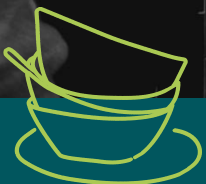


Kai Keepers

Reducing food waste
in Aotearoa's
hospitality sector



APRIL 2026

Presented by

 restaurant
association
of new zealand

 edge impact®

About



Kai Keepers

Each year, Aotearoa's cafés and restaurants generate nearly 25,000 tonnes of food waste, and a shocking 61% of it is entirely avoidable.

When this food goes to landfill, it's a wasted opportunity to advance sustainability for the hospitality industry and improve financial outcomes for operators.

To tackle this pressing issue and provide the data insights to drive awareness and action across our industry, the **Restaurant Association**, in conjunction with **Edge Impact**, launched Kai Keepers.

Initially run as a pilot across the Auckland, Waikato and Bay of Plenty regions, Kai Keepers aims to transform food waste practices and outcomes for cafés and restaurants. Kai Keepers operators are empowered to reduce food waste, achieve their sustainability goals, while also unlocking significant financial savings.

The findings from the Kai Keepers' pilot are now informing the development of a nationwide programme, so that every food business in Aotearoa can be part of the food waste movement.

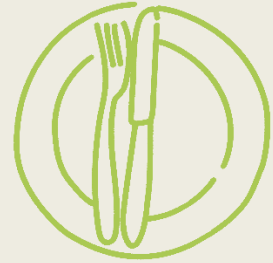


**Kai Keepers has been created
with the support of the
Ministry for the Environment.**



Ministry for the
Environment
Manatū Mō Te Taiao

Bringing people and food together



Food is something we need to thrive and not just for nourishment.

When people come together for celebration or comfort, food plays a big part.

That's why we want you to join us in keeping food where it belongs – in our mouths, bellies and memories - and out of the places where food waste can make problems for us, both today and further down the track.

Programme

Overview

We are tackling this pressing issue to provide the data insights to drive awareness and action across the hospitality industry. Kai Keepers aims to change food waste monitoring and outcomes for cafés and restaurants throughout Aotearoa.

Across 2.5 years, a groundbreaking pilot involved 120 participants in Bay of Plenty, Auckland and Waikato. The pilot involved two stages:

- | | |
|---|--|
| 1 | A 'baseline' assessment to measure businesses' food waste. |
| 2 | An 'Intervention assessment' to trial different ways to reduce food waste and test the effectiveness of those initiatives. |

Phase 1: Baseline assessment

A 7-Day food waste baseline which involved the pilot participants:

- Separating their organic waste and conducting daily weigh-ins using scales and bins supplied.
- Taking some photos and completing a daily survey to provide insights on main sources of food waste, and observations about the day's food waste impacts.

Phase 2: Food waste intervention

A 4-week food waste intervention which involved the pilot participants:

- Separating their organic waste and conducting daily weigh-ins using scales and bins supplied.
- Completing a daily survey to provide insights on main sources of food waste, and observations about the day's food waste impacts.
- Participants were randomly assigned to a control or test group. Test group participants also: Trialed a food waste behaviour change intervention.

Key findings

phase 1 – Baseline



Over a seven-day period more than 13 tonnes of food waste was generated from the preparation of 108,730 meals. According to self-reported data from participants, the food waste was generated from food preparation (44%), plate waste (43%) and spoilage (13%).

5 key insights:

1. Staff involvement: Participants reported that business owners, managers, and staff were eager to adopt and enhance waste reduction practices, showcasing the industry's growing commitment to sustainability.

2. Food waste environmental impact: Over 13 tonnes of food waste was recorded. This waste resulted in more than 15 tonnes of CO₂-e emissions, the equivalent of 70,840 kilometres travelled in a medium petrol-powered car. This is the same distance as travelling from Auckland to Wellington around 110 times.

3. The cost of food waste: The 13 tonnes of food waste is estimated to have cost businesses a combined \$102,000 in lost value over the seven-day period based on food purchasing and waste management costs.

4. Average waste per cover: Each meal contributes an average of 134 grams of food waste, costing approximately \$0.74 per cover.

