

Food waste avoidance tracking study 2012



Table of Contents

	Page No.
Executive Summary	1
Introduction	9
1. Background	9
1.1 Background to Food Waste in NSW	9
1.2 Love Food Hate Waste program	10
1.3 Background to the Research.....	13
2. Research Objectives	14
3. Research Methodology	15
3.1 Sampling	15
3.2 Timing.....	16
3.3 Questionnaire	16
3.4 Analysis and Reporting	17
3.5 Demographic Profile.....	18
Detailed Survey Findings	22
4. Environmental Concerns and the Issue of Food Waste	22
4.1 Concern about environmental problems	22
4.2 Areas of household wastage.....	25
5. Knowledge and Attitudes Underpinning Food Waste	35
5.1 Knowledge around food labels.....	35
5.2 General attitudes underpinning food waste	39
6. Behaviours Underpinning Food Waste	43
6.1 Food waste avoidance behaviours	43
6.2 Food behaviour – planning, shopping, preparation and storage	46
6.3 Value and quantity of food wasted	54
6.4 Reasons for household food waste.....	60
7. Love Food Hate Waste Program	63
7.1 Role of NSW Government.....	63
7.2 Awareness of food waste issues in the media	64
7.3 Awareness of LFHW program.....	67
7.4 LFHW message recall.....	70
7.5 Prompted recall of LFHW materials	73
7.6 Influence of LFHW program on food waste avoidance	75
8.0 Conclusions	82
Appendix 1 – Segment Summaries	83
Appendix 2 – Questionnaire	89

List of Figures

	Page No.
Figure 1. Level of concern about environmental problems	23
Figure 2. Major cause of concern about environmental problems	24
Figure 3. Reported goods/services wasted in the household	27
Figure 4. Level of concern over goods/services wasted in the household	1
Figure 5. Perceptions of waste type in the average NSW household garbage bin	31
Figure 6. Level of individual household food wastage	32
Figure 7. Estimated average annual spend on food wasted by NSW households.....	34
Figure 8. Best description of 'use by' dates	36
Figure 9. Best description of 'best before' dates.....	38
Figure 10. General attitudes underpinning food and food waste	42
Figure 11. General food waste avoidance behaviours	45
Figure 12. Food planning behaviour.....	47
Figure 13. Food shopping behaviour	49
Figure 14. Food preparation behaviour	51
Figure 15. Food storage behaviour	53
Figure 16. Quantity of food wasted per week	55
Figure 17. Main reason for household food waste	61
Figure 18. Total reasons for household food waste.....	62
Figure 19. Prescribed role of NSW Government in food waste	63
Figure 20. Spontaneous awareness of food waste media/ advertising/ promotion	64
Figure 21. Media/ advertising/ promotion recalled	65
Figure 22. Description of media/ advertising/ promotion	66
Figure 23. Spontaneous awareness of LFHW program.....	67
Figure 24. Prompted awareness of LFHW logo	68
Figure 25. Medium recalled for LFHW or LFHW logo	69
Figure 26. Spontaneous message recall	70
Figure 27. Prompted LFHW message recall	72
Figure 28. Prompted recall of LFHW materials	73
Figure 29. Influence of LFHW on motivation for food waste avoidance actions.....	75
Figure 30. Influence of LFHW on food waste avoidance actions	76
Figure 31. Reason for LFHW influence	77
Figure 32. Quantity of food waste avoided	78
Figure 33. Value of food waste avoided	79
Figure 34. Websites visited	81

List of Tables

	Page No.
Table 1. Respondent Profile (over time)	18
Table 2. CALD segment (over time)	21
Table 3. Languages spoken at home	21
Table 4. Average quantity of food wasted per week	56
Table 5. Value of food wasted	57
Table 6. Average food wastage (\$) by age	58
Table 7. Average food wastage (\$) by household type	58
Table 8. Average food wastage (\$) by gender, CALD and program awareness	59
Table 9. Average food wastage (\$) by planner	59

Please note that the data contained in this report has been prepared for the specific purpose of addressing the items contained in the project contract between **TNS Australia** and the **NSW Environment Protection Authority (NSW EPA)**. It may not be suitable for other applications. The use of this data for any other purpose should be discussed with the lead author. TNS accepts no responsibility for unauthorized use of this data by a third party.

Executive Summary

Food waste is a complex environmental, social and economic issue that is slowly gaining recognition throughout the community including governments, businesses and households. Wasting food has significant environmental, economic and social implications. To tackle this issue, the NSW Government developed the Love Food Hate Waste (LFHW) program focusing on avoidance strategies to reduce food waste across the state.

Benchmark research was conducted in 2009 to measure attitudes and behaviours and was followed by a tracking study in 2011. This report details results of a further tracking survey conducted in 2012. The survey was conducted with n=1,300 NSW residents via an online survey, between the 1st and 21st October 2012. In addition, a survey was sent to Love Food Hate Waste Food Lovers during the same time period, resulting in a further n=123 completed interviews.

The primary objectives of the research were to:

1. Measure current attitudes to and awareness of environmental issues, with particular focus on food wastage;
2. Determine effectiveness of the program in reducing volume of food waste generated and disposed at the household level; and
3. Explore the influence of the program in encouraging new habits and norms of behaviour in terms of food wastage avoidance strategies.

Research Results

1. Knowledge and attitudes with regards to environmental concerns and the issue of food waste

The level of concern for environmental problems in general is stable over time, with about two in three residents (63%) concerned either a fair amount or a great deal. This is driven primarily through a concern for their quality of life, and concern for future generations, with the third most common concern being for the maintenance of our ecosystems.

In the context of a variety of wastage behaviours at a household level, food wastage is the one that is most common amongst NSW householders, with more than two in five (43%) indicating they buy food that gets thrown away before being eaten. While this is a significant increase on the tracking result in 2011 (32%), encouragingly it remains significantly lower than the 2009 benchmark measure (49%).

Following food wastage in 2012, is the use of more electricity than is necessary, buying clothes and personal items that are rarely used, paying interest on credit card purchases and finally, with least waste reported, buying books, magazines, CDs and/or DVDs that are rarely or never used. However, concern is highest for those behaviours that have a more tangible link to personal finances, in particular electricity wastage and money spent on credit card interest (about two in three concerned about both of these behaviours, 69% and 65% respectively), compared to just over half concerned about food wastage (53%). Regardless, the issue of food wastage appears to be growing in importance, with total concern having increased significantly over time (from 51% in 2011, and 47% in 2009).

Awareness of food waste as the largest type of waste in household bins has increased significantly over time also, with more than one in five of households (22%) aware in 2012 (up from 18% in 2011, and 13% in 2009). Packaging is still perceived to be the largest contributor to household bins, although this trend is declining (67%, compared to 70% in 2011, and 73% in 2009).

Correct knowledge of food labelling is consistent with past research, and is highest for 'best before' dates, with three quarters of respondents (74%) being able to correctly describe this, compared to 'use by' dates which is correctly described by 65% of respondents.

While agreement is consistent with past research and strong for the premise that it is easy to make meals with assorted ingredients that need using up (71%), there is decreasing agreement with the proposition that food that is fed to pets or composted is not wasted (59%, compared to 63% in 2011, and 75% in 2009), and also with the idea that leftovers stored in the fridge for more than one day are unsafe to eat (14%, compared to 19% in 2011, and 22% in 2009). All of these results support program messages.

While not experiencing significant changes into 2012, environmental concerns relating to food waste have less resonance with respondents, having tracked downward over time, and significantly overall since benchmark levels. At least three in five respondents agree primarily that the energy, water and nutrients that are used to grow, process and transport food are 'lost' if food is purchased but not eaten (60%, compared with 64% in 2011, and 67% in 2009). However, fewer than two in five agree that wasting food contributes to climate change in 2012 (37%, compared with 38% in 2011, and 46% in 2009).

Agreement continues to be mixed to the premise that busy lives make it difficult to avoid food waste (34% agree while 37% disagree), though householders have been less likely to lay blame in this way over time (34% in 2011, while 38% in 2009 agreed). Fewer than one in ten (7%) agree with the statement that Australians don't waste much food.

2. Effectiveness of the program in reducing volume of food waste

While householders are more inclined than not to state that they rarely find that food they buy doesn't get used up, there is very mixed use of meal planning and shopping lists, and mixed levels of consideration of amounts that will be used when out food shopping. However, two thirds of respondents (68%, compared to 72% in 2011, and 66% in 2009) claim to always or mostly check what is in the house prior to food shopping, as well as checking the 'use by' or 'best before' dates (66%, compared to 71% in 2011, and 66% in 2009). Both results are lower than the 2011 incidence, but marginally higher or in line with initial 2009 benchmark levels.

Less than half of householders are considering finances, both in terms of buying food according to a budget (43%) or based on what is on special (39%). Buying food according to a budget has decreased over time (43%, compared to 44% in 2011, and 46% in 2009), while buying food on special has varied, decreasing significantly since 2011 to below the benchmark level (39%, compared to 50% in 2011, and 42% in 2009).

When preparing food, slightly less than half (47%) consider portion sizes and only make as much as needed, a consistent result over time (47% in 2011, and 46% in 2009). Around one in three (32%) deliberately make extra for a future planned meal, with this behaviour varying over time but significantly more likely since the benchmark (34% in 2011, and 28% in 2009). Around one in six households (17%) make extra "just in case", also varying but declined since the benchmark level (14% in 2011, and 20% in 2009).

The most common treatment of leftovers is saving them in the fridge (62%) or freezer (30%) for consumption at a later date. Encouragingly, fridge storage for consumption has increased significantly over time (57% in 2011, and 52% in 2009), also corresponding with a shift in storage behaviour from the freezer (38% in 2011,

and 36% in 2009). Fewer than one in ten households each claim they throw leftovers out at a later date from the fridge or freezer.

The average volume of food wasted by NSW households is 5 litres per week, comprising 1.8 litres of fresh food, 1.3 litres of packaged and long life food, and 1.9 litres of leftovers per week. This is a significant decrease since 2011 when reportedly 7.6 litres of food was wasted in total per week. This wastage equates to annual wastage per household of 262 litres, and a total estimated wastage across New South Wales of 648 megalitres.¹

Respondents estimate that the average NSW household wastes \$729.00 per year on food that is thrown out, similar to that estimated in 2011 (\$724.20). However, when each respondent estimates their own household's food wastage, and an average is calculated, the average dollar value of food wasted per household per week is \$56.00, equating to \$2,912 per household per year, or \$7.2 billion across the state. The primary contributor to this wastage is fresh food (\$12.74 per week), followed by leftovers (\$9.57) and packaged and long life foods (\$9.28). Similar to volume estimates, this has decreased since 2011 when respondents claimed to waste the equivalent of \$63.80 per household per week.

Primary reasons for food wastage are believed to be leaving food too long in the fridge or freezer, individual's not finishing meals, and cooking or buying too much food. The main reasons have been consistent over time, though food going off before the 'use by' or 'best before' date is less likely to be identified as an issue in 2012.

The NSW Government is decreasingly seen as having a role to play in food waste in NSW, with 58% supportive of the NSW Government playing a part, compared to 61% in 2011 and 73% in 2009. However, LFHW Food Lovers are more strongly supportive of NSW Government involvement (85%, compared with 58% of all respondents).

Awareness of any media relating to food wastage is significantly lower in 2012 (11%) than in 2011 (17%), with television the highest source of such information. The level of awareness of LFHW however has remained consistent at 5% (4% in 2011), with an increase in awareness of the LFHW logo (from 2% in 2011 to 4% in 2012), primarily via the television and Internet.

¹ Based on annual number of households in NSW of 2,471,299 from the 2011 census

Spontaneous message recall of the LFHW program is on target, with 40% of those who are aware of the program claiming it is simply suggesting we don't waste food, followed by the need to think before shopping, preparing and storing food in order to reduce waste (23%). Prompted recall of the five key messages is highest for those linked to the financial cost of food waste – 64% recalling that 231 million dollars' worth of drinks are wasted in NSW per year, and 55% recalling that NSW households waste 2.5 billion dollars' worth of food per year.

Prompted recall of specific LFHW materials is highest for the "apple" execution (5%), although 9% of respondents are aware of at least one execution.

3. Influence of the Love Food Hate Waste Program in encouraging new habits and norms

Almost one in two (49%) people who had been exposed to the program claim it motivated them very much or quite a bit to reduce their food wastage. Specific actions that these people were motivated to take focus on key program messages, namely to check use by and best before dates in store (32%), to cook the correct serving sizes (31%), to plan meals in advance (28%), to change shopping habits (28%), and to buy less food more regularly (28%). The impetus to make changes is driven equally by a desire to help the environment, and to save money.

Those exposed to the LFHW program claim to have avoided waste to the extent of 2.1 litres, or \$19.50 on average per week, as a direct result of the campaign. This is countered however, by the finding that those aware of the program report significantly higher food wastage than average, with these households estimating they currently waste 6.9 litres or \$106.04 of food per week (compared to 5.0 litres and \$56.00 on average). This may however, be a case of those households who are aware of the program are more aware, concerned and realistic about the amount of food wastage that they generate. The program target audience, who are higher food wasters, may also be responding to the program and considering their behaviours.

LFHW Food Lovers

LFHW Food Lovers are markedly different to general NSW households in both their attitudes and behaviours relating to food wastage. This is driven by a greater awareness of and concern for environmental issues in general. They are considerably more knowledgeable about food wastage as an issue, and are more aware and compliant in relation to desired strategies to reduce food waste in the home.

Conclusions, Implications and Recommendations

Knowledge and Attitudes

Conclusions:

- Concern is greatest for those behaviours that have a clear link to financial implications
- There is increasing concern over food wastage amongst the population
- There is increasing awareness of food waste as a contributor to household waste
- There is a downward trend in relation to the environmental impacts of food wastage



Implications and Recommendations:

- This is reflective of general community sentiment with a shift in priorities from the environment to finances
- Continue to raise awareness of food wastage as an issue of concern
- Reinforce and / or strengthen the financial implications of food wastage to increase urgency

Behaviour

Conclusions:

- The volume and value of food wastage has decreased over the past year
- The reasons for food wastage continue to be primarily avoidable (not using leftovers quickly enough, not finishing meals, buying or cooking too much)
- The groups currently being targeted (young people (18-24 years), families with children, high income households) are supported by the current wave of research



Implications and Recommendations:

- Continue the education focus on storage times, shopping and meal planning, preparation and portion size
- Continue the campaign focus on current target groups

Reach and Recall

Conclusions:

- There is increased awareness of food wastage
- While program recall is stable, with increased logo recall, both are still very low
- Those aware of the program have highest recall of financial messages
- The program has had strong impact on the desired behaviours / actions – checking dates, cooking correct serving sizes, planning meals, changing shopping behaviour
- Those who have taken action as a result of the program are motivated equally by the environment and finances
- There has been significant waste avoided as a result of the program, and a higher awareness of wastage for these households overall
- There has been significantly lower wastage by Food Lover households
- There is decreasing support for NSW Government to play a role in food waste, except amongst Food Lovers



Implications and Recommendations:

- To drive increased awareness and engagement, more funding towards an 'above the line' mass media campaign would be required
- Continue or strengthen the focus on financial implications
- Delivery of program through partnerships will be increasingly important
- Reported waste may increase with increased campaign reach / recall
- Continue to work within the agency and with other agencies to keep food wastage on householders' daily agenda
- Consider increased resourcing to build and maintain LFHW Food Lover membership
- Continue to focus on targeted behaviours

Introduction

1. Background

The NSW Environment Protection Authority (EPA) commissioned TNS to implement a quantitative social research online tracking study to evaluate the change in community knowledge, attitudes and behaviours about the issue of food waste and the reach of the LFHW program.

This piece of research follows an original benchmark study implemented in 2009 and a subsequent tracking study in 2011. The research will be used to inform the continued design and delivery of the LFHW program.

1.1 Background to Food Waste in NSW

Food waste in NSW

Food waste is a complex environmental, social and economic issue that is slowly gaining recognition throughout the community including governments, businesses and households. Wasting food has significant environmental, economic and social implications.

In NSW, food waste is most commonly disposed to landfill. The disposal of food waste to landfill is of particular concern as the decomposition of food waste (together with other organic materials) is a major contributor of greenhouse gas emissions across the state. National greenhouse inventory data suggests that landfill contributes to two per cent (or ~11MT CO₂-e/annum, after gas capture) of Australia's total greenhouse gas emissions². For every tonne of food waste not sent to landfill, 0.9 tonnes of CO₂-e is saved³.

In Australia, the food supply chain is estimated to be responsible for approximately 23 per cent of Australia's total greenhouse gas emissions, making it the second-largest emissions generating activity after power stations⁴. This includes direct emissions from agriculture, and that attributed to energy, transport, food production,

² Department of Climate Change (2009a) Australia's national greenhouse accounts – National greenhouse inventory accounting for the KYOTO target. Published by DCC, Canberra.

³ Department of Climate Change (2009b) National greenhouse accounts factors. Published by DCC, Canberra.

⁴ Garnaut, R (2007) Climate change: Land use – agriculture and forestry Issue paper 1, Garnaut Climate Change Review. Published By the Commonwealth of Australia, Canberra.

processing and distribution. Agriculture is the biggest component with approximately 16 per cent of total national emissions⁵.

Additionally, soil, water, natural resources and energy are used to produce, harvest, transport, process, package, distribute and market food products. When food is wasted, the energy and resources that go into producing food are also wasted.

Recent waste audits conducted by local councils indicate that food is the single largest component (almost 40% by weight) of the domestic kerbside waste stream in NSW. Approximately 800,000 tonnes of household food waste is now disposed to landfill across NSW every year. At the household level, EPA research has shown that food is commonly wasted because individuals buy too much, cook too much and are unsure about how to store different food types most effectively to maximise longevity.

According to data collected from the original LFHW benchmark study delivered in 2009, the average NSW household throws away \$1,036 worth of edible food each year. This is made up of:

- Fresh food - \$343.00;
- Leftovers - \$281.00;
- Packaged/long life items - \$151.00;
- Frozen items - \$94.00;
- Drinks - \$94.00;
- Home delivered/take away meals - \$73.00.

Across the state, this totals to \$2.5 billion dollars' worth of edible food being thrown away per year.

According to extensive research in the UK, it is estimated that 60 per cent of all food waste at the household level is avoidable.

1.2 Love Food Hate Waste program

To tackle the issue of food waste, the NSW Government has developed the LFHW program. In contrast to many other programs that address waste by focusing on reuse and recycling, the LFHW program focuses on avoidance i.e. not producing the

⁵ NGGI (2009) National greenhouse gas inventory report 2007: Australia's national greenhouse accounts. Published by the Department of Climate Change, Canberra.

waste in the first place. Avoidance is the most effective strategy to reduce waste generation in NSW. The program aims to raise awareness about the environmental and financial impacts of food waste in NSW and to reduce the amount of 'good' food being sent to landfill.

For households, to date the program has promoted easy and practical solutions for food purchasing, preparation and storage. Love Food Hate Waste is helping households across NSW to avoid food waste, save time and money and reduce our impact on the environment.

In 2012 LFHW launched a business program to engage with small and medium businesses in the hospitality and retail sectors. Businesses are encouraged to become involved by becoming program partners and committing to actions in their operations that will avoid waste.

This tracking study (2012) focuses on the household target audience.

Love Food Hate Waste program objectives

The main objectives of this program are to:

- Reduce the volume of food waste generated and disposed at the household level and the Commercial & Industrial waste stream; and
- Influence new habits and norms of behaviour with a shift towards more efficient approaches to food purchase, storage, preparation and consumption (and thus avoidance of food wastage).

The program aims to achieve these objectives through:

- Increased community knowledge about the environmental, social and economic impacts of food wastage.
- Increased community concern about the problem and awareness that action is needed to reduce the amount of food waste generated and sent to landfill.
- Increased knowledge and skills in best household practices in food purchasing, storage, preparation and use of leftovers.
- Promotion of a range of simple, benefit-driven, behaviours for individuals that support avoidance of food wastage in the home (such as menu planning, shopping from a list, correct portion sizes and more effective food storage techniques). A secondary message will address what to do with unavoidable food waste.
- Support for institutional and inter-generational transfer of knowledge and skills in more efficient food purchasing, preparation and consumption.

- Providing a platform for increased knowledge and awareness of food wastage in business.
- Gaining commitments from business to reduce and recover food waste.

The household program focuses on making it easier for consumers to avoid food waste through:

1. Campaigning directly with consumers;
2. Developing clever and engaging marketing;
3. Providing accessible help and encouragement to the target audience; and
4. Supporting program partners through an education grants program.

Love Food Hate Waste education grants program

A major initiative of the LFHW program is the implementation of an education grants program. The LFHW grants program has been developed to support the delivery of on-ground education initiatives by local government and non-government partners. To date \$464,500 has been provided to deliver LFHW projects in local communities across NSW. Further detail on the grant projects is available on the LFHW website.

Please visit www.lovefoodhatewaste.nsw.gov.au/about/latest-news/grants-program

Round 1 of the grants program was implemented throughout 2011-2012 financial year. Round 2 is being implemented throughout 2012-2013 financial year. For the first tracking study (2011), Round 1 grant activities were underway but not yet fully implemented. Similarly, when the field work for this study (2012) was being implemented, some Round 2 grants were underway. It is anticipated that as a result of the grant activities there will be an increase in awareness about the issue of food waste and the LFHW program across certain communities.

1.3 Background to the Research

The Love Food Hate Waste program is based on the successful UK program of the same name and NSW-based quantitative and qualitative research. The UK program has a proven track record in community engagement and achieving change. Key results include 1.8 million UK households are taking steps to cut back on the amount of food they throw away, resulting in an overall saving of £296 million a year, avoiding 137,000 tonnes of food being thrown away.

Initial research was undertaken to inform the design of the NSW program, including desktop research and qualitative creative concept testing, including testing of the *Sad, isn't it?* creative concept, adopted from the UK program, to ensure its suitability for and resonance with the NSW community.

2009 Benchmark

The quantitative *Food Waste Avoidance Benchmark Study 2009* was undertaken to better understand community knowledge, attitudes and behaviours about household food waste. This included n=1,200 NSW households surveyed.

- The survey was delivered online in December 2009 and was completed by NSW residents, aged 16 and older, who were mainly or equally responsible for buying and managing food in their household.
The *Food Waste Avoidance Benchmark Study 2009* [<http://www.lovefoodhatewaste.nsw.gov.au/resources/research-reports.aspx>] represents the most comprehensive and up to date analysis of community knowledge, attitudes and behaviours conducted about food waste in NSW.
- The study found that the top three food wasting groups in NSW are young consumers (aged 18–24), higher income households (incomes more than \$100,000 per year) and families with children. On average these groups waste \$24.90 – \$26.00 worth of food per week.

2011 Tracking

A tracking study was undertaken in 2011, fifteen months into the LFHW program, to assess any changes in knowledge, attitudes and behaviours. This included n=1,200 NSW households surveyed. While the results overall showed a positive trend, they also showed that there is still significant work to be done.

2. Research Objectives

The overall objective of this phase of research is to track/monitor the changes in community knowledge, attitudes and behaviours in relation to the educational activities and messages of the Love Food Hate Waste (LFHW) program, in order to inform the continued design and delivery of the program.

The research answers three key questions, incorporating the following key respective measures:

1. What are the current attitudes to, and awareness of environmental issues, with particular focus on food wastage?

- Level of concern about environmental issues;
- Awareness and understanding of food wastage as an issue; and
- Attitudes and knowledge of food wastage “myths” and avoidance strategies.

2. How effective has the program been in reducing the volume of food waste generated and disposed at the household level?

- Changes over time (since benchmark and previous tracking research) in terms of:
 - behaviour and attitudes in relation to food wastage – volume, spend, barriers and drivers; and
 - behaviour in relation to food purchase, preparation and storage;
- Information seeking behaviour in relation to food and food wastage;
- Awareness of advertising and communication (unprompted and prompted) of food wastage issues, in particular of “Love Food Hate Waste”; and
- Recall and effectiveness of campaign messages.

3. How influential has the program been in encouraging new habits and norms of behaviour in terms of food wastage avoidance strategies?

- In what way(s) did the campaign motivate residents to change or reconsider their attitudes and/or behaviour in relation to food wastage?

3. Research Methodology

3.1 Sampling

Target Audience

The target audience for the Love Food Hate Waste program is householders in NSW. It is known that everyone wastes food. However, research has identified that some groups waste more than others. The primary target audience for the LFHW program therefore includes:

- 18-24 years old;
- High income households (> \$100,000 per year); and
- Families with children.

EPA advised there was insufficient data to further segment the NSW audience based on other variables such as dwelling type, cultural or language differences and propensity for other environmental behaviours.

Population survey

Research was undertaken online using respondents selected from the MyOpinions online consumer panel. Potential participants were emailed an invitation to participate in the survey, containing a link to the survey site, hosted by TNS.

The study included a total of n=1,300 New South Wales residents aged 16 years and over. In addition to this, n=231 started but did not complete the survey and n=275 were excluded from conducting the survey as they did not meet screening criteria. On the total sample size of n=1,300 the maximum margin of error is ± 2.4 at the 95% confidence interval.

Loose quotas were placed on age, gender and location to ensure a broadly representative sample of NSW population was achieved at the interview screening stage (see table 1). The sample was also initially screened to ensure that they satisfied criterion for full or equal responsibility for food purchasing, cooking/preparation and/or storage in their household.

The sample also sought to represent the NSW population based on CALD (Culturally and Linguistically Diverse) background. Loose quotas were placed on the CALD proportion of the sample in the hope of achieving approximately n=30 respondents across each of the eight key language groups in NSW (Arabic, Chinese, Greek, Italian, Korean, Macedonian, Spanish and Vietnamese). For the purposes of the survey, CALD

were defined by participants indicating that they speak a language other than English at home. There was some difficulty in meeting this quota of interviews in some language groups (Macedonian and Korean). In order to maximise the number of completed interviews in these language groups, the fieldwork period was extended by two days, during which time a number of additional interviews were completed across the sample, extending the final sample size to n=1,300 rather than the planned n=1,200. This larger sample size increases the reliability of results and has no negative affect on the research.

LFHW Food Lovers survey

The 2012 survey included a supplementary component of n=123 Love Food Hate Waste Food Lovers, who have opted in to become a Food Lover on the NSW EPA Love Food Hate Waste website. An Open Link survey was used to invite LFHW Food Lovers via email to complete an identical survey.

3.2 Timing

This study was in field from 1st October 2012 to 21st October 2012.

3.3 Questionnaire

The online questionnaire used in the current 2012 research was based on that used in the initial 2009 benchmark and subsequent 2011 tracking surveys. The benchmark and tracking questionnaires were designed to address key research areas:

- Skills and behaviour;
- Attitudes;
- Awareness and knowledge; and
- Segmentation.

The questionnaire was reviewed in consultation with EPA representatives, with minor changes made, including:

- Removal of two questions relating to incidence of seeking information about food and food related issues, and sources of such information; and
- Addition of two questions relating to behaviour change in response to the LFHW program.

A copy of the 2012 questionnaire is available in Appendix 2.

3.4 Analysis and Reporting

This report details the results from the 2012 online population survey of NSW households to evaluate the effectiveness of the Love Food Hate Waste program. Results are tracked over time, where available, with comparison across three data sets representing three different points in time, including:

- Current 2012 tracking survey;
- 2011 tracking study; and
- 2009 benchmark study.

LFHW Food Lovers Segment

Results for the supplementary LFHW Food Lovers component of the survey have been provided under separate cover and are not detailed in this report. However, where results are relevant and of significance, results are provided here for comparative purposes against the total NSW household sample.

With some level of engagement in the program, the LFHW Food Lovers segment provides a comparison benchmark of knowledge, attitudes and behaviours of Food Lovers against that of general NSW households.

Weighting

The total sample size for the population survey has been weighted to represent the population – according to age, gender and location. Note, the LFHW Food Lovers survey results are unweighted.

Rounding

Results are provided as percentages to the nearest whole number. In some charts and tables, this may result in totals adding to slightly more or less than 100%, due to rounding. This also means that combined figures reported in the text may differ slightly from the sum of the rounded figures shown in charts/tables.

Significant differences and segment analysis

Significance testing has been applied to results, and statistically significant differences are indicated throughout the report where relevant.

- This includes differences between the current 2012 results and the previous 2009 benchmark and 2011 tracking studies.

