

# Focus Group Concept Testing of Packaging Solutions

Topline Report



**FIGHT FOOD WASTE**  
Cooperative Research Centre  
REDUCE · TRANSFORM · ENGAGE



Australian Government  
Department of Industry,  
Science and Resources

**AusIndustry**  
Cooperative Research  
Centres Program

# RMIT Contributors

- Professor Linda Brennan, School of Media and Communication
- Associate Professor Lukas Parker, School of Media and Communication
- Allister Hill, School of Design
- Associate Professor Simon Lockrey, School of Design
- Maddison Ryder, School of Design
  
- Associate Professor Karli Verghese, School of Design
- Sophie Langley, School of Design
- Dr Caroline Francis, School of Design
- Nhat Tram Phan-Le, School of Media and Communication

# About this project

Understanding the perception and use of packaging by consumers and how this plays a role in household food waste generation is an important first step in this project - FFWCRC Project 1.2.2. With a greater understanding of how people appreciate and use packaging, along with the food waste they generate, we can design improved packaging and communication on food waste avoidance that will ultimately reduce food waste.

Project 1.2.2. aims to understand consumer perceptions of the role of packaging in reducing food waste by:

- discovering target areas that will help drive packaging design decisions.
- discovering key consumer behaviours that may be adapted to reduce food waste.
- determining potential consumer responses to labelling and packaging alternatives in relation to food packaging.
- providing formative information for partners' new product development processes.
- designing packaging solutions to reduce food waste.
- designing more effective consumer education.
- campaigns to reduce food waste.

The project partners are:



# Executive Summary

This report is a top-line summary of Focus Group Concept Testing (FGCT) of packaging designs, within the FFWCRC Project 1.2.2 Packaging Design and Information Research. The FGCT research was conducted via online focus group sessions. This module of Project 1.2.2 assessed the overall level of appeal, acceptance and perceived impact on household food waste for 25 packaging designs. There were five sets of five designs (25 designs in all). The designs were reviewed as category clusters with five different focus groups.

More details of Project 1.2.2 can be provided on request. Project 1.2.2 aligns with the REDUCE and ENGAGE programs of the Fight Food Waste Cooperative Research Centre's (FFWCRC) activities. The overall project aims to understand consumers' perceptions of food waste with a view to finding opportunities for packaging design to reduce food loss and waste.

Reports for the earlier phases of this research are publicly available from the Fight Food Waste CRC website <https://fightfoodwastecrc.com.au/project/consumer-perceptions-of-the-role-of-packaging-in-reducing-food-waste/>

The five key waste areas identified in earlier phases of this research were assessed. This report on the Focus Group Concept Testing (FGCT) presents the results of the assessment of five packaging designs in each waste area/category cluster: 1) Bakery, 2) Dairy and Eggs, 3) Fruit and Vegetables (fresh produce), 4) Meat & Seafood (fresh or frozen), 5) Packaged and Processed (inc. processed meat & seafood).

Results are presented as:

1. A packaging design performance summary table with the 25 designs listed in order of acceptability to consumers, from those deemed ready to be presented to consumers, with only minor tweaks, through to those that were deemed unacceptable by consumers.
2. Top-line insights for each design within each of the separate categories – with listings of what worked well, what didn't work well and suggested optimisations for the design on each slide.
3. Implications for industry – including the key learnings and recommendations for design optimisation for reducing food loss and waste across all categories.

See the Methodology for further details on focus group structure/design and participant profile.

# Methodology

This document reports the results of online focus group sessions, held for FFWCRC Project 1.2.2, assessing packaging designs developed and refined in earlier stages of the project [and as reviewed for both the Peer Review and Consumer Choice surveys]. The packaging design options were rendered into two dimensional images, with up to 30 words of descriptive text explaining the function and form of the design option.

Participants were recruited by the market research agency and filtered into separate focus group that centred on one of the main/five food categories that they qualified for (either Bakery, Dairy and Eggs, Packaged and Processed (inc. processed meat and seafood), Fruit and Vegetables (fresh produce), Meat and Seafood (fresh or frozen).

Market research agency Stable Research managed the recruit and focus groups, with their partner subsidiary, Bastion Insights, moderating the groups and providing initial findings for this top-line report.

## Groups

For each 90-minute focus group / category discussion centred on the overall level of appeal, acceptance and perceived impact on household food waste for each of the 5 packaging designs. The order for each group discussion:

- Explore attitudes to food waste and pre-packaged foods
- Understand the role of packaging in relation to the preservation or waste of food
- Evaluate consumers detailed responses to each of the proposed pack designs
- Provide any feedback relating to the potential optimisation of each design

## Participants

A total of 27 participants informed the results. Recruitment of participants was achieved through Stable Research who project managed and recruited participants from their existing Australian panellists. Selection criteria were used to identify participants who were:






- Located across Australia
- Main or shared food purchasers/preparers
- Both male and female (approx 1/3 male and 2/3 female)
- Indicative of a cross-section, in terms of age, education level, household income and household structure, for those food purchasers/preparers aged 18 years and over
- Regular users in each of the five main food waste group categories under consideration - Bakery, Dairy and Eggs, Packaged and Processed (inc. processed meat & seafood), Fruit and Vegetables (fresh produce), Meat & Seafood (fresh or frozen). 6 participants recruited per category/focus group.

Category Group		Household Type	
Bakery	n=6	Families	n=10
Dairy & Eggs	n=6	SINKS/ DINKS	n=14
Packaged & Processed	n=5	Empty Nesters	n=3
Fruit & Vegetables	n=5		
Meat & Seafood	n=5	Location	
		VIC	n=8
Gender		NSW	n=13
Male	n=7	QLD	n=5
Female	n=20	SA	n=1

A vibrant, close-up photograph of fresh vegetables. In the foreground, there are several bright red bell peppers and a cluster of small, round cherry tomatoes still on their green vine. To the right, there are several stalks of green celery. The background is filled with more vegetables, including yellow and orange bell peppers, and some green leafy vegetables, all slightly out of focus. The overall scene is bright and colorful, suggesting a fresh market or a healthy meal preparation.

