

Waste-free lunch

Toolkit



GOVERNMENT OF
WESTERN AUSTRALIA



WASTE
AUTHORITY
WA...TOO GOOD TO WASTE



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WasteSorted Schools is a State Government program administered by the Waste Authority.

For more information about the program please contact:
Department of Water and Environmental Regulation
Locked Bag 10, Joondalup DC, WA 6919

Phone: (08) 6364 6829

Email: wastesortedschools@dwer.wa.gov.au

Website: www.wastesortedschools.wa.gov.au

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Scan the QR code to download a digital version of this resource with active hyperlinks.

www.wasteauthority.wa.gov.au/wss/teaching-resources/list/toolkit_fact_sheets

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Introduction to waste-free lunches

What is it?

A waste-free lunch contains no throwaway packaging. Food and drinks are packed in reusable containers within a reusable lunch bag or box. All containers are resealable so that leftover food and drink can be consumed (or composted) later.



Why do it?

Australia is one of the highest producers of waste per person in the western world. The average student's lunch generates a total of 3 kg of waste per school year. In an average primary school of 350 students, that equates to 10,050 kg of waste per year just from lunches.

In Western Australian schools, 3 kgs of avoidable food waste (food that has been discarded while still in edible condition) is discarded per student per year. This extrapolates to a total of 3 million whole pieces of fruit, 1.3 million packaged food items (e.g. muesli bars) and 3.5 million whole sandwiches discarded each year in schools across the state.

Holding a waste-free lunch day is a great way to:

- reduce food and packaging waste in your school
- help students and parents to understand the benefits of a waste-free lunch
- educate and inspire students and the wider school community to avoid and recover waste.

An average student's lunch generates 3 kgs of waste per year!



Steps to running a waste-free lunch day





Steps to running a waste-free lunch day



There are many ways to run a waste-free lunch day so please use and adapt the information below to best suit your school.

Plan it

1. Work out the scale of your waste-free lunch

Who will participate: one class, one year level or the entire school? It is ideal if the whole school is involved as this increases motivation and awareness.

How often will you run it: just once, once a week, for a whole week or once a term? The advantage of holding waste-free lunches for a whole week, or regularly throughout the term, is repetition of behaviour that is more likely to become a habit. It also gives more time for parents to appreciate the benefits of reusable containers and avoiding waste. Each school should consider which duration and frequency is most appropriate for their circumstances.

How will students be involved: there is great value in involving students in the planning and running of your waste-free lunch day(s). It could be led by the student 'Green Team', the participating class or a group of motivated students. This is especially effective when presenting at assemblies as student ownership improves behaviour change.

Can the school canteen be involved: a lot of school waste can come from food purchased at the canteen. Involve the canteen in coming up with a menu that can be served in reusable containers instead of lunch bags. See the [Green Canteen fact sheet](#) for further ideas to support your school canteen in avoiding waste.

Consider a lunch play swap: sometimes students' food is wasted in their haste to go and play. Changing the order of play time and eating time so that students play first then sit to eat is one way to address food waste in your school.

2. Decide what to do with food waste

Composting and worm farms are a great way to recycle fruit and vegetable scraps from lunches, diverting this waste from landfill and improving your school's operational sustainability. Your school may already have these recycling systems in place, otherwise [WasteSorted Schools](#) can provide information on how to set these up. If it is not feasible for your school to recycle this food waste, consider asking students to take their leftovers (apple cores, fruit skins, etc.) home – see 'communicate to parents and guardians' in step 5.





Steps to running a waste-free lunch day

Set it up

3. Conduct a waste audit

Before holding a waste-free lunch day, carry out an audit of lunchtime waste with your class or school. This will provide information about the type and quantity of waste generated in your school on a typical day. It will also provide baseline data to evaluate changes to your school waste as a result of your waste-free lunch program. Take photos of the waste to use in your activities. For information on how to conduct a waste audit please visit the [WasteSorted Schools](#) website.

4. Communicate to students and staff

A whole school assembly is the ideal way to introduce your waste-free lunch day(s) to students and staff even if the whole school is not participating as this may motivate others to join in. It is important to share the results of the waste audit and let everyone know how much waste is produced and how a waste-free lunch can help reduce it.

Within the classroom, use some of the activities in 'tools for schools' to prepare students and increase their understanding of the importance of reducing waste.

You could also:

- put up **posters** around the school, preferably designed by students
- make **announcements** leading up to the waste-free lunch day(s) to let staff and students know the dates and remind them to bring waste-free lunches
- set up a **demonstration table** with examples of waste-free lunch dos and don'ts.



5. Communicate to parents and guardians

As parents are largely the ones responsible for students' lunches, this part of the process is very important. Parents need to be well informed and prepared to make the waste-free lunch a success.