5. Top wasted items: The top five food waste items nominated by participants were sauces such as ketchup and pesto, fresh and/or cooked vegetables, garnishes and side salads, meat, and eggs (including shells and cooked eggs).





Key findings

phase 1 – Baseline



1

Operations with cabinet food items generated more waste on average than businesses without.

2

Lower priced menu items produced over half the preparation food waste per cover than mid-range menu items. Higher price items increased food waste per plate.

3

Larger average portion size meals resulted in 87% more waste per cover than smaller size meals.

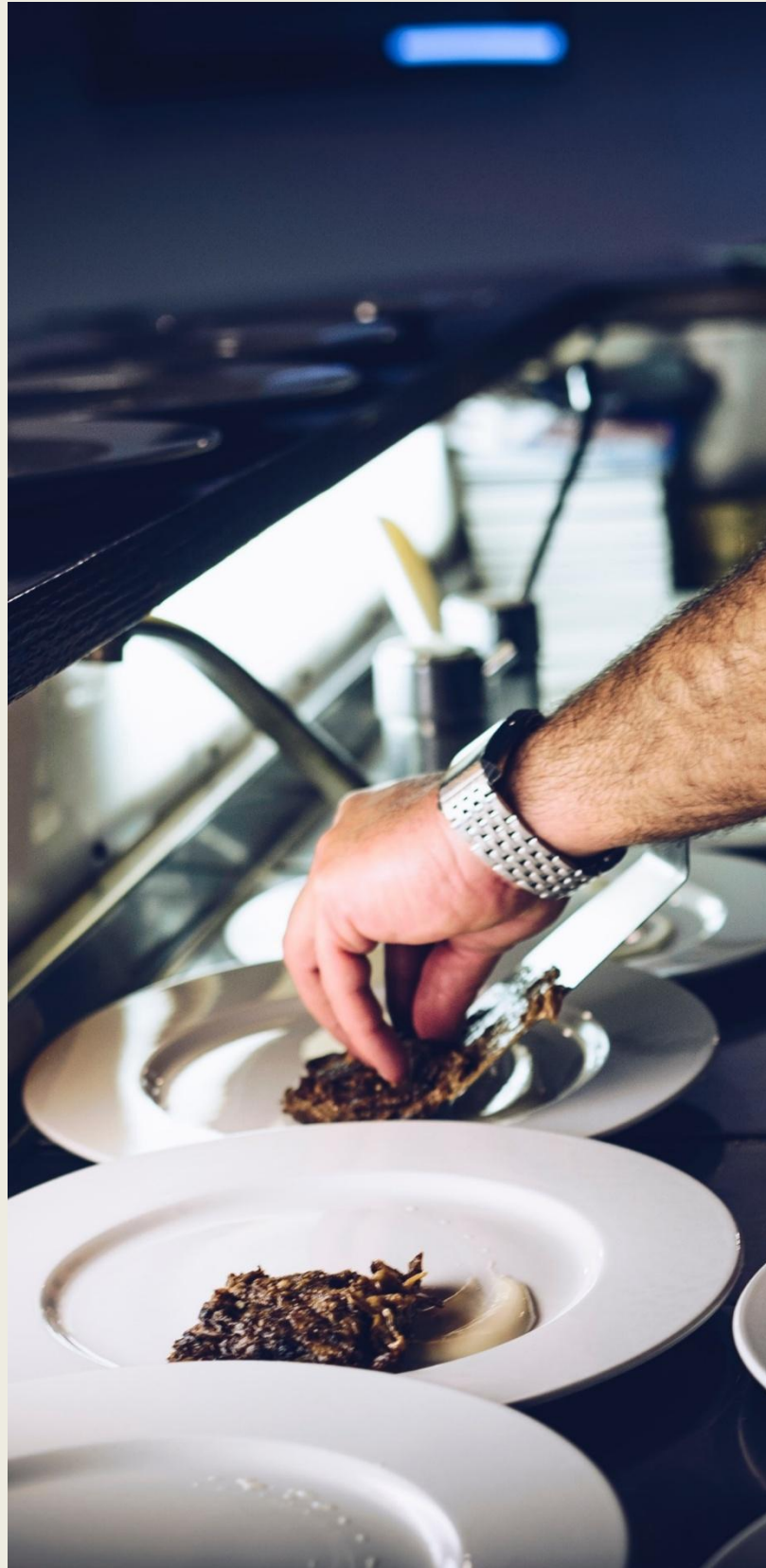


4

When businesses serve less covers than expected and prepared for, the waste per cover increases by ~25% than when expected cover numbers are met or exceeded.