**Food  
categories  
& packs**






# Bakery

Label	B1 - Bread	B2 - Cake	B3 - Biscuits	B4 - Donuts	B5 - Tortilla Wraps
<b>Description</b>	Portioned half loaf size for small or single households, featuring easy to use clip and storage instructions on how to freeze, including recipe ideas when becoming stale.	Ridged container protects the product during distribution and home storage, and the resealable lid extends shelf life. Recommended portions are suggested for planning meals. Recipe ideas advise consumers how to refresh if going stale.	This tightly wrapped plastic sleeve features an easy to open rip tab, including an adhesive resealable strip at the end of the pack to extend freshness.	Ridged plastic packaging keeps the donuts fresh for longer and can be stored upright to avoiding being squished. Messaging on the label advises how to refresh if the donuts are becoming stale.	Scissor line is placed well above the easy-to-view reseal strip to avoid cutting off the feature. Packaging includes storage and recipe ideas to extend shelf life. Oxygen scavenger pad to remain in packaging to keep the wraps fresher for longer.
<b>Image</b>					


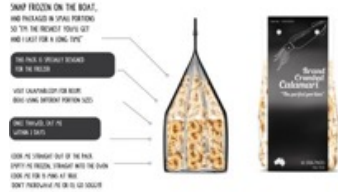



# Dairy & Eggs

Label	DE1 - Brie Cheese	DE2 - Cream Cheese	DE3 - Eggs	DE4 - Shredded Cheese	DE5 - Sour Cream
<b>Description</b>	Split entertaining pack provides smaller servings of two types of cheese. Clear message to consume within 4 days of opening. Storage instructions advise consumers to store in the original wrapper and place back into the protective cardboard outer box for storage.	This pack design features a resealable lid with a large, easy-to-lift tab for easy opening. The shallow design and curved corners allow the contents to be completely emptied with either a butter knife or spoon.	This typical egg carton packaging focuses on how to assess freshness using the float test through images and instructive text. Each stage of freshness is accompanied with appropriate recipe ideas. The overhang lid allows for customers to easily open and close the packaging to check for un-broken eggs prior to purchase.	Cutline encourages preferred opening to avoid spilling. Small portion size suits single households. Storing and freezing instructions included.	Packaging is transparent making leftovers visible, with a click-to-close resealable lid. Cup measurements are labelled to easily relate to recipe quantities. Callouts recommend how to use up the last scrapings on crackers, supported by the smooth easy-to-empty shape.
<b>Image</b>					






# Fruit & Vegetable

Label	FV1 - Cut Apples	FV2 - Frozen Peas	FV3 - Loose Apples	FV4 - Packed Fruit	FV5 - Salad Bag
<b>Description</b>	This structural packaging design focuses on call-outs to consumers to eat while fresh and on the go. Includes an idea to try in a smoothy if not eaten on the day of purchase.	This packaging uses a character to gamify and communicate how to store in the freezer, including a sticker to re-seal the pack. Markings encourage consumers to cut the corner of the pack to create a spout for easy pouring.	This design focuses on communicating how to store apples for extended freshness, i.e., in the fridge crisper drawer and includes messaging on the best time to consume for a crisp taste.	This design features an easy-to-read cut line for easy access. Familiar sayings communicate the portion of apples per week. The strong carry handle is intuitively designed for easy handling getting the product home undamaged.	Featuring tips on how to keep spinach fresher for longer through call-outs on pack. This design also demonstrates two options on where to cut open the pack, and how to store correctly using the resealable sticker which is also a temperature indicator, to show freshness.
<b>Image</b>	 A round, flat packaging for 'Brand Apple Pieces'. It features a clear window showing sliced apples and a brown paper band across the middle with the brand name and some text.	 A stand-up bag for 'Frozen Peas'. It has a green and white color scheme with a character-like shape and a 'RESEAL WITH STICKER' label.	 A rectangular box for 'Brand Fuji Apples'. It has a dark brown top and bottom with a white middle section showing the brand name and 'THE CRISPER THE BETTER LAST FOR YOU'.	 A white plastic bag for 'Red Brand Apples'. It features a large red apple graphic and a green band with the brand name and 'Perfect pack of 7'.	 A white plastic bag for 'Brand Spinach'. It has a large red graphic and a green band with the brand name and 'Fresh for Longer'.

# Meat & Seafood

Label	MS1 - Sliced Ham	MS2 - Frozen Calamari	MS3 - Minced Kangaroo	MS4 - Beef Steak	MS5 - Salmon
<b>Description</b>	Resealable tray allows for extended shelf life when stored in the fridge. Three recommended freshness checklists of sniff, see, and taste are designed for the user to sense-check the use-by date to determine whether the ham is safe to eat. Use-up recipes suggested on pack.	This packaging design is split into three individually sealed servings allowing for easy storage in the freezer and ensures the perfect amount is thawed for cooking.	Easy to open and divided portion packs of 2 X 250g sizes. Ideal for small households this pack allows for separate storage options. Call-out about removed oxygen to educate consumers on food saving packaging technology.	Designed for protection, this packaging is vacuum-sealed prolonging the life of the steak, with a call-out to justify why the meat may appear darker than usual. Vacuum packaging acts to extend shelf life while tenderising meat for fresher and better tasting steak. Temperature indicator shows safety, giving consumers confidence to consume even if nearing use-by date.	Stand-up portion packaging allows easy viewing when stored in the fridge to remind consumers not to waste the premium product and protects the premium salmon steaks from being crushed in the back of the fridge.
<b>Image</b>					










