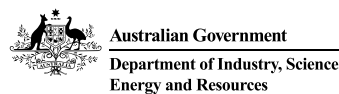


# CONSUMER PERCEPTIONS & UNDERSTANDING OF PACKAGING

## Survey Analysis Summary



**Business**  
Cooperative Research  
Centres Program



## CONTEXT

Food waste is a growing concern globally. It impacts all levels of decision makers from government and commercial enterprises, through to the consumer.

## THE QUESTIONS

- How do consumers perceive food waste?
- How do they perceive the role food packaging plays in minimising or eliminating food waste?

While there have been several studies into this over the past 5 years, consumer perceptions can change rapidly amidst shifting social views like increased environmental awareness and a desire to make a meaningful impact. Therefore, regularly studying consumer perceptions is important to assess opinion shifts and learn the current perspectives to ultimately move social behaviours in relation to food waste.

## RESEARCH SNAPSHOT

The sample was drawn to be representative of the Australian population. Most participants were responsible for household grocery shopping and cooking. The majority were qualified beyond higher school certificate levels. There were a variety of household types included

in the study. Household income was representative of the Australian population although slightly skewed on the lower side of the Australian median wage. The majority of households spent in excess of \$100 per week on groceries.

1,015 people

### Demographics



65% female



>18 spread across all age ranges

### Responsibility



>73% had main responsibility for their grocery shopping and cooking

### Education



>70% are qualified beyond high school certificate

### Household makeups



Similar spread between 'Couple with dependant children' (23%), 'Single person' (22%) and 'Couple with or without others' (19%) with the remaining spread across 8 other classifications

### Household income



>half represented by: \$25,000-\$50,000 (26%), \$50,001-\$75,000 (19%), \$75,001-\$100,00 (15%)

### States



NSW (33%)  
VIC (22%)  
QLD (21%)  
WA (9%)  
SA (5%)  
Tas (3%)  
NT (3%)  
ACT (3%)

### Weekly household grocery expenditure



\$100-\$199 (46%)  
\$200-\$299 (21%)  
under \$100 (20%)

## CONSUMER BEHAVIOUR

The majority of households shop at least weekly and top up a few times a week. Households report that they are more likely to shop in a major supermarket although fresh foods are purchased from independent retailers. More than 80% of households report planning their shopping around the food that is already available in their homes although a significant proportion of households shop according to household members meal requests.

Meal planning is undertaken by more than half of the households and families. Most people check for specials before shopping.

SHOPPING FREQUENCY	FOOD RETAILERS	PRE-SHOP PLANNING
64% do a main shop once a week	94% Major supermarkets	80% check what food is in the house beforehand
50% top-up shopping a few times a week	30-40% each for Butchers, Independent stores and Green grocers	>57% meal plan every or most times
	20-30% each for Markets and Shopping Centre Food Markets	67% use shopping lists every or most times
	12% Bulk stores	61% check promotions (every or most times)
	< 0.5% 'None of these'	>54% ask household for desired food/meals



## WHAT WAS IMPORTANT TO CONSUMERS



The price of food  
**76%**



The quality of food  
**72%**



The taste of food  
**59%**



How long the fresh food lasts for  
**51%**

The remaining 14 food issues ranged between **4-31%**. Food waste ranked 8th with **27%**.

- The price of food
- The quality of food
- The taste of food
- How long fresh food lasts for
- Level of ingredients in food (e.g. amount of salt, fat, sugar etc.)
- Food labelling (e.g. 'use-by' date; storage instructions) Food safety (e.g. Salmonella and E.Coli)
- Food waste
- The use of additives (such as preservatives and colouring) in food products
- The way the food products are packaged
- Ethical food (e.g. free range, animal welfare etc.)
- Medical advice (e.g. nutritional value, diets, personal health issues etc.)
- Organic food
- Free-from foods (e.g. foods NOT containing dairy, nut, egg, gluten, FODMAP, shellfish etc.)
- Provenance (e.g. farming region, farming techniques etc.)
- Genetically modified (GM) foods
- Food miles (e.g. the distance food travels)
- Religious consideration (e.g. kosher, halal etc.)

## SHOPPING, PURCHASING AND STORAGE

Consumer behaviours regarding purchasing of food were ranked from mostly buying the freshest food through to buying produce that was in season. Bulk buying behaviour was only undertaken less than **40%** of the time.

