







# Food waste in the NSW Aged Care sector

Food waste occurs throughout the purchasing, storage, preparation and serving phases of an aged care facility's food production cycle. Did you know:

- **11.2** % of the sector's waste destined for landfill is food?
- on average 3.5kg of food is wasted per resident each week?
- food waste costs the average aged care facility \$1,000 per week?

The Your Business is Food Aged Care Toolkit allows managers to collect food waste data, design solutions and empower staff to make effective changes.

### Your Business is Food Aged Care Toolkit

The Your Business is Food Aged Care Toolkit is part of the NSW Government's Love Food Hate Waste program. It is part of a toolkit series to assist different business sectors reduce their food waste. It provides:

- a step by step guide to avoid unnecessary food waste
- information on common causes of food waste in the sector and useful resources to gain a deeper understanding of why food is wasted in facilities
- tips to prevent food waste, reduce operational costs and environmental impact
- a food waste prevention project planning template for recording food waste data and a food waste action plan.

### Benefits of avoiding food waste:

- cut operational costs and save money on buying, preparation and disposal
- improve staff job satisfaction
- improve your facility's environmental performance.

### Four steps to saving food waste in aged care facilities:

1 Get ev	eryone ord	2	Measure your food waste	3	Develop an action plan	4	Celebrate success
Engage all staff at the facility to tackle food waste together			rd between three and n days of food waste	prod	wo to three actions for luction, receiving and ery kitchens	•	eat food waste review neasure the reduction



# How long will the program take?

It will take just a few weeks to work through the toolkit, with the actions and changes you make becoming ongoing for the longterm.

The first step is undertaking a three to seven-day food waste review to establish baselines and inform action plans. Repeating the food waste review after about six weeks will enable you to measure your success.

Setting up a successful food waste strategy requires about **five to 10 hours** of total staff time per week, with daily or weekly leadership support at staff meetings and daily activities to ensure the project's success.

### How much will it cost?

This depends on what food waste prevention actions your facility plans to implement. This toolkit is a step-by-step guide. You may tailor it to suit your needs, budget and staff capacity.

Ultimately you will be saving money with improved operational efficiency and food waste reductions.

# What are the critical steps before you start?

Before launching the project, you will need to:

- ensure senior management buy-in
- form a working group including the centre manager, executive chef and procurement manager
- choose pilot facilities (for larger aged care providers with many sites)

- visit the food supply and service areas you plan to work with
- identify food waste champions for each facility
- agree on key dates for pre and post food waste reviews and action plan implementation.

# Managing staff expectations and potential resistance

Staff engagement is critical to the success of food waste prevention projects. Managing staff concerns and expectations will lower any resistance to change. All departments, kitchens and staff need to work together on the shared goal of reducing food waste. Run an effective food waste avoidance program by:

- · hosting a kick-off meeting
- providing regular progress updates and reminders at staff meetings
- share the benefits of action with staff, like helping the environment, supporting sustainability and saving money.

Tip: Schedule regular check-in sessions to demonstrate management's commitment to the project





# How to conduct a food waste review

- · Identify different types of food waste.
- · Collect and measure food waste.
- Fill out the food waste data collection sheets (attached).

### Different types of waste

A food waste review is essential to understand where food is wasted in your facility. The data will clarify which items require attention and enable you to design solutions to reduce waste and start saving money.

It's important for staff to know the different types of food waste. This will allow you to conduct an effective food waste review.

### Aged Care facilities typically have five types of food waste:

Туре	Description			
Spoilage waste	Any food or ingredients that are thrown away from cupboards, storage areas and fridges including bruised fruit, stale bread, spoiled produce, goods that are past their expiry date			
Preparation waste	Ingredients that are discarded during the meal preparation, including peelings, off-cuts, dropped/burnt food, meat/fish, bones etc.			
Tray waste	Unserved food that remains on the serving trays			
Plate waste	Food that is left on residents' plates			
Liquid/texture modified waste	Excess liquid from leftover beverages, e.g., milk, yogurt and or texture modified/ purified food and smoothies for patients under palliative care			

### Where does food waste occur?

Aged Care facilities operate from different types of kitchens. Below is an example of the different areas within a facility and types of food waste likely to be found.