5

Businesses open 5 days reported ~50% more spoilage waste per cover than businesses open 6-7 days.





Phase 2

Intervention



75% of the Kai Keepers participants joined the programme primarily to reduce their operational costs, a critical consideration given pressures posed by a challenging economic environment, rising labour costs, and increasing produce prices.

Data from the baseline measurements helped to identify themes and insights. These were further explored through a literature review and a series of focus groups to stress test findings.

Quotes & insights from participants:

On portion sizes...

"We do half-size portions for people that don't want to eat as much. It's better for your gross profit because we're not selling at half the price, we're selling at 65% of the price, but older people are going to happily come in and pay that."

On reducing kitchen waste...

"Our food waste is relatively minimal in the kitchen because our executive chef and his team keep a very close eye on what they're ordering and the processes. And we actually have a waste tracker that's sent to myself and the general manager every morning."

On staff meals...

"In a way, it's a nice perk for the staff if we have got something left over. I'd rather give it to my staff than sell it to someone at 50% off."

On upselling items...

"It's quite good to get a list of the items that you know are getting close to becoming waste. We'll run a little upsell competition which our younger staff members love. They really get behind it, and that just gets the food out real quick."



Phase 2

Intervention



Four interventions were designed to be tested.

1 **Keep customers happy with a flexible or reduced meal size on the menu**

Common offenders of high plate waste were identified and a new portion size for the menu created. This involved either creating a flexible smaller portion option, or adjusting a component on a dish to reduce plate waste. Staff were encouraged to recommend this updated menu option.

2 **Keep preparation waste to create a new dish**

By reimagining their preparation waste, chefs were encouraged to flex their creative muscles by creating something new, giving customers more variety and improving profitability and sustainability.

3 **Upsell competition to prevent spoilage**

Operators and their teams (chefs, managers) were asked to monitor food items, or ingredients likely to spoil or not sell. Front-of-house staff were encouraged to upsell these items, using a competition approach, to reduce waste.

4 **Utilise food which can't be sold for staff**

Chefs identified prep waste, or food unable to be sold, as a potential ingredient for staff meals (or in the case of cabinet leftovers, as staff giveaways). Thus reducing food waste and providing employee perks.



