



# Food Waste Western Australian Household Attitudes and Behaviours Benchmark study 2019

## Executive Summary





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# Executive summary

## Purpose

This research was commissioned to establish a national baseline on current community knowledge, attitudes and behaviours around household food management and food waste. The research was commissioned by the Steering Group of the Fight Food Waste Cooperative Research Centre (FFW CRC) project titled 'Designing Effective Interventions to Reduce Household Food Waste' and is the first of a series of research pieces to be conducted over the four-year project. This research will provide empirical evidence to inform the project participants and other interested parties to help them effectively target messaging, programs and interventions to change household behaviour to reduce and divert food waste.

The [national benchmark research](#) consisted of an online survey of 5,272 people across Australia who are referred to throughout this report as household food managers, participants or people. This report focuses on the Western Australia (WA) sample of 503 household food managers who were primarily or partly responsible for food planning, shopping, storing, preparing and disposing.

In most questions, the survey asked participants to self-report about the seven days before completing the online survey. Almost all participants (89–92%) said the previous seven days had been a typical week for them across the five areas of household food management examined.



**34%**

of Australia's  
food waste is  
generated in  
households



**5,272**

people surveyed  
nationally



**503**

people  
surveyed in WA

# Key findings

## How much food do Western Australians estimate they throw away?

WA household food managers were asked to estimate the amount of food their household disposed of in the previous week, including any food, edible or inedible, that went to pets, composting or other disposal methods.

The results included:

Item category	Average quantity of reported food waste in last 7 days (measured in cups)	Proportion of WA households reportedly wasting or disposing this item
<b>Inedible food waste</b>	2.94 cups	73%
<b>Bread and bakery items</b>	1.27 cups	43%
<b>Meal leftovers</b>	1.23 cups	47%
<b>Fresh vegetables and herbs</b>	1.16 cups	51%
<b>Meat and seafood</b>	0.75 cups	29%
<b>Dairy products</b>	0.71 cups	25%
<b>Fresh fruit</b>	0.66 cups	34%
<b>Packaged and pantry food</b>	0.64 cups	29%
<b>Drinks</b>	0.52 cups	21%
<b>Frozen food</b>	0.49 cups	19%
<b>Total</b>	<b>11.04 cups</b>	

The combined average reported food waste per WA household over seven days, across vegetables and herbs, fresh fruit, dairy, meat and seafood, bread and bakery items, frozen foods, dry goods, drinks, leftovers and inedible food equated to 2.6 litres (2.5 litres nationally) or 11 cups (10.6 cups nationally). Reported food waste in WA was more than the national average.

Although WA household food managers recognised that some food was wasted, their estimates of the amount of food waste appeared to be very low. In line with other jurisdictions, these amounts fell short of what had been found in other studies of bin audits and self-reporting data. For example, in 2013, the Victorian Department of Sustainability in its State-wide Bin Audits Report found 7.81 litres, or 3.43kg, of food waste per week per household in Victoria. The NSW Love Food Hate Waste program reported that state's households threw away an average of 5.46 litres of food waste weekly in its 2017 tracking survey. Across all states and territories, the amounts fell short of what had been found in a number of bin audits and self-reporting data<sup>1</sup>.



The low quantities of reported food waste suggest that WA household food managers lack a clear understanding of the personal significance of the issue. This is a critical finding because it positions many WA household food managers as being in the 'pre-contemplation stage of change'. Without a recognition that they are wasting substantial volumes of food (and costing themselves money), WA household food managers lack a strong motivation for changing their behaviours thus making the task of reducing food waste much more difficult.

## What causes food waste in Western Australian homes?

Household food managers were asked why food was left uneaten in their household in the past seven days. Results included:

- > household members didn't always finish their meal (19%) suggesting the food waste was beyond their control and relied instead on those consuming the food
- > too much food was being cooked (15%)—a cause of food waste that indicated some responsibility for preparing too much food which could be a basis for behaviour change
- > food had been stored for too long in the fridge or freezer (12%)—another behavior that could be employed to reduce this factor in food waste.

Nationally, attributing the cause of food waste to meals being left unfinished was almost double for families with children under 16 (34% compared with the average of 18%) and families in general (31% versus 18%).

Respondents were also asked why they disposed of food in the last few months. The top three reasons were:

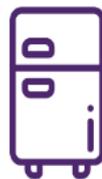
- > almost a third of household food managers (30%) could not discern whether food was able or safe to be consumed based on seeing, smelling or tasting it
- > nearly one-quarter (23%) were unsure whether anyone would actually eat the food if saved and consequently chose to dispose of it instead
- > a further 17% admitted they remained unsure of the meaning of the consumer information on packaging ('use by' and 'best by' dates) that is supposed to guide them.

There were no statistically significant differences between Western Australia and the national data.