- **Send an email or letter** to parents and guardians explaining why the school is holding a waste-free lunch day and include packing tips. See 'tools for families' for an example.
- Invite parents to take part in the home **survey**.
- Send the '**fridge flyer**' home to parents.
- Put an **article** in the school newsletter and on the school website.
- Provide **ideas** for types of reusable lunch containers which are easy to purchase. These could be displayed in the school office.
- Ask students as part of their homework to show their '**lunchbox wishlist**' (see tools for students) to their parents or guardians and to explain what they have learnt in class. *Note: early years could do this pictorially.*
- Consider holding a '**take home day**' where uneaten food is taken home. Encourage conversation between parents and students about the possible reasons why the food wasn't eaten so that lunchbox contents can be adjusted accordingly. This should be a positive interaction so that children do not feel as though they will get in trouble for leftover food.
- Provide details of a **contact person** with whom parents who have further questions about waste-free lunches can get in touch.





Steps to running a waste-free lunch day

Run it

6. Hold the waste-free lunch day

Make it fun: combine your waste-free lunch day with other recycling and sustainability-related activities. Organise a communal lunch for the participating classes. Take photos during the activities and write an article for the next school newsletter. Invite the local media to take photos and write an article for the local newspaper.

Measure progress: conduct another waste audit during your waste-free lunch day and a month afterwards to determine whether your class/school has reduced waste. Create charts and graphs showing the progress of audits so students can see the tangible result of their efforts. Display these in high traffic areas around the school so that results are also shared with parents. If time is not available for a full waste audit, take photos of the bins' contents and record any differences.



Link learning with the curriculum: there are plenty of opportunities for curriculum-based activities. See the teachers section of 'tools for schools' for ideas.

Offer incentives: prizes and rewards can be given during the waste-free lunch day, such as extra play time or vouchers if the budget permits. WasteSorted Schools has waste-free lunchbox stickers that can be used as incentives and to remind parents.

Note: Children in the early years are still reliant on their parents for packing their lunches. Some children, including those with dietary or religious needs, may still bring packaged items. Think about how this will be handled so that they are not embarrassed and other children will understand.

Keep it going

7. Reinforce change

Congratulate students: use your audit charts to highlight the change everyone has made to reducing school waste. Share this at a whole school assembly and in a newsletter to parents. Give each child a certificate as a positive reinforcement that can also be shared with parents. See template in the 'tools for schools' section.

Make it a regular thing: after the initial challenge, consider making waste-free lunches a regular school practice, such as 'Waste-free Wednesdays'. Repetition of behaviour is more likely to lead to long-term change so that children, and parents, make waste-free lunches a habit.



Tools for schools





Whole school

PowerPoint

WasteSorted Schools has designed a PowerPoint presentation that can be used at your whole school assembly to introduce and communicate important messages regarding your waste-free lunch day to staff, students and parents. Edit this presentation to suit your school's needs and be sure to add the results of your waste audit so everyone can see how much waste is produced and how a waste-free lunch can help reduce it.

Download the **PowerPoint** presentation or email wastesortedschools@dwer.wa.gov.au for an electronic copy.

Poster

Hold a poster competition for your waste-free lunch day within the participating class or whole school. The winning entries can be displayed around the school and put in the school newsletter.

Newsletter

Include the information below in your school newsletter in the weeks leading up to your waste-free lunch day.

INSERT
SCHOOL
LOGO
HERE

How to pack your waste-free lunch



Yes please

- ✓ Food in reusable containers
- ✓ Drinks in refillable containers
- ✓ Reusable utensils where required
- ✓ A reusable lunchbox or bag

No thanks

- ✗ Food packed in plastic wrap, single-use plastic bags, foil or wax paper
- ✗ Single-use drink boxes, cans, pouches, cartons and bottles
- ✗ Single-use plastic forks and spoons
- ✗ Pre-packaged single-serve snack items



Did you know?

Many families save around \$400 per child per year by packing a waste-free lunch.

Spend less. Waste less. Eat well.

Download **How to pack your waste-free lunch** [here](#).



Tools for schools



Fun facts

These facts on waste can be used as tips in your school newsletter, presented at assemblies, on notice boards around the school, in the classroom, or in other ways that support your school's waste-free lunch program.

The average Australian produces **647 kg** of municipal waste every year. In 2015 Australians were ranked the fourth biggest producer of municipal waste in the world, only lagging behind Denmark, the US and Switzerland.

(Ecocycle 2019)



On average, each household in Western Australia sends **18 kg** of rubbish to landfill each week. That's the same weight as a four-year-old child.

(ASK Waste Management 2019)

Western Australia generates **4.6 million** tonnes of waste per year. That's equivalent to 860,000 full-sized male Asian elephants.

(ASK Waste Management 2019)

Australians discard up to **20 per cent** of the food they purchase. This equates to one out of every five grocery bags they buy.

(Foodwise 2019)



Up to **40 per cent** of the average household bin is food.

(Foodwise 2019)

For the average Australian household, **\$1036** of food is thrown away every year, enough to feed the average household for over a month or pay six months of electricity bills*. **Assumes a household electricity bill of \$2072 per year.* (Foodwise 2019)

Australians throw out **\$8 billion** worth of edible food every year, 345 kg per household, which is the same weight as three average fridges.

