

PLANET ARK'S NATIONAL RECYCLING WEEK

Waste-Free Lunch Guide



A guide to creating waste-free lunch activities at your school, promoting sustainability awareness among students, parents and school staff.



NATIONAL
RECYCLING
WEEK

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**Be part of the solution,
not part of the
pollution.**

ABHIJIT NASKAR



About

WHAT IS A WASTE-FREE LUNCH?

Waste-free lunches benefit the environment by reducing packaging waste, which in turn reduces energy and resource use. Participating in a waste-free lunch activity also promotes sustainability awareness among students, parents and school staff.

Waste-free lunches tend to result in reduced litter and they encourage healthy eating. Often, highly processed foods are packaged while unprocessed snacks, such as fruit and vegetables, are not.

The purpose of the Waste-Free Lunch Challenge is to:



Help students and their parents understand the benefits of a waste-free lunch and to be more aware of over-packaging in food.



Encourage students and their parents to meet the challenge of a waste-free lunch day or week.



Minimise waste from lunches at your school.



Steps

HOW TO HOLD A WASTE-FREE LUNCH CHALLENGE

1



Work out the scale of your Waste-Free Lunch Challenge

2



Assess the composting and recycling systems at your school

3



Conduct a waste audit

4



Introduce the challenge to your students and colleagues

5



Introduce the challenge to parents and guardians

6



Hold the Waste-Free Lunch Challenge



REMEMBER TO REINFORCE CHANGE

The Waste-Free Lunch Challenge doesn't have to be a one-off event. You could use the event to encourage students, parents and staff to move towards having waste-free lunches as often as they can!



1

WORK OUT THE SCALE OF YOUR WASTE-FREE LUNCH CHALLENGE



Will the entire school participate in the Waste-Free Lunch Challenge? This is ideal, as the excitement generated by a whole-of-school activity will increase motivation and awareness, but you can scale it down to only your classroom.



Will the Waste-Free Lunch Challenge be held for one day, one week, or one day a week for a whole term? There are advantages to holding the Challenge over a week as the practice of bringing a waste free lunch becomes a habit and there is more time to appreciate the benefits of switching to reusable containers. However, the appropriate duration and frequency will depend on your school's unique situation.



Can the school canteen get involved to provide waste-free lunches to children who may not be able to bring one from home? With enough preparation and discussion, the canteen may be able to prepare lunches that can be served in reusable containers that children bring from home or can source from the school itself. The canteen will need to work out a menu of waste-free food items (e.g. sandwiches, yoghurt, fruit salad, drinks) and advise students which type of receptacles are needed if they need to bring their own (e.g. a reusable plate or container for sandwiches, a reusable cup or small container for yoghurt).



2

ASSESS THE COMPOSTING AND RECYCLING SYSTEMS AT YOUR SCHOOL



Does your school currently have composting/worm farming and recycling systems? These are important elements for helping students achieve a waste-free lunch at school. They are also excellent for teaching students about sustainability and for improving your school's operational sustainability. For information on how to set up compost/worm farming and/or a recycling system at your school, check out:

[COSTA'S GUIDE TO COMPOSTING AND WORM-FARMING](#)

[GUIDE: HOW TO SET UP A RECYCLING SYSTEM](#)



If it's not feasible to collect recyclables within your school, part of the Waste-Free Lunch Challenge can involve asking students and staff to take their recyclable items home. They can check for the Australasian Recycling Label on their pack or find services available for their household by visiting Recycling Near You.

[VISIT RECYCLING NEAR YOU](#)





CONDUCT A WASTE AUDIT



Before starting the Waste-Free Lunch Challenge, carry out a lunchtime waste audit with your class. This will give you information about the type and quantity of waste generated in your school before undertaking the Challenge. At the end of the Challenge, you can use the same methods to see whether your school has reduced waste as a result of your efforts.

A simple waste audit process, suitable for pre-school and early primary school grades, is provided in the Waste-Free Lunch Challenge Activities (for teachers) on page 11.