- Also, this includes a subgroup analysis for the current 2012 study, highlighting differences across demographic profile subgroups (such as demographic subgroups including age, gender, household structure and income, and including, where relevant, those subgroups identified as target audiences). Results that were significantly different to the total sample have been reported, where relevant.

Planners and Non-planners

Based on past research, there was a supposition that planners are more likely to be compliant in terms of food wastage behaviour. As such, for analysis purposes, all respondents were classified as either a “planner” or “non-planner”, as follows:

- Planners are defined as those people who “always” or “most times” plan the meals to be cooked in the next few days (based on responses to Q13), OR “agree” or “strongly agree” to the statement “I plan meals in advance and shop to a strict list” (Q8).
- Non-planners are all remaining respondents.

Statistically significant differences between these two groups are then discussed throughout the report.

3.5 Demographic Profile

Table 1 details the demographic profile of sample respondents over time, and compared to the NSW population where relevant (according to 2011 ABS data).

Table 1. Respondent profile (over time)

%	NSW Population *	2009 Benchmark (n=1,200)	2011 Tracking (n=1,200)	2012 Tracking (n=1,300)
Location				
Sydney	64			65
Newcastle				7
Wollongong				3
Large country town (population 15,000+)	36	NA	NA	13
Small country town (population 3,000-15,000)				8
Country rural area				4

Gender				
Male	49	50	50	49
Female	51	50	50	51
Age				
16-24 years	15	13 (18-24)	13 (18-24)	9
25-34 years	18			25
35-44 years	19	56	57	21
45-54 years	18			16
55-64 years	16			13
65 plus	14	31	29	16

*Based on 2011 Australian Bureau of Statistics Census

^Note: change in age break distributions in 2012 survey

NA: Not Available/ Not Applicable

Table 1. Respondent profile (over time), continued

%	2009 Benchmark (n=1,200)	2011 Tracking (n=1,200)	2012 Tracking (n=1,300)
Household structure			
Single person household			19
Family with children			29
Family, only adults (16+)	NA	NA	40
Shared household, unrelated			7
Other (please specify)			5
Education			
Some secondary school/primary/none	16	16	12
Completed secondary school	23	28	20
Trade/technical qualification	30	29	29
University/college diploma, degree or higher	30	27	38
Prefer not to say			1
Work status			
In paid work (full time/part time)	53	55	53
Unemployed/looking for work	6	5	5
Student	10	8	7
Home duties	10	10	9
Retired/ Age pensioner	16	17	18
Other pensioner	-	-	6
Other	4	0	1
Household income			
Less than \$20,000	6	4	8
\$20,000 to \$39,999	8	10	15
\$40,000 to \$59,999	1	17	14
\$60,000 to \$79,999	11	11	13
\$80,000 to \$99,999	12	12	11
\$100,000 to \$149,999	6	6	12
\$150,000 or more	3	3	8
Prefer not to indicate	38	38	19

NA: Not Available/ Not Applicable

Culturally and linguistically diverse (CALD) respondents

The CALD segment of respondents was based on those respondents who identified that they spoke a language other than English at home.

Table 2. CALD segment (over time)

%	2009 Benchmark (n=1,200)	2011 Tracking (n=1,200)	2012 Tracking (n=1,300)
Culturally and linguistically diverse (CALD) respondents			
Yes	22	22	24
No	78	78	76

Svi. What languages are spoken at home? (multiple response)

Table 3. Languages spoken at home

%	2012 Tracking (n=1,300)
Languages spoken at home	
English	93
Cantonese	4
Mandarin	4
Italian	3
Vietnamese	3
Arabic	2
Greek	2
Spanish	2
Korean	2
Hindi	2
Tagalog	1
Macedonian	<1
Other (please specify)	5

Svi. What languages are spoken at home? (multiple response)

Note: 2011 (Tracking) and 2009 (Benchmark) results are not comparable with 2012 results due to question change in 2012.

Detailed Survey Findings

4. Environmental Concerns and the Issue of Food Waste

To evaluate the LFHW program, the survey measures and tracks over time (since benchmark and previous tracking research) shifts in perceptions towards environmental problems, general areas of household wastage, and food wastage in particular.

4.1 Concern about environmental problems

Overall concern about environmental problems

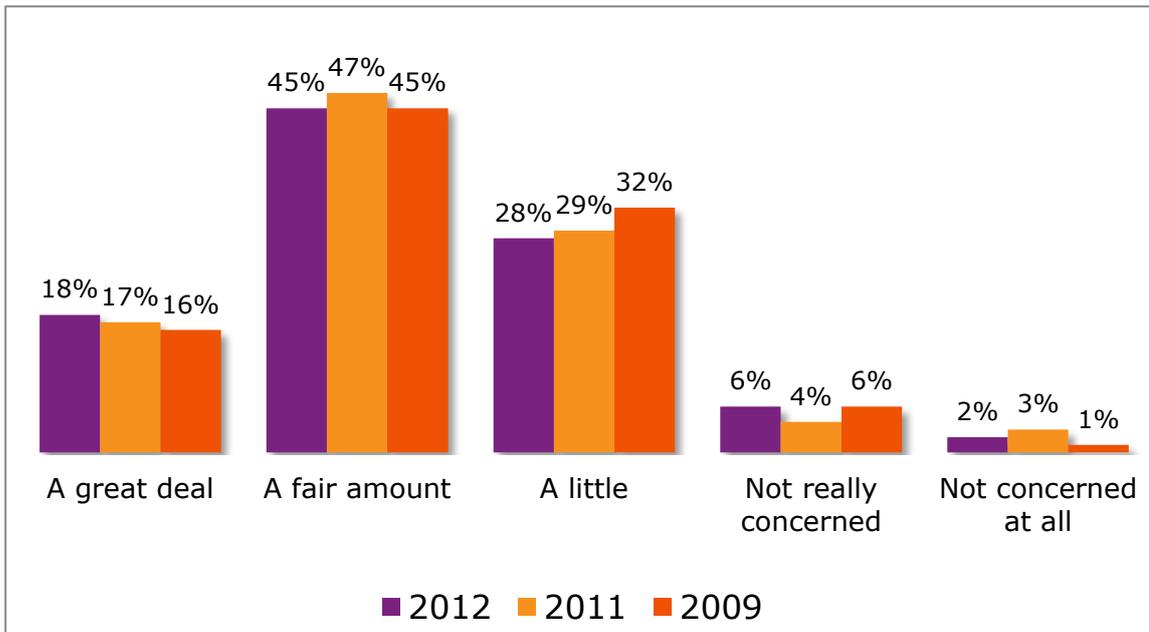
All respondents were asked their general level of concern about environmental problems overall. Firstly, respondents were asked to indicate their general level of concern on a five-point scale.

The majority of NSW households continue to express concern (*a great deal or a fair amount*) for environmental problems (63% in 2012, compared with 64% in 2011, and 61% in 2009). Interestingly, the proportion of respondents expressing *a great deal* of concern is tracking upward marginally, though not significantly, over time (18%, compared with 17% in 2011, and 16% in 2009). However, while also not significant, the proportion of respondents indicating that they were *not really/not at all concerned* about environmental problems in 2012 has peaked (8%, compared with 7% in both previous studies).

- In the current 2012 study, respondents significantly more likely to express concern (*a great deal or a fair amount*) for environmental problems were those more highly educated with university/diploma or higher (68%, compared with 63% of all respondents).
- Those *not really/not at all concerned* about environmental problems were significantly more likely to be those with a lower level of education (some secondary/primary/no schooling 16%, compared to 8% of all respondents).

LFHW Food Lovers were significantly more likely to express *a great deal* of concern for environmental problems (54%, compared with 18% of general NSW households).

Figure 1. Level of concern about environmental problems



Q1. In general, how concerned would you say that you are about environmental problems? (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Major cause for concern about environmental problems

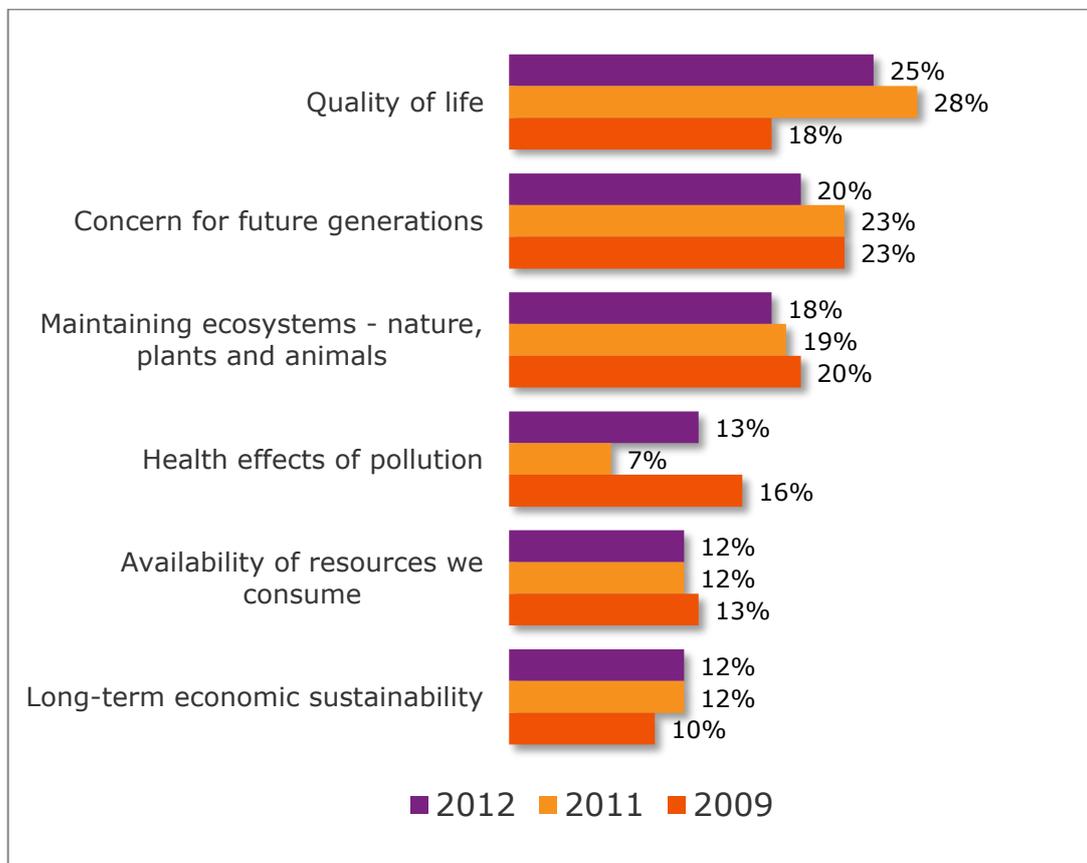
All respondents were asked to indicate which, of six possible causes, was of most concern to them in terms of environmental problems.

The significant increase in concern regarding *quality of life* registered in 2011 endures into 2012, with one quarter of respondents indicating primary concern for *quality of life* in 2012 (25%, compared with 28% in 2011, and 18% in 2009). *Concern for future generations* consistently remains a cause for greater concern over time (20%, compared with 23% in both previous studies). The issue of *maintaining ecosystems* also consistently emerges as the third cause for concern for just fewer than one in five households (18%, compared with 19% in 2011, and 20% in 2009). It should be noted, these results do not reflect significant decreases in 2012.

At least one in ten respondents each cite the remaining three issues as causes for concern. In particular, *health effects of pollution* increased significantly as a concern again in 2012, closer to the benchmark level (13%, compared with 7% in 2011, and 16% in 2009).

- In the current 2012 study, respondents significantly more likely to register *concern for future generations* were families with children (25%, compared with 20% of all respondents), as well as those partaking in home duties (29%) or those retired/pensioners (32%) and those aged 55+ (27%).
- Those significantly more likely to register concern for *health effects of pollution* were CALD respondents (20%, compared with 13% of all respondents) and those living in Sydney (16%).
- Planners were more likely than non-planners to be most concerned about *long term economic sustainability* (13%, compared to 10%).
- Differences were not notable across other demographic segments. However, LFHW Food Lovers cited significantly higher concern with *maintaining ecosystems* compared with general NSW households (36%, compared with 18% respectively).

Figure 2. Major cause of concern about environmental problems



Q2.

Please indicate which one (1) of the following you are most concerned about? (single response) Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

4.2 Areas of household wastage

Household wastage behaviours

All respondents were presented with five household goods and services behaviours in which they may spend money but might be wasteful. Respondents were asked to indicate if their household did any of these wastage behaviours.

Wastage of *food* continues to emerge as a common wastage behaviour among NSW households and tracks highest again in the 2012 study, with more than two in five respondents indicating they *buy food that gets thrown away before being eaten* (43%). While this is a significant increase on the tracking result in 2011, encouragingly it remains significantly lower than the benchmark measure (43%, compared with 32% in 2011, and 49% in 2009).

Similar to food wastage, *electricity* wastage has a significant increase on the tracking result in 2011, but encouragingly remains significantly lower than the benchmark measure (37%, compared with 29% in 2011, and 42% in 2009).

Around one third of NSW households indicate wastage in respect of *clothes/other personal items* and *paying interest on credit cards*. The proportion of respondents indicating they *buy clothes and other personal items that are rarely or never used* has tracked higher over time with a significant increase in 2012 (34%, compared with 30% in 2011, and 29% in 2009). Encouragingly, however, wastage has tracked downward over time in terms of the proportion indicating they *pay interest on credit card purchases* (33%, compared with 36% in 2011, and 39% in 2009).

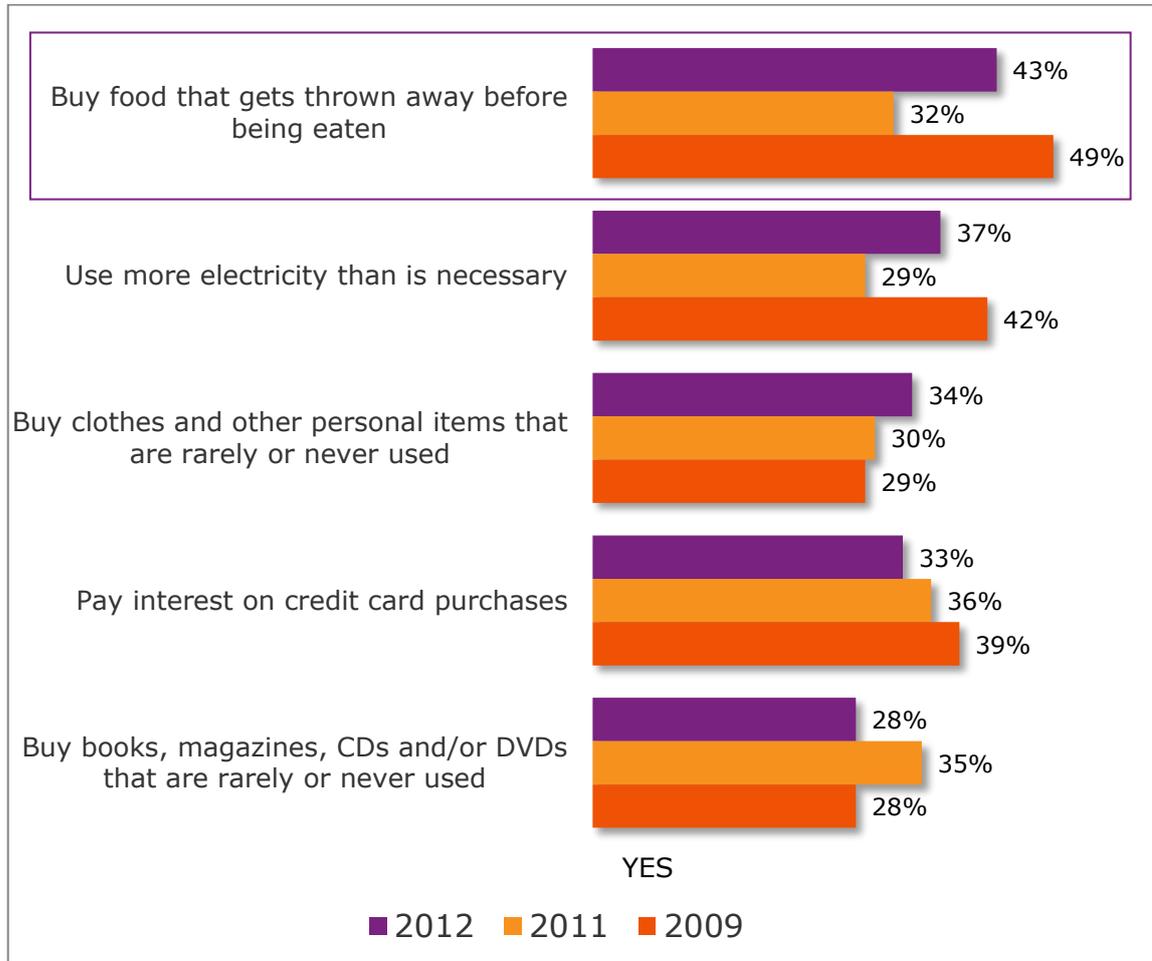
Wastage reported on *books/magazines/CDs/DVDs* is lowest among these behaviours in 2012 (28%), back to benchmark levels.

- In the current 2012 study, respondents significantly more likely to indicate wastage of *food* in their household included:
 - Those aged 25-34 years (55%, compared with 43% of all respondents);
 - Families with children (50%);
 - Those more highly educated in university/diploma or higher (50%);
 - Full time or part time workers (50%); and
 - Those on higher household incomes, including \$60,000-\$99,999 per annum (50%) or \$100,000+ per annum (59%).
- Those significantly more likely to waste *electricity* in their household were aged 25-34 years (44%, compared with 37% of all respondents), as well as families

with children (47%), full time or part time workers (41%), and those on highest household incomes of \$100,000+ per annum (46%).

- Those significantly more likely to be wasteful with *clothing and other personal items* were aged 25-34 years (43%, compared with 34% of all respondents), as well as CALD respondents (42%), those more highly educated in university/diploma or higher (40%), full time or part time workers (39%), and those on higher household incomes, including \$60,000-\$99,999 per annum (42%) or \$100,000+ per annum (41%).
- Respondents significantly more likely to waste *money on interest for credit card purchasers* were full time or part time workers (38%, compared with 33% of all respondents), and those on household incomes of \$60,000-\$99,999 per annum (43%).
- Those significantly more likely to be wasteful of *books/magazines/CDs/DVDs* were those more highly educated in university/diploma or higher (33% compared to 28% of all respondents).
- Perhaps surprisingly, LFHW Food Lovers were more likely to admit *food* wastage (52%, compared with 43% general NSW households). This may however be linked to a higher awareness of the behaviour, rather than higher incidence.
- For all five wastage behaviours, non-planners are more likely than planners to state that their household does this.

Figure 3. Reported goods/services wasted in the household



Q3a. People sometimes spend money on household goods and services that are never or rarely used. Please indicate whether your household ever does any of the following? (single response per statement)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Levels of concern over household wastage behaviours

Among those respondents indicating any one of the five wastage behaviours (at Q3a), each were then asked how concerned they were about that particular area of wastage in their household.

While food waste is the most common household wastage behaviour indicated, this attracts lower levels of concern than that associated with wastage on electricity or interest on credit card purchases. More than half of respondents who wasted food were concerned 'a great deal' or 'a fair amount' about *the amount of food that gets*

thrown away before being eaten in their household, reflecting an increase over time, and in particular, a significantly higher proportion than the benchmark level (53%, compared with 51% in 2011, and 47% in 2009).

Electricity wastage remains the most concerning household wastage behaviour, potentially due to the clear link between usage and cost. Nearly seven in ten respondents who wasted electricity indicated concern ('a great deal' or 'a fair amount') with *the amount of electricity that their household uses that could be saved*, maintaining the increase in the level of concern registered since the benchmark study (69%, compared with 71% in 2011, and 63% in 2009).

Nearly two thirds of respondents who wasted money on interest are concerned ('a great deal' or 'a fair amount') over *the amount of money their household spends on interest for credit card purchases*, again potentially due to the clear link between behaviour and cost. This result is similar again to the benchmark level after a decrease in 2011 (65%, compared with 47% in 2011, and 66% in 2009).

Concern ('a great deal' or 'a fair amount') with *the amount of clothes and other personal items in their household that are rarely or never used* is significantly higher than previously tracked in 2011, but remains lower than the benchmark level (44%, compared with 35% in 2011, and 50% in 2009).

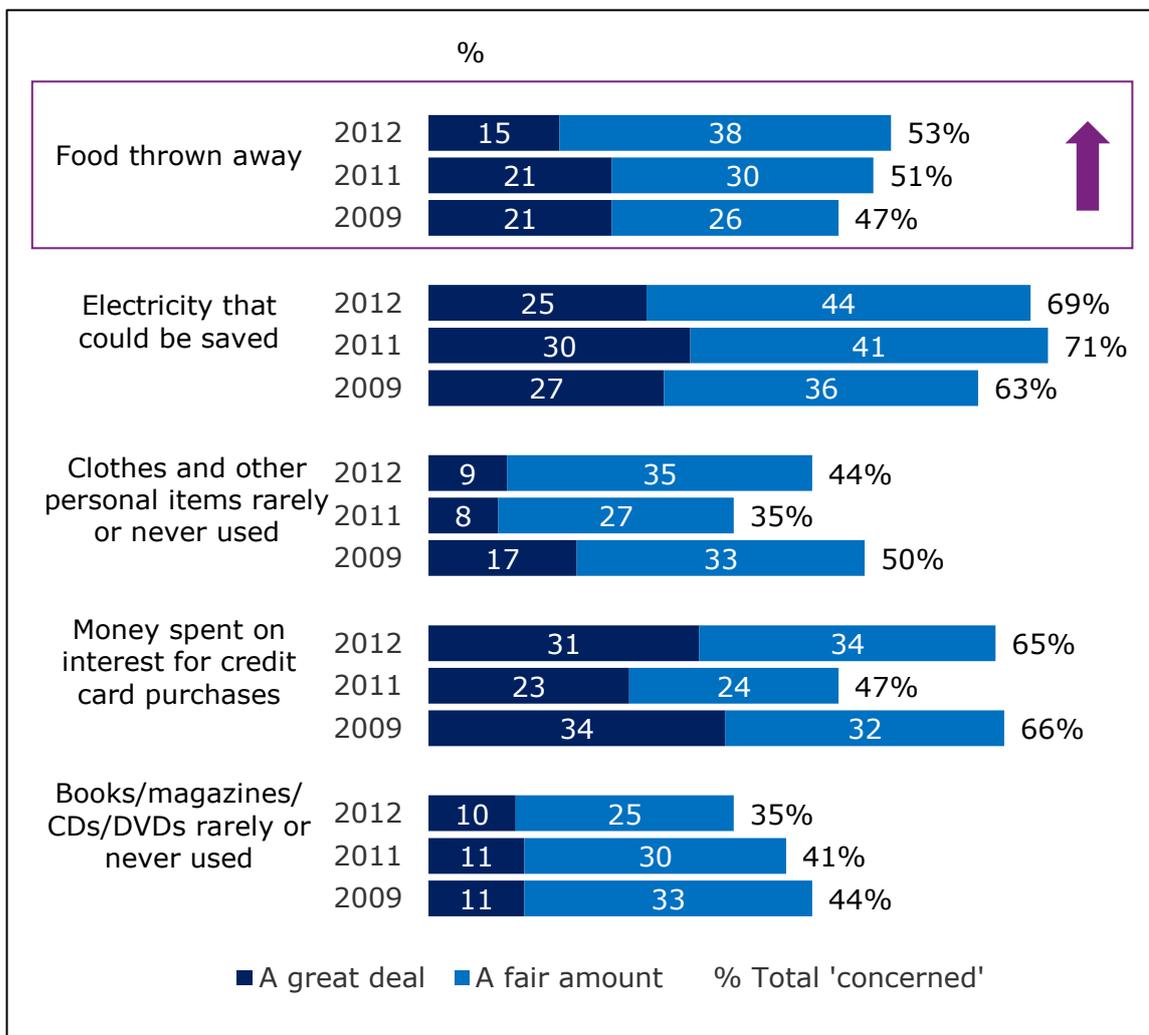
Concern ('a great deal' or 'a fair amount') with *the amount of books, magazines, CDs and/or DVDs in their household that are rarely or never used* has tracked downward over time, with a significant decrease since the benchmark study (35%, compared with 41% in 2011, and 44% in 2009).

- In the current 2012 study, non-planners were significantly more likely than planners to indicate they were concerned ('a great deal' or 'a fair amount') about *the amount of food that gets thrown away before being eaten in your household* (56%, compared with 49% of planners), while those less likely were retired/pensioners (46%, compared with 65% of all respondents).
- In the current 2012 study, respondents significantly more likely to indicate they were concerned ('a great deal' or 'a fair amount') about *money spent on interest for credit card purchases* were CALD respondents (75%, compared with 65% of all respondents), while those less likely were retired/pensioners (46%, compared with 65% of all respondents).
- Respondents significantly more likely to indicate they were concerned ('a great deal' or 'a fair amount') about *books/magazines/CDs/DVDs rarely or never used*

were single (50%, compared with 35% of all respondents), while those less likely to indicate they were concerned about wasting *books/magazines/CDs/DVDs* were aged 35-44 years (25%, compared with 35% of all respondents).

- Due to smaller respective sample sizes of respondents indicating each wastage behaviour, there are limited significant differences relevant across demographic segments.

Figure 4. Level of concern over goods/services wasted in the household



Q3b. How concerned would you say that you are about each of the following? (single response per statement)

Base: Those that wasted food, 2012 (n=556), 2011 (n=382), 2009 (n=586); Those that wasted electricity, 2012 (n=469), 2011 (n=350), 2009 (n=503); Those that wasted clothes/other personal items, 2012 (n=435), 2011 (n=362), 2009 (n=351); Those that wasted money on interest, 2012 (n=429), 2011 (n=433), 2009 (n=470); Those that wasted books/magazines/CDs/DVDs, 2012 (n=360), 2011 (n=418), 2009 (n=333)

Note: Ordered according to the proportion of reported goods/services wasted in the household

Perception of average household waste type

All respondents were asked their perception of what they consider to be the largest type of waste in the average NSW household garbage bin. Respondents selected one type of waste from five categories (including 'other').

The majority of respondents continue to identify *packaging* as the largest type of waste in the average NSW household garbage bin. However, this level has tracked downward over time, and is significantly lower compared with the benchmark level (67%, compared with compared with 70% in 2011, and 73% in 2009).

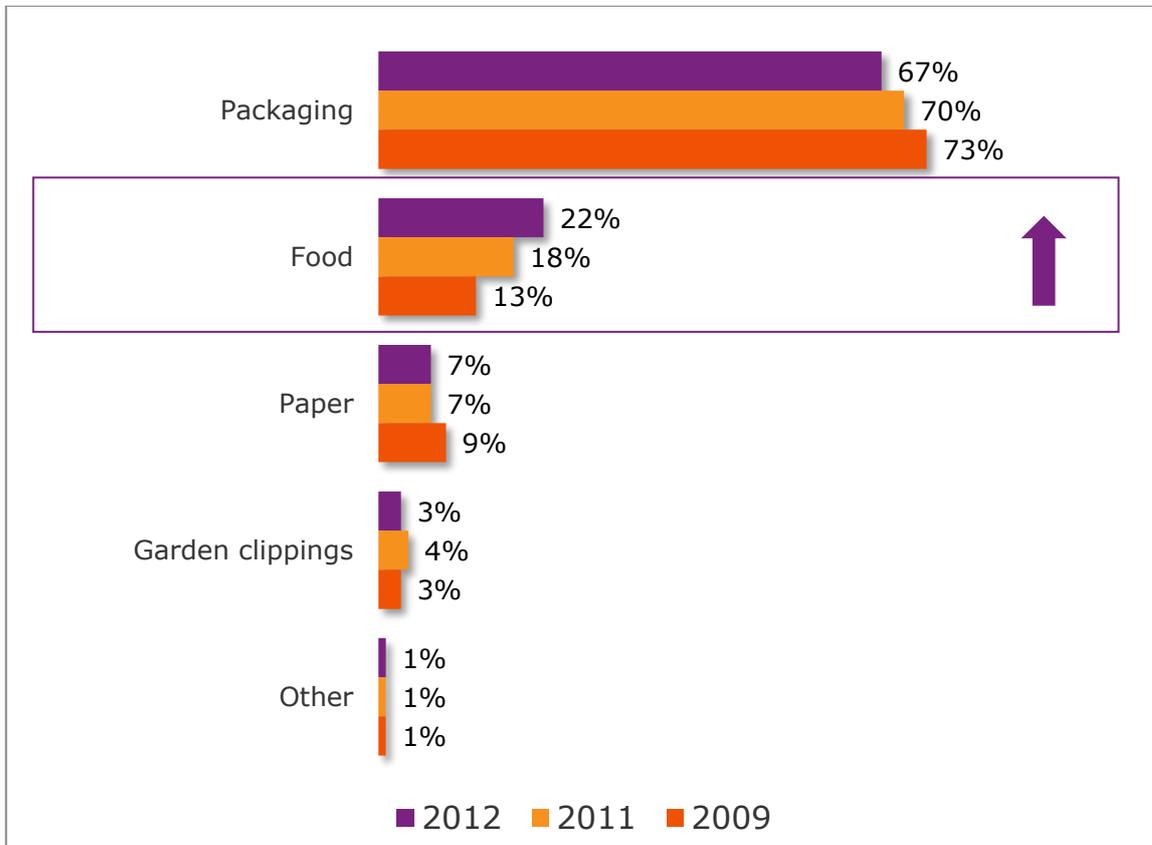
Most notably, in 2012 more than one in five respondents identify *food* waste as comprising the largest type of waste in the household bin (22%). This reflects a significant increase in awareness of the issue of household food waste over time, since the benchmark level and 2011 study (18% in 2011, and 13% in 2009).