# Packaged & Processed

Label	PP1 - Almonds	PP2 - Cornflakes	PP3 - Chutney	PP4 - Pesto	PP5 - Tinned Tuna
<b>Description</b>	Zip-lock packaging keeps almonds fresher for longer. Date language communicates in plain English when the product is freshest. Call-outs on the back of pack suggest recipe ideas for almonds passing their freshest date and the number of portions recommended.	Internal plastic pouch features a clear cutting to avoid spillage by opening by hand. Includes an adhesive strip to re-close the plastic bag to keep the cereal fresh and crisp, avoiding unnecessary spillage.	High quality reusable chutney with an easy-to-empty shape allows consumers to get all last scrapings out of the jar and reuse. Messaging also recommends using a fresh knife to avoid contamination that may cause mould growth.	Easy-to-use squeeze bottle to dispense pesto quickly and for no waste, supported by lid standing format which allows all the product to fall to the opening.	Typical shallow-tinned format with an additional clear click-to-close lid to seal in smell, freshness, and allows easy viewing to see how much tuna is left over.
<b>Image</b>	<p>BACK OF PACK SAYS...</p> <p>IDEAS FOR OLD NUTS, GRIND PIE UP INTO ALMOND FLOUR AND POP PIE IN A CASE. OR, SOAK PIE IN WATER OVERNIGHT AND BLAST PIE IN THE OVEN</p> <p>STORAGE INSTRUCTIONS: KEEP PIE IN A COOL DARK PLACE</p> 	<p>SIDE OF PACK SAYS...</p> <p>RECIPE IDEAS - Omelette - Fried bread crumble - Cornflakes cereal - Lamb/chicken casserole - Use cornflakes in the same creative ways to make cornflakes into delicious meals.</p>  <p>♻️ Cardboard and Soft Plastic</p>	<p>Back of jar says...</p> <p>High quality, reusable jar - The shape is unique, easy to clean and easy to hold in hand</p> <p>Always use a sharp knife to cut open the jar - Always use a fresh knife each time you use the jar</p> <p>*Use jar for more ideas, visit our website for more ideas</p> 		



**Packaging Design  
Performance Summary**








# Packaging Designs that inspire further usage and target to unmet needs resonate most

Packaging Design	Ready, with minor tweaks	Needs further refinement	Requires a re-think	Rationale
 DE5 - Sour Cream	●			Cup measurements and transparency help reduce waste and tap into unmet needs.
 MS2 - Frozen Calamari	●			Splitting the pack into three helps reduce food waste and is highly unique.
 DE3 - Eggs	●			The pack offers a number of helpful suggestions to reduce waste and looks strong and sturdy.
 MS3 - Minced Kangaroo	●			Splitting the pack into two has the potential to reduce waste and is relatively unique.
 B1 - Bread	●			½ size loaf appeals to small households as a way to manage portions and reduce waste.
 B5 - Tortilla Wraps	●			Zip lock functionality is well designed and has potential to reduce food waste.
 PP1 - Almonds	●			Claims and zip lock functionality have potential to reduce food waste.
 MS4 - Beef Steak	●			Freshness indicator helps reassure consumers about the colour of the meat.
 B3 - Biscuits	●			Adhesive strip has the potential to keep the biscuits fresher for longer.

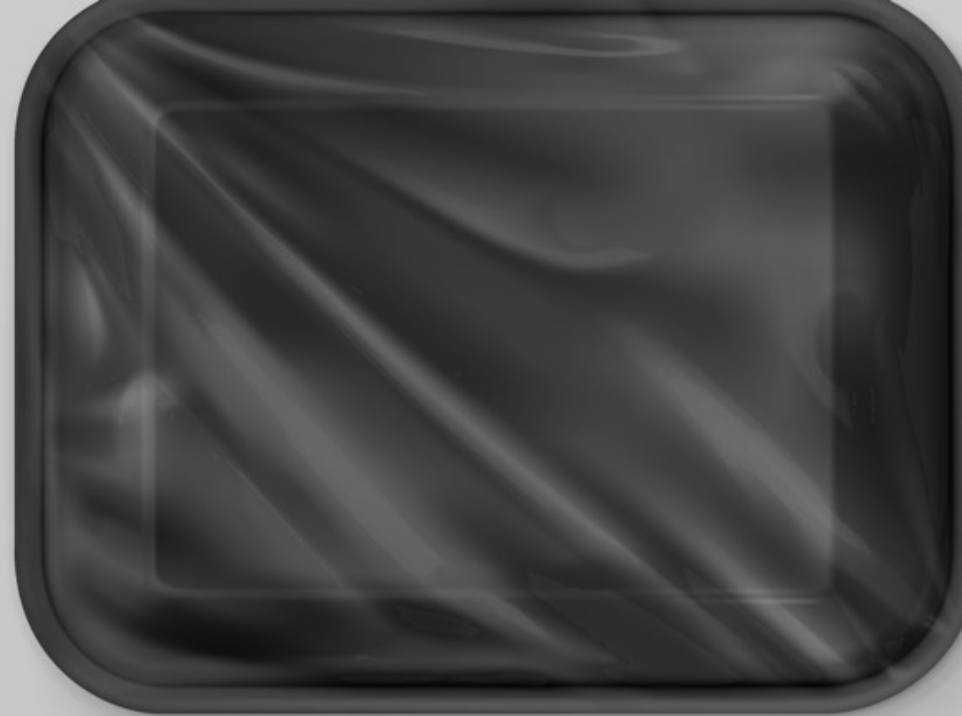
# Packaging Designs that miss the mark on pack design or claims need further refinement

Packaging Design	Ready, with minor tweaks	Needs further refinement	Requires a re-think	Rationale
 B4 - Donuts	●			Messaging on label provides helpful tips on how to refresh if the donuts are becoming stale.
 PP3 - Chutney	●			Talks about repurposing the pack, but not about reducing the potential for food waste.
 FV1 - Cut Apples	●			Delivers to a need for apples on the go, but misses the mark on recipe ideas.
 MS1 - Sliced Ham			●	Provides useful info to prevent food waste but some claims are contradictory or unnecessary.
 FV2 - Frozen Peas			●	Reseal functionality helps reduce potential for food waste but "Pea monster" is divisive.
 DE1 - Brie Cheese			●	A thoughtful way to explore flavours and reduce waste but needs a redesign and new flavours.
 FV5 - Salad Bag			●	Some good suggestions but too much info on front of pack, need to dial it back
 PP2 - Cornflakes			●	Storage directions and recipe ideas appeal but adhesive strip and transparent window divisive.
 B2 - Cake			●	Recipe suggestions lack relevance & packaging does not clearly communicate its benefit

# Packaging Designs that fail to address a consumer need or reduce food waste do not appeal

Packaging Design	Ready, with minor tweaks	Needs further refinement	Requires a re-think	RationaleDE4 -
 DE4 - Shredded Cheese		●		In lieu of a zip lock function or usage ideas, this pack may have limited impact on food waste.
 DE2 - Cream Cheese		●		Concept has nice appeal but doesn't do much to motivate consumers to reduce food waste.
 FV4 - Packed Fruit		●		Concept has nice appeal but doesn't do much to motivate consumers to reduce food waste.
 PP4 - Pesto			●	Squeezy format less than ideal, offers very few benefits and increases potential for food waste.
 MS5 - Salmon			●	Multipack has potential but in current format it's not clear that it's a multipack & it looks cheap.
 FV3 - Loose Apples			●	Consumers are unclear as to how this concept works or is priced, more clarification is required.
 PP5 - Tinned Tuna			●	Concept offers no clear benefit to the consumer and is largely considered "unsafe".