Food purchasing behaviour	Frequency	%
The freshest food	'every' or 'most times'	85%
What is on the shopping list	'every' or 'most times'	77%
Based on price	'every' or 'most times'	71%
Quality of food	'every' or 'most times'	66%
Seasonal produce	'every' or 'most times'	65%
Buy in bulk	'sometimes'	39%

Importantly, a majority of consumers are worried about the impact of food packaging on general waste. However, they agreed that packaging serves the purpose of food preservation. Consumers do not believe that packaging is necessary for fresh food although they continue to buy fresh food in packaging. Many people (**35%**) are indifferent to the issue of food packaging, believing that suppliers and retailers are in control of how food arrives in the consumers basket.

## PERSPECTIVES ON FOOD PACKAGING



**72%** are concerned about food packaging waste



**64%** 'strongly' & 'agree' that "packaging is not required for fresh food"



**42%** 'strongly' & 'agree' that "packaging helps to reduce food waste"

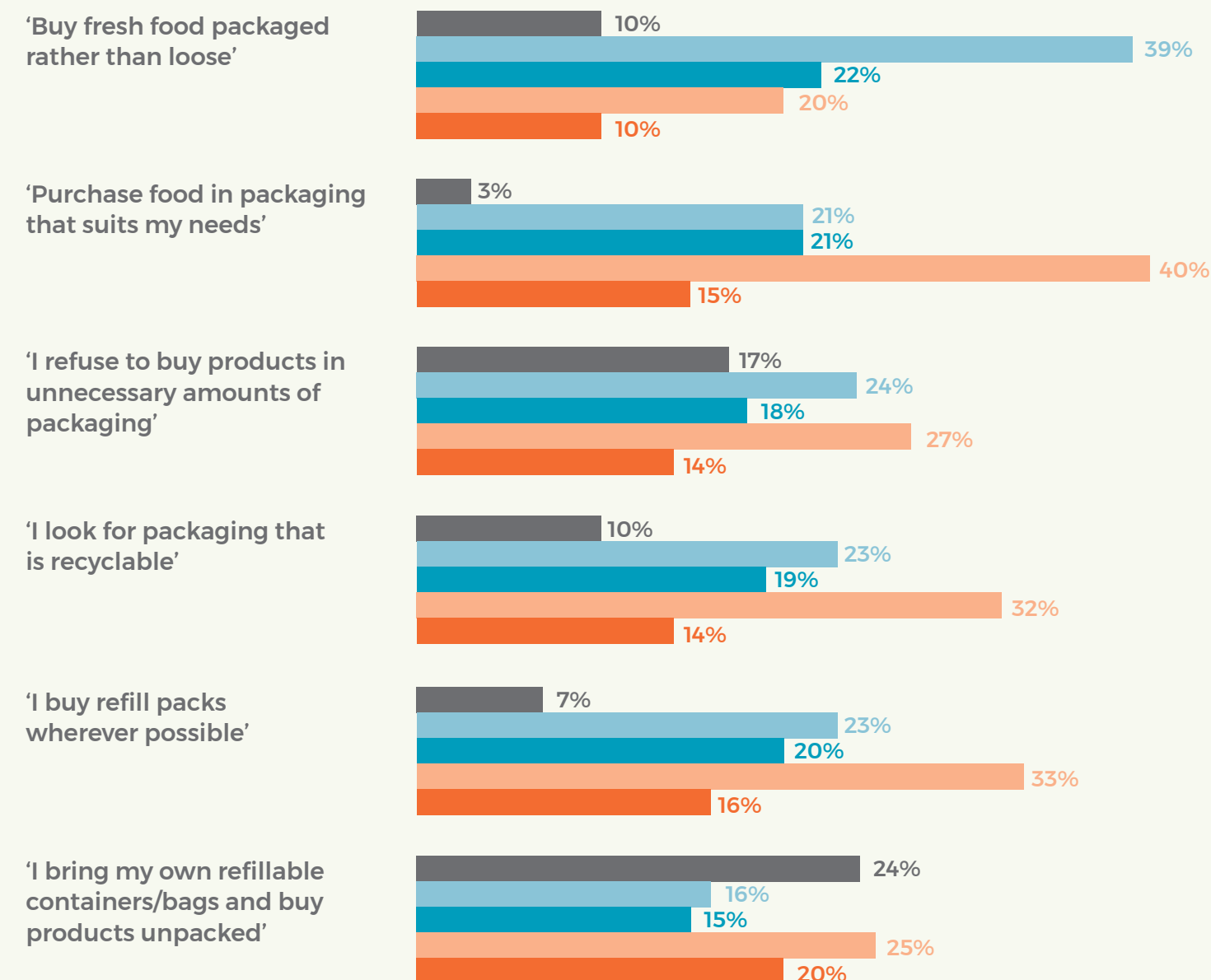


**35%** are indifferent

A majority of consumers make an effort to buy sustainable or environmental food packaging alternatives. Very few consumers 'never' purchased the sustainable alternative such as buying food loose or buying refills. However, a significant proportion (**24%**) do not bring their own packaging or buy unpacked produce.

## FREQUENCY OF FOOD SHOPPING BEHAVIOURS WHEN CONSIDERING PACKAGING

Legend: Never (dark grey), Some (light blue), Half (medium blue), Most (orange), Every (red)



## FREQUENCY OF FOOD STORAGE BEHAVIOURS WHEN CONSIDERING PACKAGING



**72%** use storage tools (sealable bags, containers, etc.) 'every' & 'most times'



**76%** consider the best way to store foods to prolong their freshness 'every' & 'most times'



**39%** 'every' & 'most times' & **30%** '½ times' don't store food for long as it is eaten quickly



**69%** rotate older food forward or to the top to ensure it is used 'every' & 'most times'



## PREPARATION AND LEFTOVERS

### FREQUENCY OF PREPARING FOR A MAIN MEAL BEHAVIOURS



>77%

try to use up the oldest food first, and food that's close to its used-by date 'every' & 'most times'



67%

consider each person's likely consumption when serving 'every' & 'most times'



47% 'most' & 44% '½ times' make extra 'just in case' or because they can't predict people's hunger