**Production kitchens** are where food is prepared. The main types of waste here include spoilage, preparation and liquid waste.

**Receiving kitchens** are where pre-made meals are delivered, re-heated and assembled before being served to residents. Some simple meals, like

sandwiches, fruit salads and fresh vegetables may be prepared in receiving kitchens too. These kitchens may have spoilage and preparation waste.

**Servery kitchens** are where meals are served, and plate waste is collected. Typical cupboard and fridge goods like bread and drinks are also kept here. Servery kitchens are the final step of the food production cycle and are where most food wastage occurs in the form of spoilage, tray, plate and liquid waste.

Given the different types of food waste and kitchens, it is recommended that each kitchen area conducts a separate food waste review.





### Staff training

Successful separation and measurement of food waste can only happen if staff know about the changes being set up. Provide staff with the motivation, knowledge and skills needed to fill in data collection sheets accurately. Set a time and date for facility-wide staff training or ensure training is provided on shift.

**Tip:** Make sure absent staff also receive training.

#### Scales or markers

You will need scales or marker pens to measure the food waste by weight or volume. Luggage scales are an easy, cheap and useful tool for measuring food waste. Alternatively, you can record the amount of food waste by volume. You can improve the data accuracy by marking inside the bucket with "¼, ½, ¾ and full".

**Tip:** Assign a supervisor to be in charge of collections and identify champions to support the process and engage other staff.

#### **Buckets to collect food waste**

We recommend you separate food waste into different containers or buckets to measure spoilage, preparation, tray, liquid and plate waste.

**Tip:** You can use any 5-15 litre empty container with a handle that is easy to carry and weigh. Label each container with the type of food waste for collection to avoid confusion.

#### Food waste data collection templates

Distribute data collection templates to each kitchen. They are included in this tool kit as a separate sheet for each kitchen type.

### Establish a collection period

You need at least three to seven days to establish an accurate baseline. Measure food waste from all kitchens at the same time. It's important to capture both weekdays and weekends across all kitchens.

# Step-by-step instructions to measure food waste

To complete the food waste review, follow the instructions:

- set up buckets to collect different types of food waste i.e. spoilage, preparation, tray, liquid and plate waste
- set zero on scales\* to exclude the weight of waste containers or use volume to record food waste
- record food by waste weight or volume on the data collection sheets
- add up food waste volume or weight for each type at the end of the day
- add up food waste volume or weight for each type at the end of the review period.

Tip: record the number of ordered meals and number of diners to determine future meal planning, food waste per resident and better enable you to assess any financial loss.



# Look for opportunities to avoid food waste

You can:

- use the food waste data to decide which areas to target, based on the highest volumes
- identify types and common causes of food waste
- discuss findings with staff to seek their input and solutions
- allow three to six weeks to implement the actions and maintain momentum
- · repeat food waste review to celebrate success.

**Tip:** Set only two or three specific, realistic and achievable actions for each kitchen.

#### **Track improvements**

- Repeat a three to seven day food waste review after the action implementation.
- The follow-up food waste review allows you to measure success and identify more improvement opportunities.

### What does the food waste data tell you?

The data will allow you to prioritise avoidance effort when you know:

- · which days and meals generate the most waste
- what are avoidable food waste items for each different kitchen
- how much food waste is generated per resident
- food waste baseline and potential savings.

**Tip:** Share with the key staff of the area and discuss the do-able actions.

#### Your opportunities to save money

- Prioritise food waste reduction actions that are easy to implement and effective.
- Identify types and common causes of high food waste per kitchen area and design solutions for each.
- Share the food waste data in staff meetings to increase engagement and input to solutions
- · Identify champions to lead on changes.





The food waste review provides a clear indication of how and where food waste is happening. Below is a summary of commonly wasted foods and tips about how to reduce your facility's food waste.