(Foodwise 2019)

If you add up all the food Australia wastes each year it's enough to fill **450,000** garbage trucks.

(Foodwise 2019)



Almost **one third** of all domestic recyclable items are placed in the garbage bin and end up in landfill.

(MRA Consulting 2019)

We are producing over **300 million tons** of plastic every year, 50 per cent of which is for single-use purposes – utilised for just a few moments, but on the planet for at least several hundred years.

(Plastic Oceans 2019)



Worldwide, **17 million** barrels of oil are used in producing bottled water every year.

(Treehugger 2019)

The average person eats at least **50,000** particles of microplastic a year.

(The Guardian 2019)

The global average of microplastic ingestion could be as high as **five grams** a week per person, which is the equivalent of eating a teaspoon of plastic — or a credit card — every week.

(ABC News 2019)

On average there are **28,000** pieces of plastic floating in every square kilometre of ocean.

(Less Plastic 2019)

Billions of pounds of plastic can be found in swirling convergences that make up about **40 per cent** of the world's ocean surfaces. At current rates, plastic is expected to outweigh all the fish in the sea by 2050.

(Center for Biological Diversity 2019)

Over **90 per cent** of all seabirds have plastic pieces in their stomachs.

(Plastic Oceans 2019)





Teachers

Class records

As a class, track any changes to waste avoidance and reduction as a result of holding your waste-free lunch day(s). Keep a record of the total number of lunch waste pieces in one day:

- **Before** the waste-free lunch day
- **On** the waste-free lunch day
- **After** the waste-free lunch day – this could be one week later and/or one month later or on a weekly basis for the term. If doing over a term it may look something like this:

Week	No. students with waste	No. waste pieces	No. waste-free students
Week 1			
Week 2			
Week 3			
Week 4			
Week 5			
Week 6			
Week 7			
Week 8			
Week 9			
Week 10			



Discuss with the class any changes and improvements – positive change will be represented by a decrease in the numbers in the first two columns, and an increase in the last column. Also note whether the waste-free lunch day(s) changed the type of food students were bringing to school and if healthier eating choices were being made. Ask the students to reflect on what they have learned from having a waste-free lunch.

This data can be used for numeracy activities where students work out:

- average number of lunchbox packaging pieces per person
- how many packaging pieces a year this would equate to
- how much waste they have avoided sending to landfill as a result of having a waste-free lunch.



Activities

1. What's in the lunchbox?

Prior to the waste-free lunch day, get students to bring their lunchboxes into class. Discuss each item and the way it is packaged. Pose these questions:

- Why do we use wrapping or packaging?
- What is the packaging made from?
- Can the packaging be avoided, reused or recycled?

Make a list of packaging used. The list may contain natural (e.g. fruit skin), plastic wrap, plastic zip lock bags, foil, chip packets, cardboard, aluminium cans, plastic bottles, etc. Draw up the following table and discuss alternative ways that foods could be brought to school so that waste is avoided.

Type of packaging	Material	Reusable	Recyclable	Alternative

Taking it further

Numeracy

- Create a graph depicting the results of the packaging items in students' lunchboxes by packaging type. Compare this to packaging on the waste-free lunch day.
- Work out the cost difference between a packaged lunch and a waste-free lunch and how much this would save parents over one school year. (See table in 'tools for families')

Literacy

- How do manufacturers appeal to their target audience of school age children to sell snack products? Think about advertising, packaging and product for both food and drink items.

Design Technology

- Look at the features of lunchboxes belonging to children who bring in waste-free lunches. What makes them successful? Use this information to design and construct your own waste-free lunchbox.



2. Where does it go?

Choose one day where students bring their lunch waste back into class. Sort the waste into three piles based on its final destination: recycling; worm farm and compost; landfill. Have a look at the piles and discuss which has the most (likely landfill). Ask the questions, 'what is landfill?' and 'why is this a problem?'.

Watch the video **What happens to rubbish** which shows general waste going to landfill, some of the problems with landfill and how these problems are managed.

Discuss the problems associated with landfill (listed below) and brainstorm solutions:

- Blown waste becomes litter.
- Greenhouse gases, mainly methane, are released into the atmosphere.
- Gases create a smell.
- Emissions are produced by the trucks transporting waste to and from landfill.
- Contamination of the surrounding soil and water with toxins from leachate occurs. *Note: although modern landfills are lined to prevent this, leaks can occur.*
- Valuable resources are buried which could be recovered through reuse or recycling.



Taking it further

Science

- Build a mini-landfill and learn about a number of environmental impacts arising from burying our waste in the ground. Follow the instructions for *Building a model landfill* in the WasteSorted Schools curriculum guide **What is Waste?**

Literacy

- Students use their knowledge to write a persuasive article for the local newspaper encouraging residents to avoid waste and reduce their waste to landfill.