INTRODUCE THE WASTE-FREE LUNCH CHALLENGE TO YOUR STUDENTS AND COLLEAGUES



If the whole school is involved in the Waste-Free Lunch Challenge, holding a presentation during school assembly is a great way to introduce the Waste-Free Lunch Challenge. Within the classroom, use Activity A on page 13 to discuss examples of a waste-generating lunch and compare it to a waste-free lunch. The activities suggested in this toolkit are designed for children in preschool or early primary school.

If your students are older (mid-primary to early secondary) you may wish to use the Packaging Lesson Plan. Use the free poster provided (page 22) to remind students and staff about the upcoming Waste-Free Lunch Challenge. If participating, the school canteen will need to advertise its waste-free meal options in advance so that parents can plan accordingly.



INTRODUCE THE WASTE-FREE LUNCH CHALLENGE TO PARENTS & GUARDIANS



For homework, ask your students to show their Activity Sheet to their parents or guardians and to explain what they have learnt in class. Provide your students with a letter for their parents or guardians, which explains the Waste-Free Lunch Challenge (a template letter is provided on page 16), as well as the 'Tips for Waste-Free Lunches' on pages 17-18. It's a good idea to provide a contact person for parents to ring if they are unsure about the Waste-Free Lunch Challenge.





HOLD THE WASTE-FREE LUNCH CHALLENGE



Make it fun

Make the Challenge as fun as possible by combining it with other recycling and sustainability-related activities.

Check out the ideas and resources available for teachers and educators on the [National Recycling Week website](#). You could also look into organising a group or communal lunch for the class(es). If school policy allows, take photos during the Waste-Free Lunch Challenge for a story in the next school newsletter or for the classroom wall. If you share to socials, don't forget to tag us @planetark!



Measure progress

Conducting another waste audit during the Waste-Free Lunch Challenge will allow your students to compare their results to those recorded prior to the Challenge. If the Challenge is being held over a week, create a giant chart that measures the progress of the class or school and hang it prominently in a public area. If you took photos of sample lunches during the first waste audit, take more photos during the Challenge so that your class has a visual comparison.



Sensitivities

Children in pre-school and early-primary school grades are particularly reliant on their parents to choose and pack their lunches.

During the Waste-Free Lunch Challenge, some of the students may bring lunches containing throw-away waste items. Children with special dietary or religious needs may also need to continue bringing pre-packaged food items in their lunch. Plan ahead for how you can ensure that other children will understand if a classmate's lunch is not waste-free, and that children are not embarrassed by the reactions of others to their lunch.





REMEMBER TO REINFORCE CHANGE

Congratulate your students on successfully completing the Waste-Free Lunch Challenge. If you've kept an audit or chart of lunchtime waste before and during the Challenge, they'll be able to see the tangible result of their efforts. Giving each child a certificate is another positive reinforcement – we have provided one you can use at the end of this guide.

Once your class or school has gone waste-free for a day or a week, it's even easier to do it again! Some schools even choose to hold waste-free lunches once a week for a term. This reinforces the practices learnt from the initial Waste-Free Lunch Challenge and children (and parents) are more likely to adopt them as a habit.



Challenge Activities



Activity:

Share easy waste-free recipes with parents

In collaboration with Coles, we have created some easy waste-free recipes that you can print or download and share with parents via newsletters. This is a great way to get parents involved in the challenge and provide them with ideas and inspiration. Students can also get involved at home! Check them out on pages 19-21.

The following activities are designed for pre-school and early primary school students.



Activity:

Conduct a pre-challenge waste audit

Use these steps as a guide to help your class conduct a simple waste audit.

1. Choose a day or a week before the Waste-Free Lunch Challenge has commenced. Ask your students to keep all of their packaging and waste from recess and lunch.
2. In the classroom or another designated area, place nine large containers labelled with the following categories: plastic containers, milk and juice cartons, paper and cardboard, metal, squeeze pouches, chip packets, plastic wrap and bags, and food scraps. On the first day, the class can work collectively to identify their packaging items and sort them into one of these nine categories.
3. After each recess and lunch, ask your students to continue placing their packaging and waste items into the correct boxes.
4. Keep a tally of the number of items collected in each box over the week or the day. Groups of students can be allocated this task over different recess and lunch periods. Ask students to fill in the results on a large chart.
5. Optional: take a photo of some of your students' lunches to capture a visual representation of the composition of their lunches.