Spoilage waste	
Common items	Milk, bread, yogurt, cream, ham, fruit & vegetables
Cause of waste	<ul><li>Did not comply with food safety requirement</li><li>Over-ordering and/or ineffective storage</li></ul>
Top tips	<ul> <li>Re-enforce food safety practices like labelling food once opened</li> <li>Use signage, visual aids and examples of food safety practices and storage tips in kitchen</li> <li>Review procurement or ordering quantities</li> </ul>

Preparation waste	
Common items	Offcuts, leftovers from texture modification or packaging machinery, over produced portions or ingredients, peels and bones
Cause of waste	<ul> <li>Incorrect portion count / over production</li> <li>Lack of culinary training/ tight schedule/ bad planning</li> <li>Unaware of the quantity of surplus ingredients/food or how to use them up</li> </ul>
Top tips	<ul> <li>Where possible, use pre-cut fruit and vegetables</li> <li>Review the production procedure to use up surplus food like mashed potato in soups or other dishes</li> <li>Basic culinary training</li> </ul>

Tray waste	
Common items	Over-produced menu items that remained unserved
Cause of waste	Incorrect forecasting of resident numbers at each mealtime
Top tips	<ul> <li>Shorten the meal order lead time</li> <li>Effective communication with kitchen when activities or residents' schedules have changed</li> <li>Regular feedback to production kitchen to adjust their supply</li> </ul>



Liquid waste / texture modification waste				
Common items	Tea, coffee, juice, milk, yoghurt, or thickened fluids such as smoothies			
Cause of waste	<ul> <li>Over-filled the cup</li> <li>Residents did not finish the drink</li> <li>Spillage</li> <li>Past expiry date or did not store food correctly</li> </ul>			
Top tips	<ul> <li>"First in, first out" practice to avoid liquid waste</li> <li>Fill the cup to three quarters only and welcome refills</li> <li>Order less, but more frequently</li> </ul>			

Plate waste	
Common items	Unfinished meals and side dishes like bread, mashed potatoes, veggies
Cause of waste	<ul><li>Serving portion sizes are too big</li><li>Residents did not like the dish or certain ingredients</li></ul>
Top tips	<ul> <li>Use visual aids and diagrams in the servery area to help staff with portioning</li> <li>Flexibility with portion sizes to meet resident's requests</li> <li>Regular feedback from residents on menu preferences</li> </ul>



# Celebrate successes!



After the set-up period, repeat the food waste review to measure the success of the action plan. This will identify:

- · what actions have worked well and what haven't
- more improvement opportunities
- opportunities to recognise champions and embed changes in other facilities.

**Tip:** Carry out a follow-up food waste review on the same day as previous review to ensure better comparability with the previous data

## Why should you celebrate successes with the team?

Their contribution has made a difference. Use a team meeting or internal communications to congratulate them on their achievements to:

- increase staff engagement in avoiding food waste
- encourage pride in their work and further improvement.

**Tip:** Data can be presented in many ways. Think about the best way to make the data meaningful to different staff







When food waste cannot be avoided, food donation or recycling food through composting is a much better and cheaper option than sending it to landfill.

Contact your local waste service provider for an organics collection service and think about setting up an on-site composting unit or worm farm that suits your site.

You can also find a food waste collection service provider through businessrecycling.com.au or contact your current waste collection provider or local council for more information.

Composting or worm farms are great ways to manage food that can't be eaten as the waste is broken down into nutrient-rich compost. Check with your local council before setting it up to make sure you have followed environmental guidelines.

Composting provides many benefits, including a reduction in methane emissions and improved soil health.

Why donate food?

Every month in NSW, food rescue agencies help 100,000 people in need, almost a quarter of them children. Your local food recovery charity can collect your surplus food that is still fit for human consumption on a regular basis or as a one-off service and distribute it to those in need.

Food donors are protected under the *Civil Liability Amendment (Food Donations) Act 2002*. The Act limits the liability of individuals and businesses that donate food, providing certain food safety conditions have been met.







