



## **New Zealand Food Waste Research Love Food Hate Waste campaign evaluation 2018**

For the past three years, the Love Food Hate Waste campaign has been run in New Zealand with the aim of increasing awareness of food waste and educating New Zealand households on how they can reduce the amount of food they throw away.

Before the campaign began, research was undertaken in 2014-2015 in the form of bin audits and an online attitudinal survey. This data provided a baseline for how much food New Zealand households threw away, the sorts of food they wasted and the attitudes and behaviours behind it.

The study showed that household food waste in New Zealand was a significant issue, with each household wasting 79kg of avoidable food (food that could be eaten e.g. not banana peels) every year at an average cost of \$563.

Over the three-year campaign (2016–2018) Love Food Hate Waste has focused on raising awareness of the issue of food waste through a range of different mediums, including a website, social media, advertising and events.

In addition to awareness-raising, Love Food Hate Waste has used a solutions-based approach to give people the knowledge and tools they need to reduce the amount of the food that they waste.

The bin audit and online survey research was repeated in 2018, towards the end of the Love Food Hate Waste campaign, to measure the amount of household food waste and to determine whether the campaign had had an impact on people's behaviour.

### **Awareness of food waste**

The Love Food Hate Waste online evaluation survey showed that 50% of people had seen or heard some information about food waste in the last two years, indicating that there is now much greater awareness that food waste is an issue.

Of the 1,000 people surveyed, 66% said they had taken actions to reduce their food waste in the last two years. On average, they had undertaken six food waste reduction behaviours, such as eating leftovers and planning their meals.

### **Bin audit results**

While it is positive to see that people are taking actions to reduce their food waste, there is still a disconnect between how much food people think they are wasting, and how much they actually are. The survey showed that of respondents who say they waste food, 81% believed that their household wastes little or very little edible food. This is unchanged compared to 2014.

The bin audits showed that on average, New Zealand households were throwing away 3.15kg of food a week via their domestic kerbside collection. This is down from 3.17kg of food waste from bin audits conducted in 2014-2015.

Nationally, the total amount of food waste has risen to 298,246 tonnes, however this increase is primarily due to the 15% growth in New Zealand's population from 2013 to 2018. This is equivalent to adding another city larger than Hamilton.

The audits also revealed that the cost of our food waste has actually decreased due to a difference in the composition of foods we are wasting. On average, households made savings of \$20 per household per annum, or \$35 million per annum nationally.

### **Impact of Love Food Hate Waste**

The online survey results found that 19% of New Zealand households had heard about the Love Food Hate Waste New Zealand campaign when prompted, with 6% of households mentioning the campaign without prompting. This is an excellent result when compared to a similar awareness study in New South Wales (NSW) which found that only 8% of respondents mentioned Love Food Hate Waste NSW when prompted.

Furthermore, the limited amount of funding for the Love Food Hate Waste campaign meant that the messaging was targeted at specific high food waster demographics, rather than the general population.

Just over half (52%) of the respondents who had heard about food waste from the Love Food Hate Waste campaign stated it had an impact on how much food they wasted. Of those people, two in five indicated that they had reduced their waste by two litres of food or more per week, and believed that this amounted to a financial saving of \$500 or more per year.

The bin audit data shows that there was 27.1% less food waste disposed of to landfill by households that were aware of the Love Food Hate Waste campaign than for households that weren't. For those households, at least 14,000 tonnes of avoidable food waste have been diverted from landfill.

While the campaign funding was not sufficient to reach the whole population, and thus impact food waste across the board, it clearly demonstrates the significant impact of Love Food Hate Waste on targeted demographics.

### **In summary**

New Zealand households are far more aware of the issue of food waste than they were three years ago and many households are taking actions to reduce their food waste.

For households who have heard of the Love Food Hate Waste campaign and engaged more deeply with food waste, they have been able to make significant reductions to the amount of food they are throwing away.

Whilst a total national decrease in food waste to landfill may be unlikely to achieve with New Zealand's current rate of population growth, the research has shown that continued Love Food Hate Waste messaging will be able to decrease food waste at the individual household level and thus reduce it on a per capita basis.

## Summary of food waste bin audits

*Conducted by Sunshine Yates Consulting  
February - July 2018*

Between February and July 2018 Sunshine Yates Consulting conducted 600 bin audits of domestic kerbside refuse at six locations around New Zealand. This was a smaller scale version of the 2014-2015 bin audit research.

The purpose of the audits was to ascertain how much food waste the average New Zealand household throws away each year, which would answer the questions: are New Zealanders wasting less food than they did three years ago, and has the Love Food Hate Waste campaign had an impact on behaviour?

### Key findings:

- On average, each New Zealand household is throwing away 3.15kg of total food waste per week. In 2015 this figure was 3.17kg, however, analysis has determined that this difference is not statistically significant.
- On a national scale, this is 157,398 tonnes of avoidable food disposed of to landfill through domestic kerbside collection per annum. This is an increase of 34,851 tonnes since 2015 which is primarily due to the 15% growth in New Zealand's population from 2013 to 2018.
- Interestingly, the average cost of our food waste has decreased due to a difference in the composition of foods we are wasting. On average households made savings of \$20 per household per annum, or \$35 million per annum nationally.
- The bin audits revealed that two thirds of households are wasting less than 1.87kg of avoidable food waste a year. However, one third of New Zealand households are high food wasters. These households dispose of between 1.89kg and 21.88kg of avoidable food waste a week, with an average of 4.01kg.
- Seventeen of the top 20 most common avoidable food types were the same in 2018 as they were in 2014-15. Bread was still the most common avoidable food type in both audits, followed by leftovers.

