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

# Strategies to Support Biodiversity and Minimising Plastic

The following strategies, together with common challenges and potential solutions, are designed to support biodiversity and support your service with choosing food with minimal or no plastic packaging.

## Biodiversity strategies

### Food education

Garden projects and understanding different species of plant and animals can increase children's understanding of biodiversity.

Children's activities/experiences/learning activities can involve understanding where food comes from, gardening projects, stories and games about growing, seasons and caring for living things.

### Menu planning

Focus on whole cuts of meat, poultry and fish in place of highly processed meats (e.g., sausages, nuggets, deli meats).

Where possible, plan diverse menus where fruits, vegetables, grains and legumes are rotated – this can support diverse farming systems.

When making slices or muffins, recipes can be adapted by adding chia seeds, sunflower seeds, Greek yoghurt, wheat germ, oatmeal, grated or mashed vegetables or fruits. This can add nutritional bulk and variety.

### Food procurement

Focus on purchasing seasonal produce where available.

For fish, it is preferable to serve fish with a sustainability certification on the label such as the blue fish tick logo certified by the Marine Stewardship Council or the Aquaculture Stewardship Council (ASC) label for responsibly farmed seafood. In addition to a variety of suppliers, seafood with these labels are available in some supermarkets in Australia for services that are limited to supermarket purchasing.

## Minimising plastics strategies

### Food education

Explore where food comes from and how it is packaged, how some packaging can help protect food and reduce spoilage. Compare different types of packaging and learn about reusing/recycling.

Where plastic packaging is unavoidable e.g. strawberry punnets – recycle packaging for learning activities.

Recycle locally if available.

Explore together with the children different ways to store/carry food. Look at plastic alternatives for packaging.

### Food procurement

Where possible, purchase food in bulk to reduce packaging – this can also reduce food costs.

Where possible, opt for wholesale produce packaged in boxes.

When purchasing from supermarkets, opt out of plastic bags for vegetables and fruit.

Request minimal packaging when ordering online from a supermarket.

Purchasing meat from a butcher can reduce food packaging.

## Defining the principles

**Biodiversity:** The guiding principles refer to preserving biodiversity, which includes biodiversity of crops, livestock and aquatic resources, with consideration of choosing foods that are not derived from overfishing or overhunting.

In the ECEC context, supporting biodiversity applies to meal planning, food procurement and food education.

**Minimising the use of plastics** and derivatives in food packaging is an important principle, as these can place higher demands on natural resources.

In ECEC, minimising plastic food packaging relates to food purchasing strategies and can be embedded into Food Education or centre policy and procedures or quality improvement plan. Choosing food without packaging or biodegradable/recyclable packaging can reduce plastic waste entering landfill and, in some cases, may also be cheaper.



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

EDITH COWAN UNIVERSITY
GOVERNMENT OF WESTERN AUSTRALIA
healthway

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

NATIONAL QUALITY STANDARD
QA1, QA3

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 to support biodiversity and to reduce plastic packaging in ECEC

## Biodiversity strategies

| | Strategies | Challenges/considerations | Potential solutions |
|---|---|---|---|
| Meal planning | Focus on whole cuts of meat, poultry and fish in place of highly processed meats (e.g., sausages, nuggets, deli meats). | Higher costs of whole cuts of meats and whole foods in certain circumstances. | Add legumes to good quality meat to reduce costs and reliance on animal products for protein – e.g. instead of using 2kg of mince for a bolognese sauce, substitute half of the meat with 4 cans of brown lentils, or 2 cups of dry lentils (washed and checked for debris). |
| | | | Opt for more affordable cuts of good quality meat (for example chicken thigh over chicken breast or good quality meat cuts suitable for slow cooking) to save on costs. |
| | Plan diverse menus where fruits, vegetables, grains and legumes are rotated – this can support diverse farming systems. | Skills and time required for preparing meals from scratch. | Meals containing whole foods instead of highly processed options can include easy to prepare recipes such as stews and soups. |
| | | | Batch cooking and freezing foods (with food safety measures in place) can save on time – e.g. lasagna or other bakes. |
| | | | Cook training in meal planning and preparation. |
| | | **For regional/remote services:** Due to limited availability/access issues there may be less choice for planning diverse, varied menus, especially with regards to fresh produce. | Buy produce when it is in season and abundant, then preserve any excess by freezing or making preserves. |
| | When making slices or muffins, recipes can be adapted by adding chia seeds, sunflower seeds, greek yoghurt, wheat germ, oatmeal, grated or mashed vegetables or fruits. This can add nutritional bulk and variety. | | |
| Food procurement | Focus on purchasing seasonal produce where available. | Limited availability in regional/remote areas. | Maintaining a store of options for whole foods, like frozen or tinned fruits and vegetables, is a feasible strategy to diversify menus. |
| | For fish, it is preferable to serve fish with a sustainability certification on the label such as the blue fish tick logo certified by the Marine Stewardship Council or the Aquaculture Stewardship Council (ASC) label for responsibly farmed seafood. In addition to a variety of suppliers, seafood with these labels is available in some supermarkets in Australia for services that are limited to supermarket purchasing. | Availability – these products may not be available in all areas. | Some products in major supermarkets can be sustainably sourced. |
| | | Existing food procurement contracts, for example only purchasing from one supermarket may limit the types of products that can be purchased. | |
| Food education | Garden projects and understanding different species of plant and animals can increase children's understanding of biodiversity. | Limited space for a garden. | |
| | | Consider risks when planning gardening projects. | |
| | Children's activities/experiences/learning activities can involve understanding where food comes from, gardening projects, stories and games about growing, seasons and caring for living things. | | |

## Minimising plastics strategies

| | Strategies | Challenges/considerations | Potential solutions |
|---|---|---|---|
| Food procurement | Where possible, purchase food in bulk to reduce packaging – this can also reduce food costs. | Storage space | Use stackable containers with clear labelling to maximise available space. |
| | | | Focus on high use or shelf stable items for bulk purchasing (e.g., legumes, rice, oats, tinned food). |
| | | | Training/support can include support on safely handling bulk food purchases. |
| | | **For regional/remote services:** Power supply issues may make it risky to buy bulk cold/ frozen items. | 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. |
| | Where possible, opt for wholesale produce packaged in boxes. | **For regional/remote services:** Supplier availability may limit packaging reduction options. | |
| | When purchasing from supermarkets, opt out of plastic bags for vegetables and fruit. | | |
| | Request minimal packaging when ordering online from a supermarket. | | |
| | Purchasing meat from a butcher can reduce food packaging. | | |
| Food education | Explore where food comes from and how it is packaged, how some packaging can help protect food and reduce spoilage. Compare different types of packaging and learn about reusing/recycling. | | |
| | Where plastic packaging is unavoidable e.g. strawberry punnets – recycle packaging for learning activities. | | |
| | Recycle locally if available. | | |
| | Explore together with the children different ways to store/carry food. Look at plastic alternatives for packaging. | Plastic wrap may be commonly used to protect prepared foods and items in fridges. | Plastic alternatives for packaging can include compostable vegetable bags, silicone wraps, vegan wraps as an alternative to beeswax wraps, recyclable containers and serving dishes. In the tropics in Australia, banana leaves make wonderful food covers. |
| | | | Sturdy reusable containers in a range of sizes with lids can be used instead of plastic wrap. |



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