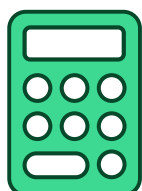


WASTE AUDIT TABLE

Below is an example table you can use for your waste audit.



ITEM	Day 1	Day 2	Day 3	Day 4	Day 5	TOTAL
Milk and juice cartons						
Plastic containers						
Glass (teachers only)						
Paper and cardboard						
Metal						
Squeeze pouches						
Chip packets						
Plastic wrap and bags						
Food scraps						



Maths activity for students

1. Using the class waste totals, work out how much waste your class would produce in one school term (assuming there are ten weeks in a term).
2. Using the above totals, how much waste would your class produce in one school year of four terms?
3. How many classes are there in your school?
4. Using the number of classes in your school, and the total waste your class would produce in one year, how much waste would your whole school produce in one year?





Activity A:

Discussing waste-free lunches

Discuss the concept of waste-free lunches with your class. Activity A on page 13 may be useful to prompt your students to think about how food can be brought to school in a waste-free way.



Activity B:

Comparing packaging for bulk and single serve

For this activity (relating to Activity B on the students' Activity Sheet), you'll need:

- Weighing scale
- 2 litre drink carton (or similar)
- As many single-serve drink containers (e.g. foil pouches or poppers) as are equivalent in volume to the large carton

Ask the students to weigh the large container, then the smaller containers all together. Ask them to compare the amount and type of packaging in each.

The smaller containers will collectively weigh more than the larger container as there is more packaging in total. Ask students to talk about the differences in the packaging in terms of resource use and recycling. Which option would fill up a recycling bin faster?



Activity C:

Discussing recycling

Although it's important to try to reduce the amount of packaging we use, recycling as much packaging as possible (when it is recyclable) is much better than throwing it in the rubbish bin. Discuss the concept of recycling with your students. For more resources on recycling, see Planet Ark's recycling-related teaching resources on the [National Recycling Week website](#).

Use Activity C on page 15 to help your students determine what can be recycled at your school. If recycling is not available at your school, change the activity to 'What can I recycle at home' and discuss what they can recycle at home (check RecyclingNearYou.com.au for information on the recycling services available to households in your school's area). Students who have recyclable items in their lunch can then be encouraged to take them home for recycling.



Activity Sheets



Activity A:

Not all packaging is waste-free

Here are some pictures of different ways lunches can be packaged. Write down which packaging belongs in which category.

1 Aluminium can



2 Lunchbox



3 Apple core



4 Ziplock bag



5 Thermos bottle



6 Banana peel



7 Chips packet



8 Plastic bottle



REUSABLE

COMPOSTABLE

SINGLE USE

RECYCLABLE





Activity B:

Large packets, individual packets - what's the difference?

Individual packets are often marketed as being the best option for school lunches. While convenient, individual packets create a lot more waste than one larger packet does. Using a reusable container or silicone bag and filling it up from a larger packet is a lower-waste way to bring snacks to school.

Take a look at the diagram below, and write out some other lunch options that often come in individual portions, and whether or not a larger container/packet may exist.

There is less packaging in one large bag of snacks...



... than in many small bags of snacks



WRITE SOME OTHER EXAMPLES

What else comes in individual portions, that could also be bought in one larger container/packet?





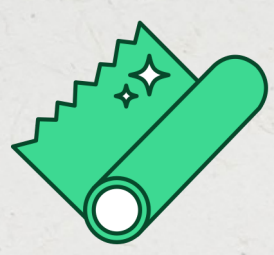
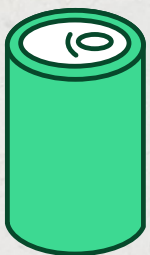
Activity C:

What can I recycle at school?

