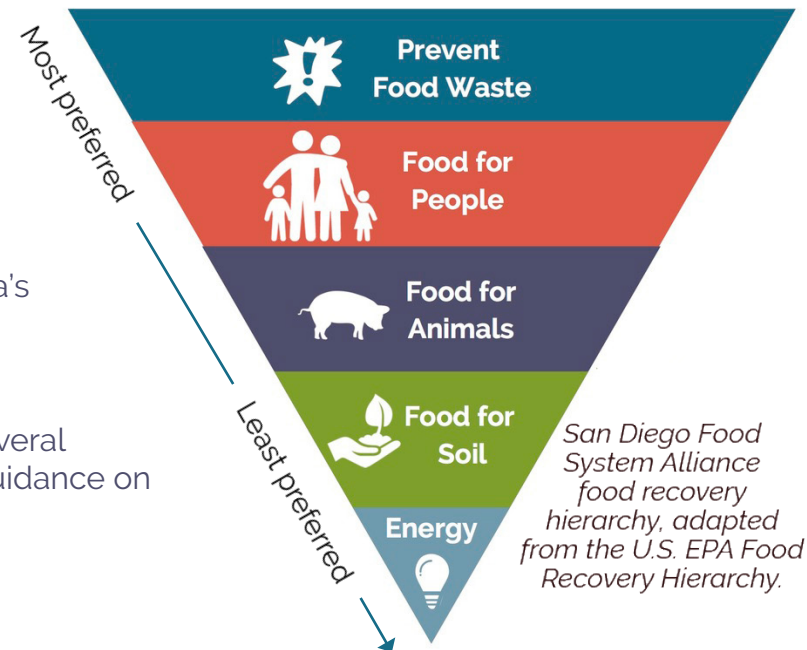
# Food Waste Reduction Made Easy

## Best Management Practices for CA and San Diego County

### Who is this document for?

This food waste reduction guidance document is part of a series aimed at helping commercial food service providers – e.g., restaurants, hotels, grocery stores, corporate cafeterias, and schools – reduce the volume of organic waste they send to landfills. Achieving California's ambitious diversion goals will take commitment from players across the food service value chain; these tips are particularly geared toward decision makers, trainers, or advisors within California's food service industry.

As shown in the diagram on the right, preventing food waste is at the top of the food recovery hierarchy. However, the most successful programs implement several strategies across the hierarchy. See the associated tip sheets in this series for guidance on food donation and source separation.



# Why reduce food waste?

Food waste is a bigger financial, environmental, and social burden than many people realize.

- **6 million tons of food waste** are landfilled across California every year; 0.5 million tons are landfilled in San Diego.
- 15% of the City of San Diego's waste stream is food waste.<sup>1</sup>
- Across the U.S., consumers, businesses, and farms spend **\$218 billion annually on food that's never eaten.**

The environmental and social benefits of reducing food waste often come with a financial upside too. Many commercial entities realize monetary savings through reduced purchasing and lower hauling costs.

Policy is also moving the dial on food waste reduction. California passed two complementary bills that mandate food waste diversion from landfills:

- **Mandatory Commercial Organics Recycling** (AB 1826, 2014) establishes the volumetric thresholds at which commercial institutions are required to divert food waste from disposal. As of January 2019, businesses generating 4 cubic yards per week of solid waste must arrange for food waste recycling service. In 2020, if statewide disposal of organics has not decreased by 50% of the level disposed in 2014, there is a trigger to reduce the threshold to 2 cubic yards.



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<sup>1</sup>Environmental Services Department, City of San Diego (2015). San Diego Zero Waste Plan: Road to Zero Waste, Next Stop 75%. Available at: [www.sandiego.gov/sites/default/files/legacy/mayor/pdf/2015/ZeroWastePlan.pdf](http://www.sandiego.gov/sites/default/files/legacy/mayor/pdf/2015/ZeroWastePlan.pdf).



## Ready to get started?

There are several methods and tools that make reducing food waste easy. Food service professionals should **implement both pre-consumer “back of house” and post-consumer “front of house” strategies to prevent wasted food**. Many of these strategies are simple, cost-effective, and provide enormous environmental and social benefits.

## Back of House Food Waste Prevention

This section highlights prevention strategies that can be used to reduce wasted food before it reaches consumers' plates. Encourage creativity and innovative methods to reduce wasted food!

### Food purchasing and procurement

- Track **purchasing history** against consumption to align food supply and demand.
- Identify foods that are **commonly wasted** and scale back or eliminate from the menu.
- Procure food of **high quality** with a longer shelf life.
- Source **imperfect produce** and help combat the 20 billion pounds of food that go to waste on farms every year.