There is more limited association with other types of waste comprising the household bin, including *paper* (7%) and *garden clippings* (3%), with levels for both remaining fairly consistent over time.

- In the current 2012 study, respondents significantly more likely to identify *food* waste as the largest type of household waste include Sydney residents (26%, compared with 22% of all respondents), as well as those aged 16-24 years (31%) or 25-34 years (31%), CALD respondents (35%), and students (33%).
- Respondents significantly more likely to identify *packaging* waste as the largest type of household waste include those living in regional and rural areas (large 80% or small country towns 82%, or country rural areas 80%, compared with 67% of all respondents). Also those more likely to identify packaging were non-CALD respondents (74%).
- *Paper* was significantly more likely to be identified as the largest type of household waste by those aged 55+ (11% compared to 7% of all respondents) and those who are retired / pensioners (12%).
- There were no notable differences among segments identifying garden clippings as the largest type of household waste.

- LFHW Food Lovers were more likely to be aware of food comprising the largest type of waste in the average household bin (32%, compared with 22% general NSW households).

Figure 5. Perceptions of waste type in the average NSW household garbage bin



Q5. What do you think is the largest type of waste in the average NSW household garbage bin? (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Level of individual household food wastage

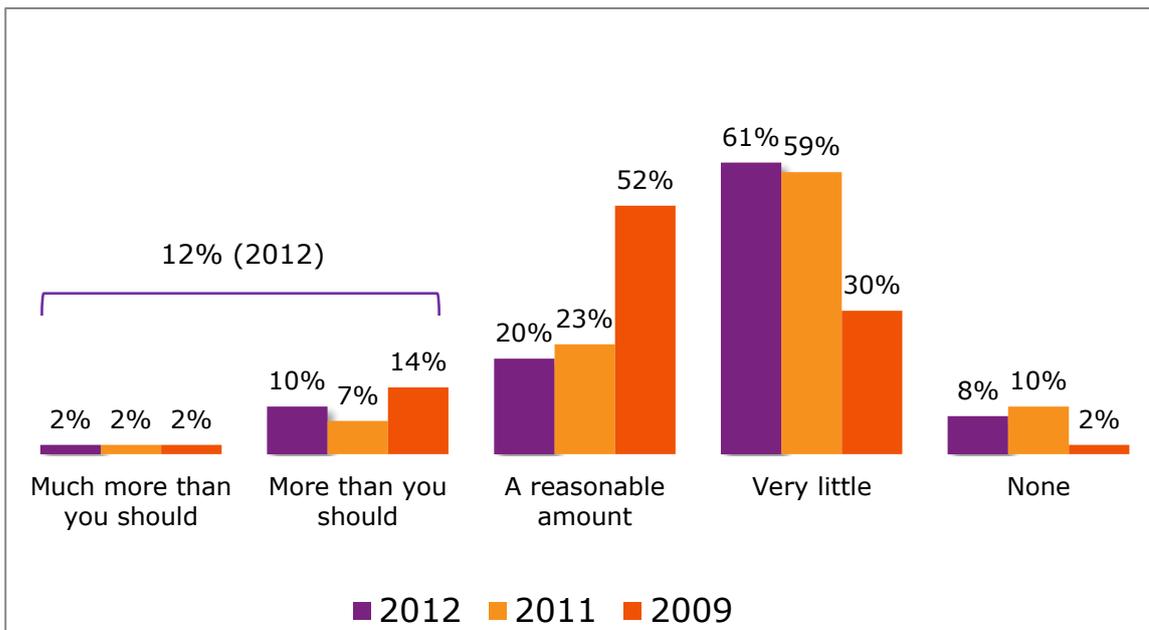
All respondents were asked to estimate how much food their household usually throws away, using a 5-point scale from ‘much more than you should’ to ‘none’.

Perceptions of current levels of individual household food wastage have significantly increased into 2012 in terms of respondents indicating they were throwing away *more or much more than they should*, however, encouragingly levels remain significantly lower than reported in the benchmark (12%, compared with 9% in 2011, and 16%

in 2009). Encouragingly also, a majority of respondents claimed *very little* or *none* by way of uneaten food thrown away (69%, identical to 2011, and significantly improved compared with 32% in 2009).

- In the current 2012 study, respondents significantly more likely to report having thrown out *more* or *much more* food than those aged 25-34 years (19%), full time or part time workers (14%), families with children (17%) or shared households (23%). Non-planners (18%) are also more likely than planners (8%) to have reported this.
- Those significantly more likely to report having thrown out *very little* or *none* include those living in country rural areas (84%, compared with 69% of all respondents), as well as those aged 55+ years (85%), those who are not working (75%), families of only adults (all aged 16+) (75%), those who are retired / pensioners (89%), and other pensioners (84%). Planners are also more likely than non-planners to report having thrown away *very little* or *none* (75%, compared to 60%).
- Current levels for NSW households are also fairly consistent with LFHW Food Lover levels reported.

Figure 6. Level of individual household food wastage



Q4. How much uneaten food would you say that your household usually throws away? (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Estimated annual financial value of food wasted by NSW households

All respondents were asked to give an estimate, to the nearest \$100, of how much they considered that the average NSW household spends on food that is purchased but never eaten each year. Due to a change in questionnaire for the 2011 tracking survey, results from the 2009 benchmark study are not directly comparable and have not been provided.

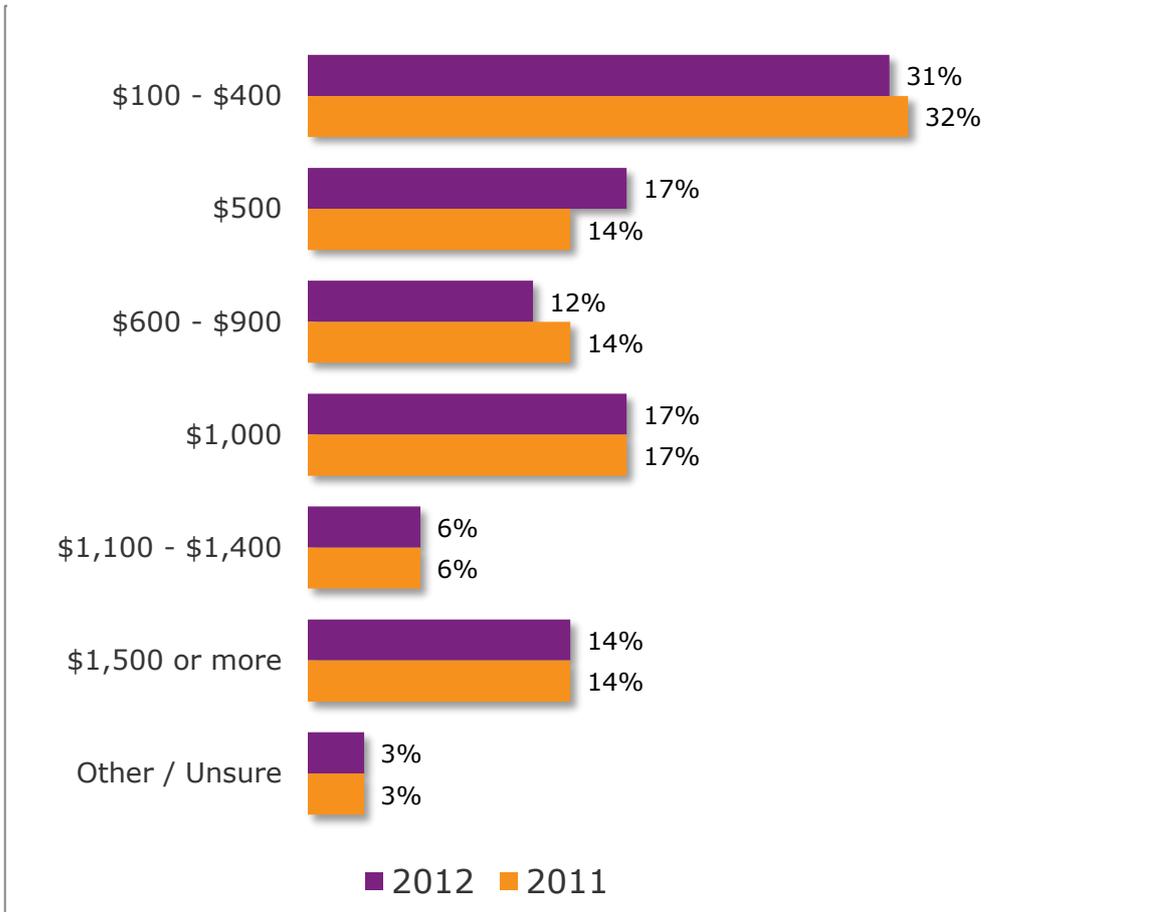
The distribution of the annual value of food estimated to be wasted by average NSW households remains relatively consistent since the previous tracking study, with a broad range of values estimated. However, around half of respondents estimated value at the lower end of the range, at or below \$500 per annum. Just over three in ten respondents placed the value in the range of \$100 to \$400 per annum (31%, compared with 32% in 2011). Around one in six respondents placed the value at \$500 per annum, a significant increase on this particular value association (17%, compared with 14% in 2011).

Three in ten respondents estimated the value of food wastage per household in the range of \$600 to \$1,000 per annum (31%, compared with 31% in 2011), while at the top end of the range, around one in seven respondents estimated the value of food wasted to be \$1,500 or more per annum (14% in both 2012 and 2011).

The mean annual value of food estimated to be wasted is \$729.00 in 2012, similar to the mean annual value in 2011 of \$724.20. Note, mean value is calculated on whole figures to the nearest \$100, with \$1,500 the assumed value assigned for "\$1,500 or more".

- While there are limited significant differences in the current 2012 study, those respondents that estimated higher annual values of food waste at \$1,500 or more per NSW household are more likely to be CALD respondents (23%).
- LFHW Food Lovers may be better informed, estimating a higher annual mean spend on food that is never eaten at \$905.00 (compared with \$729.00 among all NSW households).

Figure 7. Estimated average annual spend on food wasted by NSW households



Q6. Approximately how much would you estimate that the average NSW household spends on food that is purchased but never eaten each year? (single response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200)

5. Knowledge and Attitudes Underpinning Food Waste

Measuring and tracking changes in awareness and attitudes over time (since benchmark and previous tracking research) is critical to evaluate the effectiveness of the LFHW program and inform continued design and delivery of the program. This includes measuring and tracking knowledge around food handling and use, and fundamental attitudes underpinning food waste, food wastage myths, and waste avoidance strategies.

5.1 Knowledge around food labels

To gauge and track NSW householders' knowledge around food handling and use before its expiry, all were asked a set of questions relating to food labels, that is, 'use by' and 'best before' dates.

Knowledge of 'use by' dates

Respondents were first shown an example image of a 'use by' date food label, and asked to select which statement best described what is meant by the 'use by' date.

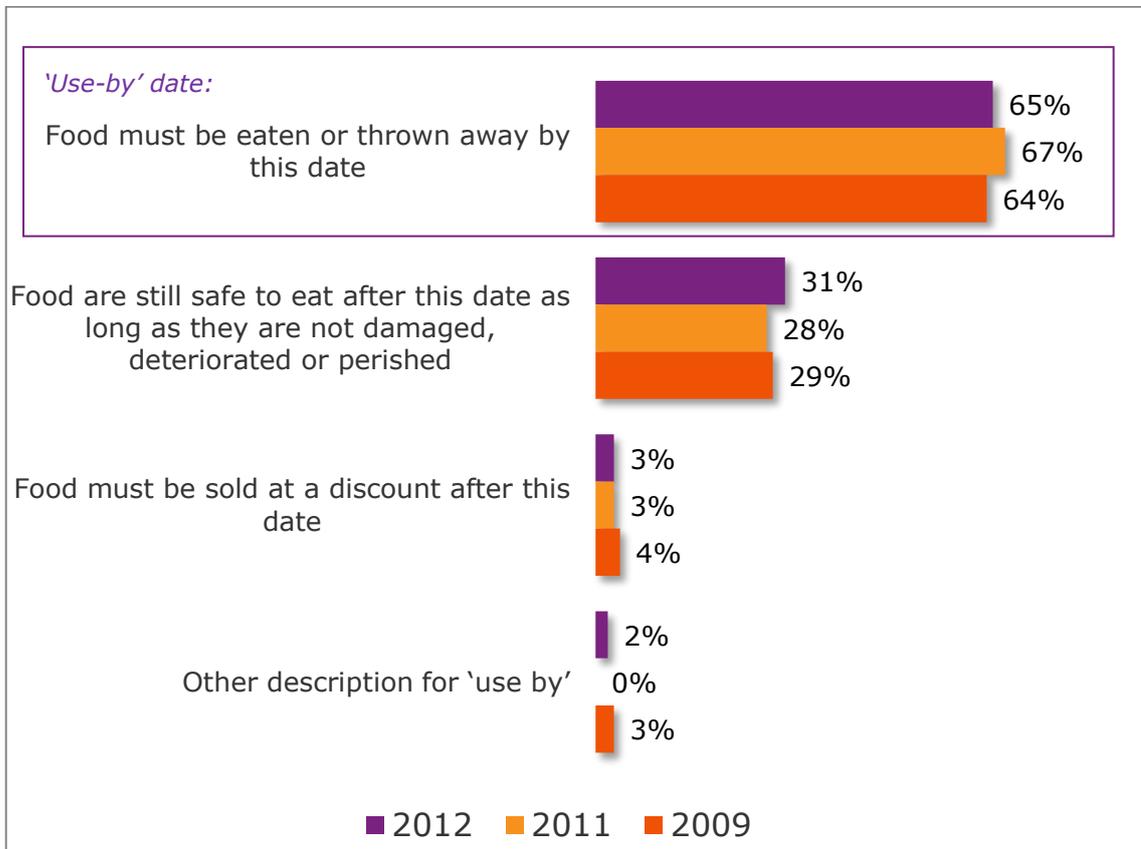
Householder knowledge has tracked consistently over time since the benchmark, with nearly two thirds of respondents correctly ascribing that a 'use by' date means that *food must be eaten or thrown away by this date*, reflecting a slight decrease returning to benchmark level, though not a significant change (65%, compared with 67% in 2011, and 64% in 2009).

While also not significant, there is a slight increase in respondents incorrectly ascribing that *food are still safe to eat after this date as long as they are not damaged, deteriorated or perished* (31%, compared with 28% in 2011, and 29% in 2009). A very limited proportion of respondents continue to incorrectly ascribe to the notion that *food must be sold at a discount after this date* (3%).

- In the current 2012 study, respondents significantly more likely to correctly ascribe to 'use by' dates in that *food must be eaten or thrown away by this date* were those under 45 years, including 16-24 years and 35-44 years (81% and 73% respectively, compared with 65% of all respondents). Families with children (71%) were also more likely to correctly ascribe to this description.

- Respondents incorrectly ascribing to 'use by' dates in that *food are still safe to eat after this date as long as they are not damaged, deteriorated or perished* are significantly more likely to be older householders, 55+ years (45%, compared with 31% of all respondents), and retired/pensioners (47%).
- Interestingly, LFHW Food Lovers were significantly less likely to exhibit correct knowledge around 'use by' dates. They were significantly less likely to correctly indicate that *food must be eaten or thrown away by this date* (50%, compared with 65% of all respondents), and significantly more likely to indicate *food are still safe to eat after this date as long as they are not damaged, deteriorated or perished* (42%, compared with 31% of all respondents).

Figure 8. Best description of 'use by' dates



Q7a. In regard to food labels, which of the following do you think best describes what is meant by the 'use by' date? <Insert image of use by label> (single response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Knowledge of 'best before' dates

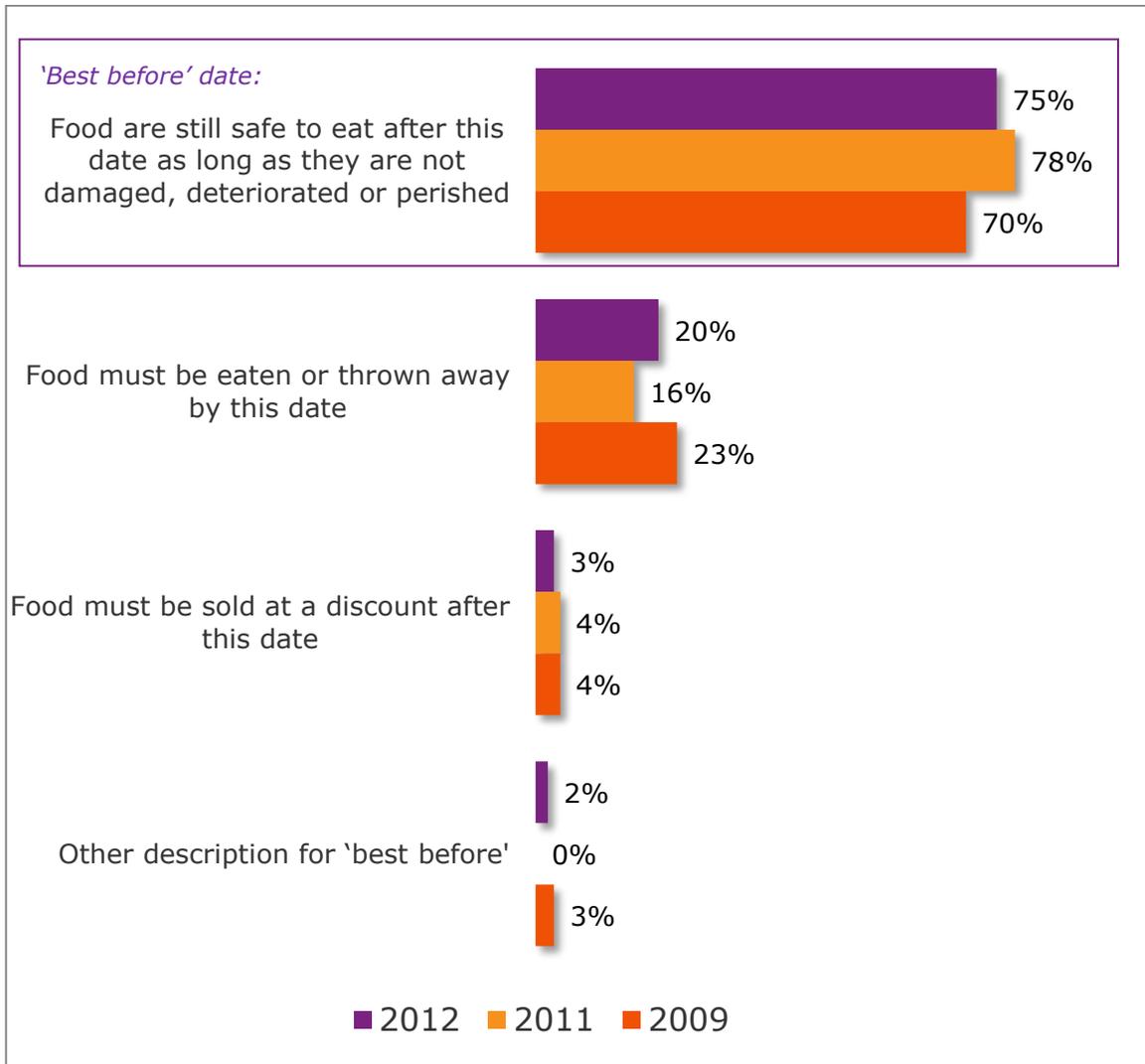
Secondly, respondents were shown an example image of a 'best before' date food label, and asked to select which statement best described what is meant by the 'best before' date.

While householder knowledge has varied slightly over time since the benchmark, a stronger knowledge continues to be demonstrated for 'best before' dates over 'use by' dates. Three quarters of respondents correctly ascribe that a 'best before' date means that *food are still safe to eat after this date as long as they are not damaged, deteriorated or perished*. However, this reflects a slight decrease, though not a significant change, and still significantly higher than in the benchmark (74%, compared with 78% in 2011, and 70% in 2009).

There remains some confusion as to the treatment of food based on 'best before' dates, with a significant increase in respondents incorrectly ascribing that *food must be eaten or thrown away by this date* (21%, compared with 16% in 2011, and 23% in 2009). Again, a very limited proportion of respondents continue to ascribe to the notion that *food must be sold at a discount after this date* (3%).

- In the current 2012 study, respondents significantly more likely to correctly ascribe to 'best before' dates in that *food are still safe to eat after this date as long as they are not damaged, deteriorated or perished* were older respondents aged 55+ years (82%) and retired/pensioners (83%).
- Respondents incorrectly ascribing to 'best before' dates in that *food must be eaten or thrown away by this date* are significantly more likely to live in Sydney (25% compared to 20% of all respondents), as well as CALD respondents (32%).
- While LFHW Food Lovers were significantly less likely to exhibit correct knowledge around 'use by' dates, they were significantly more likely to be knowledgeable around 'best before' dates. LFHW Food Lovers were significantly more likely to correctly ascribe 'best before' dates with *food are still safe to eat after this date as long as they are not damaged, deteriorated or perished* (93%, compared with 74% of all respondents), and significantly less likely to indicate that *food must be eaten or thrown away by this date* (3%, compared with 21% of all respondents).

Figure 9. Best description of 'best before' dates



Q7b. And which of the following do you think best describes what is meant by the 'best before' date? <Insert image of best before label> (single response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

5.2 General attitudes underpinning food waste

To track the fundamental attitudes underpinning food waste behaviour, all respondents were presented with eight statements (in random order) and asked to what extent they agreed or disagreed with each, using a five-point scale from 1 'disagree strongly' to 5 'agree strongly'. For the purpose of analysis, statements are grouped according to three general attitudinal areas, including using and storing food, environmental impacts of food waste, and lifestyle and food waste. Results describe the proportions of respondents that 'agree' in total ('agree' or 'strongly agree') with respective statements.

Using and storing food

The majority of NSW households appear to be comfortable with the concept of making meals from leftovers and avoiding food wastage. Seven in ten agreed *it is easy to make meals from assorted ingredients that need using up*, though while consistent with the 2011 tracking result, this remains significantly lower than the benchmark level (71%, compared to 71% in 2011, and 76% in 2009).

- In the current 2012 study, respondents significantly more likely to agree *it is easy to make meals from assorted ingredients that need using up* were those living in large country towns (81%, compared with 71% of all respondents), older respondents aged 55+ years (83%), and retired/pensioners (83%) or other pensioners (83%). Planners were more likely than non-planners to agree with this statement (75%, compared to 65%).
- However, younger respondents are more likely to disagree ('disagree' or 'strongly disagree'), in particular those aged 25-34 years (10%, compared with 7% of all respondents), as were females (9%).

There appears to be uncertainty increasing over time as to whether food given to pets or food composted avoids waste. Six in ten respondents agreed that *food that could have been eaten by people is not wasted if it is fed to the pets or composted*, however, this reflects a significant decrease since 2011, after a significant decline also from the benchmark level (59%, compared to 63% in 2011, and 75% in 2009).

- In the current 2012 study, only respondents who are pensioners (other than age pensions) are significantly more likely to agree that *food that could have been eaten by people is not wasted if it is fed to the pets or composted* (75%, compared with 59% of all respondents).

Attitudes appear to be shifting in terms of the length of time considered that food can be stored in the freezer and fridge. It appears fewer respondents consider it viable to freeze food for a long period. Around one quarter of respondents agreed that *as long as cooked food items remain frozen they can be stored for a year or more in the freezer*, reflecting a downward trend over time, and significantly lower than the benchmark level (25%, compared with 26% in 2011, and 28% in 2009). Respondents are more likely to disagree ('disagree' or 'strongly disagree') that food can be stored in the freezer for this long (45%).

- In the current 2012 study, no significant differences were evident with respect to subgroups level of agreement that *as long as cooked food items remain frozen they can be stored for a year or more in the freezer*.

Conversely, it appears respondents are becoming increasingly comfortable with longer food storage times in the fridge and eating leftovers older than one day. In 2012, just one in seven respondents agreed that *leftovers that have been kept in the fridge for more than one day are unsafe to eat*, reflecting a downward trend and significant decrease since 2011, this also following a significant decline also from the benchmark level (14%, compared to 19% in 2011, and 22% in 2009). Again, respondents are more likely to disagree ('disagree' or 'strongly disagree') that leftovers are unsafe to eat after one day (61%).

- In the current 2012 study, older respondents are more likely to disagree ('disagree' or 'strongly disagree'), in particular those aged 55+ years (68%, compared with 61% of all respondents), as well as retired/pensioners (71%), and those with a household income of \$100,000 or more (69%).

Environmental impacts of food waste

While not experiencing significant changes into 2012, environmental concerns relating to food waste have less resonance with respondents, having tracked downward over time, and significantly overall since benchmark levels. At least three in five respondents agree primarily that *the energy, water and nutrients that are used to grow, process and transport food are 'lost' if food is purchased but not eaten* (60%, compared with 64% in 2011, and 67% in 2009). However, fewer than two in five agree that *wasting food contributes to climate change* in 2012 (37%, compared with 38% in 2011, and 46% in 2009).

- In the current 2012 study, respondents significantly more likely to agree that *the energy, water and nutrients that are used to grow, process and transport food are 'lost' if food is purchased but not eaten* were those with university/diploma or

higher (66%, compared with 60% of all respondents), as well as those with a household income of \$100,000 or more (71%).

- Respondents significantly more likely to agree that *wasting food contributes to climate change* were CALD respondents (45%, compared with 37% of all respondents), as well as those with university/diploma or higher (47%), and those with a household income of \$100,000 or more (46%).
- LFHW Food Lovers appear considerably more environmentally conscious, being more likely to agree on both *the energy, water and nutrients that are used to grow, process and transport food are 'lost' if food is purchased but not eaten* (86%, compared with 60% of all respondents), and *wasting food contributes to climate change* (83%, compared with 37% of all respondents).