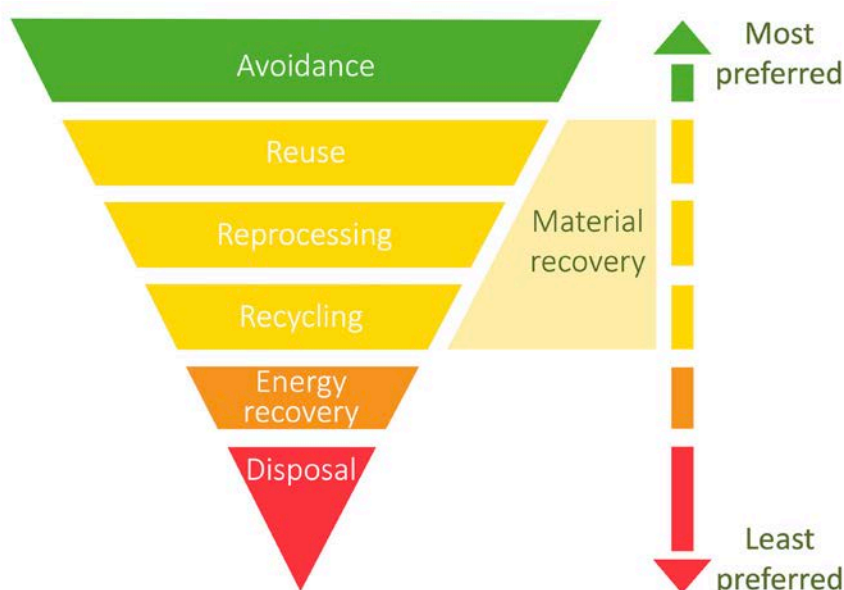
HASS

- Find out about some of the **problems and solutions related to managing waste** in a local area when the landfill site is full. Students devise their own solutions and pitch a presentation to the local council.



3. What can we do?

Show students the waste hierarchy below. As a class, discuss what it means to avoid, recover (including reuse and recycling) and dispose waste (going to landfill).



Thinking about all the waste produced from a school lunch, including leftover fruit and vegetables which can be recycled in compost or worm farms, put each item into the following categories: avoid, reuse, recycle, and dispose. Following your discussion from activity one, you should find that 'dispose' is empty.



Discuss with students why the pyramid is 'upside down': the most important thing to do with our waste is first to avoid it, then reuse where possible, then recycle and last of all dispose. The waste-free lunch philosophy is that if we avoid the use of packaging in school lunches, reuse lunch containers and recycle food scraps, then there should be no waste to dispose from a lunch.

➔➔➔ Taking it further

Literacy / IT

- Develop a presentation for assembly explaining the waste hierarchy and how best to avoid waste. There are several songs and videos online that can be used as inspiration.

Science

- Students create a mini compost-in-a-bottle to see how organic matter breaks down. Use Compost Activity 3 of the WasteSorted Schools curriculum guide **Compost**.



4. Single-use plastic

Model drinking out of a disposable plastic drink bottle or a cup with a plastic lid and throw it in the bin. Discuss with students:

- How many times did it get used?
- Where do they think it goes?
- What is it made from?
- What happens to plastic when it breaks down?
- What will happen if we keep using things once and then throw them away?



Discuss and identify single-use plastic items that you might find in a lunchbox, e.g. water bottles, cling wrap, disposable cutlery, straws, individually packaged items. Ask students if they think plastic from their school lunches can also end up in the environment. How and where?

Watch the video [Surfing for change](#).

Ask students to think of the single-use plastic items in their lunchbox again and discuss alternatives. In small groups, create a role-play about one of these items and what they can do about it. They should include the following quote:

“ Think about it. Why would you make something that you’re going to use for a few minutes out of a material that’s basically going to last forever, and you’re just going to throw it away? What’s up with that? ”
(Jeb Barrier – BagIt movie)



Ask each student to think of a Plastic-Free Pledge they would like to make and write it on a slip that can be displayed in the classroom or around the school.



Taking it further

Science / Literacy

- Use the WasteSorted Schools curriculum guide [Plastic-Free July](#) to investigate the impacts of single-use plastic on our environment and wildlife and present findings in various ways, such as narrative, persuasive text and role-play.

Literacy / IT

- Host an event or screen a movie like BagIt to raise awareness of the issues with single-use plastic. Download the [Single-use Plastic Fact Sheet](#) for more ideas.



5. Buying in bulk

Many school lunch items are packaged into single serves for perceived convenience but have a greater impact on our environment and the family budget. This activity will highlight the issues for students and help them think about alternatives.

Using one large packet and one multi-pack of sultanas, write up the volumes and costs of each one. Students then work in pairs to answer the following:

- Which packet looks the biggest?
- Which packet contains the most sultanas?
- Which packet contains the most packaging waste? Measure mass and volume.
- Which packet costs the most per serve?
- Which packet gives you the best value for money?
- Why is it a good idea to buy items in bulk rather than individually packaged?
 - less waste to manage from packaging
 - ability to recycle larger containers (often smaller packaging can't be recycled but large packets can)
 - sends a message to manufacturers to use less packaging
 - buying in bulk is cheaper
- How would you bring the sultanas to school from the large box?
- Discuss other foods that come in single serves but could be bought in bulk and brought to school in reusable containers.