**19%**

Don't finish their meals



**12%**

Believe food has been stored too long



**15%**

Believe too much food is being cooked



**30%**

Reported they could not tell whether food was safe to be consumed based on seeing, smelling or tasting it

## Recall of food waste communications

The study asked participants if they recalled seeing, reading or hearing anything about food waste in the past 12 months.

Only 21% of WA household food managers recalled seeing something in the past 12 months (23% nationally) while 18% weren't sure. The majority (61%) reported not recalling any advertising on food waste.

Of those who did report seeing information about food waste, the main sources were cited as:

- > ABC-TV's War on Waste program
- > a general TV program or advertising segment, but couldn't be more specific
- > information on the importance of using the correct bins.

Communication channels remembered as providing information on food waste included:

- > TV, was mentioned by 58% who picked up information about the food waste issue from this channel
- > the internet, which was cited by 19% as a source of information covering news feeds, social media advertising and searches for information about food waste
- > local council communications mentioned by 29% (significantly higher than the national average of 21%)
- > Facebook (21%)
- > community newspapers (13%)
- > newspapers (13%)
- > in-store promotions (11%, significantly higher than the national average of 6%)
- > radio (9%)
- > magazines (9%).

The results suggest that reaching WA household food managers will require a variety of channels, since some work better than others to reach different segments.

The television and internet were the most common channels where household food managers reported seeing information about food waste. Local council communications may be a more effective channel in WA as these were cited more frequently than in other states. In-store promotions were also mentioned more often in Western Australia.



**21%**  
of household  
food managers  
recalled seeing  
food waste  
communications

## What would motivate people to reduce their food waste?

Participants were asked how motivated they were to reduce their household food waste.

Forty-two per cent of WA household food managers said they were very motivated and 32% said they were fairly motivated, similar to the national average. Only 25% were slightly motivated or less. A desire to act is clearly aspirational and linked to a societal aversion to wasting anything. To get action on food waste, the size of the problem needs to be definitively measured as a proof point, as well as linking this waste statistic to the damage it is causing the environment.

The survey respondents were also given a list of possible motivating factors and asked which would be the factor most likely to change how they managed food. The results included:

- > saving money (52%, particularly for families)
- > environmental benefits (saving the planet) (14%)
- > the social norm around 'it's the right thing to do' (18%, particularly true for non-families).



## How is food managed within WA households?

### Key points about food planning

Respondents were asked to report how often they performed four food planning behaviours before they shopped for groceries. Unless noted there were no statistically significant differences from the national data.

Despite 75% of WA household food managers saying they mostly **checked the food already in the house** when planning food purchases, this appeared to be only cursory: many claimed it was hard to see what was in the fridge (12% most times and 11% about half the time).

Fewer than half (45%) most times **planned the meals they would cook** with the remainder planning half the time or rarely.

Only 33% of food managers said they **wrote comprehensive shopping lists**, and 26% **prepared a basic list of essentials**.

## Key points about food shopping

The survey asked participants how often they performed nine food shopping behaviours. Sticking to a budget divided food shoppers; 39% of WA household food managers reported mostly having a set budget while 41% rarely did.

Buying only what was on the shopping list was also polarizing; 41% reported being mostly likely to do so and 40% being rarely likely to do this.

A similar division was apparent when buying specials with 49% usually buying them when they shopped (this was significantly higher than the national average of 42%), and 28% rarely doing so.

Three positive food shopping behaviours were reasonably well entrenched in WA:

- > buying freshest ingredients (67% of WA food managers mostly did this, while 11% rarely did so)
- > checking the use by dates before purchasing (59% mostly did this)
- > buying in bulk (65% rarely did this).



## Key points about preparing food

There is widespread reporting of behaviours in WA that are likely to lead to food waste:

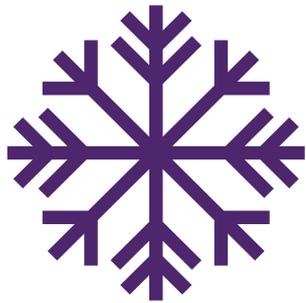
- > 44% reported making extra food 'just in case' half the time or more
- > 24% of WA household food managers said they mostly made extra food without knowing how hungry the eaters would be
- > 37% said they prepared extra for planned future meals most of the time and 27% did this about half the time.

These food planning behaviours are particularly common among families with children.

## Key points about storing food

Seven food storage behaviours were investigated in the survey.

- > 65% of WA household food managers reported mostly storing food to keep it as fresh as possible
- > 66% said they usually froze food to extend its shelf life, while 16% would only do this about half the time and 17% rarely.



**66%**

**usually freeze food to  
extend its shelf life**



## Key points about food disposal

A range of food disposal options are available to Australian households with varying levels of access and usage. Options include kerbside general waste bins, kerbside green organic/food waste bins, home compost or worm farms, feeding to pets and animals, taking directly to waste transfer stations and community composting sites.