Lifestyle and food waste

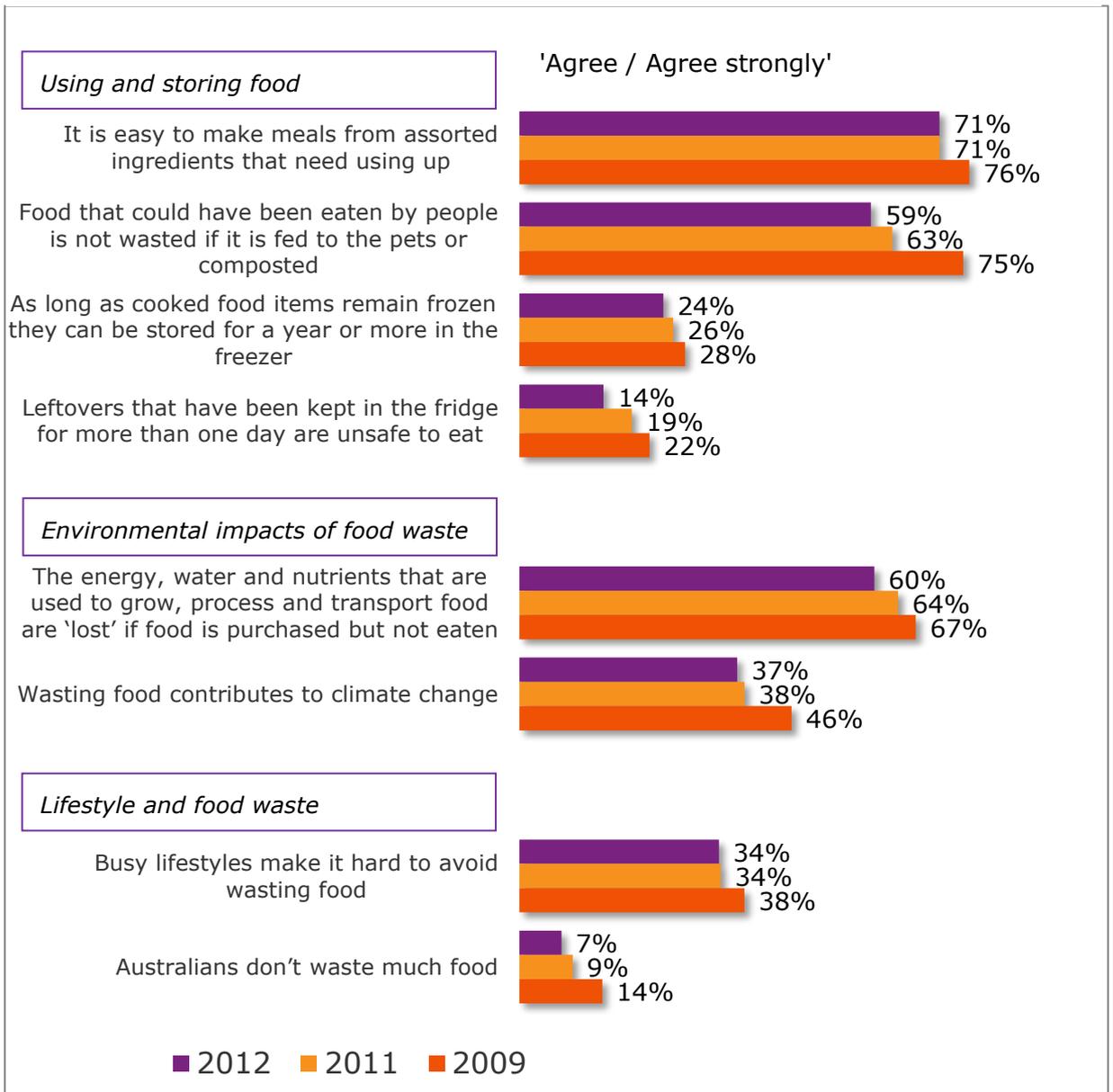
Around one third of respondents agree that *busy lifestyles make it hard to avoid wasting food*, reflecting a consistent result since 2011 (34%, compared with 34% in 2011, and 38% in 2009). However, a greater proportion disagree ('disagree' or 'strongly disagree') that busy lifestyles impact food wastage (37%).

- Respondents significantly more likely to agree that *busy lifestyles make it hard to avoid wasting food* were those with a household income of \$100,000 or more (44%, compared with 34% of all respondents), and full time or part time workers (38%). Non-planners were significantly more likely than planners to agree with this statement (39%, compared to 30%).
- However, older respondents are more likely to disagree ('disagree' or 'strongly disagree'), in particular those aged 55+ years (48%, compared with 37% of all respondents), as well as retired/pensioners (47%), those living in a rural area (54%), and those not working overall (43%).

It would appear that NSW households do not generally hold misconceptions around the issue of food waste overall by Australian households. Fewer than one in ten respondents agreed that *Australians don't waste much food*, reflecting a downward trend and in particular, a significant decline from the benchmark level (7%, compared with 9% in 2011, and 14% in 2009). Rather, the majority disagree ('disagree' or 'strongly disagree') (69%), recognising that Australians may waste food.

- In the current 2012 study, respondents significantly more likely to agree that *Australians don't waste much food* were males (10%, compared with 7% of all respondents), as well as CALD respondents (13%).

Figure 10. General attitudes underpinning food and food waste



Q9. Below is a list of statements about food. Please indicate the extent to which you agree or disagree with each of them. (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

6. Behaviours Underpinning Food Waste

As well as attitudes, measuring and tracking changes in behaviour over time (since benchmark and previous tracking research) is critical to evaluate the effectiveness of the LFHW program and inform continued design and delivery of the program. This includes measuring and tracking food waste and waste avoidance behaviours, behaviours in relation to food planning, shopping, preparation and storage, behaviours in relation to volume and spend on food waste, as well as barriers and drivers for food waste.

6.1 Food waste avoidance behaviours

All respondents were shown three statements relating to general food waste behaviours around planning and shopping for food. Each had a five-point scale where 1 represented a statement relating to a food wasting behaviour and 5 represented food waste avoidance behaviour. Respondents were asked to move a 'slider' to the position on the scale that best represented their behaviour. A mean score closer to 5.0 indicates that respondents are more likely to engage in food waste avoiding behaviour.

Using bought food

Encouragingly, the majority of respondents continue to register food waste avoidance behaviour in terms of not wasting food that has been bought. Nearly two thirds of respondents indicated agreement (position 4 or 5) with the statement *I hardly ever find that food I've bought doesn't get used* (63%). The mean score reflects a positive waste avoidance behaviour among NSW householders at 3.7 (out of 5.0), however, these results represent a significant decrease since 2011, back to the benchmark level (mean 3.8 in 2011, and 3.7 in 2009).

- Respondents with significantly higher agreement ratings include those aged 55 years and above (3.9 out of 5) and those with household incomes of less than \$20,000 (4.1 out of 5).
- Respondents with significantly lower agreement ratings, that is, more likely to find food doesn't get used are those aged 25 to 34 years (mean score 3.5), and those with household income between \$60,000 and \$99,999 (mean score 3.5).

Planning and shopping

Food waste avoidance behaviours continue to be less prevalent within planning and shopping activities.

Three in ten respondents indicated agreement with the statement *I plan meals in advance and shop to a strict list* (30%). The mean score of 2.8 (out of 5) has remained consistent into 2012, after a decrease from the benchmark level (mean 2.8 in 2011, and 3.0 in 2009). As such, meal planning as a food waste avoidance behaviour remains polarising across households between *planning meals and shopping to a strict list*, and *not usually planning and deciding what is needed while shopping*.

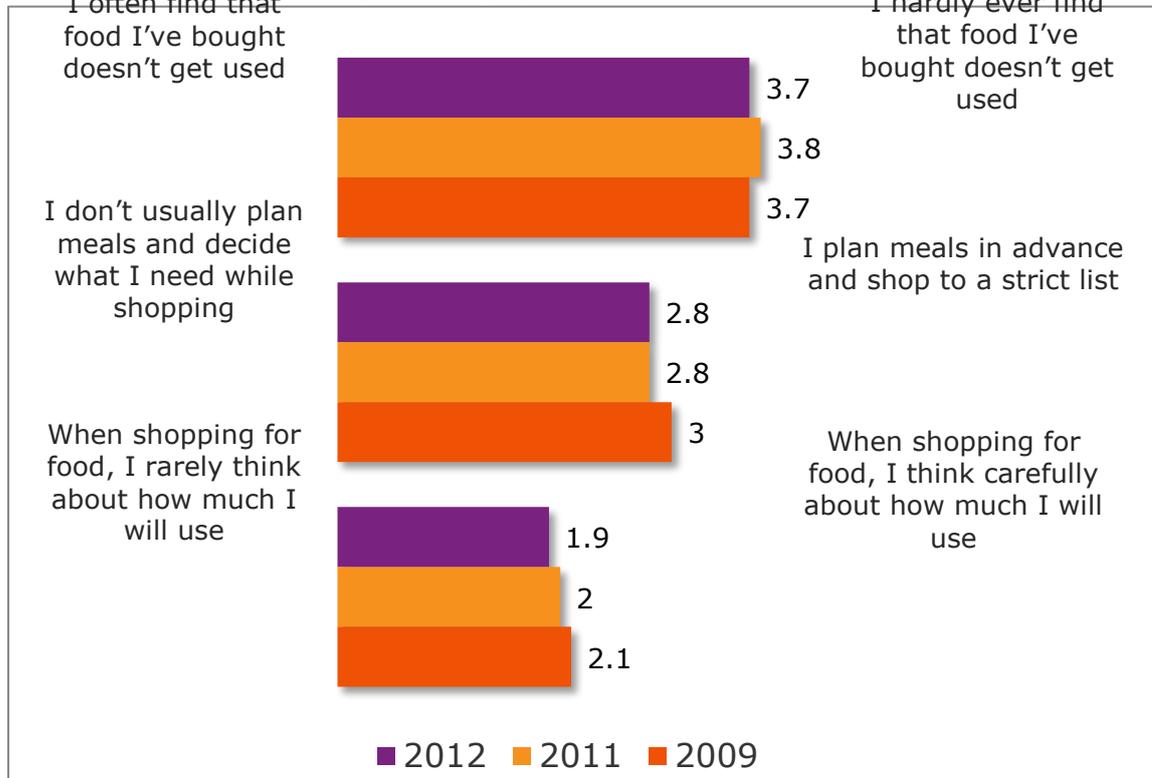
- There are no significant differences evident between sub groups of the population.

Just one in ten respondents indicated agreement with the statement about *when shopping for food, I think carefully about how much I will use* (9%), while the majority exhibit food waste behaviour towards *When shopping for food, I rarely think about how much I will use* (75%). Further, behaviours are trending further toward food wasting, with the mean score of 1.9 (out of 5) reflecting a significant decrease over time (mean 2.0 in 2011, and 2.1 in 2009).

- Respondents with significantly higher agreement ratings, that is, more likely to *think carefully* before shopping, are those aged 16 to 24 years (2.1 out of 5).
- And perhaps surprisingly, respondents with significantly lower agreement ratings, that is, more likely to *rarely think about how much they will use* before shopping, are those who live in country rural areas (1.6 out of 5).

Figure 11. General food waste avoidance behaviours

Q8. Please move each 'slider' to indicate where you personally feel that you fit between the two statements presented. If, for example, the statement on the left fully describes you, you



would move the 'slider' as far to the left as possible (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Note: Question wording changes in 2012 to make reference to 'food' in response codes.

6.2 Food behaviour – planning, shopping, preparation and storage

Respondents' behaviours were broken down further by occasion to understand regular food waste and food waste avoidance behaviours. This section measures and tracks behaviours at each stage of food planning, food shopping, food preparation and food storage.

For all questions, respondents were asked to indicate the frequency with which they conducted certain behaviours, using a five-point frequency scale ranging from 1 'never' to 5 'always'.

Food planning behaviour

Respondents were asked three planning behaviour questions in relation to those behaviours undertaken prior to the main food shop. The key planning behaviour being undertaken continues to be *checking what food is already in the house*, with two thirds of respondents in 2012 indicating they 'always' or 'most times' do so before the food shop (66%). However, this result is significantly lower than the 2011 incidence, though marginally higher than the benchmark level (72% in 2011, and 66% in 2009).

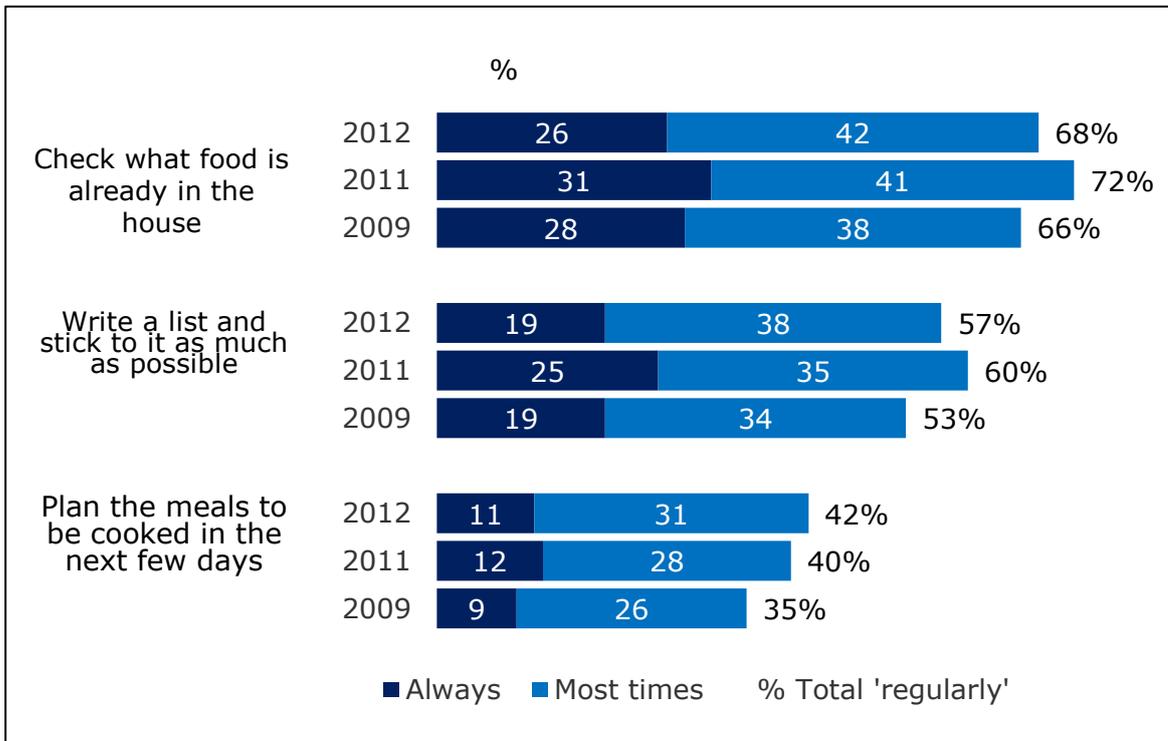
More than half of respondents indicated they 'always' or 'most times' *write a list and stick to it as much as possible* (55%), though this result also reflects a decrease but remains significantly higher than the benchmark level (60% in 2011, and 53% in 2009). *Planning the meals to be cooked in the next few days* attracts lowest incidence, but has trended upward over time, and now achieves significantly higher than the benchmark level (41%, compared with 40% in 2011, and 35% in 2009).

- In the current 2012 study, respondents significantly more likely to 'always' or 'most times' *check what food is already in the house* include those living in large country towns (76%, compared with 66% of all respondents), as well as older respondents aged 55+ (77%), retired/pensioners (78%), or other pensioners (78%). However, those less likely to *check what food is already in the house* include those aged 25-34 years (56%, compared with 66% of all respondents). Planners are more likely than non-planners to do this 'always' or 'most times' (79%, compared to 51%).
- Respondents significantly more likely to 'always' or 'most times' *write a list and stick to it as much as possible* include those living in Newcastle (68%, compared

with 55% of all respondents), as well as females (61%), older respondents aged 55+ years (70%), and families with adults (16+) (62%). Planners are more likely than non-planners to say that they do this 'always' or 'most times' (73%, compared to 31%).

- However, those less likely to 'always' or 'most times' *write a list and stick to it as much as possible* are aged 25-34 years (45%, compared with 55% of all respondents), as well as CALD respondents (43%), singles (44%), shared households (39%), full time or part time workers (49%), and students (42%).
- Respondents significantly more likely to 'always' or 'most times' *plan the meals to be cooked in the next few days* include older respondents aged 55+ (46%, compared with 41% of all respondents). However, those less likely include those living in Wollongong (29%, compared with 41% of all respondents), as well as CALD respondents (34%), and singles (31%).

Figure 12. Food planning behaviour



Q13 Before you or a member of your household does your main food shopping, how regularly do you or they do the following? (single response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Food shopping behaviour

Respondents were asked four shopping behaviour questions in respect of those undertaken during the grocery shopping. The shopping behaviour consistently emerging with highest incidence is *checking the 'use by' or 'best before' dates before purchasing food items*, with two thirds of respondents in 2012 indicating they 'always' or 'most times' do so during the grocery shop (65%). However, this incidence is significantly lower than that measured in 2011, but identical with the benchmark level (71% in 2011, and 66% in 2009).

Around two in five respondents each indicated they 'always' or 'most times' *buy food to a budget* (44%) and *on special* (39%). The proportion who indicated that they *buy food according to a set budget* has decreased over time, only marginally since 2011, but significantly from the benchmark level (42%, compared with 44% in 2011, and 46% in 2009). The proportion of respondents who indicated that they *buy food based on what is on special (including 2 for 1 deals)* is considerably variable over time, with a significant decrease since 2011, to drop below the benchmark level (39%, compared with 50% in 2011, and 42% in 2009).

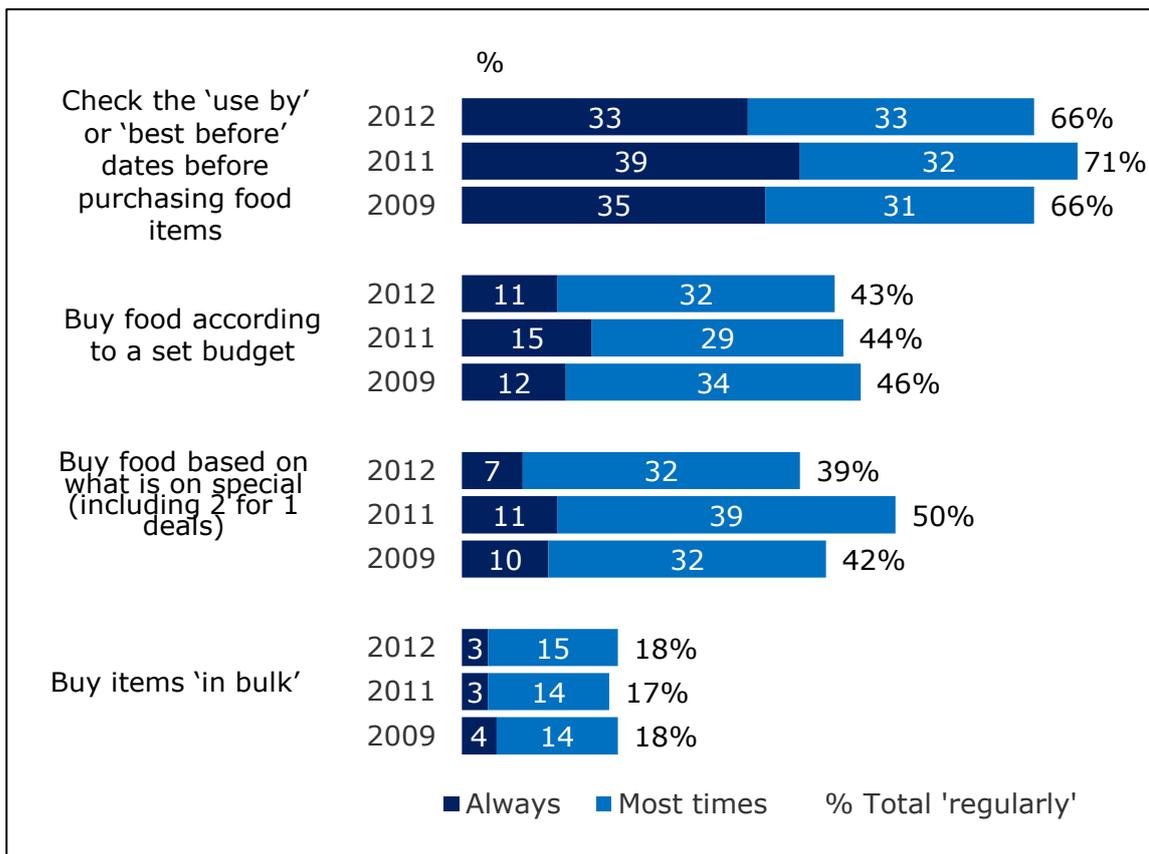
Almost one in five respondents indicated that they *buy items 'in bulk'*, with this incidence remaining consistent over time (18%, compared with 17% in 2011, and 18% in 2009).

- In the current 2012 study, respondents significantly more likely to 'always' or 'most times' *check the 'use by' or 'best before' dates before purchasing food items* include older respondents aged 55+ years (75%, compared with 65% of all respondents), as well as those retired/pensioners (77%). However, those less likely to 'always' or 'most times' *check the 'use by' or 'best before' dates* include those aged 25-34 years (54%, compared with 65% of all respondents), as well as those unemployed (52%). Planners are more likely than non-planners to do this 'always' or 'most times' (70%, compared to 59%).
- Respondents significantly more likely to 'always' or 'most times' *buy food according to a set budget* include those living in small country towns (56%, compared to 42% of all respondents), as well as older respondents 45-54 years (50%), and those on lower household incomes including under \$20,000 (55%) or \$20,000 to \$59,999 (51%). However, those less likely are younger respondents aged 16-24 years (32%), or 25-34 years (35%), and those on higher household

income of \$100,000 or more (32%). Planners are more likely than non-planners to do this 'always' or 'most times' (54%, compared to 28%).

- Respondents significantly more likely to 'always' or 'most times' *buy food based on what is on special (including 2 for 1 deals)* includes families with children (47%, compared with 39% of all respondents), while those less likely are older respondents aged 55+ years (33%).
- Planners are more likely than non-planners to 'always' or 'most times' *buy items in bulk* (20%, compared to 15%).

Figure 13. Food shopping behaviour



Q14 How regularly do you or a member of your household do the following when doing the grocery shopping? (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

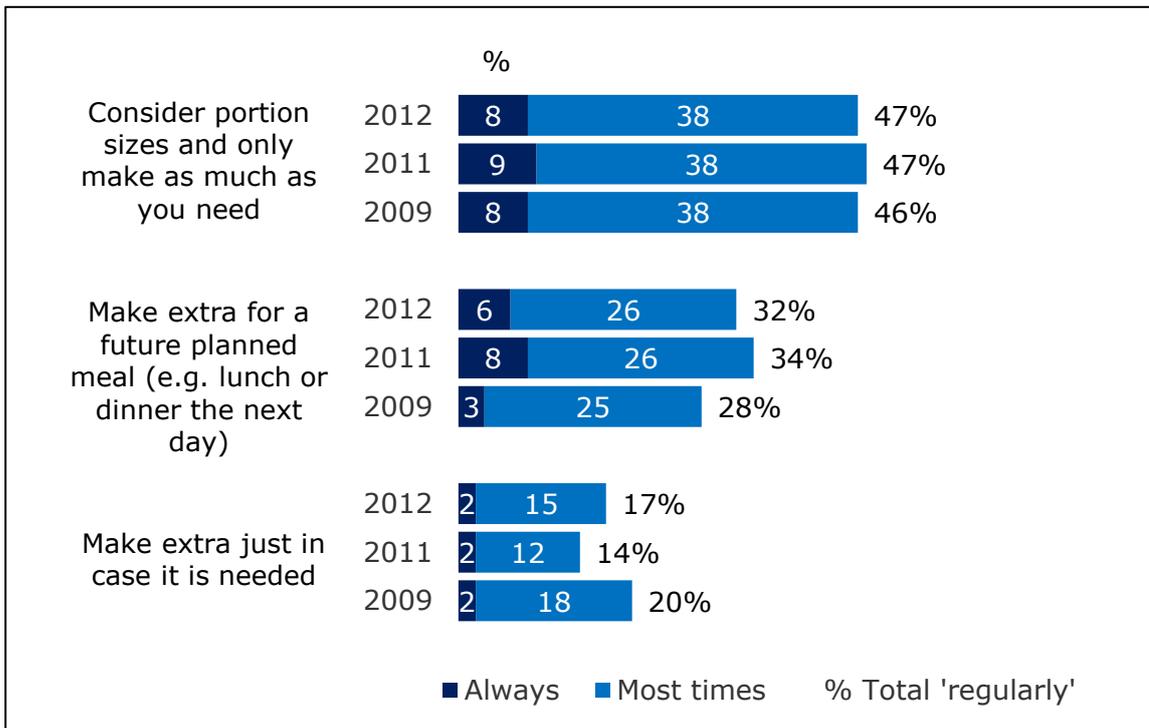
Food preparation behaviour

Respondents were asked three preparation behaviour questions in relation to preparing the main meal. The main meal time behaviour consistently emerging 'always' or 'most times' among nearly half of respondents relates to *consideration of portion sizes and only making as much as you need* (46%). This result is consistent over time.

Nearly one third of respondents indicated that they *make extra for a future planned meal (e.g. lunch or dinner next day)* (32%). However, this reflects a significant decrease in behaviour since 2011, though remains improved on the benchmark level (34% in 2011, and 28% in 2009). Around one in six respondents indicated that they *make extra just in case it is needed* (17%), reflecting a significant increase since 2011, though remaining lower than the benchmark level (14% in 2011, and 20% in 2009).

- In the current 2012 study, respondents significantly more likely to 'always' or 'most times' *consider portion sizes and only make as much as you need* include older respondents aged 55+ years (58%, compared with 46% of all respondents), and retired/pensioners (61%). However, those less likely include those living in Wollongong (27%), younger respondents aged 16-24 years (36%) or 25-34 years (37%), and students (32%). Planners are more likely than non-planners to do this 'always' or 'most times' (56%, compared to 33%).
- Respondents significantly more likely to 'always' or 'most times' *make extra for a future planned meal (e.g. lunch or dinner next day)* includes those with university/diploma or higher education (36%, compared with 32% of all respondents). Planners are more likely than non-planners to do this 'always' or 'most times' (38%, compared to 24%).
- Respondents significantly more likely to 'always' or 'most times' *make extra just in case it is needed* includes those aged 25-34 years (24%, compared with 18% of all respondents), and CALD respondents (25%). However, those less likely include older residents aged 55+ years (13%).

Figure 14. Food preparation behaviour



Q15 How regularly do you or a member of your household do the following when preparing a main meal? (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

Food storage behaviour

Respondents were asked five food storage behaviour questions in relation to saving and disposing of leftovers. There has been a considerable shift in storage behaviour particularly from the freezer to the fridge in 2012, as *saving leftovers in the fridge and consuming them afterwards* tracks upwards in significant increments over time. More than six in ten respondents registered this behaviour 'always' or 'most times' in 2012 (62%), a significant increase from 2011 (57%), and also a significant increase on the benchmark level (52%).

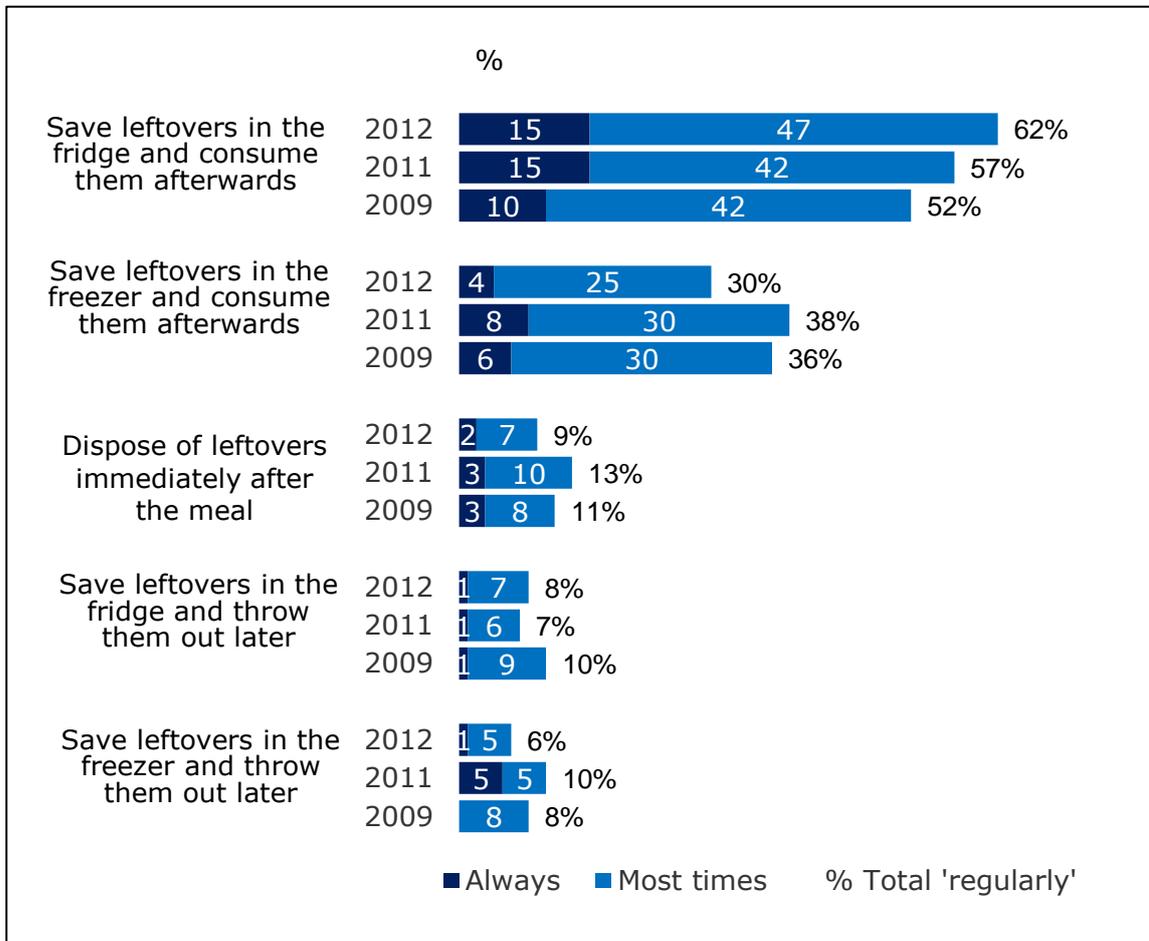
The freezer is also highlighted for storing leftovers, with about half as many respondents that indicated they *save leftovers in the freezer and consume them afterwards* (29%). However, this reflects a significant decrease in current freezer use for storage (38% in 2011, and 36% in 2009).