Materials to support



Posters

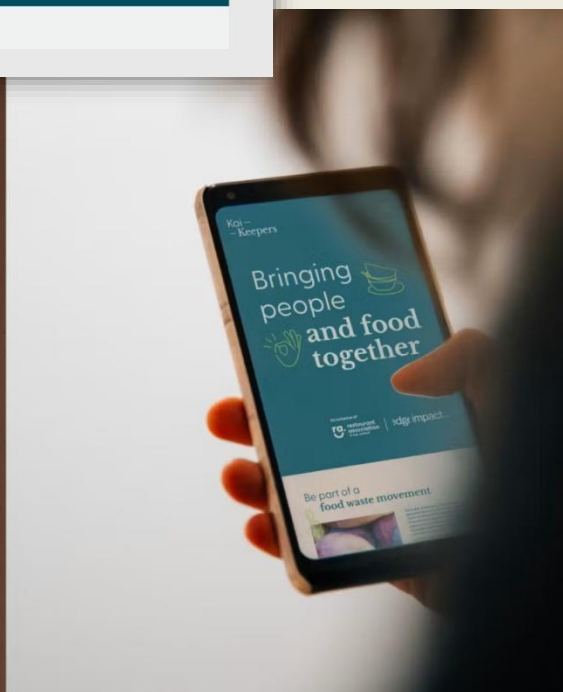
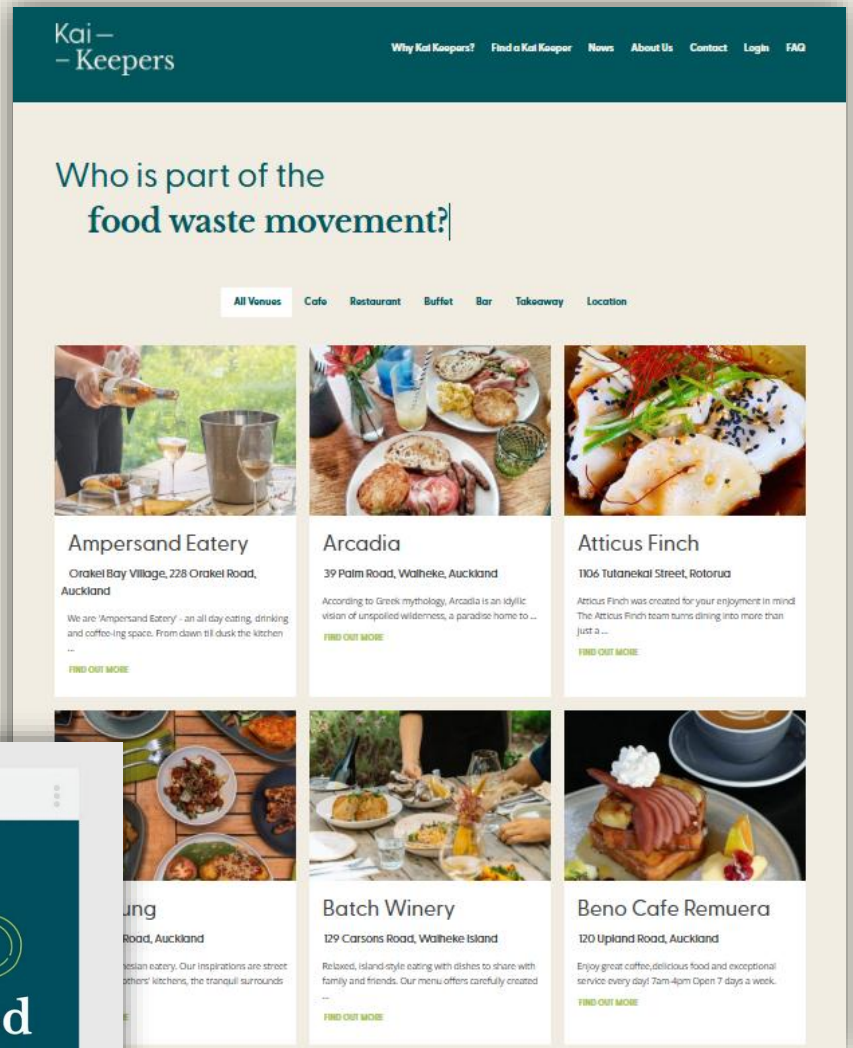
Table Talkers

Menu Inserts

Business Cards

Website

Social Assets





Key findings

phase 2 – Intervention

Across all businesses that took part, food waste dropped by an average of 22 grams per customer served (a 16% reduction) between baseline and intervention stages. This might not sound like much per person, but across thousands of meals, it adds up significantly!

Average waste reduction per cover:

The average waste reduction across all initiatives for each meal reduced from 134 grams of food waste to 112 grams (16.4%), marking a significant reduction across all interventions.

This equates to a \$0.15 savings per cover.

Food waste environmental impact:

On a monthly basis, this reduction equates to 5.3 tonnes of food waste avoided, preventing more than 6 tonnes of CO₂-e emissions. That's equivalent to eliminating 30,462 kilometres of travel in a medium petrol-powered car.

The cost savings of reducing food waste:

The 5.3 tonnes of avoided waste across all interventions totals approximately \$41,096 each month in total savings.





Key findings



Intervention 1

Smaller portion menu options – reduce plate waste, prep, spoilage

- ↓ 20.6% reduction in **total food waste per cover** (highest overall), from 134g to 108g
- Marginal reduction in plate waste (↓ 1.45%)
- Biggest gains in prep waste reduction (↓ 43.2%) & spoilage (↓ 33.3%)

Food waste environmental impact:

- Per month, the waste reduction resulted in **1.4 tonnes of CO₂-e emissions avoided**, the equivalent of **6,815 kilometres** travelled in a medium petrol-powered car.