Taking it further

Numeracy

- Students work out the cost savings for their family per year if bringing one serve of sultanas a day to school.
- Using online supermarket prices, students explore prices for their favourite food items which can be bought in single serves and bulk.
- Make a class chart that compares the cost per 100 g serve of the students favourite foods bought in bulk compared to single serves. Share this with parents.

HASS

- Look at ingredients/nutrition labels on food items to explore: food miles, nutritional/health value and sustainability of ingredients.
- Investigate the costs and nutritional content of fresh fruit and veggies compared to packaged food. Use your WasteSorted School garden to compare the cost of growing your own to buying. Share this with parents at a morning tea with the costings and health information displayed on each type of food.



6. Food waste

Your initial audit of lunchtime waste would most likely have revealed many items of food waste. Some are unavoidable, such as banana skins and apple cores, but often there are whole pieces of food, such as sandwiches and whole fruit, and other items that would still have been edible at the point of discard. Use the photographs from the audit to discuss these items.

As a class, brainstorm reasons why the food may have been discarded:

- Did not like it
- It was too much and they were full
- Didn't have time to eat it
- They don't want to get in trouble for not eating it



Discuss whether it is ok to throw uneaten food into the bin. Why/why not? Remind them what happens to food waste in landfill: it breaks down and produces methane, a greenhouse gas.



Develop a list of ways that lunch food waste can be avoided, such as packing less food and talking to Mum and Dad about what they like and don't like, or packing their own lunchbox.

Students complete the 'My lunchbox wishlist' to take home and share with parents.

Taking it further

Literacy / IT

- Use the **Love Food Hate Waste** website to research more about food waste.
- Plan a menu of home meals for four nights and write a shopping list that only includes items needed for those meals. Think about potential leftovers from one of the meals and write a recipe for a leftover meal (see the Love Food Hate Waste website for **leftover recipe** ideas).
- Ask students to design and complete a survey for the whole school to ascertain why food is thrown away. Share these results with parents.

- Get students to visit www.foodwise.com.au and research the amount of food that is wasted in Australia each year.

Numeracy

- Using the data collected in the initial lunchtime waste audit, calculate how much food waste your school could divert from landfill each year by avoiding food waste.

HASS

- Students research 'food miles' and discuss ethics related to food waste, e.g. food shortages in other countries.



7. Making a difference

Putting together all that the students have learned, discuss the following:

- Did we reduce lunch waste in our classroom/school?
- What changes can we make to our school lunches that would help the environment and our health?
- How can we make every day a waste-free lunch day?
- What sort of a difference would it make to the amount of rubbish in our school in a year?
- If every child at every school in Australia made these changes, what difference would that make to Australia's waste and our environment?

Taking it further

Literacy

- Students write a letter to a family member telling them something they have learned about packing lunches, waste and the environment and what they can do about it.





Resource links



How to make a beeswax sandwich wrap

Beeswax wraps are a great alternative to cling wrap. They are perfect for sandwiches and snacks, such as muffins and biscuits, and can be easily washed at home and reused. This hands-on activity can be done with small groups of students. It could even be a fundraising activity for the student Green Team.

Download the [fact sheet](#).

For other great **activity ideas**, check out the following links:

- **ABC education articles** with real life examples of students reducing waste in their schools.
- **Nude Food - A Tale of Two Lunchboxes** with activities for discussing waste-free lunches and analysing lunchboxes.
- **Planet Ark school recycling games**
- **Twinkl** worksheets and resources for a Nude Food Day.
- WasteSorted Schools classroom resources on plastic waste.
Plastic Free July (PP–Year 6)
Message in a Plastic Bottle (Years 7–10)
- **Wipe Out Waste Nude Food** resources and lesson plans for early years, primary and secondary.

Waste related **videos** can be found here:

- **ABC War on Waste**
- **Behind the News** video on plastics packaging, which takes a look at the problem of unnecessary packaging on fresh food and some kids who have found a way to help.
- **Recycle Right** has videos that show what happens at a material recovery facility as well as worksheets to promote correct sorting of recyclables.
- **ABC education videos** on waste and sustainability with curriculum links and appropriate year level.

Fun **online games** on waste topics can be found here:

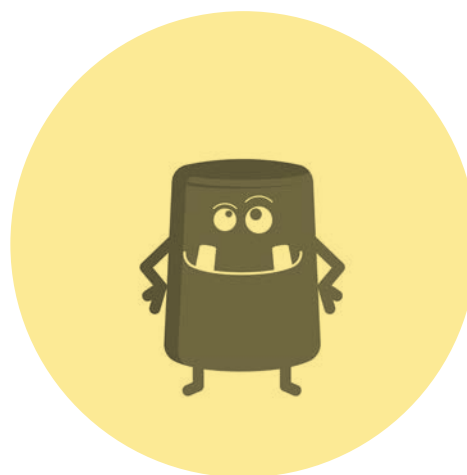
- **ABC education games** on various waste topics for pre-primary to year 10.
- **Wipe Out Waste** recycling quizzes and other games.
- **Wipe Out Waste** pack a waste-less lunch game.