Fewer than one in ten respondents indicated each of the remaining three storage behaviours, including *disposal of leftovers immediately after the meal* (9%), *saving*

leftovers in the fridge and throwing them out later (8%), and saving leftovers in the freezer and throwing them out later (6%).

- In the current 2012 study, planners are more likely than non-planners to 'always' or 'most times' save *leftovers in the fridge and consume them afterwards* (67%, compared to 55%).
- Planners are also more likely than non-planners to 'always' or 'most times' save *leftovers in the freezer and consume them afterwards* (33%, compared to 24%). Respondents significantly less likely to 'always' or 'most times' *save leftovers in the freezer and consume them afterwards* included those aged 25-34 years (23%, compared with 29% of all respondents).
- Respondents significantly more likely to 'always' or 'most times' *save leftovers in the freezer and throw them out later* included CALD respondents (13%, compared with 6% of all respondents).

Figure 15. Food storage behaviour



Q16 When you have leftovers, how regularly do you or a member of your household do the following? (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

6.3 Value and quantity of food wasted

Quantity of food wasted

Those respondents who indicated that their household had wasted food were asked to estimate how many four litre (4L) containers worth of food (according to pre-defined categories for fresh food, packaged and long life food, and leftovers) they threw out in an average week.

Food wasted was most likely to be fresh food or leftovers, with more than half of respondents indicating disposal of less than one 4L container, and a further one in ten indicating disposal of one 4L container.

- Those more likely to waste *fresh food* are respondents living in large country towns (77% waste at least some, compared to 71% of the total sample), those with household incomes between \$60,000 and \$99,999 (76%) or \$100,000 or more (78%), families with children (81%) and those aged 35 to 44 years (82%). Non-planners are more likely than planners to waste fresh food (76%, compared to 67%).
- Those more likely to waste *packaged and long life food* are respondents with household incomes between \$60,000 and \$99,999 (57% waste at least some compared to 50% of the total sample), families with children (55%) and those living in share households (58%). Non-planners are more likely than planners to waste packaged and long life food (76%, compared to 67%).
- Those more likely to waste *leftovers* are respondents with household incomes between \$60,000 and \$99,999 (82% waste at least some compared to 74% of the total sample), families with children (85%) and those aged 16 to 24 years (78%).

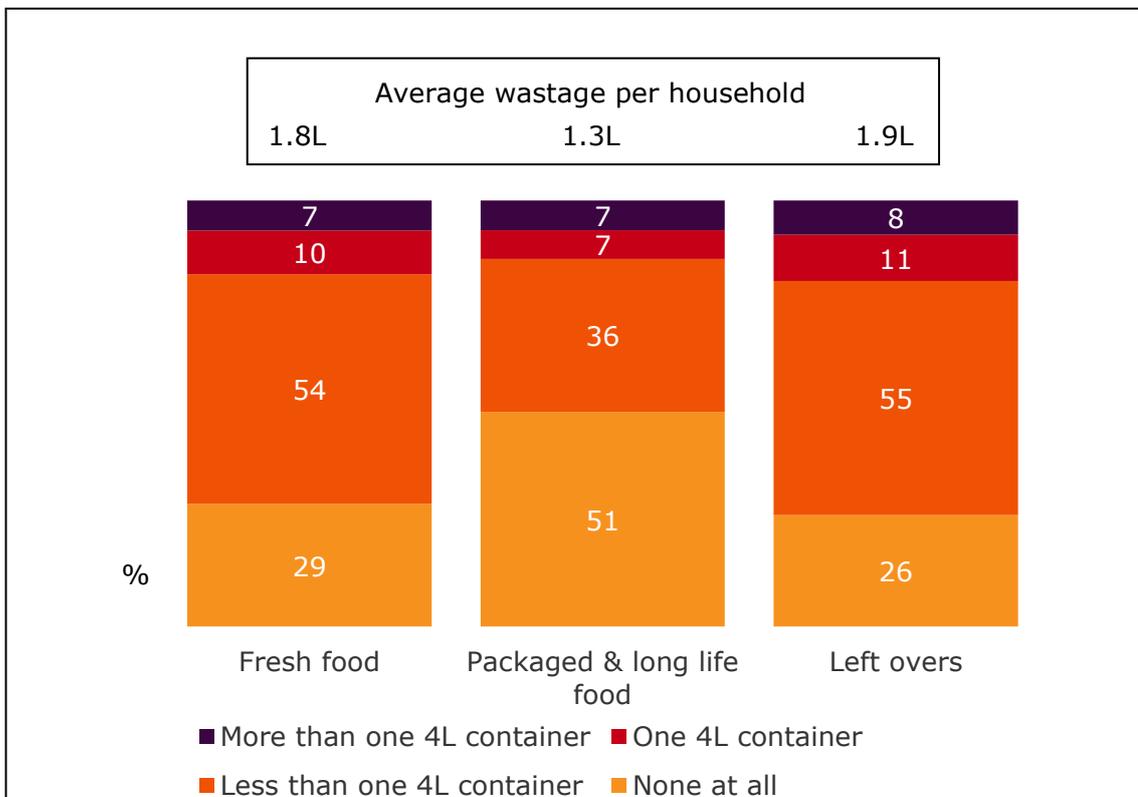
On average, households claim waste of 1.8 litres of fresh food, 1.3 litres of packaged and long life food and 1.9 litres of leftovers per week, resulting in total food wastage of 5.0 litres per week. This quantity reflects a significantly lower amount compared with that indicated in the 2011 study of 7.6 litres in total per week (comprised 2.6 litres of fresh food, 2.1 litres of packaged and long life food and 2.9 litres of leftovers per week in 2011).

- In the current 2012 study, those more likely to waste more food (in litres) are families with children (5.8 litres per week), share households (5.8 litres per week), those aged 16 to 24 years (5.6 litres per week), students (5.6 litres per

week) and those with household incomes between \$60,000 and \$99,999 (5.6 litres per week).

- Non-planners waste more food (in litres) per week than planners do (5.4 litres per week and 4.8 litres per week respectively).

Figure 16. Quantity of food wasted per week



Q10 In a normal week, please estimate how much of the following food types your household throws away (including going to the compost, worm farm, tipped down the sink or fed to pets). Please use a 4 Litre (4L) ice cream container as the way of measuring this total, and include the amount, if any, that you composted, placed in a worm farm, tipped down the sink or fed to animals. (single response for each waste category)

Base: Respondents who indicated that their household threw away uneaten food – very little, a reasonable amount, more or much more than you should (at Q4), 2012 (n=1,197)

Table 4. Average quantity of food wasted per week

	2011 Tracking (n=1,079)	2012 Tracking (n=1,197)
Fresh food	2.6L	1.8L
Packaged & long life food	2.1L	1.3L
Leftovers	2.9L	1.9L
Total quantity wasted per household	7.6L	5.0L

Base: Respondents who indicated that their household threw away uneaten food – very little, a reasonable amount, more or much more than you should (at Q4)

Note: Results were not available for the 2009 Benchmark survey.

Value of food wasted

Those respondents who indicated that their household had wasted food were asked to estimate the value of the food they had purchased but disposed of without being consumed, in a normal week.

There is considerably more wastage of fresh food than any other (28% of respondents waste the equivalent of \$10 or more each week), followed by leftovers (20% waste at least \$10 a week) and packaged and long life food (19% waste at least \$10 a week). Frozen food, home delivered/take away meals and drinks were least likely to be wasted (16%, 16% and 14% waste at least \$10 a week respectively).

The average value of food wasted was calculated for each food category by using the mid-point of each dollar range. This resulted in the total value wasted per household of \$56.00 per week, made up of \$12.74 of fresh food, \$9.57 of leftovers, \$9.28 packaged and long life food, \$8.44 drink, \$8.09 frozen food and \$7.88 of home delivered / take away meals.

- The group with the highest value of food wastage on average per week are those aged 16 to 24 years (\$88.69), students (\$74.92), CALD respondents (\$69.39), those living in Wollongong (\$66.51) and families with children (\$64.64).
- Groups with the lowest value of food wastage on average per week include those aged 55 years and above (\$38.10), and those living in small rural (\$39.97) or large rural towns (\$44.90).

- Those aware of the LFHW program claim to waste more food than those unaware, which may be a factor of higher awareness of food wastage and the reality of their behaviour on a day to day basis.
- Non-planners have a greater average value of food wastage per week than planners do (\$61.51 and \$51.70 respectively).
- Love Food Hate Waste Food Lovers were considerably less likely to waste food, with wastage of \$38.17 on average per week, made up of \$11.94 in fresh food, \$7.77 in leftovers, \$7.17 in packaged and long life food, \$3.99 in home delivered / take away meals, \$3.88 in frozen food and \$3.48 in drink.

Table 5. Value of food wasted

	Fresh food	Packaged & long life food	Frozen food	Home delivered/ take away meals	Leftovers	Drink
Do not purchase (\$0)	9%	23%	29%	47%	20%	32%
Less than \$10	63%	58%	56%	38%	61%	54%
\$10-\$24	17%	11%	9%	8%	12%	7%
\$25-\$49	5%	4%	4%	3%	4%	2%
\$50 - \$74	3%	2%	1%	2%	2%	2%
\$74- \$99	1%	1%	1%	1%	2%	2%
\$100 or more	2%	1%	1%	1%	1%	1%
Average wastage per household	\$ 12.74	\$ 9.28	\$ 8.09	\$ 7.88	\$ 9.57	\$ 8.44

Table 6. Average food wastage (\$) by age

	TOTAL	16 to 24 years (n=103)	25 to 34 years (n=269)	35 to 44 years (n=277)	45 to 54 years (n=194)	55+ years (n=354)
Fresh food	\$ 12.74	\$ 18.16	\$ 12.81	\$ 13.32	\$ 13.45	\$ 9.23
Packaged & long life food	\$ 9.28	\$ 15.96	\$ 9.56	\$ 8.48	\$ 8.67	\$ 6.91
Frozen food	\$ 8.09	\$ 15.34	\$ 8.13	\$ 8.19	\$ 6.64	\$ 5.88
Home delivered / take away meals	\$ 7.88	\$ 11.92	\$ 11.25	\$ 7.27	\$ 6.18	\$ 4.09
Leftovers	\$ 9.57	\$ 14.91	\$ 11.62	\$ 9.76	\$ 7.47	\$ 6.45
Drink	\$ 8.44	\$ 12.40	\$ 9.75	\$ 8.85	\$ 7.86	\$ 5.53
Total wastage per household	\$ 56.00	\$ 88.69	\$ 63.10	\$ 55.88	\$ 50.28	\$ 38.10

Table 7. Average food wastage (\$) by household type

	TOTAL	Single (n=205)	Family with children (n=368)	Family, no children (n=485)	Share (n=75)	Other (n=64)
Fresh food	\$ 12.74	\$ 10.49	\$ 14.98	\$ 12.08	\$ 13.49	\$ 8.15
Packaged & long life food	\$ 9.28	\$ 7.75	\$ 10.52	\$ 8.78	\$ 12.17	\$ 6.66
Frozen food	\$ 8.09	\$ 9.95	\$ 9.54	\$ 6.03	\$ 8.75	\$ 5.62
Home delivered / take away meals	\$ 7.88	\$ 8.58	\$ 9.88	\$ 5.90	\$ 9.89	\$ 6.18
Leftovers	\$ 9.57	\$ 11.80	\$ 11.26	\$ 7.28	\$ 9.13	\$ 5.79
Drink	\$ 8.44	\$ 10.36	\$ 8.46	\$ 7.79	\$ 9.22	\$ 4.42
Total wastage per household	\$ 56.00	\$ 58.52	\$ 64.64	\$ 47.87	\$ 62.66	\$ 36.82

Table 8. Average food wastage (\$) by gender, CALD and program awareness

	TOTAL	Male (n=517)	Female (n=680)	CALD (n=292)	Aware of LFHW program (n=141)
Fresh food	\$ 12.74	\$ 12.98	\$ 12.39	\$ 15.68	\$ 18.72
Packaged & long life food	\$ 9.28	\$ 9.70	\$ 8.93	\$ 10.78	\$ 13.70
Frozen food	\$ 8.09	\$ 9.04	\$ 6.80	\$ 10.02	\$ 14.82
Home delivered / take away meals	\$ 7.88	\$ 9.37	\$ 6.41	\$10.21	\$ 19.44
Leftovers	\$ 9.57	\$ 11.11	\$ 7.70	\$ 11.42	\$ 20.99
Drink	\$ 8.44	\$ 9.67	\$ 7.36	\$ 11.27	\$ 18.37
Total wastage per household	\$ 56.00	\$ 61.87	\$ 49.60	\$ 69.39	\$ 106.04

Table 9. Average food wastage (\$) by planner

	TOTAL	Planner (n=724)	Non- planner (n=576)
Fresh food	\$ 12.74	\$ 11.96	\$ 13.63
Packaged & long life food	\$ 9.28	\$ 9.06	\$ 9.58
Frozen food	\$ 8.09	\$ 8.11	\$ 8.21
Home delivered / take away meals	\$ 7.88	\$ 6.90	\$ 9.18
Leftovers	\$ 9.57	\$ 8.39	\$ 11.07
Drink	\$ 8.44	\$ 7.27	\$ 9.84
Total wastage per household	\$ 56.00	\$ 51.70	\$ 61.51

Q11 In a normal week, please estimate the dollar value of each food type that your household purchased but threw away without being consumed (including going into the compost, worm farm, tipped down the sink or fed to pets). Please make your best estimate in whole dollars. (single response)

Base: Respondents who indicated that their household threw away uneaten food – very little, a reasonable amount, more or much more than you should (at Q4), 2012 (n=1,197)

6.4 Reasons for household food waste

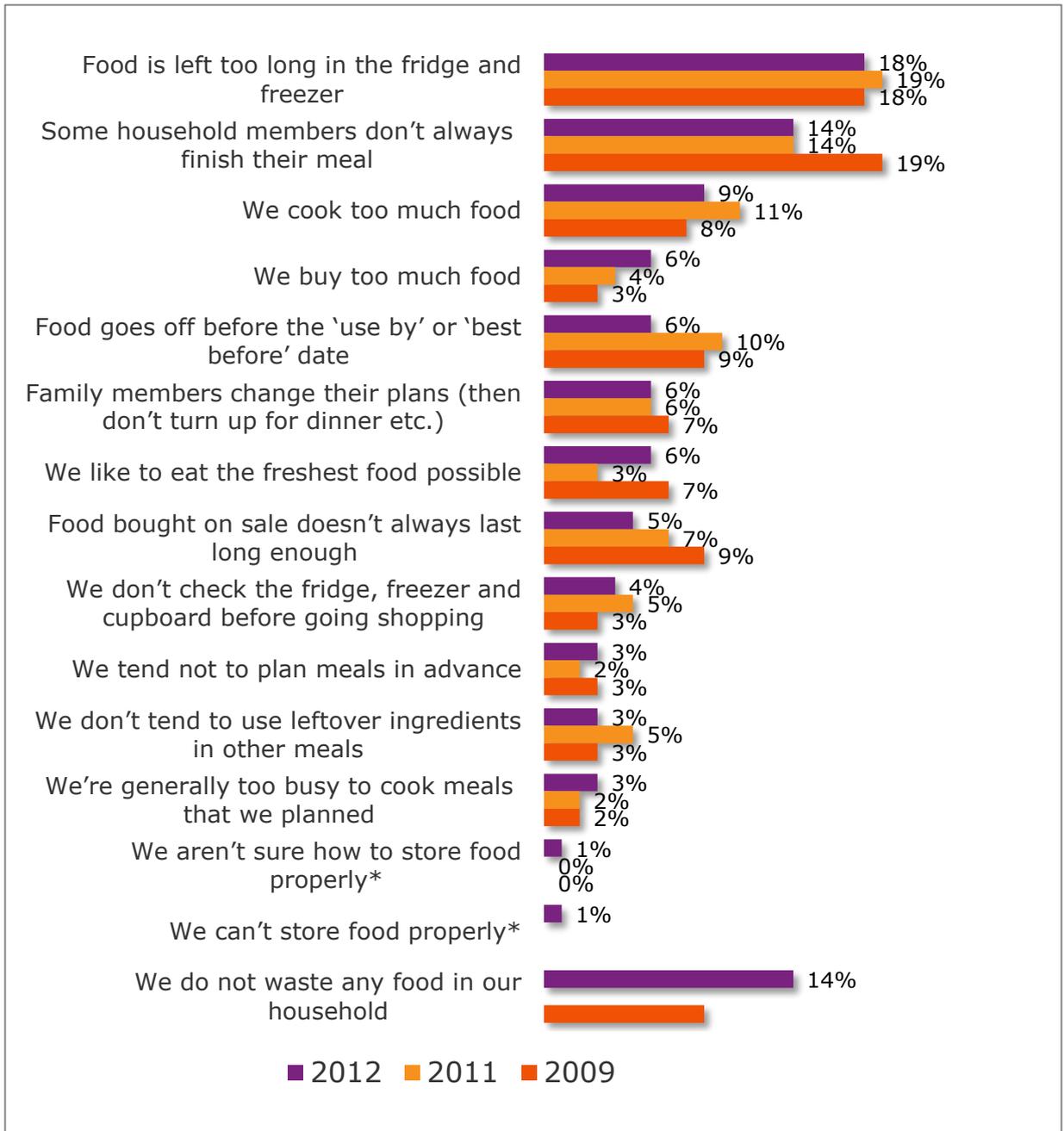
To help understand the barriers to food waste behaviour change, all respondents were asked to consider why food gets wasted in their household. Respondents were asked to select (from a pre-determined list of potential reasons) the main reason food gets wasted in their household, and secondly, any other reason/s food may get wasted in their household.

The main reason for household food wastage that consistently emerges over time is that *food is left too long in the fridge and freezer*. Nearly one in five respondents overall cite this reason (18%, compared with 19% in 2011, and 18% in 2009). This is consistent across all sub groups of the sample, however planners are more likely to cite this as the main reason than non-planners are (18%, compared to 15%).

The next most common perceived main reason for household food waste is that *some household members do not always finish their meals* (14%, consistent with 14% in 2011 but lower than 19% in 2009). This is particularly the case amongst families with children (25% of them cite this as the main reason).

Other common reasons are *cooking too much food* (9% in 2012, 11% in 2011 and 8% in 2009), particularly among families with children (12%), and *buying too much food* (6% in 2012, 4% in 2011 and 3% in 2009), particularly among share households (12%).

Figure 17. Main reason for household food waste

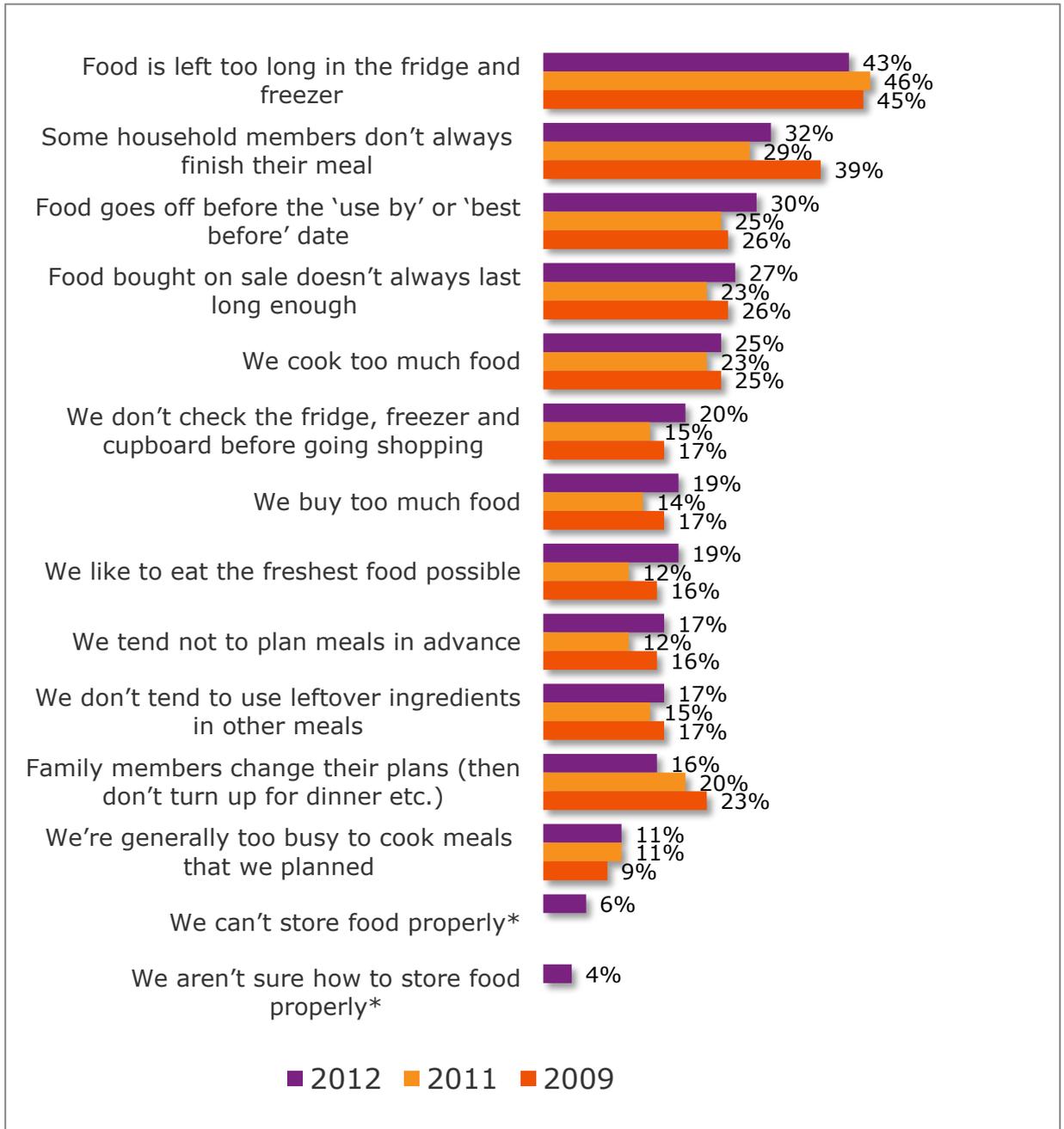


Q12a Please think about why food gets wasted in your household. Firstly, select the main reason that food gets wasted in your household. (single response).

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

*These statements were split out in 2012, previously asked as one statement "We are not sure how to or cannot store food properly".

Figure 18. Total reasons for household food waste



Q12b Now select all other reasons that apply. (multiple response).

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

*These statements were split out in 2012, previously asked as one statement "We are not sure how to or cannot store food properly" which gave a result of 3% in 2011 and 2% in 2009.

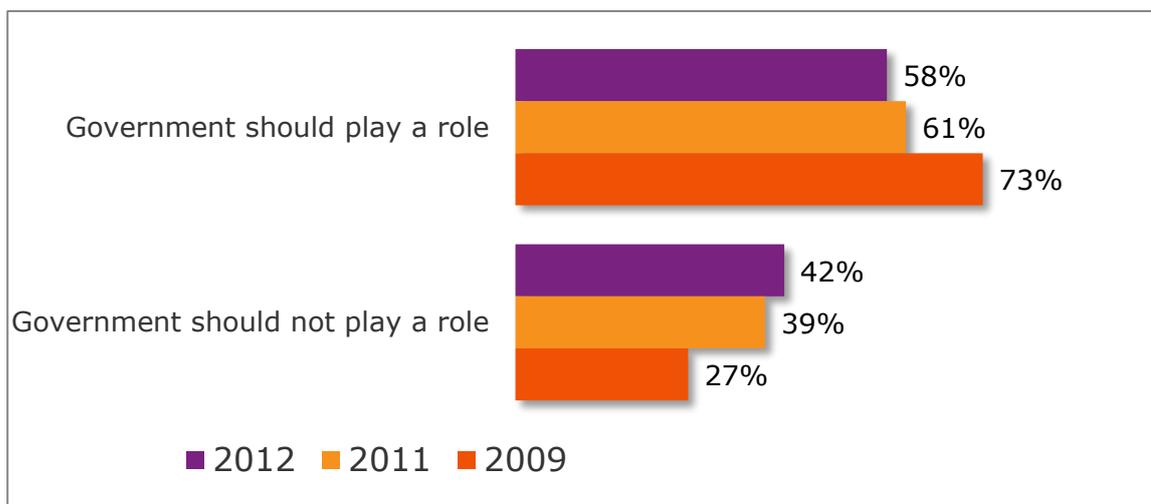
7. Love Food Hate Waste Program

7.1 Role of NSW Government

All respondents were asked if the NSW Government should have a role in assisting the people of NSW to reduce the amount of food they waste. Results have suggested a somewhat diminishing expected role for the NSW Government, at least on the face of the issue. Nearly six in ten respondents expressed that the NSW Government should have a role in food waste (58%), however, this expectation has tracked downward significantly since both 2011 and the benchmark level (61% in 2011, and 73% in 2009).

- While there are limited subgroup differences across NSW households, respondents more likely to support NSW Government involvement include CALD respondents (68%, compared with 58% of all respondents), and those who are university/diploma or higher educated (64%).
- LFHW Food Lovers are also more strongly supportive of NSW Government involvement (85%, compared with 58% of all respondents).
- However, those less likely to support involvement include older respondents aged 55+ years (50%).

Figure 19. Prescribed role of NSW Government in food waste



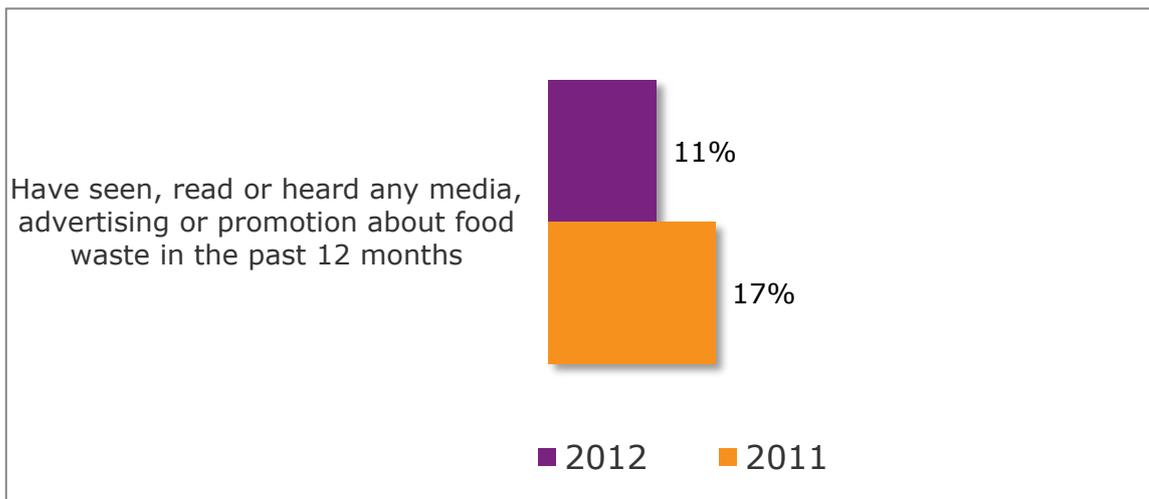
Q17. Do you think the NSW Government should have a role in assisting the people of NSW to reduce the amount of food they waste? (single response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200), 2009 (n=1,200)

7.2 Awareness of food waste issues in the media

Just over one in ten (11%) indicated that they had seen, read or heard media, advertising or promotions about the issue of food waste in general in the last 12 months, which is a significant decrease from the 2011 result (17%).