The cost savings of reducing food waste:

- Per year, the average hospitality business in this group could save up to **\$8,941.20**.

Intervention 2

Reuse prep waste in a new dish – reduce prep waste via menu innovation

- ↓ 17.5% reduction in total food waste per cover (36.5 g)
- Statistically significant decrease in prep waste (↓ 28 g, or 55%)
- Customer response: 92% positive/very positive.

Food waste environmental impact:

- Per month the waste reduction resulted in an estimated **1.2 tonnes of CO₂-e emissions avoided**, the equivalent of **6,184 kilometres** travelled in a medium petrol-powered car.



The cost savings of reducing food waste:

- Per year, the average hospitality business in this group could save up to **\$3,436.44**.



Key findings



Intervention 3

Upsell at-risk stock – prevent spoilage through staff-led sales

- Largest proportional reduction in total food waste (across all groups)
- ↓ 20% reduction in total food waste per cover (27 g)
- Spoilage ↓ 50% (largest proportional drop)
- Customer response: 84% positive/very positive.

Food waste environmental impact:

- Per month the waste reduction resulted in roughly **1 tonne** of CO₂-e emissions avoided, the equivalent of 5,283 kilometres travelled in a medium petrol-powered car.

The cost savings of reducing food waste:

- Per year, the average hospitality business in this group could save up to \$7,435.32.

Intervention 4

Redirect unsold food to staff – create staff perks

- ↓ 17% reduction in total food waste per cover (21 g)
- 70% of venues reduced overall waste; unsold category data mixed due to reporting changes
- Avg. 704g/day redirected per venue

Food waste environmental impact:

- Per month the waste reduction resulted in roughly **0.8 tonnes** of CO₂-e emissions avoided, the equivalent of 4,193 kilometres travelled in a medium petrol-powered car.



The cost savings of reducing food waste:

- Per year, the average hospitality business in this group could save up to \$5,797.32.

Combined results



1

On average, food waste per cover declined by 16.4% from baseline to intervention phases.

2

Even the control group recorded a reduction of 16 grams per cover (12%), suggesting that measurement and awareness may themselves contribute to waste reduction.

3

Waste reductions were observed across all major categories (plate, prep, spoilage), with the most notable decreases seen in spoilage and unsold items.

4

Even after interventions, most waste continued to occur during preparation (39%) and from customer leftovers (36%), highlighting key areas for ongoing reduction.

5

Interventions worked best when they directly targeted the specific reason why food was being wasted – eg you get the best results when your solution matches the actual problem.



What we heard from businesses



The Good News

- "It was surprisingly simple" – Most businesses found the changes easy to implement with minimal disruption
- "Customers loved having options" – Diners appreciated portion flexibility and were interested in sustainability efforts
- "Staff felt proud" – Teams enjoyed being part of something positive
- "It made us think differently" – Businesses became more aware of their practices and started making other improvements too.

A key theme that emerged was the importance of staff engagement.

While initial behaviour-change efforts required effort, particularly around modifying ingrained routines such as how plate waste was disposed of, most participants reported that staff adjusted quickly.

Several businesses introduced tailored internal processes to support this, such as updating front-of-house run sheets, briefing teams in advance, or creating custom spreadsheets to track data in ways that aligned with existing operational systems.



Lessons learned



1

Interventions work best when they align with existing rhythms.

2

Pairing interventions enhances impact.

3

Messaging matters: Framing changes around quality, efficiency, and ingredient care motivated staff more effectively than compliance-driven narratives.

4

Peer learning drives innovation: Facilitating exchange of knowledge between businesses would strengthen future programmes.



For hospitality businesses this means that small changes can make a real difference:

- **You don't need expensive technology** – Simple awareness and measurement tools work
- **Customers respond positively** – People appreciate portion options and sustainability efforts
- **Multiple approaches work** – Choose what fits your operation best
- **It's not just about waste** – Businesses also reported better stock control, improved staff awareness, and enhanced reputation.