### FREQUENCY OF UNPLANNED LEFTOVERS

Across all responses, approx. **89%** experience unplanned leftovers at some point.

### FREQUENCY OF UNPLANNED LEFTOVER BEHAVIOURS

**30-50%** claim that they 'never' waste or dispose of unplanned leftovers, including feeding to pets

**29% & 36%** stating that they save leftovers in the fridge/freezer 'every time' & 'most times'

### WEEKLY ESTIMATION OF DISPOSED LEFTOVERS

On average, ~ **8.2 cups** of leftovers wasted weekly per household, including wet, dry, chilled and frozen foods

## PRIOR KNOWLEDGE OF DATE LABELLING

### KNOWLEDGE OF 'BEST-BEFORE' LABELLING

- **58%** understand that best before means 'food is still safe to eat after this date as long as it is not damaged, deteriorated or perished'
- **25%** believe food is unsafe after the best before date
- **15%** believing is determined saleability or discounting practises.

### KNOWLEDGE OF 'USE-BY' LABELLING

- **59%** understand used by relates to food safety & freshness
- **21%** believe it determines food saleability
- **15%** believe 'food is still safe to eat after this date as long as it is not damaged, deteriorated or perished'



## MOTIVATIONS

### LEVEL OF MOTIVATION TO REDUCE HOUSEHOLD FOOD WASTE

65% detractor



22% passive



14% promoter



This suggests that the majority of consumers (**86%**), are currently not active in promoting or strategizing ways to reduce their overall household food wastage

### REASONS GIVEN FOR FOOD WASTE

UNEATEN FOOD REASONS	Frequency (times)	%
Waste food due to lack of proper storage knowledge	'rarely' & 'never'	69%
Like to eat the freshest food	'very frequently' & 'often'	58%
Waste food due to over-purchasing	'rarely' & 'never' / 'some'	56%/32%
Waste food due to passing expiration date	'rarely' & 'never' / 'some'	51%/32%
Waste food due to cooking too much food	'rarely' & 'never' / 'some'	49%/35%

The motivations to reduce food waste amongst consumers are varied but the principle reason to save food is to save money. However, environmental and social considerations are also important. When it comes to food waste, the reason most people dispose of food is because they want the freshest possible food (**58%**) and they do not have a solid understanding of how to store food properly (**69%**). Over purchasing and preparing too much food ranked highly, and people are unwilling to repurpose or use leftovers.