# Packaging designs by category





# Bakery

# Bakery: B5 - Tortilla Wraps

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of a ½ size loaf appeals to singles and small households as a way to manage portion sizes and reduce food waste
- Information about usage and storage is simple, easy to understand and clear
- Expiry date on pack preferred vs on tag (easier to see, won't go missing)
- Freeze and squeeze suggestions considered helpful tips
- Recycle logo draws attention on the front of pack

## What didn't work well:

- The phrase “freshest before” feels more positive and open than “used by” but isn't as clear and consistent as “best before”
- Icons on bottom of pack are read separately, not as a sentence from left to right
- Some are drawn to the recycle logo which suggests it can be recycled at home
- Others know very little about where to find or how to use a RED cycle bin
- Most unclear about whether or not it can only be recycled at a store
- This idea is not particularly new or unique
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Greater clarity required around the recycling opportunities of this pack
- Replace the phrase “freshest before” with “best before”
- Reword “getting stale” to “getting old”
- Provide greater context for AU logo



# Bakery: B2 - Cake

Result: Needs further refinement ●

## What worked well:

- The idea of a ridged container with a resealable lid that protects the product during distribution and home storage is mildly appealing
- Recyclable logo is easy to see on pack and the fact it can be recycled is appealing
- Contrast in colour for the Australia logo helps it stand out on pack
- Recommended portions are helpful, but odd numbers (7,9) seem a bit strange as most would typically cut and divide a cake evenly

## What didn't work well:

- Lacks uniqueness, looks similar to current cake packaging
- Not clear whether “eat me up before” is used by or best before
- Sticker on lid makes it hard to see and judge the quality of the product
- Recipe ideas lack relevance and sound like they require too much effort
- Freshen up in the microwave unnecessary, self explanatory to most
- Impact on food waste vs current packaging thought to be minimal
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Replace the recipe idea with “once opened consumer within x days”
- Replace the phrase “eat me up before” with “best before”
- Reduce the size of the sticker on the lid
- Provide greater context for AU logo



# Bakery: B3 - Biscuits

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of a tightly wrapped plastic sleeve with an easy to open rip tab is appealing
- The inclusion of an adhesive reseal strip at the end of the pack to extend freshness is highly unique in the biscuit category and would be a benefit to those with limited storage space or who do not typically decant biscuits into a tin or jar at home
- The call out on pack resonates reinforces the fact that the pack is resealable
- The design (colour, type font, callouts) feels simple, modern and minimalist

## What didn't work well:

- Some question the quality of the adhesive strip, and suggest it needs to be high quality
- Others are less interested in the strip as they would likely decant the biscuits anyway
- Unlikely to impact purchase intent or food waste, more of an added benefit
- 6 portions not clear – some mistake this for the total number of biscuits
- Use of colour and lack of imagery feels a bit bland and inspiring
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Ensure adhesive strip clearly indicates quality and strength
- Add a bit of colour and / or imagery to the pack design
- Provide greater context for AU logo
- Clarify what 6 portions means



# Bakery: B4 - Donuts

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of a ridged plastic pack that keeps donuts fresher for longer is appealing, albeit not particularly unique vs packaging that is already on offer
- The notion that the packaging can be stored upright is thought to be beneficial, but mostly for the purposes of merchandising rather than to avoid being squished
- Use of the term best before is clear and easy to understand
- Text on back of pack is equally informative and easy to understand
- “Am I getting old?” has positive and playful tone – better than saying “am I going stale”
- “Dip on a hot drink” or “pour custard over me” considered helpful suggestions
- Recyclable cardboard logo is highly appealing and easy to see

## What didn't work well:

- “Break me up and roll me into small balls for a lunch snack” feels too arduous
- Back of pack suggests plastic tray is recyclable but front of pack doesn't reinforce this
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Get rid of or replace the suggestion to roll it up into small balls and use as a snack
- Specify whether or not the plastic lid is recyclable on the front of pack
- Provide greater context for AU logo



# Bakery: B5 - Tortilla Wraps

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of tortilla wrap packaging with a resealable strip is appealing, albeit not unique
- Placing the scissor line well above the easy-to-view reseal strip, however, is considered to be highly thoughtful and addresses a key consumer need
- Instructions for freezing thought provoking for some, appreciated by all
- Instructions for microwaving self explanatory for most, but informative for some
- Oxygen scavenger pad appealing, but most feel as if it is a 'standard feature'

## What didn't work well:

- The phrase "freshest before" feels more positive and open than "used by" but isn't as clear and consistent as "best before"
- Caramel sauce and cake seems a bit odd, consider a savoury recipe idea instead
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Call out the benefit of placing the scissor line well above the easy-to-view reseal strip
- Replace the phrase "I am at my freshest before" with "best before"
- Remove the caramel sauce and cake suggestion
- Provide greater context for AU logo



# Dairy & Eggs



# Dairy & Eggs: DE1 - Brie Cheese

Result: Needs further refinement ●

## What worked well:

- The idea of an entertaining pack that provides smaller servings of two types of cheese appeals at a high level – especially for households with differing tastes as it allows consumers to explore different flavours while also reducing waste
- Protective cardboard outer box assumed to help maintain the freshness of the product if not eaten all in one go – (i.e. will last longer and taste better at the 4 day point compared to non-protective packaging)
- Protective cardboard box also cues high end, expensive
- Instructions regarding consumption and storage are helpful and clear

## What didn't work well:

- Two layers of packaging seems a bit excessive, raises concerns about the environment
- Some questions about how the product is divided into two portions – is it split down the middle, are there two separate portions inside the pack – need to make this clear
- Blue cheese considered an acquired taste, limits purchase intent for some
- AU logo lacks meaning as a stand alone, more info required
- Use of colour feels a little bit bland and uninspiring