Some types of packaging can be recycled. Although it's important to try to reduce the amount of packaging we use, recycling whatever packaging we can is much better than throwing it in the rubbish bin.

In the table below, draw a tick in the column(s) that apply to the type of packaging: whether it is recyclable at school, not recyclable at school, or recyclable from home.

ITEM	Can recycle at school	Can't recycle at school	Can recycle at home
Milk or juice carton			
Plastic drink bottle			
Aluminium can			
Paper bag			
Plastic wrap (eg. cling wrap)			
Chip packet			
Plastic tub (eg. single serve yoghurt/fruit)			
Squeeze pouch			
Tin (eg. small tin of fruit pieces)			



Template Letter



Below is a template that can be used in your school newsletter to announce the waste-free lunch challenge to parents. Simply replace the text in green with your own details.

Dear Parents,

<Class Name(s)> at <School Name> is holding a Waste-Free Lunch Challenge <on / from> <insert date period>.

<On this/these days / During this period>, we ask that your child's lunch contain as few items as possible that must be thrown away. Ideally, your child's lunch will only contain items that will be eaten, composted or recycled.

Examples of how to pack waste-free lunch items are provided in the attached guide. Reusable containers are a handy way to pack a waste-free lunch. They also make it easy to buy food and drink in bulk (instead of in single-servings) which can save money over time.

The Waste-Free Lunch Challenge is one of <School Name>'s sustainability education initiatives. By participating, students will have a better understanding of how we can take action to reduce our waste. Waste-free lunches also save money and promote healthy eating.

Attached you'll also find easy recipes that can help with inspiration (they even tell you how to recycle the packaging from the products you'll need!), they are both nutritious and delicious!

[If the school canteen has agreed to provide waste-free lunches]: If your child cannot bring a waste-free lunch from home, the school canteen can provide waste-free lunches <on the day / during the Waste-Free Lunch Challenge>. [Provide details of what lunches will be served including prices, and details of what type of container the students need to bring]. All your child needs to do is bring reusable receptacles into which the lunch will be served, e.g. a reusable container, plate, bowl or cup, and reusable fork and/or spoon.

[If applicable]: Fruit and vegetable scraps (e.g. apple cores and banana skins) will be composted at the school through our compost/worm farming system.

If you have any questions, comments or concerns about the Waste-Free Lunch Challenge, please don't hesitate to contact <Name of Designated Contact Person> on <Contact details>.

Thank you for supporting your child's participation in <School Name>'s Waste-Free Lunch Challenge.

Yours sincerely,

<School principal, teacher, coordinator, administrator etc>



Tips for waste-free lunches

FOR PARENTS

Waste-free lunches contain only items that are eaten, composted or recycled. They don't contain wrappers or packaging that will be thrown in the rubbish bin.

We know some pre-packaged items can be a time saver and making waste-free lunches may seem a bit daunting for some. To help you with ideas and inspiration, take a look at the lists below, and also check out the quick and easy waste-free recipes on pages 19-21. They are both delicious and nutritious.

Examples of lunch items with waste



Sandwich in disposable cling-wrap or plastic sandwich bag



Chips or pretzels in a plastic/foil packet



Juice in a squeeze pouch, with plastic straw



Yoghurt in squeeze pouches or plastic 'shot' bottles



Individually wrapped muesli bars



Pre-packaged fruit salad in a small plastic tub or tin



Pre-packaged 'snack pack' of crackers and cheese spread



Individually wrapped confectionary bars or cakes



Individually wrapped cheese sticks/strings



Disposable cutlery



Paper serviette

Examples of lunch items without waste



Sandwich in a snug-fitting reusable container



Snacks in a reusable container



Drink in a reusable and resealable bottle, filled at home from a bulk container



Yoghurt in a small reusable container, filled at home from a bulk container



'Trail mix' in a reusable container



Whole fruits without packaging or fruit pieces in reusable containers



Raw/salad vegetables (eg. carrots, celery, cucumber) with small container of dip



Muffin, fruit bread or biscuits in a reusable container



Sliced cheese and crackers in a reusable container



Durable cutlery that is designed to be washed and reused



Washable cloth napkin



Tips for waste-free lunches

FOR PARENTS



Reusable containers

Using reusable containers is the cornerstone of a waste-free lunch! Suitably sized containers will keep sandwiches intact and make little treats easy to pack. Although reusable containers may have a higher upfront cost than a roll of plastic wrap, they are durable, they will save you money in the longer term and they will help to reduce waste.