- Those with a university degree / diploma or higher education were significantly more aware of food waste media / advertising / promotions (15%, compared to 11% of all respondents).

Figure 20. Spontaneous awareness of food waste media/ advertising/ promotion



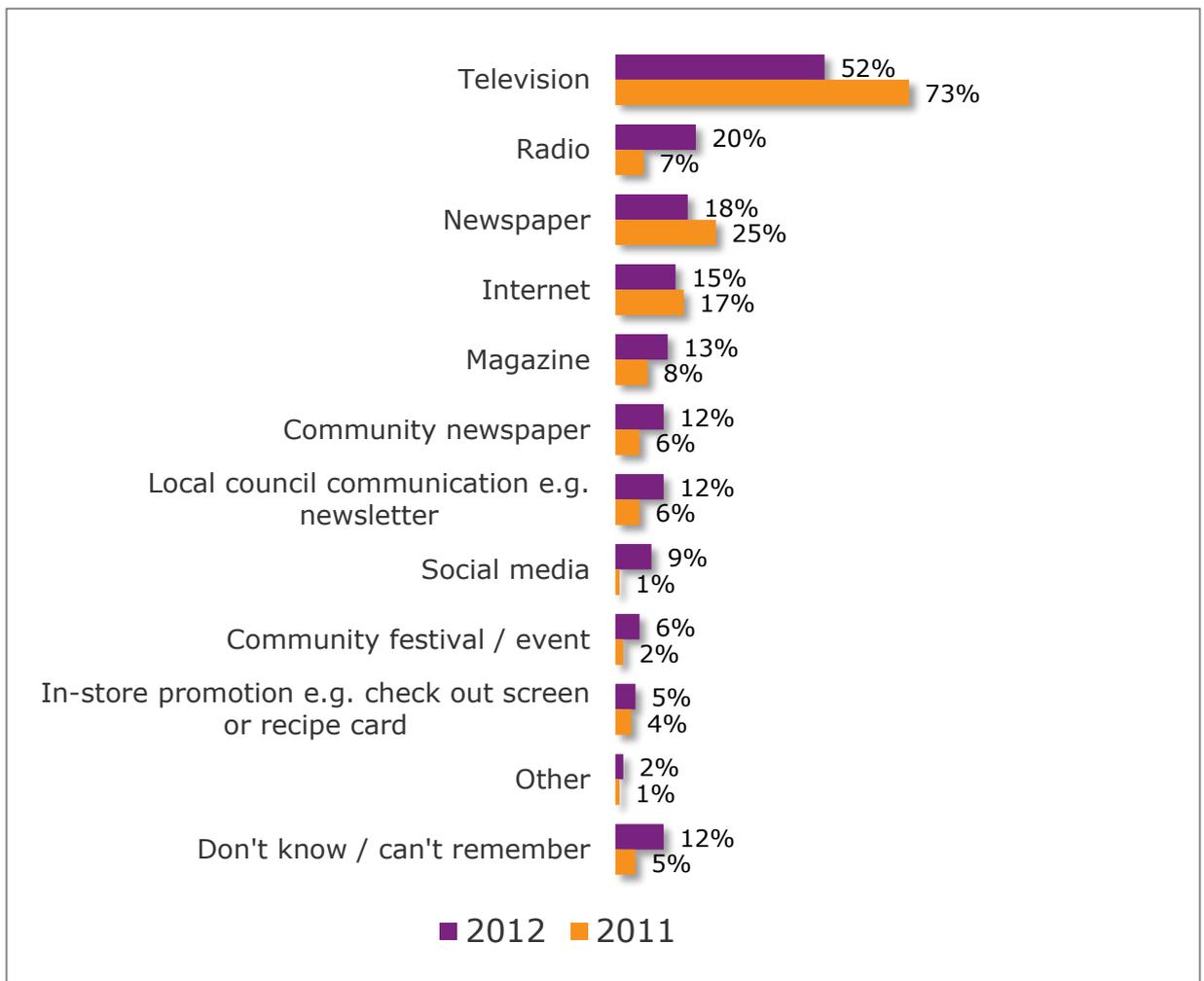
Q18. Have you seen, read or heard any media, advertising or promotion about the issue of food waste in the past 12 months? (single response)

Base: All respondents, 2012 (n=1,300), 2011 (n=1,200)

Amongst those aware of food waste media, advertising or promotions, television continues to be cited as the most common source of awareness, although just one in two indicated they saw something on television, significantly lower than the 2011 tracking study (52% and 73% respectively).

One in five said they heard something on radio, which is significantly greater than the proportion who heard something on radio in 2011 (20% and 7% respectively), while less people were likely to have read something about food waste in the newspaper (18% in the current study compared to 25% in the 2011 tracking study).

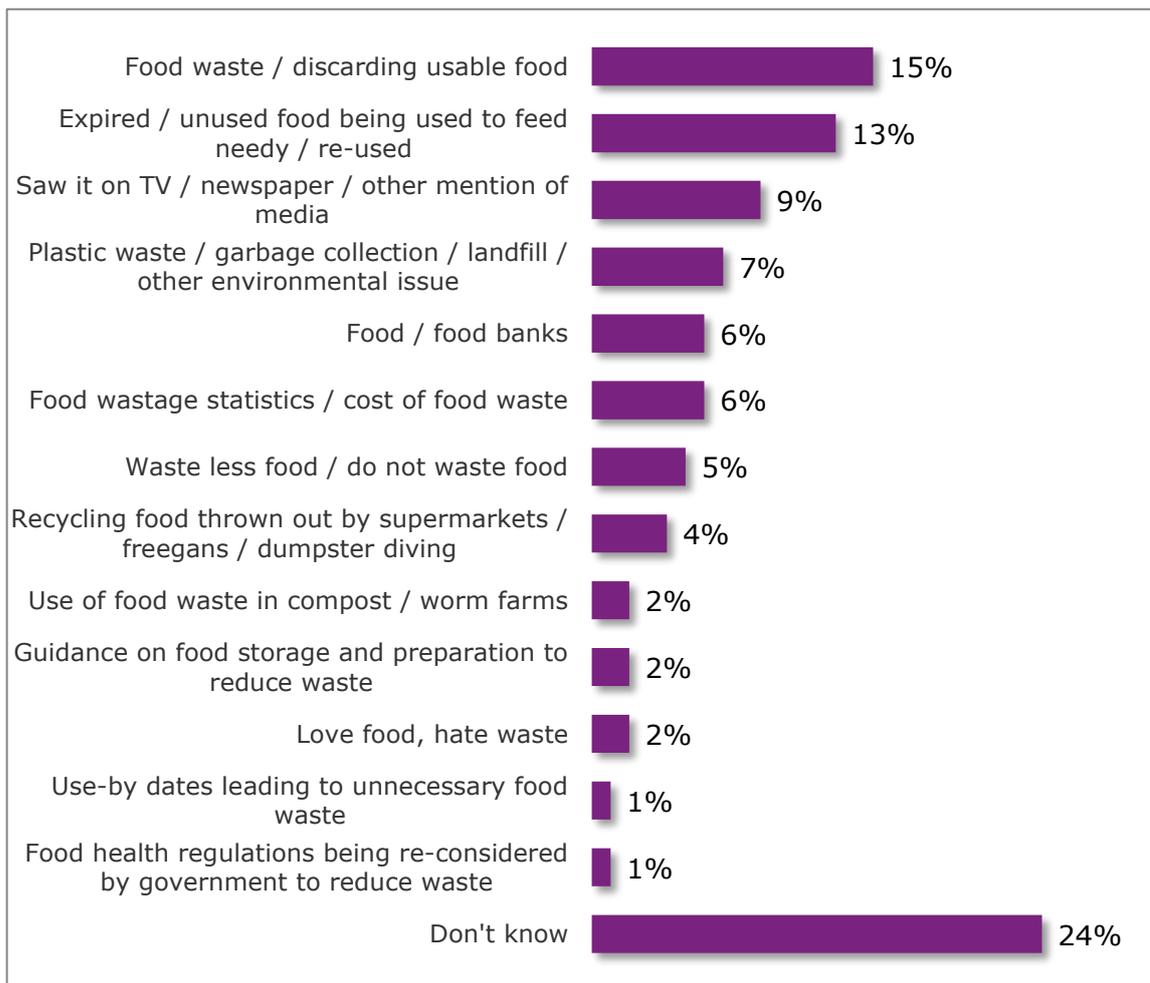
Figure 21. Media/ advertising/ promotion recalled



Q19. Where did you see or hear this media, advertising or promotion? (multiple response)
 Base: Respondents aware of advertising or promotion, 2012 (n=143), 2011 (n=200)

When those who said they were aware of food waste media / advertising / promotion were asked to describe what it was about, most gave general descriptions about wasting usable food or providing the needy with usable food that would otherwise go to waste. Other specific topics mentioned include environmental issues, food banks and statistics around food waste – including costs.

Figure 22. Description of media/ advertising/ promotion



Q20. What was that media, promotion or advertising about? (multiple response – open ended question coded)

Base: Respondents aware of advertising or promotion, 2012 (n=143)

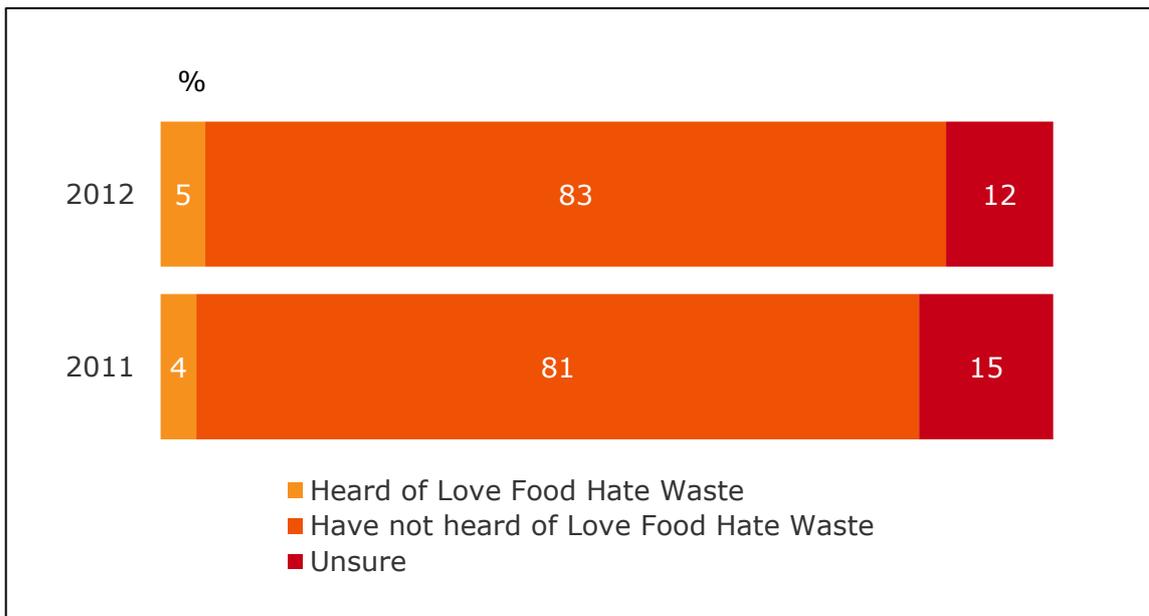
7.3 Awareness of LFHW program

For the remainder of section 7 of this report, results for the 2009 benchmark and 2011 tracking study are excluded for some questions as they are not directly comparable to 2012 results, due to agreed changes to the questionnaire in 2012.

All respondents were asked if they had heard of Love Food Hate Waste, with 5% indicating that they had (consistent with the 2011 tracking study result of 4%). The vast majority of NSW households remain unaware of the LFHW program (83%, also consistent with 81% in 2011), while just more than one in ten indicated they were unsure (12%, compared with 15% in 2011).

- There are no significant differences among sub-groups in terms of prompted awareness of the program in 2012.
- However, as would be expected, the vast majority of LFHW Food Lovers register awareness of Love Food Hate Waste (94%, compared with 5% among all NSW households).

Figure 23. Spontaneous awareness of LFHW program



Q21a. Have you heard of Love Food Hate Waste? (single response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200)

Furthermore, all respondents were shown the Love Food Hate Waste logo and asked if they had seen it before, with 4% indicating that they had, a significant increase from the 2011 tracking study result of 2%.

- In the current 2012 study, CALD respondents were significantly more likely to indicate that they had previously seen the logo (7%, compared to 4% of the all respondents).

Figure 24. Prompted awareness of LFHW logo

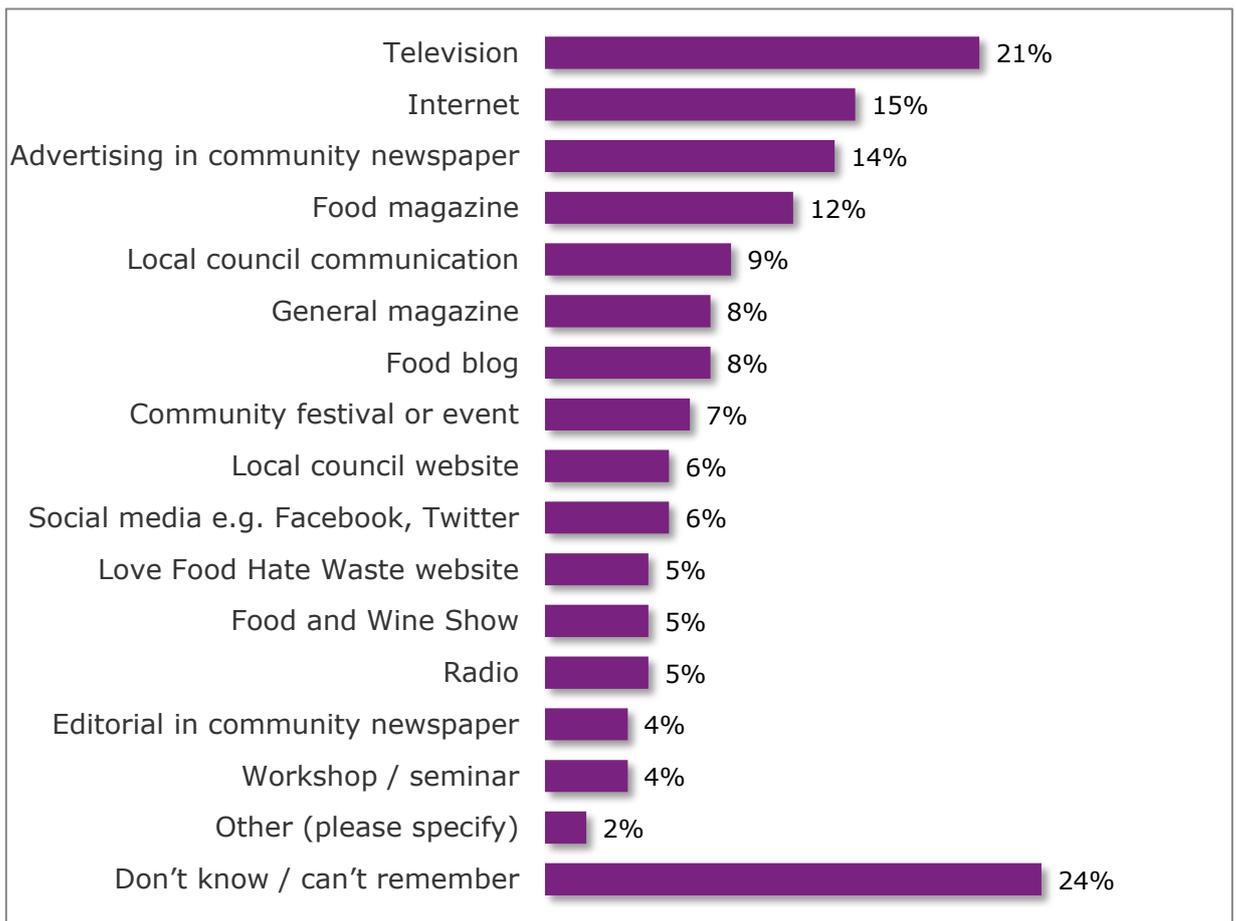


Q21b. Have you seen the Love Food Hate Waste logo, shown below, in any media, advertising or promotional materials? (single response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200)

Of those who have heard of LFHW or seen the logo, one in five indicated that they saw it on television (21%), while internet, community newspapers and food magazines were also common sources of awareness cited.

- Due to a small base size, any significant differences between sub-groups are unable to be identified.

Figure 25. Medium recalled for LFHW or LFHW logo



Q22 - Where did you hear about Love Food Hate Waste or see the logo? (multiple response).
 Base: All respondents aware of Love Food Hate Waste name or logo, 2012 (n=83)

7.4 LFHW message recall

Respondents who had recalled LFHW or the LFHW logo were asked to describe the main message of the LFHW materials they had seen. The basic key message of the LFHW program recalled was to reduce food waste and not waste food (recalled by 40%). Almost a quarter (23%) spontaneously mentioned recalling at least one of the stages (buying, storing and/or preparing food) at which particular behaviours can reduce food waste.

- Due to a small base size, any significant differences between sub-groups are unable to be identified.

Figure 26. Spontaneous message recall



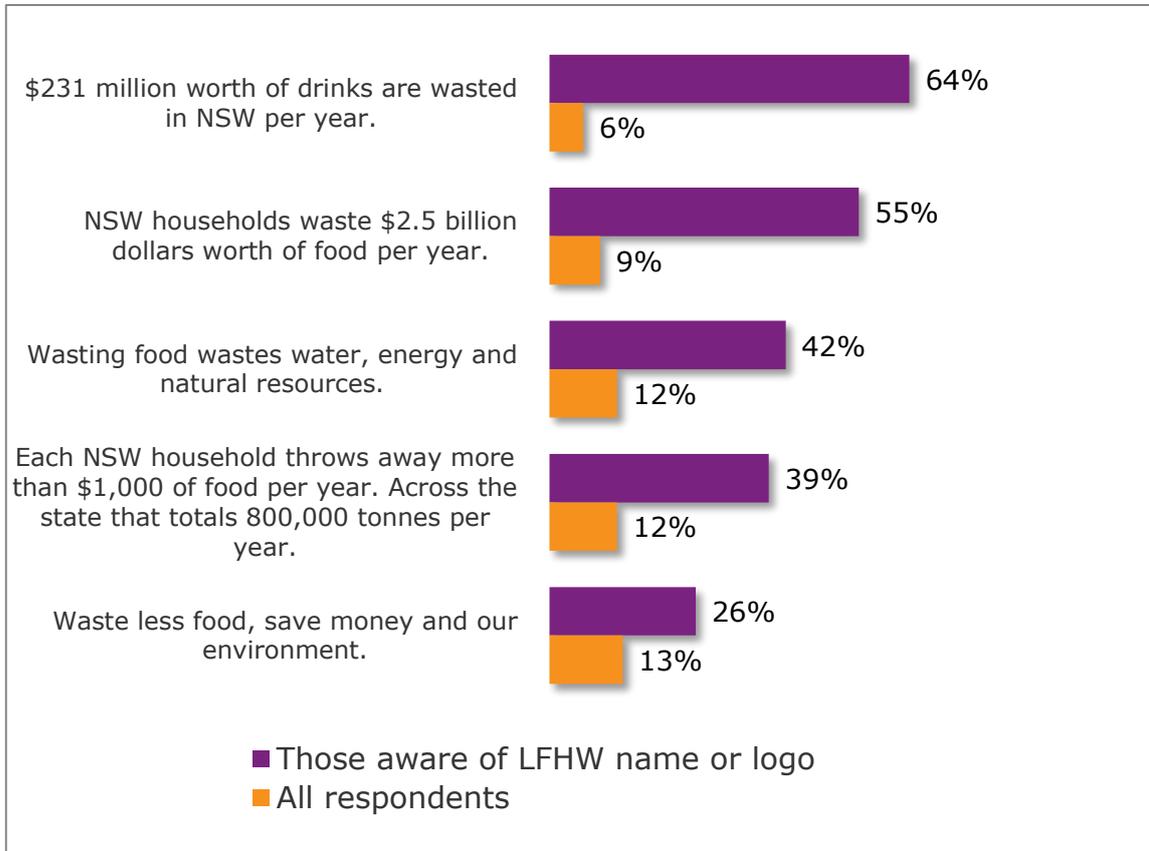
Q23. What would you say are the main messages of the Love Food Hate Waste materials you have seen? (multiple response – open ended question coded)

Base: All respondents aware of Love Food Hate Waste name or logo, 2012 (n=83)

To gauge specific message recall more broadly across NSW households, all respondents were shown five particular messages from the LFHW program and asked to indicate which (if any) they recalled. Those who had heard of LFHW or seen the logo were significantly more likely to recall each of the messages.

- CALD respondents were significantly more likely than all respondents to recall the messages:
 - *NSW households waste \$2.5 billion dollars' worth of food per year* (15%, compared to 9% of all respondents);
 - *Wasting food wastes water, energy and natural resources* (20%, compared to 12% of all respondents);
 - *Waste less food, save money and our environment* (21%, compared to 13% of all respondents); and
 - *\$231 million worth of drinks are wasted in NSW per year* (12%, compared to 6% of all respondents)
- Those aged 25 – 34 years were significantly more likely than all respondents to recall the messages:
 - *\$231 million worth of drinks are wasted in NSW per year* (10%, compared to 6% of all respondents); and
 - *Waste less food, save money and our environment* (18%, compared to 13% of all respondents).
- LFHW Food Lovers were also significantly more likely than all NSW households to recall each of the five messages. In particular, messaging around *waste less food, save money and our environment* (72%, compared to 13% of all respondents), and *wasting food wastes water, energy and natural resources* (65%, compared to 12% of all respondents) resonated for Food Lovers.

Figure 27. Prompted LFHW message recall



Q24. Can you recall seeing or hearing any of these specific messages from the Love Food Hate Waste program? (multiple response)

Base: All respondents aware of Love Food Hate Waste name or logo, 2012 (n=83); All respondents, 2012 (n=1300)

7.5 Prompted recall of LFHW materials

All respondents were shown the four print advertisements for the LFHW program (below) and asked which (if any) they had seen before. Consistent with the 2011 tracking study, “Apple” was the most recalled print advertisement, with 5% indicating they had seen it before. However, the majority of respondents indicated that they had not seen any of these materials before today (91%, similar to 92% in 2011).

- The “Cheese” advertisement was significantly more likely to be recalled by those who earn an annual household income between \$20,000 and \$59,999 (6%, compared to 3% of all respondents).
- While this is the only significant difference in awareness of specific LFHW materials among subgroups, results indicate some additional variations:
 - Males appear somewhat more likely than females to recall three of the advertisements, including “Cheese”, “Milk”, and “Tomato”.
 - Younger respondents appear somewhat more likely to recall advertising, including “Apple” and “Milk” recall somewhat higher among those aged under 45 years, “Cheese” recall somewhat higher among those aged under 35 years, and “Tomato” recall somewhat higher among those aged 25-44 years.
- Corresponding with the above age differences, those indicating that they had not seen any materials before today were significantly more likely to be older respondents aged 45-54 years (96%, compared to 91% of all respondents), and also those who earn an annual household income of \$20,000 or under (96%).



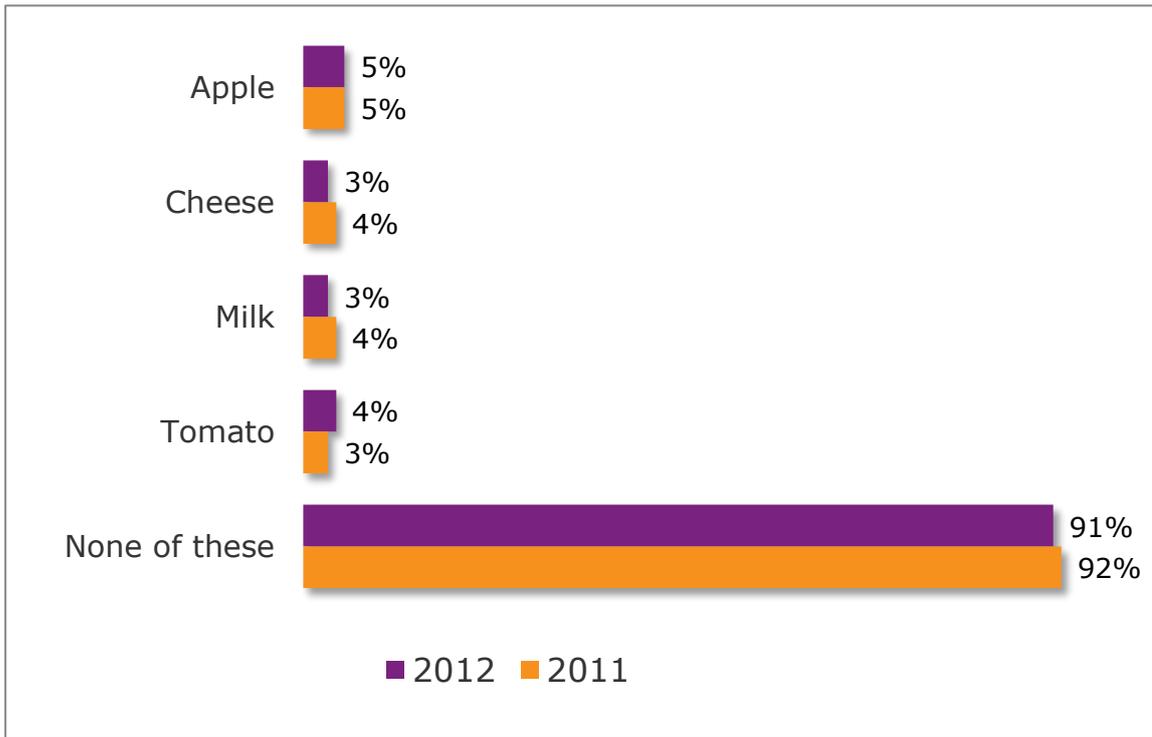
Apple

Tomato

Cheese

Milk

Figure 28. Prompted recall of LFHW materials



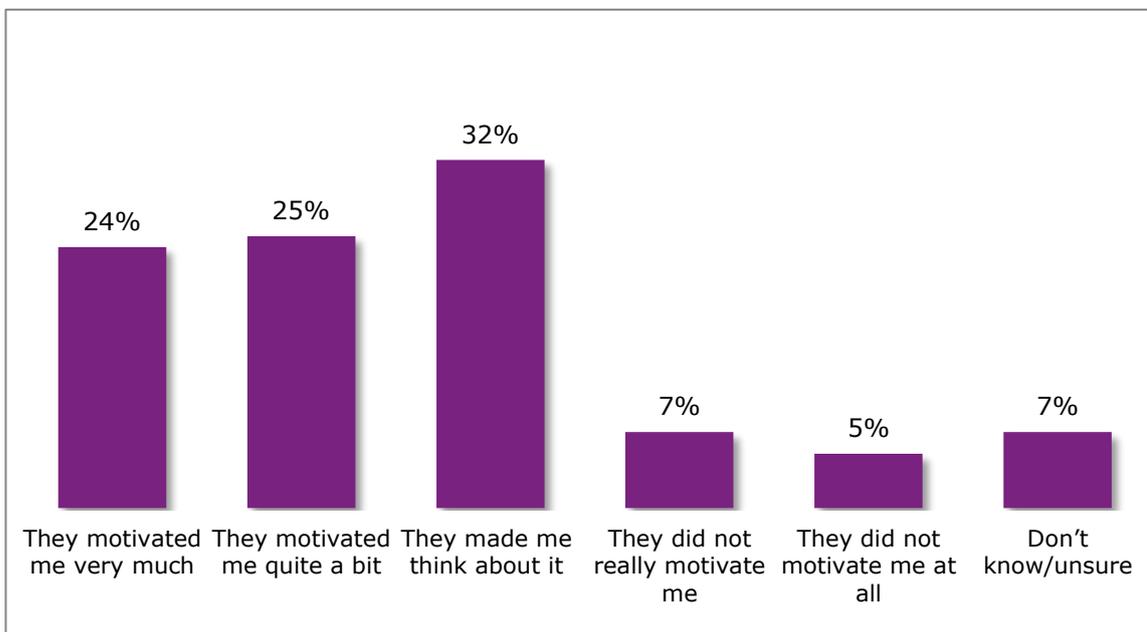
Q25. Which of the following materials have you seen before today? (multiple response)
 Base: All respondents, 2012 (n=1,300), 2011 (n=1,200)

7.6 Influence of LFHW program on food waste avoidance

Those who indicated that they had either heard of the LFHW program, seen the logo or had previously seen any of the four print materials shown were then asked to what extent they were motivated by this, if at all, to reduce food waste. Encouragingly, almost one in two (49%) indicated that they were motivated 'very much' or 'quite a bit' by the materials. Around a third (32%) said the materials made them think about the issue of food waste, a required step before long term behaviour change can occur. Only 12% said they were not really motivated or not motivated at all by the materials.