## Optimisations:

- Provide more clarity around how the 2x chesses are stored in the pack
- If possible, make a recyclable claim on the front or back of back
- Consider replacing blue cheese with Camembert
- Provide greater context for AU logo
- Reconsider the colour scheme



# Dairy & Eggs: DE2 - Cream Cheese

Result: Needs further refinement ●

## What worked well:

- The idea of cream cheese in a tub is mildly appealing, albeit not particularly unique
- Use of a resealable lid with a large, easy to lift tab for easy opening seems thoughtful
- Shallow design, curved corners appeals to those who use cream cheese as a spread
- Easy to reseal pack claim self explanatory – consider calling out easy to lift tab instead

## What didn't work well:

- Tub format lacks appeal to those who intend to use cream cheese for cooking (rather than as a spread) – often tend to prefer the foil packaging (akin to butter) instead
- Once opened eat within 3 days good and important information to know, however this negatively impacts purchase intent due to the fact it has a relatively short shelf life
- Lack of recipe or usage suggestions impact potential reduction in food waste
- Use of colour and lack of imagery feels a bit bland and uninspiring
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Lean into the spreadable occasion with on pack claims or activations
- Consider adding some recipe or usage suggestions on side of pack
- Consider the addition of some imagery to liven up the pack design
- Make a claim about the easy to open tab on the pack
- Provide greater context for AU logo



# Dairy & Eggs: DE3 - Eggs

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of an egg carton with extra strong packaging, usage instructions and an overhanging lid for ease of use is highly appealing and somewhat unique
- “This box is extra strong” claim resonates strongly and address a key consumer need
- Overhang lid allows for customers to easily open and close the packaging to check for unbroken eggs prior to purchase – preferred by most vs current egg carton packs
- Base of the carton looks stronger and sturdier than typical egg carton packaging
- Information on how to assess freshness using the float test through images and instructive text is considered to be highly useful, and is new news to some
- Recipe ideas at each freshness stage are relevant and thoughtful
- Assumed to be made out of cardboard and fully recyclable
- Use by date clear and easy to see

## What didn't work well:

- Some question how the overhanging lid might lock in and seal tight
- Pack lacks specificity around how many eggs are in the carton
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Ensure that it is easy to see or feel the overhanging lid locking in and sealing tight
- Be sure to specify how many eggs are actually in the pack
- If possible, make a recyclable claim on the pack
- Provide greater context for AU logo
- The concept helps reduce food waste and directly addresses a key consumer need
- The pack offers a number of helpful suggestions and looks strong and sturdy



# Dairy & Eggs: DE4 - Shredded Cheese

Result: Needs further refinement ●

## What worked well:

- The idea of a small portion sized pack of shredded cheese appeals to single or small sized households as a way of managing portions and reducing waste
- “Once opened, finish me within 2 weeks” seems like a reasonable amount of time and is nice to have called out on the front of pack (keeps freshness top of mind)
- “Freeze me for up to 3 months” a helpful suggestion, surprising to some

## What didn't work well:

- Looks like every other pack of shredded cheese, lacks uniqueness in terms of design
- “Eat me fresh by” feels a bit ambiguous, suggests sticking with best before instead
- “I like to be seen, store me where you can see me” largely unhelpful, self explanatory
- No clear indication that the pack is resealable which limits purchase intent
- Scissor line is placed in the middle of the top strip which may result in consumers accidentally cutting off the zip lock feature if, in fact, there is one
- AU logo lacks meaning as a stand alone, more info required
- Use of colour cues low quality, reminds of Black & Gold

## Optimisations:

- Add a zip lock function and ensure that the scissor line is well above the zip
- Highlight the small portion pack claim and get rid of the quote underneath
- Consider adding some imagery or using different colour scheme
- Replace the phrase “eat me fresh by” with “best before”
- Provide greater context for AU logo



# Dairy & Eggs: DE5 - Sour Cream

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of a transparent sour cream pack with cup measurements, a big tab and a resealable lid is highly appealing and relatively unique
- Cup measurements considered to be highly thoughtful, easily relate to recipe quantities
- “I’m perfect on crackers” serves as a helpful tip in a personable and endearing tone
- Click-to-close resealable lid helps keep the product fresher for longer after opening
- Transparent packaging makes leftovers visible, prompts usage, reduces waste
- Oversized blue tab makes it easier to open, reduces the chances of spillage
- Smooth easy-to-empty shape cues considered design, good for cooking
- Use of colours, font type and overall design cues modern and fresh
- Use by date clear and easy to see

## What didn’t work well:

- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Consider adding “once opened, consume within x days” underneath used by date
- Provide greater context for AU logo





# Fresh Fruit & Veg

# Fruit & Veg: FV3 - Loose Apples

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of cut apples is divisive at a high level but the use of eco-friendly materials and the addition of a lid strengthens the appeal and offers clear functional benefits vs the typical single use plastic used to package supermarket bought cut apples
- 100% recyclable packaging is highly appealing and unique for cut apple packaging – furthermore, it works well to partly reduce the guilt associated with buying these types of ‘convenience’ or ‘on-the-go’ type products that are typically made from plastic
- Design aesthetic and use of brown / cardboard cues simple, modern and natural
- Packed with vitamins / antioxidants good to know, reinforces health credentials
- Best before date clear and easy to see

## What didn't work well:

- Compared to whole apples, cut apples are known to go off and turn brown quicker – in addition to this, some feel like buying this type of product is “lazy”
- “Try me in a smoothy” divisive – provokes thought but feels a little bit odd, few had ever thought of having apple in a smoothy and even fewer would be willing to try it – would make more sense if the product in question was watermelon, passionfruit or mango
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Ensure the product is stocked with convenience products in the supermarket
- Replacing “try me in a smoothy” with another suggestion – potential to consider something akin to apple sauce, salsa or apple chips
- Provide greater context for AU logo



# Fruit & Veg: FV2 - Frozen Peas

Result: Needs further refinement ●

## What worked well:

- The idea of a frozen pea pack with a character to gamify and communicate how to store in the freezer is divisive but the addition of a resealable sticker and thoughtfully placed cut line is highly appealing and relatively unique
- Cut line perceived to be thoughtfully placed – has potential to impact food waste by reducing the potential for spillage when opening or pouring out the product
- Resealable sticker is highly appealing and unique to the category – eliminates the need to tie it up or store it in another container – however some question the quality of the adhesive strip and others failed to notice it due to its position on pack
- Use of colour (green and white) is appealing and feels in line with category code

