



Wipe out Waste



Uneaten Food Waste

Overview

This resource aims to develop students' knowledge and understanding around wastage of uneaten food. Students consider reasons that uneaten food may be wasted and impacts on the environment when food is placed in the landfill bin. By exploring how uneaten food wastage can be reduced, students are able to assess their own actions and decisions.

Learning intentions

Students will explore the following:

- Why do people waste uneaten food?
- Facts and figures regarding uneaten food wastage in Australia.
- What are the impacts of uneaten food placed in the landfill bin?
- What resources are involved in food production?
- How can we reduce uneaten food waste?
- What recipes can we create to reduce food wastage?



Uneaten food commonly found in school Bin Materials Audits.

Suggested Australian Curriculum connections

- **General Capabilities:** Literacy, Numeracy, Critical & creative thinking , Ethical understanding
- **Learning areas:**
 - ▽ English Year 4, 5, 6, 7 (language)
 - ▽ F-6/7 HASS Year 4 , 5, 6 (Inquiry & skills, Knowledge & Understanding)
- **Cross-curriculum priorities:** Sustainability

Other learning areas will apply and curriculum information is updated regularly on the [Australian Curriculum website](#).



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Suggested learning experiences

Ask students if they have ever thrown out uneaten food at home or school.

Ask: Why do people waste food?

Discuss in small groups or whole class and record responses (some possible answers below).

- ▽ We cook/prepare too much food
- ▽ Food is thrown out based on use-by/best before date
- ▽ We forget about leftovers in the fridge/freezer
- ▽ We don't know how to use leftovers
- ▽ We buy too much because we don't stick to a shopping list
- ▽ We often shop when we're hungry so we buy more food than we need
- ▽ We don't check the cupboard or fridge before going shopping
- ▽ We are not planning our meals and menus
- ▽ Buying takeaway instead of using food we have, due to family members changing plans.

Provide information or have students research uneaten food waste facts (figures below from foodwise.com.au).

- ▽ Australians discard up to 20% of the food they purchase - equivalent to 1 out of every 5 bags of groceries
- ▽ Australians waste \$8 billion of edible food each year, equivalent to 523kg per household (the weight of 5 average fridges)!
- ▽ If you add up the food Australians waste each year, it's enough to fill 450,000 trucks. (Placed end to end, the convoy would cover the distance from Adelaide to Queensland's Sunshine Coast).
- ▽ An estimated 20- 40% of fruit and vegetables are rejected before they reach the shops, often because they do not match supermarkets high cosmetic standards.
- ▽ Up to 40% (by weight) of the average Australian household landfill bin is food
- ▽ The average Australian household discards \$1,036 worth of food each year.





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Learning experiences continued

Ask: What are the impacts of food being placed in to the landfill bin (suggested answers below)?

- ▽ When food and other organic materials break down in landfill it generates methane gas, which is 25 times more potent than CO₂ as a greenhouse gas.
- ▽ The breakdown of food in landfill releases nutrients, which may migrate out of landfill into the surrounding environment. Too many nutrients can pollute groundwater and waterways and create eutrophication issues.



Ask: What resources are involved in making food?

You could read the Fish Finger Footprint story (below) which describes resources involved in food production or find other examples. Online example- ['Supervalu' - a look at food miles and food waste](#)

In Australia, fish fingers are mainly made with Hoki, a fish from New Zealand. For the fish to keep its flavour, it has to be frozen as soon as possible after being caught, so diesel-driven trawlers have refrigerators to store the catch until they return to dock. Filleting of the fish occurs near the port and after filleting, the fish is frozen. The filleted Hoki is then shipped to Australia and transported to a refrigerated processing plant. Here the Hoki is cut, crumbed and packaged into cardboard boxes ready to distribute. It's then packaged, not once, but twice. The box of fish fingers for purchase at a supermarket is bundled with others and packed into large boxes for transportation in refrigerated trucks to supermarket distribution centres. From the distribution centres, the boxes are trucked to individual supermarkets, where the small boxes are placed in glass-fronted freezers, awaiting purchase. After purchasing, the buyer drives home with their packet of fish fingers to place in their freezer. Sometime later they are cooked for eating. Someone may be served more than they can eat, so fish fingers are left on the plate, unwanted, and may then be placed into the landfill bin.