Buying in bulk

Buying items such as juice, yoghurt, crackers, biscuits and cheese in bulk quantities or containers, rather than in individual servings, will probably save you money as well as reduce waste. It also allows your child to drink or eat only as much as they want at one time, and then they can reseal the container.



Recyclable packaging

We understand that some children's lunches may need to contain packaged food items for dietary, religious or other reasons. Check which types of packaging are recycled at the school (the school can inform you). You can also check which items can be recycled at home, by visiting [Recycling Near You](#) and searching under your council area. This information may be relevant for your bulk containers at home, or if recycling is not available through the school.



Join the waste-free challenge yourself!

Seeing you go waste-free for lunch at the same time is the best possible motivation for your child.



WASTE-FREE RECIPE

DAIRY-FREE RASPBERRY MUFFINS

These raspberry muffins are a great dairy-free option for the kids. They're ideal for after school or to pop in the lunch box.



INGREDIENTS

- ★ 1 1/2 cups (240g) wholemeal self-raising flour
- ★ 1 cup (120g) almond flour*
- ★ 1/3 cup (60g) coconut sugar
- ★ 1/3 cup (75g) raw sugar
- ★ 250g fresh or frozen raspberries
- ★ 1 egg
- ★ 1/2 cup (125ml) canola oil, sunflower oil or vegetable oil
- ★ 3/4 cup (185ml) dairy-free coconut and almond milk*

*Make this recipe nut-free by using coconut/oat flour instead of almond flour, and by using coconut/soy/oat milk instead of coconut and almond milk.

DIETARY INFORMATION

Dairy-free, lactose free, peanut-free, sesame-free, soy-free, vegetarian.

METHOD

STEP 1

Preheat oven to 180°C. Line twelve 1/3-cup (80ml) muffin pan holes with paper cases. Combine the wholemeal flour, almond flour, combined sugar and raspberries in a large bowl.

STEP 2

Whisk the egg, oil and milk in a jug. Add the egg mixture to the flour mixture and gently fold until just combined (don't overmix). Divide mixture evenly among paper cases.

STEP 3

Bake for 25 mins or until a skewer inserted in the centres comes out clean. Transfer the muffins to a wire rack to cool completely.



Make sure you check the ARL to know how to dispose of the packaging from your ingredients. For any organic scraps, you can dispose of them in your Food Organics bin if your council provides one, or your home compost bin.



This recipe was originally published by Coles (<https://www.coles.com.au/inspire-and-create/recipes-tips-ideas/recipes/dairy-free-raspberry-muffins>) and republished here with permission.

WASTE-FREE RECIPE

ZUCCHINI, CORN & HALOUMI FRITTERS

Looking to up the kids' veggie intake? Try these zucchini, corn and haloumi fritters. They're so delicious the kids will be asking for more.



INGREDIENTS

- ★ 2 small zucchini
- ★ 1 cup (150g) plain flour
- ★ 1/2 cup (75g) self-raising flour
- ★ 1/2 cup (125ml) milk
- ★ 2 eggs, lightly whisked
- ★ 1 cup (160g) frozen corn kernels, thawed, drained
- ★ 125g haloumi, coarsely grated
- ★ 1/2 cup (60g) grated tasty cheddar
- ★ 2 tbs finely chopped chives
- ★ 1/4 cup (60ml) vegetable oil



Make sure you check the ARL to know how to dispose of the packaging from your ingredients. For any organic scraps, you can dispose of them in your Food Organics bin if your council provides one, or your home compost bin.