## What didn't work well:

- “I'll waste your peas if you leave them out of the freezer” is self explanatory, suggest replacing with commentary about the resealable sticker / functionality here instead
- Pea monster character is divisive – some think it is cute and endearing, while others (particularly SINKS / DINKS) feel like it is targeted at families with young kids
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Replace “I'll waste your peas” messaging with information about the resealable sticker
- Move the resealable sticker closer to the top of pack to make it more noticeable
- Consider removing the pea monster in order to appeal to a wider audience
- Provide greater context for AU logo



# Fruit & Veg: FV3 - Loose Apples

Result: Requires a re-think ●

## What worked well:

- The idea of a cardboard box for apples is appealing at a high level – however, there is a lot of confusion about what this concept is and how it would practically work
- The sooner I'm eaten the better I am – helpful tip to prevent apples from going off
- Keep me cold and I'll last longer – thought provoking, helpful to some
- Cardboard box looks small and slim enough slot into a fridge
- Better than plastic – cardboard is recyclable

## What didn't work well:

- Lots of confusion about whether the apples would be sold in the box as a multipack or simply stored in the box and available for individual purchase
- If it is the former, consumers see no clear benefit, question how it would be priced (unit or weight) and generally struggle to get their head around it
- If it is the latter, consumers see clear benefit in storing apples in cardboard but fail to see how this is different to how apples are already currently stocked
- Cardboard box considered to be far less practical than loose apples or smaller packs – no handles, harder to hold / carry / transport / fit into a shopping bag
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- The concept requires further clarification and therefore the response to it is unclear
- Need to specify whether or not the product is sold as a multipack or individually
- Need to specify how the product will be priced (unit or weight)
- Need to provide greater context for AU logo



# Fruit & Veg: FV4 - Packed Fruit

Result: Needs further refinement ●

## What worked well:

- The idea of packaged fruit is divisive and lacks uniqueness but has some appeal should the fruit in question not be available for purchase in a loose format – “its just a plastic bag... I do sometimes buy them admittedly because I can get small ones for the kids and you cant get them loose... but I don't think it's very necessary”
- Plastic bag perceived as slightly more environmentally friendly than fruits double wrapped in single use plastic
- An apple a day is simple, effective and reinforces health credentials
- Strong built in carry handle is appreciated but calling it out on pack isn't necessary
- Portion pack of 7 – useful information, good to know
- Best before date clear and easy to see

## What didn't work well:

- Compared to loose fruit, packaged fruit is assumed to be more expensive, worse for the environment and sometimes, not as fresh – in addition to this, there is often a sense of guilt or laziness associated with buying a product like this
- “Carry handle to help get us home undamaged” lacks believability – doesn't account for the potential for the product to get bruised in a shopping trolley or bag etc.
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Add recipe suggestions to pack to help prevent food waste – e.g. strudel or apple pie
- If product is different to what is available in a loose format make a claim about it – i.e. lean into it being small sized or kids sized etc. as this is often the core benefit
- Provide greater context for AU logo



# Fruit & Veg: FV5 - Salad Bag

Result: Needs further refinement ●

## What worked well:

- The idea of a salad bag with a freshness indicator and tips on how to use and keep fresher for longer is more appealing in theory than it is in practice
- Freshness indicator is unique and appealing – but it is unclear how it works
- Fresher for longer instructions are helpful – but sound slightly arduous
- Recipe ideas helpful to some, self explanatory to most
- Best before date clear and easy to see

## What didn't work well:

- Too many cut lines creates unnecessary clutter and confusion
- Not clear that the freshness indicator is actually a temperature indicator
- Not immediately clear that the freshness indicator doubles as a resealable sticker
- Diagonal cutline and fold down to seal pack line offer no clear benefit or purpose
- Eat me within 4 days not clear – need to specify that it is 4 days after opening
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Rename “freshness indicator” to temperature indicator and call out that it is a sticker
- Move the fresher for longer instructions to the back of pack and use a better icon
- Remove the white line and instruction that is positioned in middle of the pack
- Specify that it is “eat me within 4 days after opening”
- Simplify the pack by removing the diagonal cutline
- Provide greater context for AU logo





# Meat & Seafood

# Meat & Seafood: MS1 - Sliced Ham

Result: Needs further refinement ●

## What worked well:

- The idea of a resealable tray for sliced meat is mildly appealing but lacks uniqueness
- Peel and reclose provides clear functional benefits so long as it is high quality
- Once opened, consume within 3-5 days – clear concise and easy to understand information that adds value beyond simply stating the use by date and could potentially help reduce the potential for food waste
- Sniff, see, touch icons a thoughtful reminder but hard to see due to colour contrasting
- Helpful to know the number of slices in a pack
- Used by date clear and easy to see

## What didn't work well:

- Don't throw me out sticker feels a bit accusational – consider recipe ideas instead
- Suggestion to use 2 slides a day for 7 days is at odds with “eat within 3-5 days”
- Consumers don't want or need to be told how many slices to use each day
- Use of colour and lack of imagery on pack cues boring, bland, uninspiring
- AU logo lacks meaning as a stand alone, more info required
- Unclear as to whether or not this pack can be recycled
- QR code lacks context, unlikely to be used

## Optimisations:

- Remove the QR code or consider repurposing it as a tool to access recipe suggestions
- Remove the don't throw me out sticker, consider replacing it with recipe suggestions
- Play with the contrast in colours, ensure the sniff, see and touch logos are easy to see
- Remove 2 slices per sandwich each day of the week messaging
- Provide greater context for AU logo



# Meat & Seafood: MS2 - Frozen Calamari

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of snap frozen calamari split into three individually sealed servings is highly appealing and unique
- Splitting the pack into three individual portions offers clear functional benefits – allows for easy storage in the freezer, ensures the perfect amount is thawed for cooking and as a result, reduces the potential for food waste
- Once thawed eat within 3 days – clear, concise and easy to understand
- Cooking instructions very informative – esp. the tip to avoid the microwave
- Website for recipe ideas – a welcome addition, likely to be used by some
- Reference to the “perfect portion” reinforces the fact it is a multipack
- Use of colour and imagery cues premium, upmarket and expensive
- Used by date clear and easy to see