Recommendations



1 Provide flexible intervention options that suit different service models

WHY?

- Interventions delivered different levels of impact depending on venue type and operational context.
- Interventions closely aligned with daily kitchen operations are highly effective.
- Bundling compatible interventions, such as pairing portion control with improved prep management, may also enhance outcomes while supporting behavioural change.

2 Embed waste tracking into existing routines

WHY?

- Accurate measurement is critical to identifying intervention success, particularly for preparation and spoilage waste.
- Intervention 2 achieved a significant 55% reduction in preparation waste because these waste streams were easier to measure consistently.
- Programmes should encourage integration of tracking into existing workflows.



3 Pair front-of-house and back-of-house actions where appropriate

WHY?

- Future delivery should promote complementary intervention pairs to strengthen outcomes and build engagement across all staff roles

Recommendations

4 Facilitate peer learning and resource sharing

WHY?

- Peer-to-peer learning (such as sharing recipes for prep waste or upsell strategies) was identified as a valuable enabler. Future programmes should build in opportunities for venues to exchange practical insights.

5 Focus messaging on quality, value, service



WHY?

- Positive customer responses to smaller portion sizes (35% very positive, 40% positive) indicate that framing interventions around quality and value improves uptake.
- Messaging should continue to emphasise customer experience, particularly when interventions alter portion sizes or menu items.

6 Allow for gradual or phased implementation

WHY?

- Interventions requiring operational adjustments benefited from venues trialling changes incrementally.
- Providing the option to phase adoption will help businesses refine practices and embed behaviour change.





Recommendations

7 Provide clear feedback on results

WHY?

- Measured outcomes were a key motivator for participants.
- Feedback loops that show reductions in waste, cost savings, and other benefits should be continued, as they help reinforce engagement and sustain improvements.



“We loved being part of this great initiative. The trickle-down effect has been long lasting for our business and unified our team in our efforts to reduce food waste.”

Focus group participant



The Big Picture

Aotearoa New Zealand hospitality businesses generate significant food waste, but Kai Keepers shows we can do something about it. The participating venues in the Kai Keepers pilot served over 239,000 customers during the trial period and recorded more than 26,000 kilogrammes of food waste –with clear reductions across all types of waste.

This isn't just about being environmentally responsible (though that matters). It's also about:

- Reducing costs (less waste means less money thrown away)
- Improving operations (better planning and stock control)
- Enhancing reputation (customers value sustainability)
- Supporting staff (through food redistribution and pride in their workplace)

With the right support, Aotearoa New Zealand's hospitality sector can significantly reduce food waste while maintaining high service standards.

For businesses interested in reducing waste, the Restaurant Association can provide guidance, tools, and connections to other businesses making similar changes.

For policymakers, this pilot shows that targeted, practical support for hospitality businesses delivers measurable results which can be enhanced at scale

Want to know more? Contact the Restaurant Association of New Zealand – info@restaurantnz.co.nz - to learn how your business can reduce food waste and join the growing movement of Kai Keepers across Aotearoa.

About the Kai Keepers team

Restaurant Association of New Zealand

As the voice of Aotearoa New Zealand's hospitality industry, the Restaurant Association provides vital support to restaurants and cafés and other hospitality businesses across the country. We offer guidance on compliance and legislation, expert advice on business and employment challenges, and resources to help operators navigate a complex and ever-changing industry. Through training programmes, advocacy, and industry insights, we empower our members to make informed decisions, grow their businesses, and thrive in the vibrant world of hospitality. Learn more about the ways we support the industry on our [Why Join](#) page.

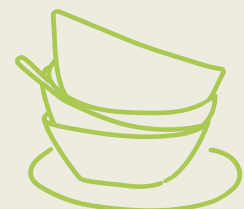
Thousands of restaurants and cafés consider the Restaurant Association their secret weapon for success.

www.restaurantnz.co.nz

Edge Impact

Edge Impact is a full-service global impact consultancy combining science, strategy and storytelling in partnership with motivated leaders, organisations and industries to reimagine sustainability for positive impact.

www.edgeimpact.global



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