THE BEST PRACTICE GUIDE FOR
Early Childhood Education and Care Food Environment

Strategies for Reducing Food Waste and its Environmental Impact

The following strategies, together with common considerations, challenges and potential solutions, are designed to support food waste reduction in your service and the environmental impact of food waste once it has occurred.

Reducing food waste strategies

Effective communication

A key cause for serving waste (food prepared but not plated) is a lack of chef/cook being informed about the number of children in attendance on the day. Having a system in place (e.g., notifying the chef by a certain time (e.g., 8:30 am) of the number of children in each room) can ensure that the cook prepares the right amount of food.

Educators should also notify the cook if children have participated in cooking experiences, celebrations, or special food events during the day. These activities can significantly affect children's appetite and the amount of food required, helping to further reduce serving waste.

Ask for family input to find out what children enjoy eating at home and include some of these meals in the menu.

Menu planning

Careful menu planning, considering serving sizes for children, can ensure that sufficient food is prepared for the children without preparing too much food.

Develop flexible menus that can be adapted to incorporate ingredients nearing their best-before or use-by date, while maintaining food safety requirements.

When new foods are introduced to children, introduce them in smaller quantities alongside familiar foods.

Check products in the pantry before menu planning and purchasing. Making careful choices in meal planning can avoid "out of date" scenarios.

Include a designated section on displayed menus (as required by regulations) to allow for minor menu modifications based on ingredient use-by dates. This can support greater flexibility while maintaining compliance.

Untouched leftover food can be given to staff or families. In some services this practice is done as a community building practice.

Meal preparation

Be mindful when preparing produce, to only waste what is absolutely necessary. For example, when preparing strawberries only remove the green part rather than cutting a portion of the strawberry.

Present food attractively (e.g., small quiches or cutting of fruit instead of whole fruit) to make it more appealing for children which may lead to less waste.

Storage approaches

Ensure correct storage of items. For example, freeze extra supplies of bread, keep herbs fresh by storing them in water, line airtight containers containing pre-cut vegetables or berries with paper towels.

Regional/remote services: Maintain frozen food supplies to reduce spoilage and improve menu flexibility.

Mealtime practices

It is important to note that children are still developing their taste preferences, and their appetite differs across days. Therefore, in the ECEC setting it is reasonable to expect that there will be plate waste, some days more than others. It is very important that children's autonomy and hunger and 'had enough' cues are being respected. Therefore, it is important not to ask children to finish their plates to save on food waste.

Creating a calm, unhurried mealtime environment supports children to recognise and respond to their hunger and 'had enough' cues and may also reduce plate waste by allowing children enough time to finish eating if they choose.

Family-style serving of meals where children can serve themselves what they think they will eat, can reduce plate waste.

Encourage children to take smaller portions and then come back for seconds or thirds if they are still hungry.

Pour small amounts of milk from a jug that children can top up to save on milk waste.

Lunchbox services

Encourage parents to pack enough food for their child but in appropriate child sized portions.

Encourage parents to involve children in lunchbox planning and packing.

Provide a fridge to store food appropriately or encourage lunchboxes to be packed with appropriate cold storage to last throughout the day.

Child involvement

Involve children when planning meals at the service.

Involve children in reflecting on food waste by discussing which foods they enjoyed, and which foods were left uneaten. Discuss ways that similar foods can be prepared to ensure repeated exposure whilst children's taste preferences are developing. This information can help inform future menu planning while promoting children's agency and participation.

Repurposing unused food or leftovers

Rice, pasta and quinoa can be used in soups, salads and bakes.

Unused fruits and vegetables can be used to make baby purees, stock, muffins or dips.

Unused herbs can be used to flavour different dishes or make pesto.

Leftover cooked vegetables, grains, or herbs can be incorporated into soups, bakes or dips.

Leftover yoghurt can be used for smoothies/icy poles or 2-ingredient pizza dough.