This planning form will assist you to collect essential data and make critical decisions before launching the project in your facility. One page per site. Three key steps to complete the journey are pre & post food waste review and action plan implementation.

waste review and action plan implementation.							
Name of participating centre							
Contact name							
Contact number  Agree to lead on this avoidance project							
Number of residents  Average number of meals prepared/ cooked on site per day							
Average number of meals delivered to the centre per day							
Is current food management practice high, medium or low?  Date to kick off- staff engagement							
What is your preferred food waste collection method (please click)	by volume by weight						
How many days will you review your food waste (please click)							
What is your current food waste disposal method (please click)	Garbage bin		l waste ection	Onsite composting or process			
What types of kitchens are involved in food provision/preparation in your facility (please click)	Production kitchen	Rece kitch	eiving nen	Servery kitchen			
Current food waste avoidance practices:	First in first out Pre-cut Check pantry						
	Order less but more frequently	Food	l safety	Training			

If multiple facilities take part in this project, consistent food waste review methodology will allow you to compare and provide insights for future business operations.





## Servery kitchen

Day and date			
Spoilage waste	Items	Quantity by weight or volume	Reason (out of date, poor quality, opened with no label etc.)
From cupboard, storage room or fridge			
	Total in kilograms or litres		
Tray waste	Menu Items	Unserved portions	Note
Menu items that were overproduced and not served			
	Total in kilograms or litres		
Plate and liquid waste	Plate scrapings	Quantity by weight or volume	Note
From residents or visitors' plates or cups	Bucket 1 Bucket 2 Bucket 2		
	Total in kilograms or litres		



# Receiving kitchen

Day and date			
Spoilage waste	Items	Quantity by weight or volume	Reason (out of date, poor quality, opened with no label etc.)
From residents or visitors' plates or cups			
	Total in kilograms or litres		
Preparation waste	Menu Items	Unserved portions	Note
Un-used food from preparation in the kitchen			
	Total in kilograms or litres		



# Production kitchen

Day and date			
Spoilage waste	Items	Quantity by weight or volume	Reason (out of date, poor quality, opened with no label etc.)
Spoilage waste			
	Total in kilograms or litres		
Preparation waste	Items	Quantity by weight or volume	Note
Un-used food from preparation in the kitchen			
	Total in kilograms or litres		
Texture modification waste	Items	Quantity by weight or volume	Note
	Total in kilograms or litres		



Facility name:		Date:	
Collection period:			
Food waste collection method:	By weight	By volume	Bucket size:

Site location name <sup>1</sup>	Site 1	Site 2	Site 3	Site 4	TOTAL
Waste Grand Total (kilograms or litres)					
Number of meals ordered					
Food waste per resident					
Spoilage/food waste (%)					
Preparation/tray waste (%)					
Plate/liquid waste (%)					

 $<sup>^{\</sup>rm 1}\!\text{Site}$  location name may include floor number, central kitchen, delivery dock etc.

### **Action Plans**

Production Kitchens - Actions	
Name of person responsible	Action period:
	1
	2
	3

### **Action Plans continued**

Serveries - Actions	
Name of person responsible	Action period:
	1
	2
	3
Storage - Actions	
Name of person responsible	Action period:
	1
	2
	3
Action plan completio	on Date:
Next food waste revie	
110/10/10/10	
Notes	

#### Disclaimer

This action plan was compiled in good faith, exercising all due care and attention, however it may contain errors. Neither the NSW Department of Planning, Industry and Environment nor the Assessor accepts responsibility for any inaccurate or incomplete information supplied by third parties. No warranty or representation is made about the accuracy, completeness or suitability of the information contained in this action plan for any particular purpose. The Assessor and the DPIE disclaims liability for any act or omission made in reliance on this action plan and any consequences of any such act or omission. You should seek appropriate advice when applying the information to your specific needs.







**NSW Aged Care** sector generates

**15,23** 

tonnes of food waste every year:

- on average **3.5kg** of food is wasted per resident each week
- · At \$4 per kg, that costs an average facility **\$1,000** a week

### Most common food waste items

- bread, biscuits



- spoiled fruit
- unserved pre-made meals
- unfinished drinks



## Quick wins tips

 review tea time and meal serving schedule



- shorten meal order lead time
- remember to seal and date food once it has been opened
- conduct regular staff training



If you need help, contact us. info@lovefoodhatewaste.nsw.gov.au