## Sector Spotlight: Corporate Cafeteria The Genentech Café

Bon Appétit Management Company provides food management services for over 1000 cafés in 33 states across the U.S. The corporate dining hall at Genentech is a working example of measures that Bon Appétit is taking to cut food waste across their operations.

On any given day at the Genentech Café, **one to three fresh produce ingredients are sourced from the Imperfectly Delicious Program**, Bon Appétit's way of combatting the tendency for cosmetically challenged fruits and vegetables to be left on farms to rot. Working directly with farmers and produce aggregators, Bon Appétit gets those spotted apples and scarred butternut squash into their kitchens and onto people's plates. Annually, the **program saves 35,000 pounds of produce from potential disposal**.

The Genentech Café also participates in the Chefs to End Hunger program, **donating 50-60 pounds of prepared food per week**. Transport is provided by LA Specialty Produce Co., a produce distributor that picks up the Chefs to End Hunger boxes and brings them to a facility where the food is inspected before distribution to shelters or other charitable organizations.

*“To be a part of the Chefs to End Hunger program is something we do with joy and with a sense of pride. My hope is that many more restaurants and food producing establishments will take food waste seriously, and take part in either Chefs to End Hunger, or a similar organization.”*

- Chef Manager Lasse Fredrik Jensen



# Let technology help track your food waste

Rigorous tracking is a powerful method for revealing food waste trends and opportunities for improving back and front of house practices that lead to waste reduction.

- [Galley](#) is a digital platform for food production that helps manage inventory, plan shopping lists, and scale and cost intended menus.
- [Leanpath](#) is a food waste tracking platform that integrates a scale, camera, and touchscreen user interface.
- [Phood](#) is a digital platform that tracks food waste and helps facilitate food donation.
- [Winnow](#) is another digital platform for tracking food waste and costs.



## Sector spotlight: Food Waste Tracking Smart Kitchens San Diego

Smart Kitchens San Diego is an innovative food waste reduction program with 15 participants ranging from Palomar Medical Center, Petco Park, University of California San Diego, Viejas Casino, and Hilton Bayfront, among others. Smart Kitchens equips participants with **Leanpath food waste tracking hardware, software**, and back-end analytics; provides personal coaching on source reduction; and facilitates food donation partnerships between each institution and the San Diego Food Bank's partner agencies.

Palomar Medical Center is an example of the success stories coming out of the Smart Kitchens program. The facility serves nearly 4000 meals per day to over 600 patients, and after 6 months of participation had **reduced food waste by 35% and donated 5,300 pounds of food to a local food pantry.**

According to the Director of Food and Nutrition Services, Palomar was initially reluctant to take on a new program but are thrilled they took the risk. **"Leanpath is a data system; it has a scale, camera, and a touchscreen. It takes about 30 seconds to enter data about what food is being tracked, and it allows us to see the food we're wasting, what sort of food we're wasting the most, where it is coming from, and why we might be wasting it."** Palomar's employees are bought-in too – the program **"allows staff to feel like they're participating in something valuable. Nobody likes to see food get thrown away."** Tracking technology is transforming food waste generation and management norms for Palomar and other Smart Kitchen participants.

Smart Kitchens is supported by CalRecycle through California Climate Investments and administered by the San Diego Food System Alliance.





## Storage and inventory

- Ensure food is **properly handled** and stored to prevent damage and spoiling.
- Incorporate **first-in first-out storage** and rotation systems for your perishable foods.
- Tag items for **priority use** with “use first” labels.
- **Label** prepared food with descriptive language rather than simply a date (e.g., use by, freeze by, etc.).
- Avoid inventory shrinkage by taking **frequent physical inventory**.
- Perform **preventative maintenance** on refrigerators and freezers to avoid catastrophic down time and potential food loss from inadequate temperature control.

## Preparation

- Employ **root-to-stalk cooking** (using the entire vegetable) along with nose-to-tail cooking (using the entire animal) to reduce food scraps and make healthy and delicious stocks.
- Ensure that kitchen staff have proficient **knife skills**, minimizing food waste during trimming and cutting.
- Cut food uniformly for evenly cooked and **aesthetically pleasing** dishes.
- **Repurpose** surplus food or food items that are not appealing to customers (overripe bananas, bruised fruit, stale bread).
- Avoid using garnishes that do not get eaten.