The general waste bin was the most common method for disposing of food with WA household food managers (68%). This was significantly higher than the national average (61%). Other more productive, but less frequently used, food disposal methods, included household-managed systems such as composting and worm farms (18%), pets (20%), and green organics bins (11%). These would be other potential paths to reducing overall food waste.

There are some critical issues in WA. Namely:

- > Only 20%, when eating out, take leftover food home to consume later on
- > On the other hand, only 6% throw leftover food away immediately but too many save the food in the fridge (7%) or freezer (30%) only to throw it away later on
- > Only 48% of WA household food managers most times make use of leftovers while 16% do so about half the time and 36% rarely.



**68%**

**Nominated the kerbside general waste bin as their main method of food disposal**



**20%**

**of participants fed food waste to pets**



**18%**

**of participants had a household-managed compost system or worm farm**

## Does the WA community understand food labels?

Survey respondents were asked to select the meanings of Best Before and Use By dates from a list of four possible definitions. The WA results were similar to the national averages.

Just over two-thirds (69%) of the WA household food managers understood that 'best-before' food labels meant the food was still safe to be eaten if it was not damaged, deteriorated or perished in any way.

Three-quarters (75%) of WA household food managers took the 'use by' label to mean 'food should not be eaten after this date as it may be unsafe'.

However, only 50% of WA household food managers understood the meaning of both food date labels with 50% getting the meaning of one of the labels wrong. Substantial work is still required to ensure both labels are well understood as this knowledge is key to helping household food managers decide when food can be eaten safely.

## How does the community shop for food?

How people purchase food can influence household food waste quantities. The survey investigated grocery shopping frequency, locations and methods.

Just over three-quarters (77%) of household food managers across WA reported shopping weekly for groceries, followed by a 'top-up' shop. A further 12% only shopped for food as they needed it.

The main grocery shop was undertaken once a week for a majority of WA household food managers (60%).

Almost all household food managers in WA did a top-up shop (95%) at least weekly. The most common frequency was once to twice a week.

Almost two-thirds (63%) of WA household food managers visited Woolworths in the week before the survey. Coles (60%) and Aldi (20%) were the next most popular retail outlets for food.

Well over one third (40%) of those surveyed nominated Woolworths as the retailer at which they spent the most money, followed by Coles (37%) and Aldi (7%).

Although different for each store, the main reasons for food shoppers' choice of store were:

- > convenience of location (usually first reason)
- > easy parking
- > good prices
- > having products they liked.

The online shopping approach has achieved significant in-roads as a channel with 13% of WA household food managers having used the channel in the last seven days. Families were more likely to shop online for groceries than non-families (15% versus 11%).



**77%**  
of people reported doing a  
main grocery shop plus top-up  
shopping as needed

## How often do households report eating out of the home?

Respondents were asked about their eating habits, including getting takeaway and eating out.

WA household food managers reported moderate levels of consumption of takeaway or home-delivered meals in the seven days before the survey. In fact, 61% didn't order a takeaway or home-delivered meal over that time while only 25% ordered one meal and 11% two or more meals.

Similarly, low levels of eating out of the home were reported with 66% claiming they did not eat out for dinner in the last seven days. This is statistically significant and 6% higher than the national average.

In 48% of cases, the decision to eat out was not a last-minute decision but in 52% of cases it was. Families were more likely to dine out or get take-away/home delivery, and it was more likely to be a last-minute decision.



# 36%

**of household food managers ate at least one meal out of the home or ordered a takeaway or home-delivered meal**

# Key statistics

- > The combined average reported food waste per household over seven days, across vegetables and herbs, fresh fruit, dairy, meat and seafood, bread and bakery items, frozen foods, dry goods, drinks, leftovers and inedible food equated to 2.6 litres (2.5 litres nationally) or 11 cups (10.6 cups nationally). Reported food waste in WA was more than the national average.
- > Almost one third (30%) of WA participants reported that they could not tell if something was safe to eat so disposed of it.
- > 50% of WA household food managers understood the meaning of both use by and best before food date labels.
- > 45% reported making extra food just in case half the time of more.
- > A third of people (33%) reported that at least half of the time, their fridge or freezer was too full to store more food.
- > Less than half (47%) of WA household food managers reported making use of leftovers most of the time and over one third (40%) rarely saved and used leftovers.

Almost one third (30%) of WA participants reported that they could not tell if something was safe to eat so disposed of it.

# About this project

This research was commissioned by the Project Steering Group for the project 'Designing Effective Interventions to Reduce Household Food Waste'. It is part of a four-year research program delivered through the Fight Food Waste Cooperative Research Centre.

## Project Steering Group members





instinct and reason