## What didn't work well:

- “This pack is specially designed for the freezer” is a largely self-explanatory claim – consider replacing it with a relevant and thought-provoking recipe idea
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Replace “designed for the freezer” claim on back of pack with a thoughtful recipe idea
- Provide greater context for AU logo



# Meat & Seafood: MS3 - Minced Kangaroo

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of portion packed meat is highly appealing and relatively unique – particularly to small households and within the pre-packaged supermarket meat category
- Dividing meat into 2x 250 portions allows consumers to better manage the freshness of the meat by preserving one of the portions for use on a later date
- Map strengthens quality perceptions by suggesting the meat is locally sourced
- Snap and freeze is self explanatory to most but for some it may be nice to know
- Oxygen removed from the pack is self explanatory but again, is nice to know
- Recipe ideas and specific reference to leftovers is relevant and thoughtful
- Use of colour, font type and images cues rustic, minimalist, high quality

## What didn't work well:

- Needs to specify whether or not the packaging is recyclable
- Needs to specify lean x% fat, star rating or heart tick
- Needs to specify how long you can freeze it for
- Needs expiry date on both portions

## Optimisations:

- If possible, make a claim about the quality or fat percentage of the meat
- If possible, make a recyclable claim on the front or back of back
- Add a “used by” or “best before” date to each portion of the pack
- Add a note about how long it can be safely frozen for



# Meat & Seafood: MS4 - Beef Steak

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of a vacuum sealed steak is appealing but not particularly unique
- “Vacuum packaging keeps your steak fresher for longer” is appealing and believable
- Temperature indicator easy to understand and thought to be a good idea
- “My darker colour is natural” is clear, helpful and reassuring
- Used by date clear and easy to see

## What didn't work well:

- “Packed for protection” requires more clarification, most unclear as to what it means, some assume it is anti-theft technology for the purposes of supermarket security
- Temperature indicator likely to help influence whether a consumer deems the product as safe for purchase at the point of sale but unlikely to impact their willingness or confidence to consume it at home once it nears its used by date
- AU logo lacks meaning as a stand alone, more info required
- Single serve not particularly relevant to families

## Optimisations:

- Consider adding some recipe suggestions back of pack
- Remove or reconsider the packed for protection logo
- Provide greater context for AU logo



# Meat & Seafood: MS5 - Salmon

Result: Requires a re-think ●

## What worked well:

- The idea of salmon in stand up packaging makes it easier to see the product in the fridge but offers very few clear benefits to the consumer
- Eat me within 2 days sentence isn't finished but is assumed to mean within 2 days of opening which is considered to be good to know
- Add butter, lemon and parsley nice to know – but an actual and thought provoking recipe idea would be more helpful

## What didn't work well:

- Stand up packaging offers no clear benefit or advantage to the consumer – feels unnecessary, cues over packaging and is assumed to take up extra room in the fridge
- “I am a premium product don't waste me” is self explanatory and has a negative tone
- Premium product sash looks cheap, lacks credibility and feels a bit gimmicky
- Image behind brand name is confusing, does not convey any meaning
- Lack of colour and meaningful imagery makes the pack feel cheap
- It's not immediately clear that there are 2x adult size portions
- AU logo lacks meaning as a stand alone, more info required
- Lightbulb icon looks tacky, is reminiscent of clip art

## Optimisations:

- Ensure that it is very clear that there are 2x portions of salmon in this pack
  - Improve the lightbulb logo and add a more thoughtful recipe suggestion
  - Consider a complete overhaul of the colour scheme, and design
  - Remove “I am a premium product don't waste me”
  - Provide greater context for AU logo
- 
- The concept feels like it benefits the supermarket more than the consumer
  - The pack design doesn't cue premium or clearly specify that there are actually 2x portions of salmon





**Packaged & Processed**

# Packaged & Processed: PP1 - Almonds

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of a transparent zip lock pack with thoughtful tips on how best to use almonds is highly appealing, and somewhat unique
- Zip lock packaging – slightly more unique and convenient than most typical nut packs
- Ideas for old nuts – a thoughtful way to reduce waste by inspiring further usage
- Squeeze air out claim – not necessarily new info but still good to know
- Keep me in a cool dark place – expected but still helpful info
- Recycle logo – stands out on pack and is easy to see

## What didn't work well:

- The phrase “freshest before” feels more positive and open than “used by” but isn't as clear and consistent as “best before”, suggest reverting to best before for the sake of simplicity, clarity and consistency across products
- Return to store to recycle easy to miss on transparent background, could potentially result in consumers accidentally throwing it in the regular recycling bin
- 5 serves pie chart is confusing, consumers don't understand why one slice is missing
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Move “return to store to recycle” to underneath the PET logo so that it is easier to see
- Get rid of the pie chart next to 5 serves or make sure all 5 slices are coloured in
- Replace the phrase “I am at my freshest before” with “best before”
- Make a call out about the zip lock functionality
- Provide greater context for AU logo

- The concept appeals largely for its zip lock functionality
- The pack provides useful recipe ideas and storage suggestions



# Packaged & Processed: PP2 - Cornflakes

Result: Needs further refinement ●

## What worked well:

- The idea of a corn flake packet with a transparent window and resealable adhesive strip has mixed appeal but is relatively unique to the cereal category
- The adhesive strip has mixed appeal – some see it as a convenient way to store it / maintain freshness, others question its effectiveness and some simply prefer to decant their cereal into jars or containers which means that it offers no added benefit
- Product window is appealing, but raises some questions about structural integrity or tampering (esp. for cornflakes which can be easily squished)
- Recipe ideas are relevant and thought provoking – website is also a welcome addition
- Squeeze air out claim – not necessarily new info but still good to know
- Recycle logo specifies that cardboard and soft plastic can be recycled and is relatively prominent on the side of pack which makes it reasonably easy to see