Students

Badges

The templates below could be used for student monitors on your waste-free lunch days.



Certificate

Download a **certificate** to provide students to celebrate their success. It is important that this is shared with parents to reinforce the home-school message. If you are going paper-lite at your school this could be emailed or shared electronically on a class forum instead of printing.





My lunchbox wishlist

Tick the foods you would like to have in your school lunchbox.



Vegetables	Fruit	Grains	Protein	Snacks
<input type="checkbox"/> Carrots	<input type="checkbox"/> Apple	<input type="checkbox"/> Rice	<input type="checkbox"/> Ham	<input type="checkbox"/> Cheese and crackers
<input type="checkbox"/> Avocado	<input type="checkbox"/> Orange	<input type="checkbox"/> Quinoa	<input type="checkbox"/> Chicken	<input type="checkbox"/> Hummus and carrot sticks
<input type="checkbox"/> Broccoli	<input type="checkbox"/> Pear	<input type="checkbox"/> Noodles	<input type="checkbox"/> Turkey	<input type="checkbox"/> Homemade muffins
<input type="checkbox"/> Capsicum	<input type="checkbox"/> Banana	<input type="checkbox"/> Sushi rolls	<input type="checkbox"/> Salami	<input type="checkbox"/> Corn chips
<input type="checkbox"/> Green beans	<input type="checkbox"/> Plum	<input type="checkbox"/> Bread	<input type="checkbox"/> Chicken soup	<input type="checkbox"/> Banana bread
<input type="checkbox"/> Celery	<input type="checkbox"/> Peach	<input type="checkbox"/> Wraps	<input type="checkbox"/> Hard-boiled egg	<input type="checkbox"/> Homemade muesli bar
<input type="checkbox"/> Cherry tomatoes	<input type="checkbox"/> Nectarine	<input type="checkbox"/> Pizza	<input type="checkbox"/> Roasted chickpeas	<input type="checkbox"/> Popcorn
<input type="checkbox"/> Snow peas	<input type="checkbox"/> Strawberries	<input type="checkbox"/> Wholegrain muffin	<input type="checkbox"/> Cooked beans	<input type="checkbox"/> Dried fruit
<input type="checkbox"/> Corn or baby corn	<input type="checkbox"/> Blueberries	<input type="checkbox"/> Pasta	<input type="checkbox"/> Hummus	<input type="checkbox"/> Homemade biscuits
<input type="checkbox"/> Zucchini	<input type="checkbox"/> Kiwi	<input type="checkbox"/> Tacos	<input type="checkbox"/> Lentil or bean soup	<input type="checkbox"/> Soy crisps
<input type="checkbox"/> Cucumber	<input type="checkbox"/> Apricots	<input type="checkbox"/> Quiche	<input type="checkbox"/> Fish	<input type="checkbox"/> Rice crackers
<input type="checkbox"/> Eggplant	<input type="checkbox"/> Grapes	<input type="checkbox"/> Crackers	<input type="checkbox"/> Yoghurt	
<input type="checkbox"/> Cabbage	<input type="checkbox"/> Mandarins	<input type="checkbox"/> Rice cakes	<input type="checkbox"/> Frittata	
<input type="checkbox"/> Mushrooms	<input type="checkbox"/> Cherries	<input type="checkbox"/> Focaccia	<input type="checkbox"/> Haloumi	
<input type="checkbox"/> Spinach	<input type="checkbox"/> Watermelon	<input type="checkbox"/> Couscous	<input type="checkbox"/> Tofu	
<input type="checkbox"/> Asparagus	<input type="checkbox"/> Passionfruit		<input type="checkbox"/> Beef	
<input type="checkbox"/> Lettuce	<input type="checkbox"/> Pineapple			
<input type="checkbox"/> Sprouts	<input type="checkbox"/> Mango			

Add any others that you like, then take this home to share with your parents. If we eat the foods we like, and that are good for us, there is less waste going to landfill, we will feel better and be healthier and our parents will save money on buying unnecessary foods.



Packing my waste-free lunch



Fill in the table below with the food you would like to take to school, how you can help prepare it, how to take it to school with the least amount of packaging and what to do with any leftovers. An example has been done for you.