### WHAT MOTIVATES PEOPLE TO REDUCE FOOD WASTE?

'Extremely motivated' or 'motivated' by

- saving money **83%**
- 'doing the right thing' **79%**
- saving time **72%**
- environmental awareness **72%**
- easing guilt **60%**
- educating others such as children **60%**



## CONCERNS AND PERCEPTIONS

### CONSUMER'S CONCERN ABOUT FOOD PACKAGING

Consumers are 'extremely' and 'very concerned' about:

- 53% general amount of packaging
- 55% amount of plastic packaging material
- 46% recyclability
- 37% perceived packaging to not keep food safe (38% neutral).



### CONSUMERS BELIEFS IN THE VALUE OF PACKAGING ('HIGHLY' & 'VERY BENEFICIAL')

- Extends shelf life/freshness, & maintains safety & hygiene 68%
- Protects food in factory, shop and transport 67%
- Protects food at home 64%
- Makes it easy to reuse products 63%
- Helps reduce food waste 62%
- Helps buy correct quantities, and ease of portioning 59%

Consumers were well aware of the reasons for food packaging with a majority of consumers understanding that food will be fresher for longer which will lower food waste overall. They were also concerned about the impact of food packaging on the environment, especially waterways, littering and climate change. A significant barrier to behaviour was knowing how to effectively recycle packaging.

### CONSUMER CONCERNS ABOUT IMPACTS OF FOOD PACKAGING ('EXTREMELY' & 'VERY CONCERNED')

- Impact of oceans and marine life 68%
- Litter in towns and countryside 62%
- Goes to landfill 60%
- Impact on human health 58%
- Difficult or impossible to recycle 57%
- Lack of confidence that packaging is being recycled 55%
- Contribution to climate change 54%
- Resources used in manufacture of packaging 53%

### PERCEIVED LEVEL OF EFFECTIVENESS OF PACKAGING FEATURES ON FOOD WASTE REDUCTION ('DRAMATICALLY' & 'SOMEWHAT')

- Resealable/Re-closable 74%
- Refillable/Re-usable 72%
- Packaging that keeps the product fresher for longer 72%
- Clearer storage information on the label 71%
- 'Split packs' 69%
- Smaller pack sizes 69%
- Packaging that monitors the freshness of the product 66%
- Buying in bulk and packaging into portion sizes 63%

Consumers proposed several packaging features that would save food. The most effective was resealable packaging that did not require decanting at home. Another major request was to have smaller portions available, even if these came in multiple or bulk packs. Consumers also saved food a number of different ways with the most used being freezing.

### HOW OFTEN DO CONSUMERS TRY TO SAVE FOOD? ('VERY FREQUENTLY' & 'OFTEN')

- Freeze food 73%
- Don't over purchase 65%
- Reuse leftovers for lunches 64%
- Repackage the food at home 58%
- Buy only what is needed 55%

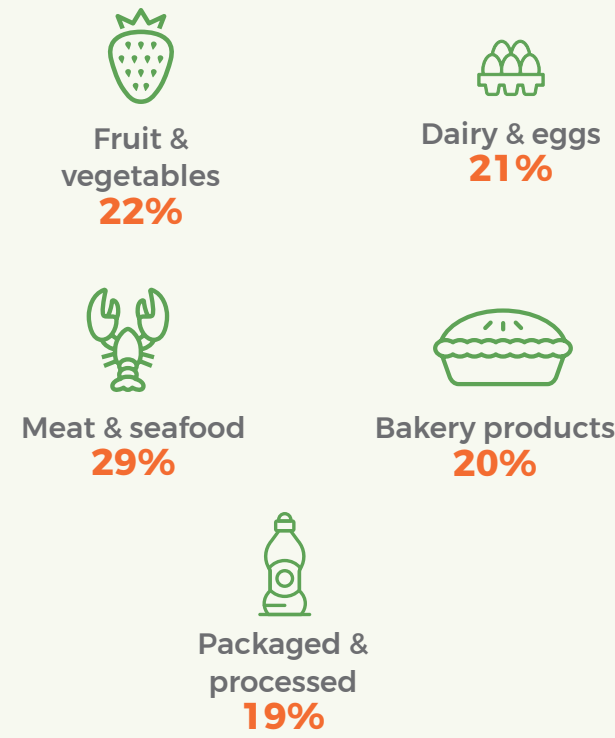
### CHANGES IN VIEWS TOWARDS FOOD WASTE OVER PAST YEAR