- Significant differences between sub-groups cannot be identified due to small base sizes.

Figure 29. Influence of LFHW on motivation for food waste avoidance actions



Q26. Thinking about the Love Food Hate Waste media, advertising or promotion that you have seen, did these motivate you to act in ways to waste less food? (single response)

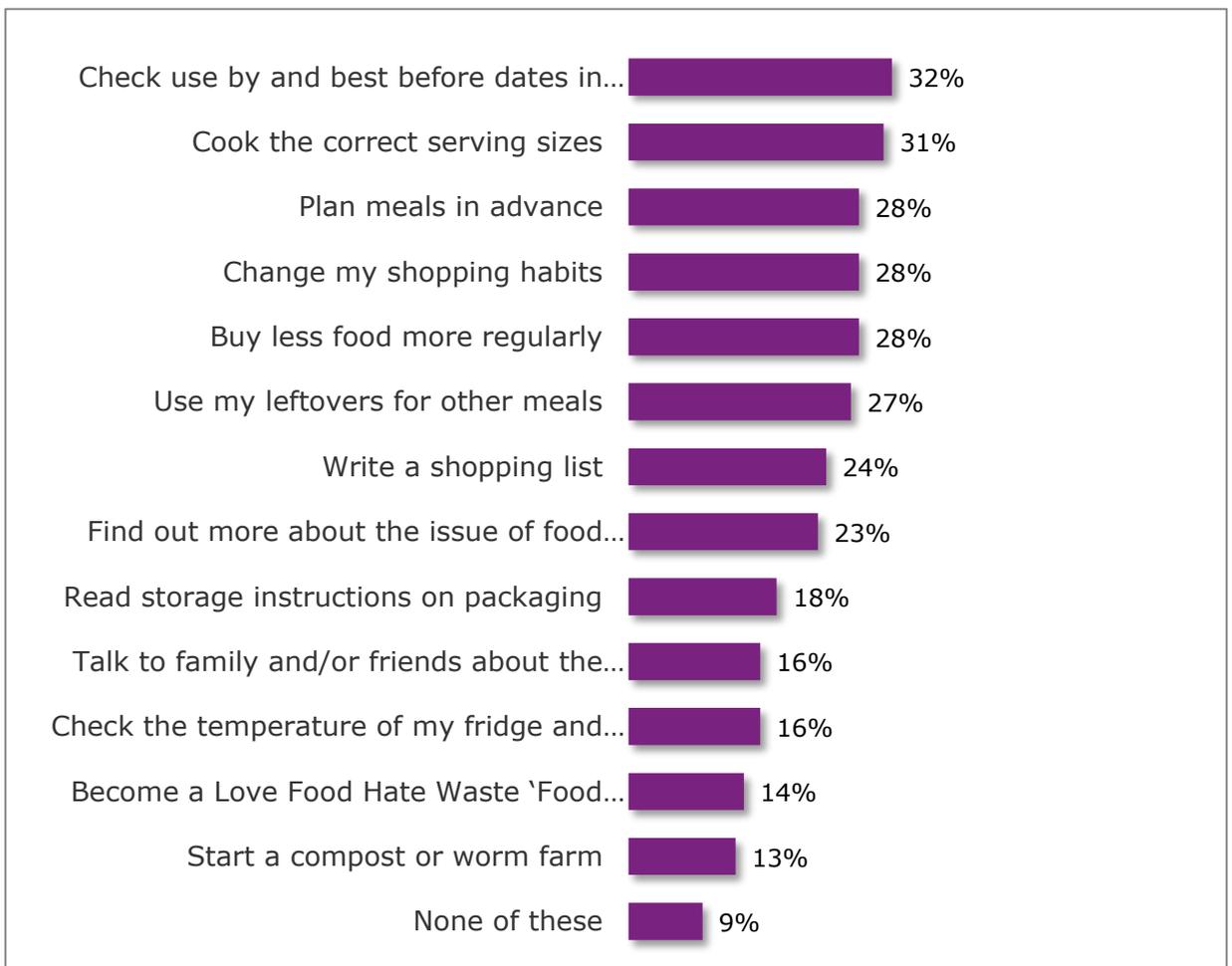
Base: All respondents aware of Love Food Hate Waste name or logo 2012 or seen any of the LFHW materials at Q25, 2012 (n=148)

Those who said the LFHW materials motivated them to some extent were prompted with a list of food waste reducing actions and asked which of these they were motivated to do. *Checking use by and best before dates* as well as *cooking correct service sizes* were the two actions most commonly undertaken. Other actions were

undertaken across the food planning and buying stages. Just over one in ten (14%) said the materials motivated them to become a LFHW Food Lover.

- Planners are more likely than non-planners to say that exposure to the program motivated them to plan meals in advance (35%, compared to 19%).
- Other significant differences between sub-groups cannot be identified due to small base sizes.

Figure 30. Influence of LFHW on food waste avoidance actions



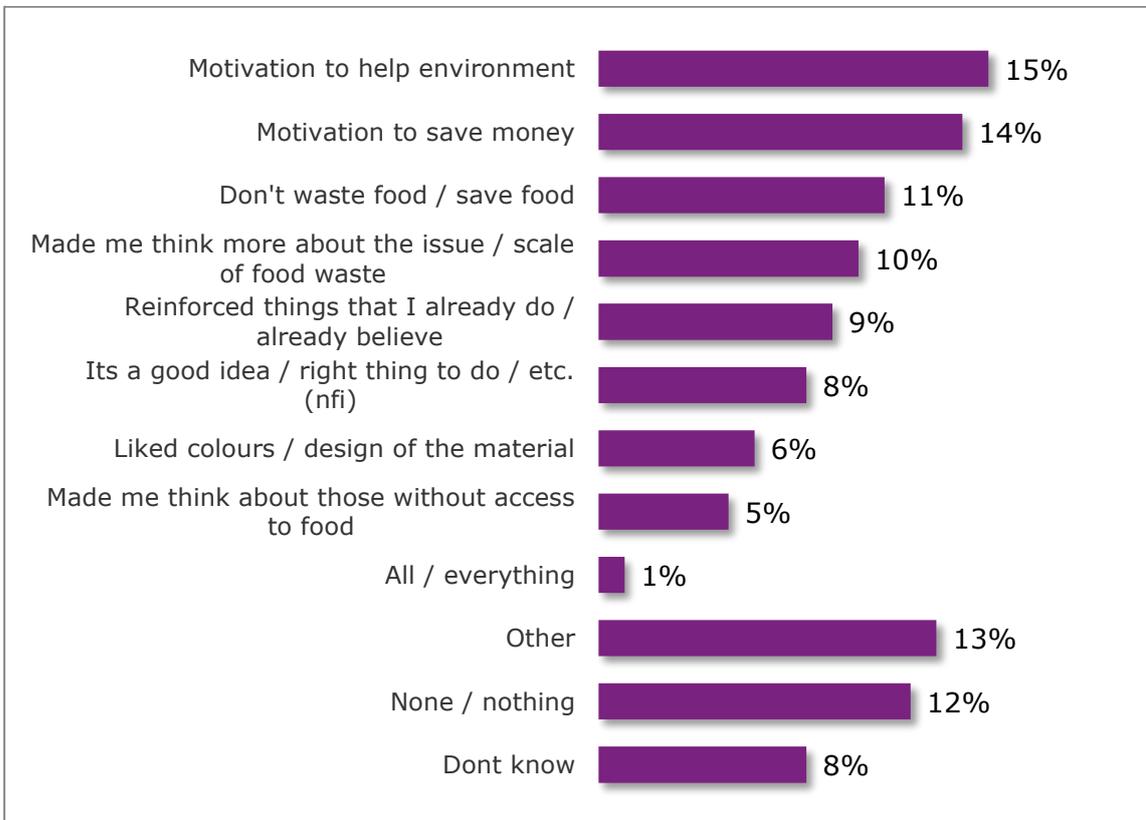
Q27. After seeing or hearing the Love Food Hate Waste promotion, media, advertising materials or attending an event, which of the following were you motivated to do? (multiple response)

Base: All respondents aware of Love Food Hate Waste name or logo 2012 or seen any of the materials, and were motivated by these to some point (very much, quite a bit, made me think, or did not really motivate) (Q26), 2012 (n=141)

After particular respondents indicated that specific food waste reducing actions were undertaken as a result of being motivated by LFHW materials, these respondents were asked what it was about the materials that motivated them. This was asked as an open ended questions which as coded post-fieldwork. Messages around how reducing food waste can help the environment motivated most (15%), while the money that can be saved from reducing food waste was also a key motivator for undertaking food waste reducing actions (14%).

- Significant differences between sub-groups cannot be identified due to small base sizes.

Figure 31. Reason for LFHW influence



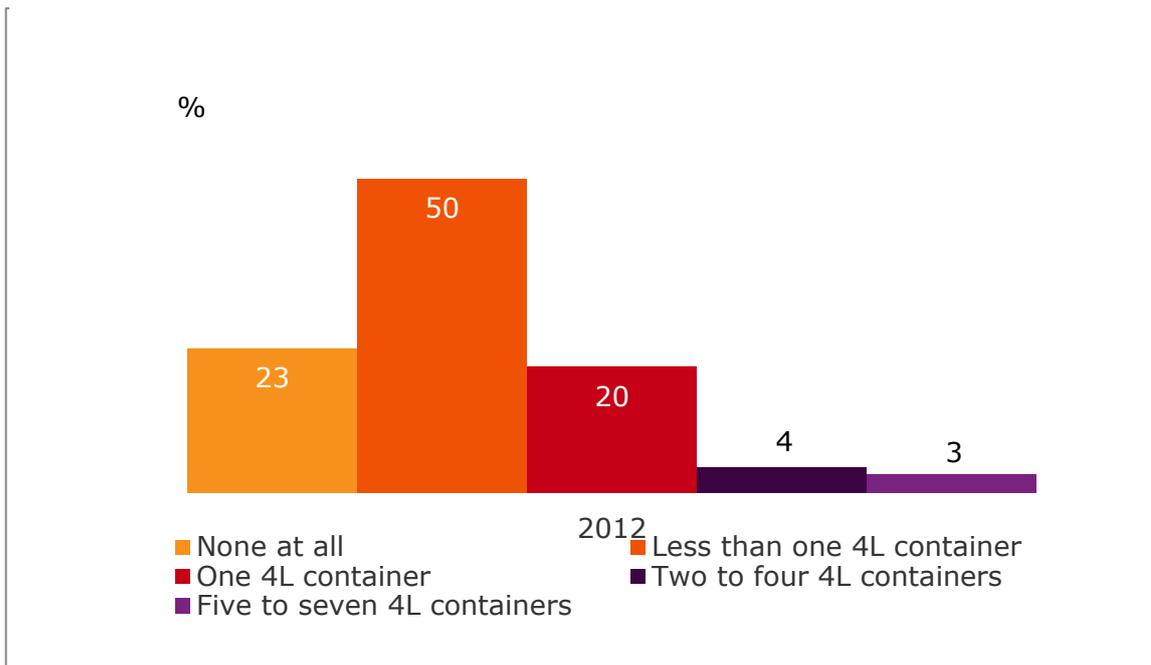
*Q28 And what was it about the media, advertising, promotion or event that has motivated you to want to do these things?(multiple response – open ended question coded)
 Base: All respondents aware of Love Food Hate Waste name or logo 2012 or seen any of the materials, were motivated by these (Q26), and motivated to act (Q27), 2012 (n=128)*

In the current study, two new questions were added around the quantity of food waste that was avoided as a result of exposure to the LFHW program. This was asked only of those who took action after some exposure to the LFHW program. One in two

said they avoided wasting less than one 4L container of food in an average week (50%), while one in five said they avoided wasting one 4L container and 7% said they avoided wasting more than this. Only a quarter (23%) said the actions they took as a result of exposure to the LFHW program did not help them to reduce any food waste. On average, those households who have been exposed to the program claim that they have avoided wasting 2.1 litres of food per week,

- Significant differences between sub-groups cannot be identified due to small base sizes.

Figure 32. Quantity of food waste avoided

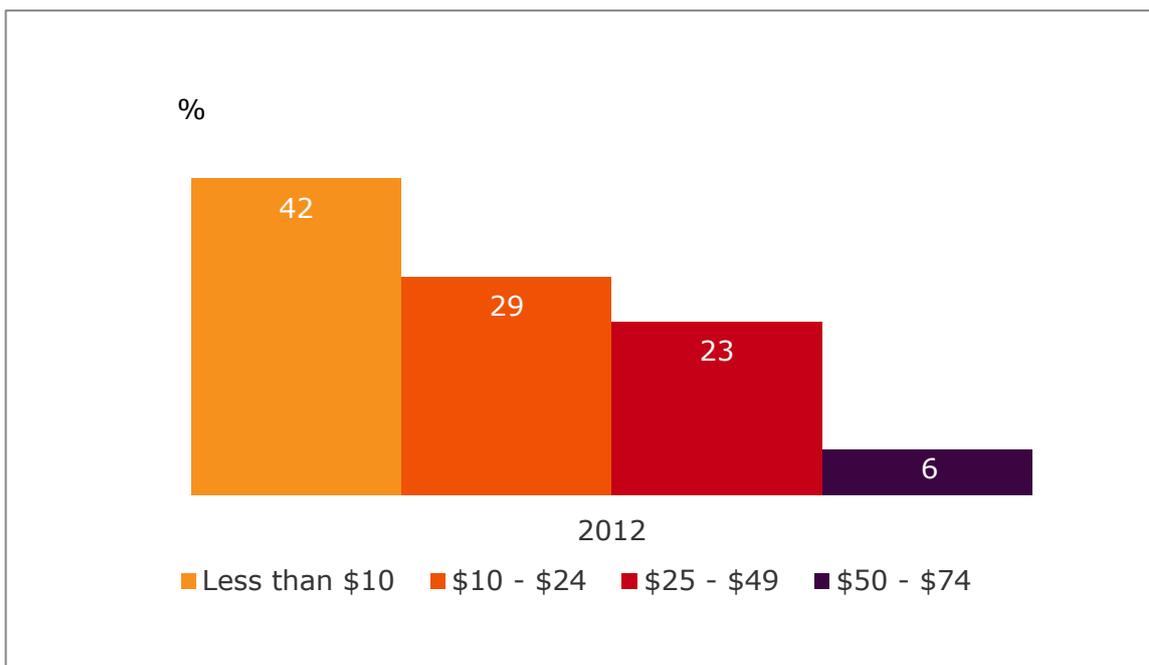


*Q28a As a result of the actions you took after being motivated by the Love Food Hate Waste program, how much food has your household avoided throwing away in an average week? Please use a 4 Litre (4L) ice cream container as the way of measuring this total. Do not include the amount, if any, that you composted or fed to animals.
Base: All respondents aware of Love Food Hate Waste name or logo or had seen any of the materials and avoided throwing away food because of it, 2012 (n=100)*

When asked to estimate the dollar value per week of the food they avoided wasting, more than half (58%) indicated they saved \$10 a week or more – a significant saving for simple behaviour changes. On average, those aware of the program claim to have avoided wasting \$19.50 worth of food per week.

- Significant differences between sub-groups cannot be identified due to small base sizes.

Figure 33. Value of food waste avoided



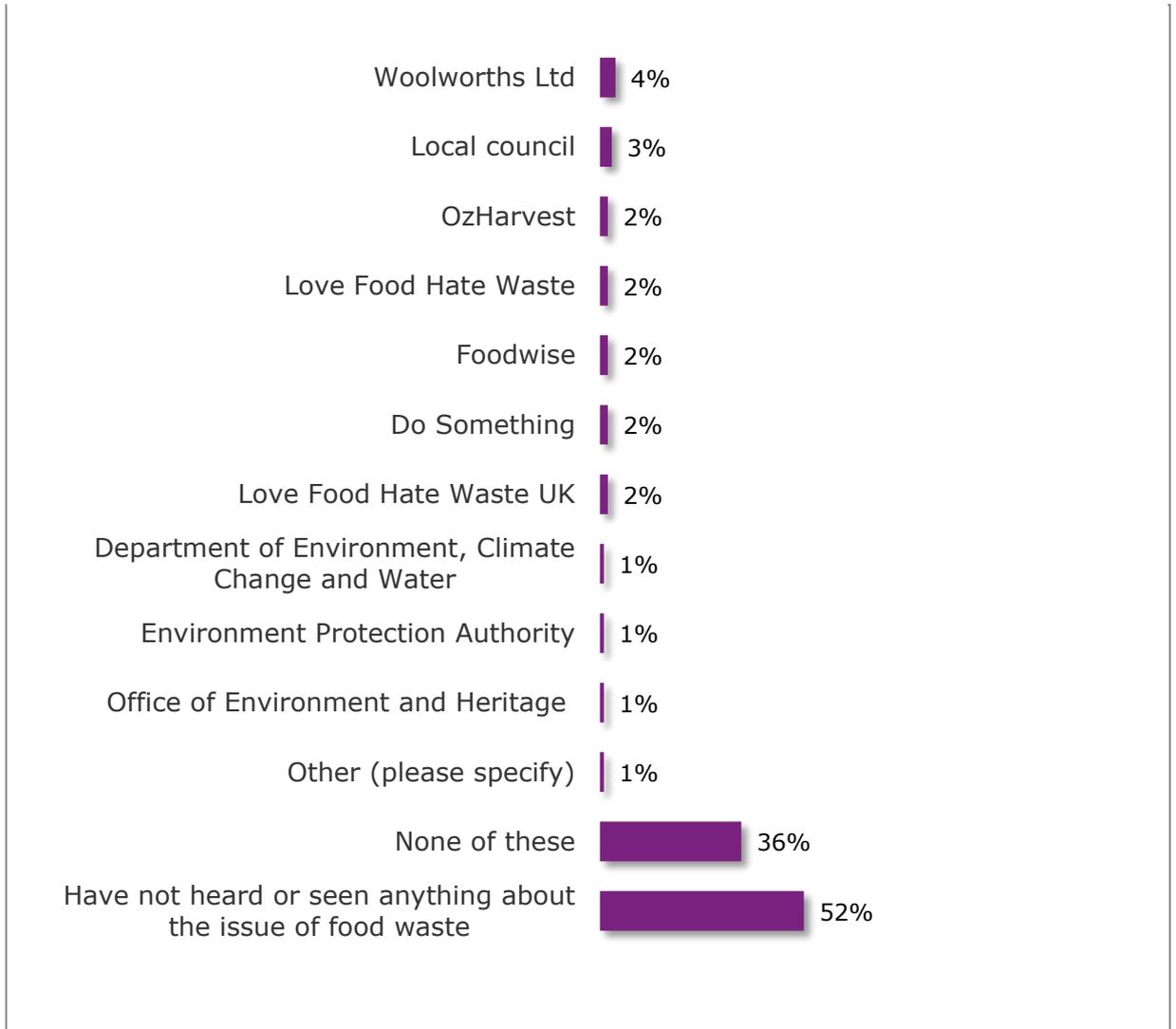
*Q28b And what was it about the media, advertising, promotion or event that has motivated you to want to do these things?(multiple response – open ended question coded)
 Base: All respondents aware of Love Food Hate Waste name or logo or had seen any of the materials and avoided throwing away food because of it, 2012 (n=100)*

Websites visited

Among all respondents, websites most likely to have been visited as a result of seeing or hearing about the issue of food waste were Woolworths (4%), local council websites (3%) and also OzHarvest, Love Food Hate Waste (both Australian and UK), Foodwise, and Do Something (all 2%).

- Share households (12%), students (11%) and CALD households (7%) are more likely to have visited the Woolworths website (compared to 4% of all respondents).
- While other differences in website visitation are not necessarily significant among subgroups, results indicate some additional variations:
 - Respondents in rural areas, younger respondents (16-24 years), CALD respondents, and those in shared households are more likely to visit their local council website.
 - CALD respondents are also somewhat more likely to visit the LFHW website and Environment Protection Authority website.

Figure 34. Websites visited



Q29. Which websites, if any, have you visited as a result of seeing or hearing anything about the issue of food waste?

Base: 2012: All respondents (n=1,300)

8.0 Conclusions

The 2012 LFHW study has tracked changes in food waste knowledge, attitudes, and behaviours, as well as exposure to and impacts of LFHW initiatives. Results indicate that while there is increasing concern about food wastage amongst the NSW population, concern is greatest for wastage behaviours that have a clear link to financial implications. Therefore, reinforcing and strengthening messages about the financial implications of food wastage is recommended, supported by the insight that current financial messages have the highest recall amongst those who are aware of the LFHW program.

The reasons for food wastage continue to be primarily avoidable, and support the continuing education focus on storage times, shopping and meal planning, preparation and portion size.

The volume and value of food wastage has decreased over the past year, as follows:

Average food waste per household	2011	2012
Volume	7.6 litres	5 litres
Value	\$ 63.80	\$ 56.00

Results support that the LFHW program should continue to focus on current target groups (young people (18-24 years), families with children, high income households) as these groups continue to be more likely to waste food. While results indicate that the LFHW program does encourage food waste avoidance behaviours, awareness of the program is very low, and funding towards an 'above the line' mass media campaign would be required to increase awareness and engagement with the program. Continuing to deliver the program through partnerships will be increasingly important, as there is decreasing support amongst NSW households for NSW Government involvement in the issue of food waste.

Appendix 1 – Segment Summaries

Food Lovers

LFHW Food Lovers are markedly different to general NSW households, driven by a greater awareness of and concern for environmental issues.

Food Lovers are more likely to express *a great deal* of concern for environmental problems (54%, compared with 18% of general NSW households), which is likely to have influenced their decision to become a LFHW Food Lover in the first place. They also cite a higher concern with *maintaining ecosystems* (36%, compared with 18%).

In addition to a greater level of concern for the environment, it is apparent that Food Lovers have more knowledge and a better understanding of the issue of food wastage and its environmental impacts. Food Lovers are more likely to agree that *energy, water and nutrients that are used to grow, process and transport food are 'lost' if food is purchased but not eaten* (86%, compared with 60% of general NSW households) and that *wasting food contributes to climate change* (83%, compared with 37% of general NSW households).

Food Lovers appear to be more informed about the *extent* to which food wastage is an issue in NSW. They are more likely to be aware that the largest type of waste in the average household bin is food (32%, compared with 22% general NSW households) and also estimate a higher annual mean spend per household on food that is never eaten (\$905.00, compared with \$729.00 among all NSW households).

Although Food Lovers were more likely to admit food wastage (52%, compared with 43% general NSW households), it is likely that this result is linked to the group's heightened awareness of the issue, and therefore greater consciousness of their contributing behaviours. However, of those Food Lovers who did admit wasting food, the dollar value estimated to be wasted on average per week was considerably lower than that wasted by general NSW households (\$38.17 and \$56.00 respectively).

Food Lovers are more supportive of the NSW Government's involvement in assisting the people of NSW to waste less food (85%, compared with 58% of general NSW households), evidenced by their own decision to become a LFHW Food Lover.

It is recommended that the LFHW program continues to recruit and engage with Food Lovers, to ensure the issue of food waste remains prevalent amongst this environmentally conscious group, and to encourage food waste avoidance behaviours.

16 – 24 year olds

Younger NSW residents (aged 16 – 24 years) waste a considerably greater amount of food than general NSW households and should be targeted with tailored messages to increase their awareness of the issue of food waste and encourage positive behaviour change.

This group is significantly more likely than general NSW households to correctly identify food as the largest type of household waste in NSW (31%, compared to 22% of all respondents). They are also more likely to correctly identify the meaning of 'use by' dates on food labels as *food must be eaten or thrown away by this date* (81%, compared to 65% of all respondents).

Despite their higher than average knowledge for the aforementioned topics, younger NSW residents are less likely to engage in food waste avoidance behaviours. They are significantly less likely to 'always' or 'most times' *buy food according to a set budget* (32%, compared to 42% of all respondents) or *consider portion sizes and only make as much as needed* (36%, compared with 46% of all respondents).

As a result of not engaging in food waste avoidance behaviours, younger residents waste more food than others; 5.6 litres per week on average (compared to 5.0 litres for general NSW households). Translating this quantity into dollars, by wasting food, 16 – 24 year olds waste significantly more money each week compared to general NSW households do (estimated average of \$88.69 and \$56.00 respectively).

To encourage positive behaviour change amongst this group, it is recommended that they are targeted with messages about the benefits of shopping to a strict budget, how to estimate correct portion sizes for meals, and the money that can be saved by engaging in these simple food waste avoidance behaviours.

CALD respondents

CALD respondents are those who indicated that they speak a language other than English at home. This group differ to general NSW households in terms of their food waste related knowledge, perceptions, and behaviours, as well as their potential to engage with and be influenced by the LFHW program.

It appears that CALD residents are more aware of the extent of food wastage in NSW than general NSW households, as they were more likely than any other sub-group analysed to correctly identify *food* as the largest type of NSW household waste (35%, compared to 22% of all respondents). They were also more likely to estimate higher annual values of food waste at *\$1,500 or more* per NSW household (23% estimated this amount, compared to 14% of all respondents).

Each week, CALD residents waste a considerably greater amount of food than general NSW households (\$69.39, compared to \$56.00). There are a number of food wasting behaviours contributing to this across the stages of shopping for, preparing and storing food.

In terms of shopping behaviours, CALD residents are less likely to 'always' or 'most times' *write a list and stick to it as much as possible* (43%, compared with 55% of all respondents). They are also less likely to 'always' or 'most times' *plan the meals to be cooked in the next few days* (34%, compared to 41% of all respondents). When preparing food, CALD residents are more likely to 'always' or 'most times' *make extra just in case it is needed* (25%, compared to 18% of all respondents).

CALD residents are also more likely to 'always' or 'most times' *save leftovers in the freezer and throw them out later* (13%, compared with 6% of all respondents). A greater proportion of CALD residents in comparison to general NSW households misconceive that 'best before' dates mean *food must be eaten or thrown away by this date* (32%, compared to 20% of all respondents). This means that almost a third of CALD residents are likely to be discarding food that has passed the best before date without checking if it is edible or not.

Encouragingly, CALD residents are more likely to support NSW Government involvement in reducing food waste (68%, compared with 58% of all respondents), suggesting they will respond positively to the LFHW program. Although recognition of the LFHW logo remained low in 2012, it was significantly more recognised by CALD residents (7%, compared to 4% of the all respondents). They were also significantly more likely than all respondents to recall the messages:

- NSW households waste \$2.5 billion dollars' worth of food per year (15%, compared to 9% of all respondents);
- Wasting food wastes water, energy and natural resources (20%, compared to 12% of all respondents);
- Waste less food, save money and our environment (21%, compared to 13% of all respondents); and
- \$231 million worth of drinks are wasted in NSW per year (12%, compared to 6% of all respondents)

This greater recall amongst CALD residents indicates that they are open to and receptive to the LFHW campaign and messaging. This, along with the insight that CALD residents engage in limited food waste avoidance behaviours, suggests that targeting communications and activities to this group would be an efficient and effective use of resources.

