

Avoidable food waste

It is estimated that food waste is responsible for 8–10 per cent of greenhouse gas emissions – nearly five times the total emissions from the aviation sector¹.

Currently, Australian households discard almost 2.5 million tonnes of food each year. Over half of the food wasted in homes is edible.

Households can save up to \$2,500 annually by reducing the amount of food they waste³.

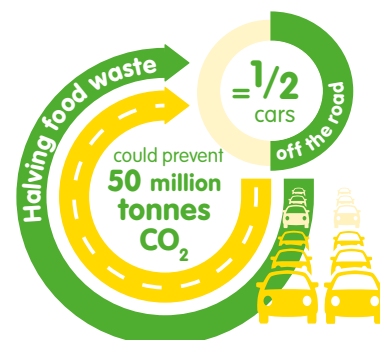
On average, roughly 3 million whole pieces of fruit, 1.3 million packaged food items and 3.5 million whole sandwiches are wasted each year in schools across the state⁴.

Avoidable food waste is food that has been discarded while still in a condition that most people would consider edible.

In 2022, a staggering 1.05 billion tons of food was wasted, while 783 million people went hungry and a third of the global population faced food insecurity¹. Currently, Australian households discard almost 2.5 million tonnes of food each year. Over half of the food wasted in homes is edible. This is the equivalent of 7.7 million meals of perfectly good food wasted every single day². Households can save up to \$2,500 annually by reducing the amount of food they waste³.

Avoidable food waste sent to landfill has environmental impacts such as the production of methane and carbon dioxide, which are harmful greenhouse gases.

Halving food waste from paddock to plate in Australia by 2030 could prevent 50 million tonnes of CO₂ emissions. This would be the equivalent of removing half the vehicles from Australian roads for a year³.



Through our research, WasteSorted Schools have found that three kilograms of avoidable food waste is discarded per student, per year in WA schools. On average, roughly 3 million whole pieces of fruit, 1.3 million packaged food items and 3.5 million whole sandwiches are wasted each year in schools across the state⁴.

The three main areas that have been found to influence students' food waste behaviours are:

1. the waste related behaviours of their parents
2. the school environment
3. the individual knowledge and skills of the student.

For more information about the WasteSorted Schools program visit www.wastesortedschools.wa.gov.au





Avoiding food waste from students' lunchboxes

The overlap between avoidable food waste behaviours in schools and the behaviours of parents at home has been found to impact the likelihood of edible food being wasted. Some of the key impacts were found to be what food is provided, how much food is packed and how parents react to uneaten food.



Strategies for parents:

- Discuss with children what, and how much, they like to eat at school. Consider using the *My lunchbox wishlist*, available on page 21 of the [Waste-free lunch toolkit](#).
- Plan a week of lunches in advance, including using up some leftovers.
- Only pack an appropriate amount of food.
- Involve children in making their own lunches. Evidence shows that when children are familiar with the food that they're eating, they are more likely to eat the entire meal.
- Pack food that will keep and not spoil or go soggy.
- Include foods that can be eaten in stages. For example, cutting up fruit or sandwiches into pieces to eat throughout the day. Whole apples are one of the most common whole food items found during waste audits.
- Invest in good lunchboxes to reduce damage and spoiling of foods.