Vegetables like cauliflower, broccoli and cabbage, with waste from the stems, can be used to make stock cubes. To do this, add garlic and herbs to vegetable leftovers, cook, blend and freeze in a shallow pan lined with parchment paper. Cut into cubes and store in an airtight container in the freezer for up to 3 months.

Some shop bought vegetables can be regrown once the tops have been cut and the base replanted e.g., spring onions, celery, herbs.

Milk that is about to go out of date can be used to make custard or white sauce for pasta dishes.

Reducing environmental impact strategies

Food waste management

For services with enough space for a compost set up, fruit and vegetable scraps can be added to the compost bin.

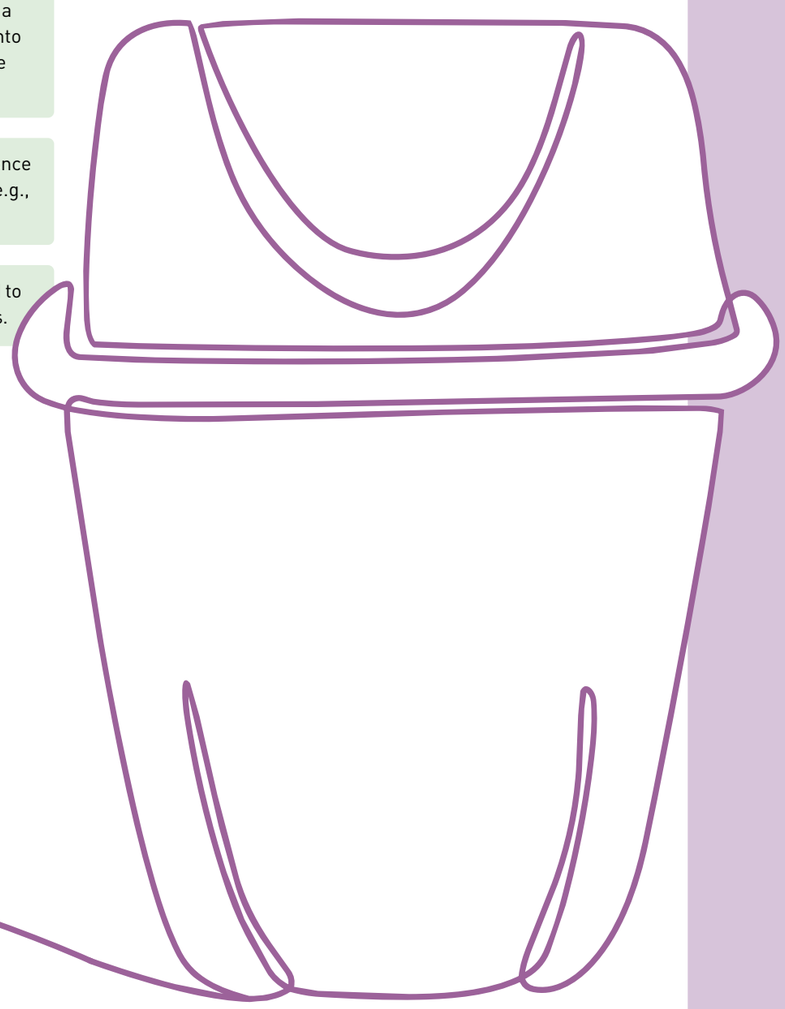
Separate food waste from other waste at the service. Set up separate small waste bins for food in the kitchen or outside of rooms.

Bokashi units can be useful for rodent and odour free composting.

Child involvement

Children can be encouraged to add their plate waste to dedicated food scrap buckets. This can form part of educational experiences where children can learn about and be actively involved in managing food waste in their service.

A worm farm can be useful both for managing food waste and as part of a curriculum experience for children. Children can be involved in turning kitchen scraps into fertiliser for the service veggie patch, garden, or potted herbs.



⚠ **When implementing these strategies services should ensure they continue to meet the relevant food safety, food allergy and regulatory requirements.**

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A project funded by Healthway and delivered by Edith Cowan University.