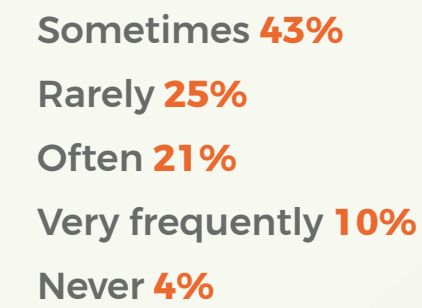
## PURCHASING AND DISPOSAL INSIGHTS

### PURCHASING CATEGORIES

FOOD CATEGORY MOST REGULARLY PURCHASE



FREQUENCY OF PURCHASING FRESH FRUIT & VEGETABLES IN PACKAGING



### POST-PURCHASE HANDLING BEHAVIOURS

FRESH FRUIT & VEGETABLES	Frequency	%
Stored in original packaging and original packaging plus open to let food breath	'most' & '½ times'	55%
Removed packaging and the food is repackaged into resealable containers/bags	'most' & '½ times'	49%
Packaging is removed and food is stored unpackaged	'most' & '½ times'	49%
Across all behaviours	'every time'	7-11%

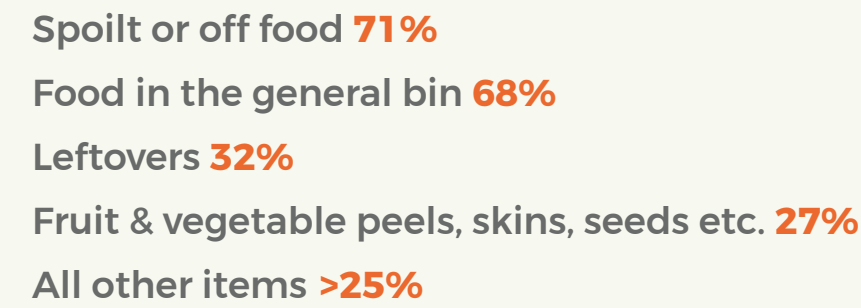
MEAT & SEAFOOD	Frequency	%
Repackage into own containers of bags	'every' & 'most times'	49%
Buy in bulk and separate portions into other packaging	'every' & 'most times'	47%
Look for resealable packaging	'every' & 'most times'	37%

DAIRY & EGGS	Frequency	%
Keep eggs and dairy in original packaging	'every' & 'most times'	65%

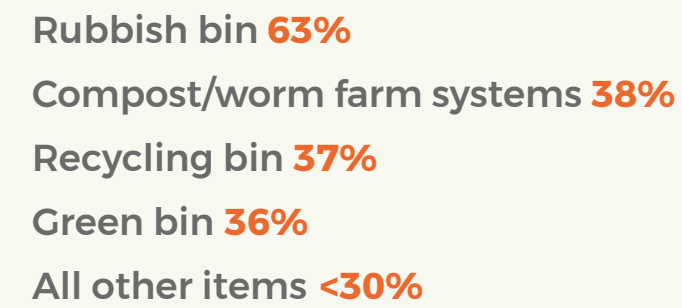
BAKERY ITEMS	Frequency	%
Store bakery items in their original packaging	'every' & 'most times'	61%
Never use their own packaging when purchasing bakery	'every' & 'most times'	49%

PACKAGED & PROCESSED FOOD	Frequency	%
Repackage into containers or bags	'every' & 'most times'	49%
Look for easy to open packages	'every' & 'most times'	42%

ITEMS CONSIDERED AS FOOD WASTE



DESTINATIONS FOR FOOD WASTE



## ENVIRONMENTAL CONCERNS

### PERCEIVED ENVIRONMENTAL IMPACT OF FOOD WASTE AND PACKAGING WASTE

	Food Waste	Packaging Waste
Extreme environmental issue	19%	43%
Large environmental issue	32%	32%
Moderate environmental issue	32%	20%
Small environmental issue	14%	6%
Not an environmental issue	6%	1%

### CONSUMER'S AGREEMENT WITH STATEMENTS

Personal efforts to reduce food waste are worthwhile ('strongly' & 'somewhat agree')



Food waste is too much of a hassle to bother worrying about ('strongly' & 'somewhat disagree')



I am prepared to make lifestyle compromises to benefit the environment ('strongly' & 'somewhat agree')



Food waste is out of my control ('strongly' & 'somewhat disagree')



Other waste streams (e.g. medical, industrial etc.) are larger environmental issues than food waste ('strongly' & 'somewhat agree')



neither agreed nor disagreed across all statements





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