Families with children

Families with children have been a key target audience of the LFHW program, and the 2012 research supports that they should remain so, with this group registering significantly greater incidence of various food wasting behaviours and overall quantities of food wastage.

One in two families with children admit that their household wastes food, considerably greater than the proportion of general NSW households (50% and 43% respectively). While only one in ten NSW households believe they throw out *more* or *much more* food than they should, a significantly greater proportion of families with children admit they do this (12% and 20% respectively).

In comparison to general NSW households, families with children waste more fresh food, packaged and long life food, and leftovers, with their average food wastage per week being 5.8 litres (compared to just 5 litres for general NSW households). This quantity translates into families with children wasting on average \$64.64 each week (compared to just \$56.00 of general NSW households).

Contributing factors to food wastage for families with children can be identified at various stages. Almost one in two (47%) say they 'always' or 'most times' *buy food*

based on what is on special (including 2 for 1 deals), which is significantly greater than the proportion of general NSW households (39%). Another contributing factor to food waste for families with children is that one in four (25%) say *some household members do not always finish their meals*, significantly greater than the proportion of general NSW households (14%). Additionally, families with children are significantly more likely to cite *cooking too much food* as a reason for food wastage (12%, compared to 9% of general NSW households).

Messages targeted towards families with children should highlight that buying food on special will not always save them money, if the additional food ends up not being eaten and therefore going to waste. The LFHW program should also promote to families with children information about how to estimate realistic edible proportions to cook and serve to the children in the family. As one in four families with children (25%) register *concern for future generations* as their greatest concern in terms of environmental problems, incorporating messages about the long term environmental impacts of food wastage could be influential in encouraging food waste avoidance behaviours.

Metro vs. Rural

As LFHW is a state-wide program, identifying differences between locations, metro, and rural areas can aid in developing and delivering targeted communications.

In the current 2012 study, **Sydney** residents are more likely to register concern for *health effects of pollution* (16%, compared with 13% of all respondents) and were significantly more likely to correctly identify *food* waste as the largest type of household waste (26%, compared with 22% of all respondents). There is potential to reduce food waste amongst Sydney residents by educating them about the correct meaning of 'best before' dates on food labels, as Sydney residents were more likely to incorrectly believe these dates indicate that *food must be eaten or thrown away by this date* (25%, compared to 20% of all respondents).

Wollongong residents differed significantly from all respondents on a number of food waste behaviours at the meal planning stage. They less likely to 'always' or 'most times' *plan the meals to be cooked in the next few days* (29%, compared with 41% of all respondents), and less likely to 'always' or 'most times' *consider portion*

sizes and only make as much as you need (27%, compared with 46% of all respondents). This lack of planning translates into Wollongong residents wasting around \$10 a week more than average on food that has gone to waste (\$66.51 wasted per week, compared to \$56.00 for all respondents). Targeting this region with tips to avoid wasting food at the meal planning stage specifically is likely to be beneficial.

Generally, those living in rural and regional areas are less likely to waste food, with specific differences as follows:

- Those living in **large country towns** are more likely to agree that *it is easy to make meals from assorted ingredients that need using up* (81%, compared with 71% of all respondents), and are more likely to 'always' or 'most times' *check what food is already in the house* before shopping (76%, compared with 66% of all respondents). They also have a significantly lower value of food wastage on average per week (\$44.90, compared to \$56.00 for all respondents).
- Those living in **small country towns** are significantly more likely to always' or 'most times' *buy food according to a set budget* (56%, compared to 42% of all respondents) and have a significantly lower value of food wastage on average per week (\$39.97, compared to \$56.00 for all respondents).
- Those living in **country rural areas** are more likely to report having thrown out very little or no food (84%, compared with 69% of all respondents). They are also more likely to disagree ('disagree' or 'strongly disagree') that *busy lifestyles make it hard to avoid wasting food* (54%, compared to 37% of all respondents).

Communications and initiatives in these regions should encourage continued positive food waste avoidance behaviours.

Appendix 2 – Questionnaire

Questionnaire

Introduction – MyOpinions Only

IntroForAU

Hello from MyOpinions.

Thank you for agreeing to participate in this survey that is being carried out by TNS. To begin the survey, click on the button below. As you move through the survey please do not use your browser buttons - use the buttons at the bottom of each screen.

Please remember:

- Your views are important to us and your answers will be kept in the strictest confidence.
- None of the responses you give are directly linked to you as an individual. They are used purely for statistical purposes only. To see our privacy statement click the link at the bottom of the screen.
- The survey incentives and expected length are outlined in the invitation e-mail.
- Even if you do not qualify for the survey you will still receive incentive points.
- To understand the benefits of participating in legitimate research visit Your Views Count by clicking on the logo below



To answer a question: Most questions have a round button to click or a tick box to check. Click on the box or button that best describes your answer to each question. Sometimes you may need to type in your answer in the spaces provided.

If you forget to answer a question, or miss part of a question, then a message reminding you that the question needs to be answered will appear. If this happens, you need to complete your answer to carry on with the survey. Sometimes you'll need to scroll across or down the page to see all of the possible answers.

To change an answer: For questions with a single choice, click on a different button. For questions with multiple choices (tick boxes), click again on your original answer to clear the box and make a new choice.

To go to the next question: When you've finished answering a question, click the >> button at the bottom of the screen.

To pause the survey and return to it later: Simply close the window and click on the link in the invitation e-mail to resume.

Dial-up users: If you are on a dial up modem or other slow connection, some of the questions may take a few moments to load. Please be patient.

Please click next if you agree to spend a reasonable amount of time completing this survey and to provide honest and thoughtful responses.

Introduction – Open Link Only

Thank you for agreeing to participate in this survey that is being carried out by TNS. To begin the survey, click on the button below. As you move through the survey please do not use your browser buttons - use the buttons at the bottom of each screen.

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To answer a question: Most questions have a round button to click or a tick box to check. Click on the box or button that best describes your answer to each question. Sometimes you may need to type in your answer in the spaces provided.

If you forget to answer a question, or miss part of a question, then a message reminding you that the question needs to be answered will appear. If this happens, you need to complete your answer to carry on with the survey. Sometimes you'll need to scroll across or down the page to see all of the possible answers.

To change an answer: For questions with a single choice, click on a different button. For questions with multiple choices (tick boxes), click again on your original answer to clear the box and make a new choice.

To go to the next question: When you've finished answering a question, click the >> button at the bottom of the screen.

Dial-up users: If you are on a dial up modem or other slow connection, some of the questions may take a few moments to load. Please be patient.

Please click next or >> if you agree to spend a reasonable amount of time completing this survey and to provide honest and thoughtful responses.

Screener

In this study respondents should be **SOFT** terminates.

Screener Questions

Si Please enter your postcode in the space provided below

Respondent must enter 4 numerals. Screen out if post code does not fall into 1000 – 2999.

Sii Where do you live?

Please select one

Sydney	1	MAX n= 770
Newcastle	2	
Wollongong	3	
Large country town (population over 15,000)	4	
Small country town (population between 3,000 and 15,000)	5	
Country rural area	6	

Siii Please indicate your gender.

Please select one

Male	1	MAX N= 600
Female	2	MAX N= 600

Siv Please indicate which of the following age groups you belong to.

Please select one

16 to 24	1
25 to 34	2
35 to 44	3
45 to 54	4
55 to 64	5
65 plus	6

Sv Please indicate if you are the person who is mainly responsible, or equally responsible, for each of the following activities in your household:

Please select one response for each activity

	Yes	No
Food purchasing	1	1
Cooking / food preparation	2	2
Food storage (i.e. of grocery items and leftovers)	3	3

TERMINATE IF “NO” FOR ALL THREE STATEMENTS AT Sv

Svi What languages are spoken at home?

Please select all that apply

English	1	
Cantonese	2	Min n=30
Mandarin	3	Min n=30
Arabic	4	Min n=30
Italian	5	Min n=30
Greek	6	Min n=30
Macedonian	7	Min n=30
Vietnamese	8	Min n=30
Spanish	9	Min n=30
Korean	10	Min n=30
Hindi	11	
Tagalog	12	
Other (<i>please specify</i>)	97	SPECIFY
Prefer not to indicate	98	EXCLUSIVE

Quota Definitions

Ensure minimum of n=30 in each of codes 2 – 10 at Svi. Use 'least filled' allocation. For example, if someone speaks both Italian and Greek, and so far there are 20 completed surveys of people who speak Italian, but only 5 completed surveys of people who speak Greek, allocate as a Greek respondent.

Termination and Welcome Screens

Screen Out/Quota Fail

We would like to thank you for taking the time to participate in our survey. Your opinions and responses are gratefully received and extremely important to us.

The survey is now closed due to overwhelming responses from people like yourself.

Once again thank you for your interest.

Please click the '>>' button below to earn your points.

Welcome – MyOpinions Only

Congratulations!

You have qualified for the survey. This survey will take you approximately 20 minutes to complete.

You will be rewarded xx MyOpinion points for completing this survey.

Main Survey

Q1 In general, how concerned would you say that you are about environmental problems?

Please select one

A great deal	1
A fair amount	2
A little	3
Not really concerned	4
Not at all concerned	5

Q2 Please indicate which **one (1)** of the following you are most concerned about.

Please select one

Health effects of pollution	1
Quality of life	2
Concern for future generations	3
Long-term economic sustainability	4
Maintaining ecosystems – nature, plants and animals	5
Availability of resources we consume	6

Q3a People sometimes spend money on household goods and services that are never or rarely used.

Please indicate whether your household ever does any of the following:

Please select one response per statement

RANDOMISE	Yes	No	Don't know
Use more electricity than is necessary	1	2	99
Buy food that gets thrown away before being eaten	1	2	99
Buy books, magazines, CDs and/or DVDs that are rarely or never used	1	2	99
Buy clothes and other personal items that are rarely or never used	1	2	99
Pay interest on credit card purchases	1	2	99

ONLY ASK IF CODE 1 “YES” AT ANY STATEMENT AT Q3A.

Only show statement if corresponding statement at Q3a = 1 (i.e. if Q3a statement A = 1, show Q3b statement A, etc.)

Q3b How concerned would you say that you are about each of the following?

RANDOMISE	A great deal	A fair amount	A little	Not at all
The amount of electricity that your household uses that could be saved	4	3	2	1
The amount of food that gets thrown away before being eaten in your household	4	3	2	1
The number of books, magazines, CDs and/or DVDs in your household that are rarely or never used	4	3	2	1
The amount of clothes and other personal items in your household that are rarely or never used	4	3	2	1
The amount of money your household spends on interest for credit card purchases	4	3	2	1

ASK ALL

Q4 How much uneaten food would you say that your household usually throws away?

Please select one

Much more than you should	1
More than you should	2
A reasonable amount	3
Very little	4
None	5

Q5 What do you think is the largest type of waste in the average NSW household garbage bin?

Please select one

Packaging	1	
Food	2	
Garden clippings	3	
Paper	4	
Other (<i>please specify</i>)	97	SPECIFY

Q6. Approximately how much would you estimate that the average NSW household spends on food that is purchased but never eaten each year?

Please select one

\$100	1	
\$200	2	
\$300	3	
\$400	4	
\$500	5	
\$600	6	

\$700	7	
\$800	8	
\$900	9	
\$1000	10	
\$1100	11	
\$1200	12	
\$1300	13	
\$1400	14	
\$1500 or more	15	
Other (<i>please specify</i>)	97	SPECIFY

Q7a In regard to food labels, which of the following do you think best describes what is meant by the 'use by' date?

<INSERT "263101135 UseBy Lable.JPG" IMAGE>

Q7b And which of the following do you think best describes what is meant by the 'best before' date?

<INSERT "263101135 BestBefore Label.JPG" IMAGE>

	Q7a	Q7b
Food must be eaten or thrown away by this date	1	1
Food are still safe to eat after this date as long as they are not damaged, deteriorated or perished	2	2
Food must be sold at a discount after this date	3	3
(SHOW FOR Q7A ONLY) Other description for 'use by' (<i>please specify</i>)	97	-
(SHOW FOR Q7B ONLY) Other description for 'best before' (<i>please specify</i>)	-	97

Attitudes and knowledge

Q8. Please move each 'slider' to indicate where you personally feel that you fit between the two statements presented. If, for example, the statement on the left fully describes you, you would move the 'slider' as far to the left as possible.

INSERT SLIDER SCALE – WITH FIVE POINTS

Statement on left	Statement on right
When shopping for food, I think carefully about how much I will use	When shopping for food, I rarely think about how much I will use
I often find that food I've bought doesn't get used	I hardly ever find that food I've bought doesn't get used
I plan meals in advance and shop to a strict list	I don't usually plan meals and decide what I need while shopping

Q9. Below is a list of statements about food. Please indicate the extent to which you agree or disagree with each of them.

RANDOMISE	Disagree strongly	Disagree	Neither agree nor disagree	Agree	Agree strongly
Food that could have been eaten by people is not wasted if it is fed to the pets or composted	1	2	3	4	5
Australians don't waste much food	1	2	3	4	5
The energy, water and nutrients that are used to grow, process and transport food are 'lost' if food is purchased but not eaten	1	2	3	4	5
Busy lifestyles make it hard to avoid wasting food	1	2	3	4	5
As long as cooked food items remain frozen they can be stored for a year or more in the freezer	1	2	3	4	5
Leftovers that have been kept in the fridge for more than one day are unsafe to eat	1	2	3	4	5
It is easy to make meals from assorted ingredients that need using up	1	2	3	4	5
Wasting food contributes to climate change	1	2	3	4	5

General Behaviour

ASK IF Q4 = 1 – 4

The following question relates to the amount of food that you throw away in a normal week. The question will use the terms that appear below. Please read the definitions provided here first before answering the question.

SCRIPTER NOTE: ensure “closed” black bullet points are used, like the ones below.

- ‘Fresh food’ includes fresh fruit, vegetables, salad items, herbs, bread, milk and dairy products, meat and seafood.
- ‘Packaged and long life food’ includes sweet and savoury biscuits, chips, rice, cereal, flour, coffee and tinned food.
- ‘Frozen food’ includes frozen vegetables and fruit, chips, ready-made meals and frozen desserts.
- ‘Leftovers’ includes any uneaten food portions or ingredients remaining from a previous meal that can be eaten at a later date including take away meals, home cooked dinners or individual cooked ingredients like pasta.

- ‘Home delivered and take away meals’ includes meals which have been purchased, not prepared at home including pizza, Thai, Indian or Chinese food.
- ‘Drinks’ includes soft drinks, cordial, tea and coffee, juices, milkshakes and purchased bottled water (sparkling and still), but excludes alcohol.

Q10 In a normal week, please estimate how much of the following food types your household throws away (including going to the compost, worm farm, tipped down the sink or fed to pets).

Please use a 4 Litre (4L) ice cream container as the way of measuring this total, and include the amount, if any, that you composted, placed in a worm farm, tipped down the sink or fed to animals.

<INSERT “263101135 Icecream Container.JPG” IMAGE>

	Fresh food	Packaged & long life food	Left overs
None at all	1	1	1
Less than one 4L container	2	2	2
One 4L container	3	3	3
Two to four 4L containers	4	4	4
Five to seven 4L containers	5	5	5
Eight or more 4L containers	6	6	6

ASK IF Q4 = 1 – 4

Q11 In a normal week, please estimate the dollar value of each food type that your household purchased but threw away without being consumed (including going into the compost, worm farm, tipped down the sink or fed to pets). Please make your best estimate in whole dollars.

	Fresh food	Packaged & long life food	Frozen food	Home delivered/ take-away meals	Left overs	Drink
Do not purchase (\$0)	1	1	1	1	1	1
Less than \$10	2	2	2	2	2	2
\$10-\$24	3	3	3	3	3	3
\$25-\$49	4	4	4	4	4	4
\$50 - \$74	5	5	5	5	5	5
\$74- \$99	6	6	6	6	6	6
\$100 or more	7	7	7	7	7	7

ASK IF Q4 = 1 – 4

Q12a Please think about why food gets wasted in your household. Firstly, select the main reason that food gets wasted in your household.

Please select one

SCRIPTING NOTE: CODE 98 – ANCHOR AND MAKE EXCLUSIVE

ASK IF Q12a = 1 - 97

Q12b Now select all other reasons that apply.

Please select all that apply

SCRIPTING NOTE: EXCLUDE RESPONSE SELECTED AT Q12a FROM Q12b, BUT ALLOW CODE 97 (SPECIFY) AT Q12a AND Q12b.

RANDOMISE	Q12a (SR)	Q12b (MR)
We buy too much food	1	1
We cook too much food	2	2
Food goes off before the 'use by' or 'best before' date	3	3
Food is left too long in the fridge and freezer	4	4
We don't check the fridge, freezer and cupboard before going shopping	5	5
We tend not to plan meals in advance	6	6
We don't tend to use leftover ingredients in other meals	7	7
We aren't sure how to store food properly	8	8
We can't store food properly	9	9
Family members change their plans (then don't turn up for dinner etc.)	10	10
We like to eat the freshest food possible	11	11
We're generally too busy to cook meals that we planned	12	12
Some household members don't always finish their meal	13	13
Food bought on sale doesn't always last long enough	14	14
Another reason (<i>please specify</i>)	97	97
We do not waste any food in our household	98	-

Behaviour – Food purchase, Preparation & Storage

Q13. Before you or a member of your household does your main food shopping, how regularly do you or they do the following?

Please select one response per activity

RANDOMISE	Never	Rarely	Some times	Most times	Always
Check what food is already in the house	1	2	3	4	5
Plan the meals to be cooked in the next few days	1	2	3	4	5
Write a list and stick to it as much as possible	1	2	3	4	5

Q14. How regularly do you or a member of your household do the following when doing the grocery shopping?

Please select one response per activity

RANDOMISE	Never	Rarely	Some times	Most times	Always
Buy food according to a set budget	1	2	3	4	5
Buy food based on what is on special (including 2 for 1 deals)	1	2	3	4	5
Buy items 'in bulk'	1	2	3	4	5
Check the 'use by' or 'best before' dates before purchasing food items	1	2	3	4	5

Q15. How regularly do you or a member of your household do the following when preparing a main meal?

Please select one response per activity

RANDOMISE	Never	Rarely	Some times	Most times	Always
Consider portion sizes and only make as much as you need	1	2	3	4	5
Make extra for a future planned meal (e.g. lunch or dinner the next day)	1	2	3	4	5
Make extra just in case it is needed	1	2	3	4	5

Q16. When you have leftovers, how regularly do you or a member of your household do the following?
Please select one response per activity

	Never	Rarely	Some times	Most times	Always
Save leftovers in the fridge and consume them afterwards	1	2	3	4	5
Save leftovers in the fridge and throw them out later	1	2	3	4	5
Save leftovers in the freezer and consume them afterwards	1	2	3	4	5
Save leftovers in the freezer and throw them out later	1	2	3	4	5
Dispose of leftovers immediately after the meal	1	2	3	4	5

Information

Q17. Do you think the NSW Government should have a role in assisting the people of NSW to reduce the amount of food they waste?
Please select one

Yes	1
No	2

Love Food Hate Waste Program

Q18. Have you seen, read or heard any media, advertising or promotion about the issue of food waste in the past 12 months?
Please select one

Yes	1
No	2

ASK IF Q18 = 1

Q19. Where did you see or hear this media, advertising or promotion?

Please select all that apply

RANDOMISE		
Television	1	
Radio	2	
Newspaper	3	
Community newspaper	4	
Internet	5	
Community festival / event	6	
Local council communication e.g. newsletter	7	
Magazine	8	
In-store promotion e.g. check out screen or recipe card	9	
Social media	10	
SHOW FOR CLIENT SAMPLE ONLY: Love Your Food (Love Food Hate Waste newsletter)	11	
Other (please specify)	97	ANCHOR SPECIFY
Don't know/can't remember	99	EXCLUSIVE ANCHOR

ASK IF Q18 = 1

Q20. What was that media, promotion or advertising about?

Please write in as much detail as you can

ASK ALL

Q21a. Have you heard of Love Food Hate Waste?

Please select one

Yes	1
No	2
Unsure	3

SHOW ON SAME SCREEN AS Q21a (TRIGGER). ASK ALL. APPEAR AFTER ANSWER SELECTED AT

Q21a.

Q21b. Have you seen the Love Food Hate Waste logo, shown below, in any media, advertising or promotional materials?

Please select one

<INSERT "263101135 Core Logo Green.jpg" IMAGE>

Yes	1
No	2
Unsure	3

ASK IF Q21a = 1 OR Q21b = 1

Q22. Where did you hear about Love Food Hate Waste or see the logo?

Please select all that apply

RANDOMISE		
Editorial in community newspaper	1	
Advertising in community newspaper	2	
Love Food Hate Waste website	3	
Local council website	4	
Food magazine	5	
General magazine	6	
Food blog	7	
Internet	8	
Workshop / seminar	9	
Community festival or event	10	
Food and Wine Show	11	
Local council communication e.g. newsletter	12	
Radio	13	
Social media e.g. Facebook, Twitter	14	
Television	15	
Other (please specify)	97	ANCHOR SPECIFY
Don't know / can't remember	99	ANCHOR EXCLUSIVE

ASK IF Q21a = 1 OR Q21b = 1

Q23. What would you say are the main messages of the Love Food Hate Waste materials you have seen?

Please write in as much detail as you can

ASK ALL

Q24. Can you recall seeing or hearing any of these specific messages from the Love Food Hate Waste program?

Please select one response per statement

RANDOMISE	Yes	No
NSW households waste \$2.5 billion dollars worth of food per year.	1	2
Wasting food wastes water, energy and natural resources.	1	2
Each NSW household throws away more than \$1,000 of food per year. Across the state that totals 800,000 tonnes per year.	1	2
Waste less food, save money and our environment.	1	2
\$231 million worth of drinks are wasted in NSW per year.	1	2

Q25 Which of the following materials have you seen before today?

Please select all that you have seen

SHOW 4 IMAGES (2 SIDE BY SIDE, 2 UNDERNEATH) WITH SELECT BUTTON FOR EACH.

RANDOMISE ORDER OF IMAGES.

INSERT 263101135 Apple.jpg

INSERT 263101135 Cheese.jpg

INSERT 263101135 Milk.jpg

INSERT 263101135 Tomato.jpg

ALLOW CODE 98 "None of these" AS EXCLUSIVE BUTTON – SHOW AT TOP OF SCREEN ABOVE THE IMAGES.

ASK IF ANY IMAGE SELECTED AT Q35 OR Q21a =1 OR Q21b = 1. EVERYONE ELSE SKIP TO Q30 SECTION

Q26. Thinking about the Love Food Hate Waste media, advertising or promotion that you have seen, did these motivate you to act in ways to waste less food?

They motivated me very much	1
They motivated me quite a bit	2
They made me think about it	3
They did not really motivate me	4
They did not motivate me at all	5
Don't know/unsure	99

ASK IF Q26 = 1 – 4 OR 99

Q27. After seeing or hearing the Love Food Hate Waste promotion, media, advertising materials or attending an event, which of the following were you motivated to do?

RANDOMISE		
Visit the Love Food Hate Waste website	1	
Find out more about the issue of food waste	2	
Talk to family and/or friends about the issue of food waste	3	
Plan meals in advance	4	
Write a shopping list	5	
Change my shopping habits	6	
Cook the correct serving sizes	7	
Use my leftovers for other meals	8	
Read storage instructions on packaging	9	
Check use by and best before dates in store	10	
Check the temperature of my fridge and freezer	11	
Buy less food more regularly	12	
Become a Love Food Hate Waste 'Food Lover'	13	
Start a compost or worm farm	14	
Other (please specify)	97	ANCHOR SPECIFY
None of these	98	ANCHOR EXCLUSIVE

ASK IF Q27 = 1 – 97

Q28. And what was it about the media, advertising, promotion or event that has motivated you to want to do these things?

Please write in as much detail as you can

--

ASK IF Q27 = 1- 97

Q28a. As a result of the actions you took after being motivated by the Love Food Hate Waste program, how much food has your household avoided throwing away in an average week?

Please use a 4 Litre (4L) ice cream container as the way of measuring this total. Do not include the amount, if any, that you composted or fed to animals.

Please select one

<INSERT “263101135 Icecream Container.JPG” IMAGE>

None at all	1
Less than one 4L container	2
One 4L container	3
Two to four 4L containers	4
Five to seven 4L containers	5
Eight or more 4L containers	6

ASK IF Q28a = 2 – 6 (TRIGGER). SHOW ON SAME SCREEN AS 28a – ONLY APPEAR AFTER CODE 2 – 6 HAS BEEN SELECTED.

Q28b. And how much do you think this amount would roughly equate to in dollar value? That is, the approximate dollar amount that you have avoided throwing away in an average week.

Less than \$10	1
\$10 - \$24	2
\$25 - \$49	3
\$50 - \$74	4
\$75 - \$99	5
\$100 or more	6

ASK ALL

Q29. Which websites, if any, have you visited as a result of seeing or hearing anything about the issue of food waste?

Please select all that apply

RANDOMISE		
Love Food Hate Waste	1	
Foodwise	2	
Department of Environment, Climate Change and Water	3	
Do Something	4	
Environment Protection Authority	5	
Office of Environment and Heritage	6	
OzHarvest	7	
Woolworths Ltd	8	
Local council	9	
Love Food Hate Waste UK	10	
Other (please specify)	97	ANCHOR SPECIFY
None of these	98	ANCHOR EXCLUSIVE
Have not heard or seen anything about the issue of food waste	99	ANCHOR EXCLUSIVE

SHOW FOR CLIENT SAMPLE ONLY

Q30 Do you have any feedback you would like to provide on the Love Food Hate Waste program?

Please type in the box below.

CLASSIFICATION

ASK ALL

We just have a few more questions to ensure that we have a response from a good cross-section of people.

Qi Which one of the following best describes you?
Please select one

In paid work (full time or part time - includes being self-employed)	1
Unemployed and looking for work	2
Student	3
Home duties	4
Retired/ Age pensioner	5
Other pensioner	6
Other (please specify)	97

Qii Which of the following best describes your household composition?
Please select one

Single person household	1
Family with children	2
Family, only adults (16+)	3
Shared household, non-related	4
Other (please specify)	97

ASK IF Qii = 2 - 97

Qiii How many people in your household are in each of the following age bands?
Please enter number next to each relevant age band

NOTE FOR SCRIPTER: respondents must enter numerals. Must enter at least one number in at least one age band.

0 to 6	
7 – 12	
13 – 17	
18 – 24	
25 – 34	
35 – 44	
45 – 54	
55 – 64	
65 plus	

ASK ALL

Qiv What is the highest level of education that you have completed?
Please select one

No formal schooling	1
Primary school	2
Some secondary school	3
Completed secondary school (HSC, Leaving Certificate, etc.)	4
Trade or technical qualification (e.g. TAFE)	5
University or College of Advanced Education diploma, degree or higher degree	6
Prefer not to say	98

Qv Which of the following best describes your household income before tax?
Please select one

Less than \$20,000	1
\$20,000 to \$39,999	2
\$40,000 to \$59,999	3
\$60,000 to \$79,999	4
\$80,000 to \$99,999	5
\$100,000 to \$149,999	6
\$150,000 or more	7
Prefer not to indicate	98

Completion Screens - MyOpinions

We would like to thank you for taking the time to complete our survey. Your opinions and responses are gratefully received and extremely important to us.

Your responses will be used at an aggregate level only, and as such we would like to assure you once again that your details will be used in the strictest of confidence and will not be passed on to any other party for any purpose other than that which it was intended.

To check the bona fides of TNS please phone SurveyLine on 1300 364 830.

Once again thank you for your interest. To ensure that you receive further relevant surveys, please make sure that your details are always up to date.

Please click the '>>' button below to earn your points.

Completion Screens – Open Link

We would like to thank you for taking the time to complete our survey. Your opinions and responses are gratefully received and extremely important to us.

Your responses will be used at an aggregate level only, and as such we would like to assure you once again that your details will be used in the strictest of confidence and will not be passed on to any other party for any purpose other than that which it was intended.

To check the bona fides of TNS please phone SurveyLine on 1300 364 830.

Once again thank you for your interest.