EARLY YEARS LEARNING FRAMEWORK
Outcome 1, Outcome 2, Outcome 3, Outcome 4, Outcome 5

NATIONAL QUALITY STANDARD
QA1, QA6

www.ecec-best-practice-guide.com.au

This information has been sourced from the Best Practice Guide for Early Childhood Education and Care Food Environment.

Strategies for reducing food waste and its environmental impact

Strategies		Challenges/considerations	Potential solutions
Effective communication	A key cause for serving waste (food prepared but not plated) is a lack of chef/cook being informed about the number of children in attendance on the day. Having a system in place (e.g., notifying the chef by a certain time (e.g., 8:30 am) of the number of children in each room) can ensure that the cook prepares the right amount of food.	Limited communication between educators and kitchen.	Service leader-supported systems in place for effective/streamlined cross-team collaboration and whole of service approach to sustainability.
	Educators should also notify the cook if children have participated in cooking experiences, celebrations, or special food events during the day. These activities can significantly affect children's appetite and the amount of food required, helping to further reduce serving waste.	Staff workload.	Effective communication and collaboration can help reduce individual staff workload. For example, during food-based experiences, cooks and educators can work together so that foods prepared are incorporated into the experience, rather than the cook preparing a separate meal that is not used while the educator independently leads the activity. By working together, both staff members can save on time and workload.
Menu planning	Ask for family input to find out what children enjoy eating at home and include some of these meals in the menu.		
	Careful menu planning, considering serving sizes for children can ensure that sufficient food is prepared for the children without preparing too much food.	Lack of menu planning skills.	
		Young children's appetites and food preferences can vary from day to day, making it difficult to predict how much food to prepare.	
	Develop flexible menus that can be adapted to incorporate ingredients nearing their best-before or use-by date, while maintaining food safety requirements.	Limited paid hours allocated to menu planning and on-the-day adjustments.	Allocated time for recipe adjustment.
	When new foods are introduced to children, introduce them in smaller quantities alongside familiar foods.		
	Check products in the pantry before menu planning and purchasing. Making careful choices in meal planning can avoid "out of date" scenarios.	Pantry and fridge management skills.	Training/support in food service operation skills, including pantry management.
	Include a designated section on displayed menus (as required by regulations) to allow for minor menu modifications based on ingredient use-by dates. This can support greater flexibility while maintaining compliance.		
	Untouched leftover food can be given to staff or families. In some services this practice is done as a community building practice.		
Involving children in menu and meal planning and food waste discussions	Involve children when planning meals at the service.		
	Involve children in reflecting on food waste by discussing which foods they enjoyed, and which foods were left uneaten. Discuss ways that similar foods can be prepared to ensure repeated exposure whilst children's taste preferences are developing. This information can help inform future menu planning while promoting children's agency and participation.		
Storage approaches	Ensure correct storage of items. For example, freeze extra supplies of bread, keep herbs fresh by storing them in water, line airtight containers containing pre-cut vegetables or berries with paper towels.	⚠ **For regional/remote services** Products may arrive with a shorter shelf life due to time travelling to service location.	Coordination with food suppliers may be needed.
	⚠ **For regional/remote services** Maintain frozen food supplies to reduce spoilage and improve menu flexibility.	Remote services may experience power outages or delays in power restoration, increasing the risk of food spoilage.	Develop contingency plans for power interruptions, including consideration of backup power sources (e.g. generators) where appropriate. Monitor freezer temperatures and follow food safety guidance after outages.
	⚠ **For regional/remote services** Prepare and preserve fresh produce when deliveries arrive by washing, cutting and freezing fruits and vegetables for later use.	Limited freezer space may limit this practice in regional/remote settings.	Coordination with food suppliers may be needed.
		Limited time for staff to prepare and preserve items.	Allocated dedicated time for kitchen staff to prepare and store produce as soon as deliveries arrive. This can save on the costs of food that would be wasted if spoiled.
Meal preparation	Be mindful when preparing produce, to only waste what is absolutely necessary. For example, when preparing strawberries only remove the green part rather than cutting a portion of the strawberry.		