METHOD

STEP 1

Coarsely grate the zucchini. Place in a sieve over a bowl. Set aside for 5 mins to drain.

STEP 2

Meanwhile, sift combined flour into a large bowl. Make a well in the centre. Whisk milk and eggs in a jug. Add egg mixture to flour. Whisk until smooth. Use your hands to squeeze excess moisture from zucchini. Discard liquid. Add zucchini, corn, haloumi, cheddar and chives to the bowl. Stir to combine.

STEP 3

Heat 1 tbs of the oil in a large frying pan over medium heat. Pour four 1/4-cup (60ml) portions of the zucchini mixture around the pan, allowing room for spreading. Cook for 3 mins each side or until golden and cooked through. Transfer to a plate lined with paper towel. Repeat with the remaining oil and zucchini mixture. Serve warm or cold.

Store it: Keep fritters in a container in the fridge for up to 3 days. Wrap individually and place in lunch boxes with an ice brick.

DIETARY INFORMATION

Nut-free, peanut-free, sesame-free, soy-free, vegetarian.



This recipe was originally published by Coles (<https://www.coles.com.au/inspire-and-create/recipes-tips-ideas/recipes/zucchini-corn-and-haloumi-fritters>) and republished here with permission.

WASTE-FREE RECIPE

NO-BAKE CHIA MUESLI BARS

Get the kids involved in whipping up their school snacks. These crunchy chia muesli bars are easy-as-you-don't even need an oven!

INGREDIENTS

- ★ 1 1/2 cups (135g) rolled oats
- ★ 1/2 cup (100g) pepitas (pumpkin seeds)
- ★ 1/2 cup (65g) dried cranberries
- ★ 1/4 cup (35g) sunflower seeds
- ★ 2 tbs chia seeds
- ★ 1/3 cup (80ml) honey
- ★ 1/3 cup (80g) coconut oil
- ★ 1 tsp vanilla extract
- ★ 1/4 cup (35g) white chocolate melts
- ★ 1 tsp chia seeds, extra



Make sure you check the ARL to know how to dispose of the packaging from your ingredients. For any organic scraps, you can dispose of them in your Food Organics bin if your council provides one, or your home compost bin.



METHOD

STEP 1

Grease an 18cm x 28cm slice pan and line the base and 2 long sides with baking paper, allowing the sides to overhang.

STEP 2

Combine the oats, pepitas, cranberries, sunflower seeds and chia seeds in a heatproof bowl.

STEP 3

Melt the honey and coconut oil in a small saucepan over medium heat for 3 mins or until combined. Bring to the boil. Cook for 2 mins or until light golden. Remove from heat. Stir in the vanilla.

STEP 4

Pour the honey mixture over the oat mixture. Stir until well combined. Press into the prepared pan. Place in the fridge for 3 hours or until firm.

STEP 5

Cut into pieces. Drizzle with chocolate. Sprinkle with extra chia seeds. Store in an airtight container in the fridge for up to 1 week.

DIETARY INFORMATION

Egg-free, nut-free, yeast-free, sesame-free.



This recipe was originally published by Coles (<https://www.coles.com.au/inspire-and-create/recipes-tips-ideas/recipes/no-bake-chia-muesli-bars>) and republished here with permission.

WE ARE TAKING PART IN

The Waste-Free Lunch Challenge



All students and staff are encouraged to bring waste-free lunches to school.

REUSE



Reusable food containers



Reusable cutlery



Refillable drink bottles



Cloth napkins



Compost your food scraps

TAKE HOME TO RECYCLE



Plastic containers



Aluminium cans



Paper



Glass (teachers only)



The Waste-Free Lunch Challenge



THIS CERTIFICATE IS AWARDED TO:

**For actively participating in the Waste-Free
Lunch Challenge.**



WELL DONE!

“**The greatest threat to our planet is the belief that someone else will save it.**”



ROBERT SWAN

Explorer and conservationist



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