- **Table 4.9 – Comparison of Top 20 'avoidable' food types – 2018 and 2014-2015**

Top 20 'avoidable' food types - 2018	Proportion of 'avoidable' food waste	Top 20 'avoidable' food types – 2014-2015	Proportion of 'avoidable' food waste
Bread	9.6%	Bread	10.5%
Leftovers	8.2%	Leftovers	7.8%
Oranges, mandarins etc	4.0%	Potatoes	5.2%
Apples	3.3%	Apples	3.3%
Bananas	3.1%	Poultry	2.8%
Potatoes	3.0%	Bananas	2.6%
Poultry	2.6%	Lettuces	2.6%

Rice	2.6%	Oranges, mandarins etc	2.3%
Lettuces	2.4%	Pumpkins	2.2%
Beef	2.0%	Carrots	1.9%
Yoghurt/yoghurt drinks	1.8%	Cabbages	1.8%
Pumpkin	1.7%	Onions	1.7%
Takeaway - chips	1.6%	Takeaway - chips	1.7%
Carrots	1.5%	Tomatoes	1.5%
Cheese	1.4%	Rice	1.4%
Grapefruit	1.4%	Cake	1.3%
Tomatoes	1.3%	Sandwiches - homemade	1.3%
Lemons	1.3%	Yoghurt/yoghurt drinks	1.3%
Kiwifruit	1.3%	Beef	1.2%
Cabbages	1.2%	Cheese	1.1%

- A survey was distributed to all households that participated in the audit and was returned by 29% of households. Just over half of the households (54%) that completed the survey stated that they had done something to reduce food waste in the past three years. The most common behaviours were buying less food (23%), followed by composting or using a worm farm or Bokashi (17%), and eating more leftovers (15%).
- Twenty-two per cent of the surveyed households stated that they had heard of the Love Food Hate Waste campaign. Overall the audits showed that there was 27.1% less food waste disposed of per household that was aware of the Love Food Hate Waste campaign than per household that was not. This is a statistically significant difference. When scaled up nationally, this has seen at least 14,000 tonnes of avoidable food waste diverted from landfill.<sup>1</sup>
- Five per cent of households threw away no avoidable food waste.

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<sup>1</sup> The bin audits found that households who had heard of Love Food Hate Waste threw out 27% less food waste than those who hadn't. This means on average they are throwing away only 0.8kg of food per set-out. If the set-out rate for rubbish is assumed to be weekly, then households who had heard of the campaign reduced their food waste by 41.6kg per annum. The bin audit survey found 22% of the population were aware of Love Food Hate Waste, while the online survey recorded a 19% awareness. Using an estimated household population of 1,758,900<sup>1</sup>, the reduction in food waste to landfill from households who have heard about the campaign could range from 14,000 tonnes (19% awareness) to 16,200 tonnes per annum (22% awareness).

## Summary of results of New Zealand survey into food waste

*Conducted by Key Research Ltd  
September 2018*

Key Research was commissioned to repeat the survey that they conducted in 2014 on New Zealander's food waste behaviours and attitudes.

To do this, 1,000 New Zealanders who were primarily or jointly responsible for food shopping and preparation were surveyed online in September 2018, four months before the end of the Love Food Hate Waste campaign.

### **Key findings:**

Awareness of the issue of food waste:

- Half of the respondents surveyed had seen or heard some information about food waste in the last two years.
- Nineteen per cent of New Zealand households had heard about the Love Food Hate Waste campaign when prompted, with 6% of households mentioning the campaign without prompting.
- The people who are most likely to have heard about the Love Food Hate Waste campaign are women aged between 25 and 39, and families with children under the age of 16. These were the two, key high-food waste demographics that Love Food Hate Waste messaging targeted.

Awareness of their contribution to the issue:

- In general, people still did not view their own food waste behaviour as wasteful, with the majority (81%) estimating they threw away little or very little food that could have been eaten. This remained unchanged from 2015. Fourteen per cent said that they wasted no food at all (up 4% since 2014) which is statistically significant. Whereas only 2% of households perceived the amount of food waste they generate to be quite a lot.
- Segmentation analysis found that although 25% of households are still high food wasters, the number of high food waste households had decreased from 37% in 2014 to 25% in 2018. The number of low wastage households rose from 35% in 2014 to 38%.

Actions taken to reduce food waste:

- New Zealanders say that they are taking actions to reduce their food waste. 66% of respondents said they had taken actions to reduce their food waste in the last year. On average, respondents had undertaken six different actions to reduce their food waste. Eating leftovers, writing a shopping list, storing leftovers or excess food in the freezer and planning meals in advance being the main actions taken.
- Eating leftovers saw a significant increase from 70% of respondents saying they do it in 2015 to 81% in 2018. The number of people who plan their meals has also risen considerably from 19% to 36%. Both of these behaviours were the focus of strong campaign messaging.
- Reasons for food waste have changed considerably since 2014, with fewer respondents claiming that leftovers were not eaten or reused (down 13% to 47%) and mentioning food in the fridge/freezer going off (down 6% to 43%). Once again, this accords with the key campaign messages.

- More respondents in 2018 indicated that food was wasted in their household because too much food was cooked (up 8% to 38%), too much food was bought (up 10% to 31%) and family members were fussy eaters or have specialist dietary requirements (up 4% to 26%).

Demographic of high food wasters:

The demographic of households who are more likely to be high food wasters is consistent with 2014:

- Younger people i.e., those aged 16 to 24 years in the household responsible or jointly responsible for food shopping and preparation.
- Large households i.e., those with four or more people living in them.
- Households with children aged 15 years and under.
- Households with a high annual income (\$100,000 per annum or more)

Due to funding limitations, the Love Food Hate Waste campaign targeted households with children aged 15 and under and large households.