	Present food attractively (e.g., small quiches or cutting of fruit instead of whole fruit) to make it more appealing for children which may lead to less waste.		
Repurposing unused food or leftovers	Rice, pasta and quinoa can be used in soups, salads and bakes.	Recipe/menu modification skills.	
	Unused fruits and vegetables can be used to make baby purees, stock, muffins or dips.	Limited paid hours allocated to menu planning and on-the-day adjustments.	Allocated time for recipe adjustment.
	Unused herbs can be used to flavour different dishes or make pesto.		
	Leftover cooked vegetables, grains, or herbs can be incorporated into soups, bakes or dips.		
	Leftover yoghurt can be used for smoothies/icy poles or 2-ingredient pizza dough.		
	Vegetables like cauliflower, broccoli and cabbage, with waste from the stems, can be used to make stock cubes. To do this, add garlic and herbs to vegetable leftovers, cook, blend and freeze in a shallow pan lined with parchment paper. Cut into cubes and store in an airtight container for up to 3 months.		
	Some shop bought vegetables can be regrown once the tops have been cut and the base replanted e.g., spring onions, celery, herbs.	Limited space for growing vegetables.	Limited space does not have to be a barrier to gardening. Herbs, vegetables and other plants can be successfully grown in small pots, containers or on windowsills.
	Milk that is about to go out of date can be used to make custard or white sauce for pasta dishes.		
Mealtime practices	It is important to note that children are still developing their taste preferences, and their appetite differs across days. Therefore, in the ECEC setting it is reasonable to expect that there will be plate waste, some days more than others. It is very important that children's autonomy and hunger and 'had enough' cues are being respected. Therefore, it is important not to ask children to finish their plates to save on food waste.	Lack of knowledge/skills in responsive feeding practices.	
	Creating a calm, unhurried mealtime environment supports children to recognise and respond to their hunger and 'had enough' cues and may also reduce plate waste by allowing children enough time to finish eating if they choose.		
	Family-style serving of meals where children can serve themselves what they think they will eat, can reduce plate waste.		
	Encourage children to take smaller portions and then come back for seconds or thirds if they are still hungry.		
	Pour small amounts of milk from a jug that children can top up to save on milk waste		
Lunchbox services	Encourage parents to pack enough food for their child but in appropriate child sized portions.	In lunchbox services, services have limited control over the types and quantities of food packed by families.	
	Encourage parents to involve children in lunchbox planning and packing.		
	Provide a fridge to store food appropriately or encourage lunchboxes to be packed with appropriate cold storage to last throughout the day.	This strategy may not be feasible in some settings.	
Food waste management	For services with enough space for a compost set up, fruit and vegetable scraps can be added to the compost bin.	Limited space – some services may not have sufficient outdoor space to support composting systems or worm farms.	Partner with the local community garden/school/church/etc to see if they are able to take and compost the service's food waste – that way no large compost bins are needed on-site.
			Connect with local council food and organics collection service if available.
		No council support for garden organics – particularly in regional/remote areas.	If feasible, use a paid composting service to manage and compost food waste.
		Costs – establishing composting systems, purchasing bins, or accessing commercial collection services may involve additional costs.	Apply for grants, contact your local hardware store or garden centre and see if they can donate any supplies, or ask for donations from families.
	Separate food waste from other waste at the service. Set up separate small waste bins for food in the kitchen or outside of rooms.	Staff time/workload – implementing and maintaining food waste management practices may place additional demands on educators and cooks who have competing responsibilities.	
	Bokashi units can be useful for rodent and odour free composting.	Costs – Bokashi units come at an additional cost.	Apply for grants, ask for donations from families or run a fundraiser.
Child involvement	Children can be encouraged to add their plate waste to dedicated food scrap buckets. This can form part of educational experiences where children can learn about and be actively involved in managing food waste in their service.		
	A worm farm can be useful both for managing food waste and as part of a curriculum experience for children. Children can be involved in turning kitchen scraps into fertiliser for the service veggie patch, garden, or potted herbs.		

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