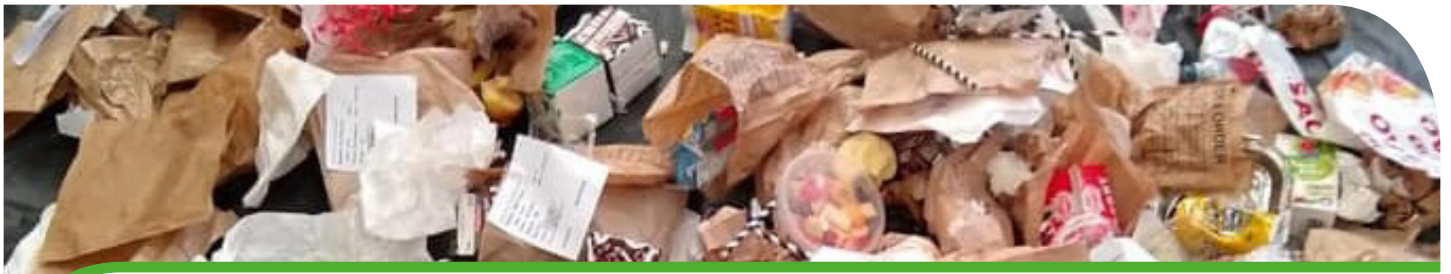


Some of the reasons that have been identified as to why students discard edible food include too much food being packed, the food provided is not appealing or popular, students not having enough time to eat everything (and still having time to play), and a fear of potential negative consequences of bringing uneaten food home⁵.

Strategies for students:

- Discuss with parents what they would like in their lunchbox.
- Pack their own lunchbox.
- Bring unwanted/uneaten food home.

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www.wastesortedschools.wa.gov.au



Research has found that students who engaged in lessons that focused specifically on raising awareness around food waste reduce their avoidable food waste by 30 per cent⁶. There is also evidence to suggest that the timing of when food is eaten (in relation to play) can affect the amount of food eaten by students.

Strategies for schools:

- Have a “pack in and pack out” school lunch box policy, where students take their uneaten lunches home. This allows parents to see how much, and what their children are eating, and may encourage parents to change how much lunch they provide⁷.
- Schedule eating time after play time. Some schools have found that allowing students to play first before eating lunch reduces how much food is wasted, and improves students’ concentration and performance in the afternoon.
- Provide longer lunch breaks.
- Educate students about avoidable food waste. WasteSorted Schools have a Year 5 cross curricular [Food waste curriculum guide](#) available to download.
- Motivate students to recognise their role and responsibility in reducing avoidable food waste.
 - Offer half portions for certain canteen items.
 - Some schools have created sharing tables where students can leave their uneaten items for others to enjoy. To avoid food allergy issues, consider using a list of acceptable/unacceptable items to be shared.



Research has found that one of the major factors that can encourage behaviour change around food waste at home is financial savings.

- > Have students use the *Food waste calculations* worksheets from the [Food waste curriculum guide](#) to calculate the cost of food wasted in WA schools over a whole year.
- > When they have completed the activity, they can then share this information with the wider school community.



Avoiding food waste in the canteen and other food preparation areas

Plan ahead:

- Plan your meals in advance.
- Take stock of what you already have before purchasing more food.
- Write a shopping list and stick to it.

Correct food storage and labelling:

- Make sure your fridge is set between 0 and 5 degrees Celsius.
- Once opened, store your dry goods in airtight containers to make them last longer.
- Clearly label and date all food items in the fridge and freezer.
- Store fruit in the fridge to help it stay fresher longer.
- Freeze food that is close to its use by date to save it for later.

Use what you've got:

- Use the [Use It Up Tape™](#) from OzHarvest to ensure everyone knows which food items need to be used first.
- Use an app or website such as [Saveful](#) to help you plan meals using what you have available. You can sign up for the Saveful School program and compete to become the school that avoids the most food waste.
- Incorporate recipes into your planning that allow you to use leftovers. Find some helpful recipes at:
 - [The Great Unwaste](#)
 - [OzHarvest](#)
 - [Recipes I Love Food Hate Waste](#)



By working together to avoid food waste at home and in school, we have the best chance of keeping avoidable food waste out of landfill.

¹ United Nations Environment Program [Food Waste Index Report 2024](#), viewed July 2025

² The Great Unwaste [What is Food Waste?](#), viewed July 2025

³ End Food Waste Australia [2024-2030 Strategic Business Plan](#), viewed July 2025

⁴ Boulet M, Wright B and Rickinson M (2016), [Tackling Avoidable Food Waste in Western Australian Schools](#), Monash University, viewed July 2025

⁵ Government of South Australia, [Wipe out Waste](#), viewed July 2025

⁶ Antón-Peset A, Fernandez-Zamudio M-A and Pina T (2021), [Promoting Food Waste Reduction at Primary Schools. A Case Study](#), MDPI, viewed July 2025

⁷ Love Food Hate Waste New Zealand, [How to reduce food waste in schools](#), viewed July 2025