Food type	How can I help?	How should I pack it?	What's leftover?	What should I do with the leftovers?
<i>Hard-boiled egg and salad</i>	<i>Get ingredients out and grate the carrot</i>	<i>In a reusable container</i>	<i>Egg shell</i>	<i>Compost at school (or take home)</i>

*Adapted from Wipe Out Waste Lunchbox Challenge, from family transition information at St Anthony's Catholic Primary School, Millicent SA



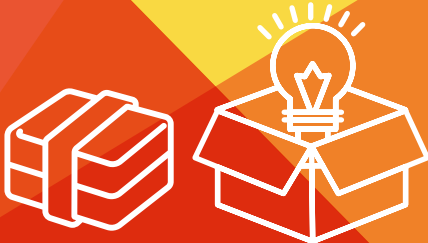
Waste-free lunch board game

Download the **board game** below from the WasteSorted Schools website and let students challenge their friends to avoid single-use plastics and pack a waste-free lunch.



The full game with teacher instructions and support activities can be found on the WasteSorted Schools website at: www.wasteauthority.wa.gov.au/wss/teaching-resources/list/activities_games.

Tools for families





Letter to parents

Dear Parent/Guardian,

As part of our school's commitment to reducing our waste to landfill, we are holding a waste-free lunch day on <date>.

A waste-free lunch contains no throwaway packaging and produces no food waste. The typical waste-free lunch is packed in a reusable lunchbox or bag. Food is put in reusable containers rather than wrapped in disposable packaging. A drink is in a refillable bottle and all containers are resealable so that leftover food and drink can be saved for later. Fruit and vegetable scraps (e.g. apple cores and banana skins) will be composted at the school through our compost and worm farming system.

Australia is one of the highest producers of waste per person in the western world. The average student's lunch generates around 3 kg of waste per school year. If you consider the impact of the collective lunches of your family, that's a lot of waste. But with your assistance, we can make a great contribution towards avoiding waste.

By helping your child pack a waste-free lunch you will help fulfill a number of goals:

- ✓ Learn about waste avoidance and recovery, including reuse and recycling.
- ✓ Reduce the 13 million tons of lunch waste currently going to landfill in Australia.
- ✓ Reduce the cost of waste disposal so the school's resources can be put to better use.
- ✓ Minimise litter around the school due to less waste becoming litter.
- ✓ Encourage healthy eating by avoiding prepackaged foods which tend to be high in fats, sugar, sodium and artificial ingredients.
- ✓ Help you save money – an average waste-free lunch can save you \$10.50 per week or \$397.50 per year per child.

Please see over for tips on creating a waste-free lunch. If you are unsure about the type of containers to use, there is a display with examples in the school office. If you have any further questions or concerns about the waste-free lunch day please contact <name> on <email or phone>.

Thank you for supporting your child's participation in the waste-free lunch day and our school waste and sustainability program.

Sincerely,

The WasteSorted Schools Committee



Tools for families

WasteSorted

Schools

Tips for parents

[include these with your letter to parents]

Waste audits in WA schools show large amounts of avoidable food waste discarded each year, including whole foods, such as sandwiches and fruit, and unopened packaged foods. Research indicates that children are less likely to waste food if given the opportunity to select it, the food is familiar and can be eaten easily. You may like to talk to your child about what they like to eat and how much. Often children will throw food away because they don't want to upset the person who packed the lunch. Encourage them to bring uneaten food home to prevent all that waste and save your family money. Better still, get them to pack their own lunch!

Here are some tips to help you pack a waste-free lunch:

- Use a **reusable lunch bag or box** for carrying lunch. There is a non-disposable alternative for every item you can imagine to make your waste-free lunch a breeze.
- Put food in **reusable containers** instead of wrapping in plastic wrap.
- Put drinks in **refillable containers**.
- **Label** all containers to make sure they come home.
- Let children **make their own** lunch and help them to make it nutritious and waste-free.
- **Only** pack as much food as your child will eat.
- **Buy in bulk** – food such as crackers, chips, biscuits, yoghurt, cheese or other small packaged food is much cheaper bought in bulk and put into reusable containers, and creates a lot less waste.
- **Stock up** on easy-to-pack, healthy foods, such as fresh fruits, vegetables and wholegrains.
- **Cut up** fruit and vegetables and pack them in reusable containers so that any uneaten can be saved for later.
- Put **leftovers** from dinner directly into a lunch container.
- Minimise the morning rush by packing lunches the **night before** and leave in the fridge overnight. Cut up a few extra vegetables whilst preparing dinner and part of the job is done.



Many families avoid single-use items by packing reusable containers and cutlery in lunch boxes.

Yes please

- ✓ Food in reusable containers
- ✓ Drinks in refillable containers
- ✓ Reusable utensils where required
- ✓ A reusable lunchbox or bag

No thanks

- ✗ Food packed in plastic wrap, single-use plastic bags, foil or wax paper
- ✗ Single-use drink boxes, cans, pouches, cartons and bottles
- ✗ Single-use plastic forks and spoons
- ✗ Pre-packaged single-serve snack items



Packing a waste-free lunch is cost beneficial:

An average waste-free lunch

\$1.88 / day

\$9.40 / week

\$386.56 / school year

An average disposable lunch

\$3.98 / day

\$19.90 / week

\$784.06 / school year



Tools for families



Best lunchboxes contain fewer processed foods and as a result contain less sugar and preservatives for better health!