## Cooking and serving

- Practice batch or **just-in-time cooking**. Preparing food in small batches improves food quality and limits overproduction.
- Offer different **portion options** to regulate the amount of food customers take. Smaller plate sizes have also been shown to significantly reduce food waste.

## Special events

- Discuss food waste prevention efforts with vendors prior to events and **communicate last minute changes with culinary staff**.
- Source food from vendors that limit waste.
- Ensure **contracts include food waste reduction** and food recovery strategies, along with solid waste reduction and recycling.
- Require **updated headcounts** prior to, and day of, the event.
- Hold post-event meetings to discuss successes and areas for improvement.



# Front of House Food Waste Prevention

There are several strategies for preventing food waste in dining areas, including **layout, food presentation, portion sizes, and education**. Enable your diners to be part of the solution!

## Dining hall layout and presentation

- In buffet and self-serve settings, encourage customers to take only what they will eat:
  - Incorporate **trayless dining and/or smaller plates** to limit the amount of food customers take;
  - Design the dining hall to **minimize lines** and discourage over-loading.
- **Avoid refreshing chafing dishes**. Instead, transfer food into smaller dishes, and use upside down trays or other items to fill empty space and make the buffet look full and inviting.
- **Minimize the depth of buffet trays** such that they can be made to look full with less food.
- Orient pastry and cookie trays horizontally in display cases to make the case appear full.
- Consider taste stations to introduce consumers to small bites of lesser known items.

## Sector spotlight: School Cafeterias San Diego Unified School District

With one simple, low-cost act, the San Diego Unified School District (SDUSD) **reduced their average salad bar waste by 66%**. That's the equivalent of **2,070 pounds of food per day** across the district's 180 schools. How did they do it? SDUSD **reduced the size of the serving pans** on their salad bar from four inches deep to two inches. This change limits the amount of food that gets put on the line, availing surplus for use the next day, or for donation.

Down-sizing serving pans was part of the District's comprehensive effort to reduce and divert food waste from landfills and to save money. SDUSD also partners with Feeding San Diego to rescue edible food from all school kitchens, and provides opportunities for schools to compost any leftover salad bar waste on-site through a Café to Compost program.



## Education and signage

Strategically place **educational signage and/or digital screens** around dining areas to increase awareness about wasted food:

- Consider a variety of messaging, from data about the amount of food wasted, to associated financial, environmental, and social costs;
- Help connect people to their food by providing information about its source and the fate of food that is not consumed.

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## Resources

### Tools

- [EPA Tools for Preventing and Diverting Wasted Food](#)
- [FDA Refrigerator and Freezer Storage Chart](#)
- [Hotel Kitchen Food Waste Toolkit \(World Wildlife Fund and American Hotel & Lodging Association\)](#)

### Guidance documents and videos

- [ConServe Program](#) (National Restaurant Association)
- [Retail Food Waste Action Guide](#) - available for restaurants, retailers, and food service providers (ReFED)
- [Food Waste Culinary Instructor Curriculum](#) (James Beard Foundation)
- [Food Waste Reduction Alliance](#)
- [Reducing Food Waste by Changing the Way Consumers Interact with Food](#) (New Venture Fund)
- [San Diego Area Food Recovery Links and Resources](#) (U.S. EPA)
- [San Diego Food System Alliance](#)
- [Solana Center for Environmental Innovation](#)
- [Storage tips](#) and [campaign assets](#) (Save the Food)
- [Using Data to Reduce Food Waste](#) (Spoiler Alert)

WHAT  
DOES  
THIS  
MEAN



### COMPOST

Anything marked with this symbol is compostable and must be placed in the compost bin. Look for this symbol at all food stations and containers.



### RECYCLE

Anything marked with this symbol is recyclable and must be placed in the recycling bin. Look for this symbol all plastics, aluminum, and glass.



### TRASH

Anything marked with this symbol is trash and must go into the trash bin. Look for this symbol on all cellophane bags, plastic or candy wrapping, and chip bags.

Thank you for your participation in  
the recycling and compost program.

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The Center for EcoTechnology (CET) helps people and businesses save energy and reduce waste. CET acts as a catalyst to accelerate the development of a vibrant marketplace to divert wasted food from the commercial and institutional sectors. We have been a leader in the wasted food reduction and diversion movement for more than 20 years, implementing some of the first wasted food composting programs in the country, and contributing to effective public policy.

We believe that better managing wasted food is critical in order to address climate change, feed more hungry people, and grow our economy. If you are a city, state or federal agency, industry group or foundation, and want to tackle the issue of wasted food, please contact us!

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