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Learning experiences continued

Ask: What resources are involved in food production?

Generate a flow-chart and map of the production of your chosen food item.

Consider:

- ▽ soil/land/water
- ▽ energy (including human labour)
- ▽ fuel
- ▽ machinery
- ▽ end of life disposal.



Discuss the consequences of wasting food. (Use the fish finger example, or your own.)

- ▽ When we waste leftover food, we also waste the energy and resources that were used to put the food on the plate. With the fish finger example, the Hoki (after being caught) has been moved from one refrigerator to another relying on machinery, transportation and electricity. For a small food item, the environmental footprint is huge. It's important to consider the journey that food has made before putting it into our shopping basket. Fish fingers are just one example of any number of processed foods that we may buy at the supermarket. An alternative food in this instance is locally caught, unpackaged fish with a significantly smaller ecological footprint.

Ask: Can you think of other examples of packaged supermarket foods that may have a local alternative with a smaller ecological footprint?

Discuss as a group, generate examples to research.

You may wish to use examples of packaged uneaten food found in a Bin Materials Audit on the Wipe Out Waste website- under [DIY Audit Kit](#) or use your own audit findings.



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Conclusion

Ask: How can we reduce uneaten food waste? (Brainstorm as a group. Some possible answers below.)

- ▽ **Menu planning** - Plan a weekly menu, including supplies for morning teas and lunch boxes. Make the most of leftovers (they make great lunches!).
- ▽ **Shopping list** - One of the simplest things you can do to avoid over-buying is write a shopping list. By checking cupboards, fridge and freezer, you can see what you have in stock and avoid food duplication when making shopping lists. You'll also save money by avoiding impulse buying!
- ▽ **Carefully consider special offers** - Think twice about bulk buy 'specials'. While bulk buying *can* be a great money saver, it can also create waste. For special promotions, always check the use-by date to be sure you have time to use it. For perishables, plan how to use excess to ensure nothing is wasted. Freezing goods in airtight containers before they reach their used by date is an option to prolong their edible lifespan.
- ▽ **Know when not to shop** - Always avoid food shopping when you're hungry. Not only will it make you susceptible to food waste traps mentioned above, it can make you shop faster than usual. Snap decisions are often the most wasteful and speed can get in the way of making smarter, more sustainable choices. So eat first, then shop.
- ▽ **Storage** - Know the best ways to keep and store your food. Getting the basics right on how to store food effectively makes it easy to reduce food waste. Check the Foodwise webpage for [storage tips](#).
- ▽ **Try recipes with your leftovers** - Cookbooks and recipes are a fantastic place to start when deciding how to use the food in your fridge. The [Foodwise Recipe Finder](#) is a great way to find recipes for the ingredients you have on hand.
- ▽ **Chickens, pets or compost** - Feed leftover food to chooks, pets (check what is safe for them to eat) or compost organic scraps to be turned into 'food' for your garden.



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Conclusion continued...

- ▽ **Reduce packaging** - Look for bulk, whole foods that take less energy and resources to produce. Many of these can be bought free from packaging. They may also be healthier and with a smaller environmental impact.
- ▽ **Grow your own food** - Growing your own food reduces your food miles to food steps! (Do an internet search to find out more about calculating food miles.) It reduces your contribution to climate change, allows you to eat seasonally, reduces the money you need to spend on food and gives you a greater connection with how food is grown.
- ▽ **Change the way you shop** - Visit local farmers markets, where farmers sell produce direct to you, or other local initiatives. Many community centres have food swap initiatives where you can offer something you have a surplus of to trade for other food.
For example - [Ripe Near Me](#) website or other applications.

Present your ideas to others in the class, school or wider community.

Extension

Recipe Builder - in pairs or groups, create recipes that can use some/all of these leftovers.

- ▽ Fruit
- ▽ Cheese
- ▽ Rice
- ▽ Bananas
- ▽ Bread
- ▽ Eggs
- ▽ Milk
- ▽ Vegetables

Freeform fruit pie taste.com.au