	Average Lunch (packaged)				Better Lunch (waste-free)				Best Lunch (waste-free and homemade)			
	Lunch item	Daily cost	Annual cost	Pieces of waste per year*	Lunch item	Daily cost	Annual cost	Pieces of waste per year*	Lunch item	Daily cost	Annual cost	Pieces of waste per year*
Sandwich**	Plastic sandwich bag	\$0.05	\$9.85	197	Reusable Sandwich Container	0	\$4.00	0	Reusable sandwich container	0	\$4.00	0
Biscuits	Teddy biscuits in individual package	\$0.50	\$98.50	197	Teddy biscuits in reusable container	\$0.38	\$74.86	0	Homemade Teddy biscuits***	\$0.10	\$19.70	0
Fruit	Individual packaged fruit cup	\$1.00	\$197.00	197	Fruit cup in a reusable container (from tin)	\$0.51	\$100.47	0	Fresh fruit (based on apple @ \$4.50/kg)	\$0.54	\$106.38	0
Yogurt	Squeeze yogurt	\$1.60	\$315.20	197	Yogurt in reusable container	\$0.56	\$110.32	0	Yogurt in a reusable container	\$0.56	\$110.32	0
Drink	Juice box (200mL)	\$0.78	\$153.66	197	Juice in a reusable container (200mL)	\$0.43	\$84.71	0	Tap water in a reusable bottle (200mL)	\$0.0004	\$0.08	0
Misc.	Plastic spoon	\$0.05	\$9.85	197	Reusable spoon	0	\$1.20	0	Reusable spoon	0	\$1.20	0
					Reusable containers set of 3	0	\$6.00	0	Reusable containers set of 3	0	\$6.00	0
					Reusable bottle	0	\$5.00	0	Reusable bottle	0	\$5.00	0
Total:		\$3.98	\$784.06	1182		\$1.88	\$386.56	0		\$1.20	\$252.68	0
Total for 2 children:		\$7.96	\$1,568.12	2364		\$3.76	\$773.12	0		\$2.40	\$505.36	0

- * Based on 197 days in 2019 public school year.
- * Assumes all food is eaten and fruit scraps are composted. Does not take into account rubbish produced at home.
- * Assumes reusable items are placed in existing lunchbox
- * Waste items at school, does not take into account waste produced at home
- * Reusable container prices assume products were bought in large containers and individual amounts were placed in containers for schools

- * All items can be purchased at supermarket - prices as of 22/1/19
- ** Does not take into account the cost of actual sandwich
- *** Recipe from <https://www.ohsobusymum.com.au/tiny-teddies-recipe/>




Tools for families


Fridge flyer

Download the **fridge flyer** that can be sent home with the parent letter for easy reference on the family fridge.

INSERT
SCHOOL
LOGO
HERE



Waste-free lunches



Avoid waste and save money with a waste-free lunch!

Yes please

- ✓ Food in reusable containers
- ✓ Drinks in refillable containers
- ✓ Reusable utensils where required
- ✓ A reusable lunchbox or bag

No thanks

- ✗ Food packed in plastic wrap, single-use plastic bags, foil or wax paper
- ✗ Single-use drink boxes, cans, pouches, cartons and bottles
- ✗ Single-use plastic forks and spoons
- ✗ Pre-packaged single-serve snack items

Our family commits to a waste-free lunch on

Spend less. Waste less. Eat well.



Tools for families

Home survey

This survey has been designed to get families thinking about attitudes and behaviours relating to school lunches. Contact wastesortedschools@dwer.wa.gov.au to receive your unique school link that can be emailed to parents. Once completed WasteSorted Schools will send a report of the findings. This may be useful in guiding your communication with families about your waste-free lunch day.

Helpful links for parents

[include these in newsletters or emails home to parents]

Lunchbox tips from a parent - a short presentation

This three-minute video provides some easy lunchbox tips from a parent to help you through the preschool and school years: [Wipe Out Waste Lunchbox tips for parents](#).

Nude food recipes

[Wipe Out Waste](#) recipe booklet containing healthy and easy alternatives to packaged foods.

Tips for waste-free lunches

Watch this [video](#) for some simple tips on how to pack a low waste lunchbox.

[Healthy Kids](#) provides tips on how to set up a waste-free lunchbox. Click on the link to visit the lunchbox page for some great waste-free lunch food ideas.



“ My mum always says to bring the food home so I can eat it for afternoon tea or so she can see how much I ate and will ask me questions as to why I didn't eat it. I can always have a say on the grocery list so mum gets what I like/want to take to school. ”

- Year 8 student,
Melville Senior High School

References





References



For further information or assistance in implementing any of the ideas presented in this toolkit, please contact wastesortedschools@dwer.wa.gov.au

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WasteSorted Schools

www.wastesortedschools.wa.gov.au

