What did we want to find out?
Understanding the role of packaging in consumers’ food waste journeys is important if we are to reduce food waste through packaging design. This includes how packaging is used, how the consumers respond to packaging (changes, designs, styles, and types), and how the consumers waste (or not) their food.

The research mapped consumer food waste journeys through households’ shopping, storage, cooking, and disposal habits, characterising the role of packaging throughout the journey (Figure 1).

What did we find out?
There are a range of different behaviours, motivations, practices, and obstacles for consumers across different food categories. These insights reveal several challenges and opportunities for food packaging to play a role in reducing consumer food waste regardless of whether that packaging is currently designed to help reduce food waste.

A strong theme across multiple recommendations was consumer education, whether that be of the overall impact of food waste, or why a specific form of packaging suits the product the consumer has purchased.

What can we do next?
These recommendations provide industry and government with foundational advice to pursue actions that may better inform and enable consumers on how to reduce food waste in the home in relation to packaging.

These insights will also be used in the development of industry and consumer engagement programs and activities across the FFW CRC.
01 Visibility of food waste impact along the supply chain

Consumers said they would like more communication and education about where food waste is occurring along the whole food supply chain, highlighting the relative impact of consumers to reinforce their important role in reducing food waste.

02 Engaging with household needs

The willingness of individual household members to reduce their food waste may depend on what they think other household members would find suitable. This results in the need for adaptive packaging design in the unique and diverse uses and needs within a household.

03 Deep and nuanced consumer research

Understanding the dynamic nature and shifts in household demographics, headcounts, and needs is key for companies aligning serving sizes of packaging and product combinations as a continual process over time.

04 Up-stream supply chain action

Food producers, manufacturers and retailers need to use the latest consumer research to further develop appropriately designed supply conditions, sales practices, and packaging features, including the criteria being developed as part of the FFW CRC Save Food Packaging Design Criteria and Framework project. The importance of co-designed solutions cannot be understated here.

05 Packaging function education

The lack of consumer understanding of various packaging suggests a need to educate them on food waste and improve their knowledge of the related functions. Examples of this includes chemical/physical protection of the food, functions that facilitate better handling of the food, communication of important safety information, or packaging disposal instructions.

06 Food category education

Any consumer education efforts should also aim to increase consumer’s knowledge about how long various foods last. This could include why particular packaging materials are used, and how fresh food breathes, ripens and degrades.

07 Packaging product interaction

Packaging could also be used to communicate specifically how it can help store particular food, and why certain packaging is required for certain products. If we are hoping to increase acceptance of the role of packaging in reducing food waste then it is important that consumers understand how packaging works to slow degradation and extend life.

08 Packaging vs food waste education

By opening a consumer conversation about packaging benefits to reduce food waste, we would be able to increase the understanding of packaging’s role in the broader sense, and that reducing food waste has such significant positive environmental, social and economic impacts.

09 Packaging design for home storage

It may be useful to consider the relationship between food, packaging and storage when designing food packaging. This includes the temperature considerations, consumer practices i.e. decanting, and available pantry, fridge and freezer space.

10 More packaging, rather than less

Where the potential impact of the particular type of food waste is quite high, some food products might require more packaging rather than less.

11 Communication on packaging for optimal home storage

Consumers would benefit from increased communication on ideal storage for food products, like how to store in the freezer, including optimal storing temperatures or length of time. These can both help improve food quality and reduce food waste. Even if this information is currently on pack, consumers might need additional communication about the availability of this advice on food packaging.

12 Date label clarity and reform

Confusion around what date labels mean is currently resulting in significant unnecessary volumes of food being waste. Changes to how governments and industry regulate and present date labels as well as educating consumers about the meanings is needed.

13 Deploying packaging material benefits

Any opportunity to modify packaging material to something that is recyclable or compostable would benefit food producers and brand owners. Using the Australasian Recycling Label (ARL), an ‘on-pack labelling scheme that helps consumers understand how to recycle products correctly’ (operated by the Australian Packaging Covenant Organisation) should be supported by food system stakeholders.

14 Communicating packaging material benefits

Given the increasingly nuanced consumer understanding of recycling, if the best way to package a particular food does include the use of non-recyclable or non-compostable packing materials, then this needs to be clearly communicated to consumers.

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