## What didn't work well:

- Some concern about the potential for corn flake crumbs to stick to adhesive strip and reduce it's functionality and / or result in the product being exposed to air / going stale
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Consider adding add a zip lock function instead of an adhesive strip and ensure that the scissor line is well above the zip
- Consider removing the transparent window or ensuring that the outer packaging is sturdy enough to prevent it from getting squished in transit
- Provide greater context for AU logo



# Packaged & Processed: PP3 - Chutney

Result: Ready, with minor tweaks ●

## What worked well:

- The idea of a high quality reusable chutney jar feels slightly unnecessary but is appealing to some so long as it does not attract a price premium
- “My label is easy to peel” appeals to those who intend on reusing the jar
- Messaging around “using a fresh knife” is self explanatory to some, but most can see how this message may be beneficial to people who may not know better
- Safety seal self explanatory and easier to see compared to typical chutney packaging
- Font type, label design and use of colour cues premium, authentic, high end
- Easy to empty shape sounds thoughtful, cues considered design

## What didn't work well:

- “Use jar to store spices, nuts and homemade preserves” once jar is finished is thought provoking but doesn't help to prompt alternative uses of the chutney and therefore fails to make any significant impact on the potential for food waste
- No clear information about whether or not the jar is recyclable – in lieu of this, those who do not intend on repurposing it may feel guilty for purchasing it
- Some minor concerns around the quality of the clasp – will it be long lasting?
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- Add recipe ideas or usage suggestions to help reduce potential for food waste
- Add a “best before” date and recyclable logo to the front of pack
- Ensure metal clasp clearly indicates quality and strength
- Provide greater context for AU logo
  
- The concept offers consumers a convenient way to repurpose the product but doesn't do much by way of reducing the potential for food waste
- The pack looks premium and high end but consumers don't want to pay more for it



# Packaged & Processed: PP4 - Pesto

Result: Requires a re-think ●

## What worked well:

- “I am fully recyclable” is inexplicably clear and relatively easy to see
- Squeeze lid makes it easy to dispense the product, at least initially
- Usage suggestions are thought provoking and “in your face”
- Use of colour and imagery cues bright, light and fresh

## What didn't work well:

- The idea of an easy-to-use squeeze bottle to dispense pesto lacks relevance and appeal and fails to tap into any key consumer needs
- Squeeze lid makes it hard to get the last bits of pesto out of the bottle which could potentially result in frustration and / or food waste – most of those we spoke to would prefer a glass jar as it is easier to get a spoon into and is better suited for cooking
- AU logo lacks meaning as a stand alone, and white colour blends into pack
- There is no best before or used by date that is visible on this pack
- “My packaging keeps me fresher for longer” lacks believability

## Optimisations:

- There is no need or benefit to having a squeeze pack of pesto and the concept is considered to result in a higher potential for food waste than current packaging.
- This concept requires a serious re-think.



# Packaged & Processed: PP5 - Tinned Tuna

Result: Requires a re-think ●

## What worked well:

- The idea of being able to reseal food packaging appeals at a high level

## What didn't work well:

- The idea of a tuna can with a "click-to-close lid" offers no clear benefits to the consumer and raises significant food safety concerns
- Most of those we spoke to claim to typically eat 250 grams of tuna in one sitting which renders the benefit of a click-to-close lid null and void
- Most also claimed to be taught from a young age not to store tinned food in the fridge for fear of metal taste or food contamination which again, suggests that even if the click-to-close lid was on a bigger can of tuna, there would still be concern
- No clear info about whether or not the tin or click-to-close lid is recyclable
- AU logo lacks meaning as a stand alone, more info required

## Optimisations:

- While the notion of being able to reseal pre-packaged food is appealing, the idea of resealing and storing canned food raises some serious safety concerns
- Unless it is possible to make a claim that the can is safe to store in the fridge, this concept requires a serious re-think



A blurred photograph of a supermarket aisle. The shelves are filled with various products, and the overhead lights create a bright, slightly out-of-focus atmosphere. The perspective is looking down the center of the aisle.

# Implications

# Key Learnings

Across all categories

- The most impactful concepts are unique and deliver to a true consumer need.
- Recipe ideas and storage instructions are helpful, but only if they are thought provoking.
- Best before is more consistent and easier to understand than eat me / freshest by.
- Australia logo doesn't work as a stand-alone, consumers need more info and context.



# Key Recommendations

Across all categories



## **ADD CONTEXT TO THE AU LOGO**

The Australian logo on its own does not provide consumers with enough context behind whether or not the product in question was made, produced or packaged in Australia and / or made from Australian ingredients. As a result, more information and clarity is required to address this.



## **OFFER THOUGHTFUL RECIPE IDEAS**

Recipe ideas and storage suggestions are a great way to inspire use and reduce the potential for food waste. However, ideas and suggestions must be relevant and thought provoking (i.e. go beyond the obvious) in order to be noticed and make a true impact. If not, all they will do is take up space on the pack.



## **STICK WITH THE TERM BEST BEFORE**

The term best before is feels relatively open to interpretation and is consistently well known across a variety of different products and categories. Suggest sticking with this terminology as compared to eat me or freshest by as it is easier to understand – esp. for CALD audiences.



## **AVOID USING EAT ME / FRESHEST BY**

The terms eat me by or freshest by are rather divisive. Some feel that they are slightly more positive and open than the term best before. Others (esp. CALD audiences) find it more slightly confusing, foreign and unclear. Suggest avoiding the use of these terms for the sake of clarity and consistency.



## **SPECIFY EAT WITHIN X NUMBER OF DAYS**

In addition to a used by or best before date, consumers find it highly useful for packaging to clearly and effectively call out the number of days after opening the pack the product should be consumed. This serves as a reminder of when to eat the food and is thought to play a key role in reducing potential food waste.

# Acknowledgements

Associate Professor Lukas Parker, Professor Linda Brennan, Dr Simon Lockrey, Associate Professor Karli Verghese are Chief Investigators on the Consumers and Packaging Project, which is funded by the Fight Food Waste Co-operative Research Centre with additional investigators Allister Hill, Maddison Ryder, Sophie Langley, Dr Caroline Francis, and Nhat Tram Phan.

Find out more about the [Fight Food Waste CRC](#).

The work has been supported by the Fight Food Waste Cooperative Research Centre whose activities are funded by the Australian Government's Cooperative Research Centre Program. This is FFW CRC Document 2022\_013.