



## BRISTOL GOING FOR GOLD

# GUIDE TO FOOD WASTE REDUCTION

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JUNE 2019

## Introduction

### Who is this guide for?

This guide has been compiled particularly for restaurants, cafés, hotels and caterers based on research carried out in Bristol with local and national organisations working in the city. The guide includes case studies from a range of organisations and aims to provide real-world practical advice for food waste reduction that goes beyond having a separate food waste bin (although we recommend this too), and has positive financial and environmental benefits.

### What is the Going for Gold campaign?

Going for Gold is a Bristol-wide bid to be recognised as a Gold Sustainable Food City. Sustainable Food Cities is a national programme that celebrates and supports communities that are making positive changes to their food system. As one of the first three cities to achieve Silver status, Bristol has already shown that it has the motivation to make Good Food part of the city's identity. Now, individuals, organisations and policy makers are joining together to make big and lasting improvements across six key Food Action Areas: Buying Better, Food Waste, Urban Growing, Community Action, Eating Better and Food Equality.

### Why is Going for Gold focusing on food waste?

The time is also right for Bristol to focus attention on food waste – a significant issue with environmental, economic and social consequences. The role that cities can play in reducing food waste is attracting more interest internationally and Bristol has some fundamental building blocks in place, upon which we believe our food waste ambitions can be developed. Our ambition is to become a Zero Food Waste city by establishing the food waste hierarchy (reduction, redistribution and recycling) across the food supply chain within Bristol and demonstrating a shift in emphasis towards food waste reduction. Ending food waste is a major contribution to reducing our impact on the environment and in creating a food system that meets the needs of the global population. Wasting food wastes land, energy, fuel, and water in its production, transport, storage and cooking.

### What do we mean by food waste reduction?

Many people think that food waste reduction is putting food waste in a separate bin and organising a collection to a recycling facility. But whilst this is important, food waste reduction actually goes to the heart of why food is becoming waste in the first place, and offers many financial and environmental benefits to your business.

#### WHO ARE WE?

This guide was compiled by **Livvy Drake** [sustainablesidekicks.com](http://sustainablesidekicks.com) on behalf of **Bristol Food Network** [bristolfoodnetwork.org](http://bristolfoodnetwork.org) as part of the **Going for Gold** campaign [goingforgoldbristol.co.uk](http://goingforgoldbristol.co.uk)



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## Reasons to tackle food waste in your business

### Financial

- All food that goes in the bin is food a business has bought, paid staff to prepare and bought energy to heat and light. This fun video captures food waste very cleverly: [https://drive.google.com/open?id=1\\_IeJIn2uWmgVWHHVpAnT\\_RkyVTQONY5j](https://drive.google.com/open?id=1_IeJIn2uWmgVWHHVpAnT_RkyVTQONY5j)
- By reducing food waste, you can reduce your waste management costs.

### Environmental

What happens to food waste in the general waste bin will depend on your waste contract but these are the issues:

- Food waste in landfill releases methane which is a 25 times more dangerous greenhouse gas than carbon dioxide.
- If food waste is sent for waste-to-energy it is wasting a precious resource which could be used for fertilising future crops.

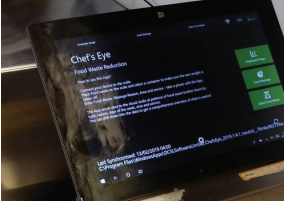
## Food waste facts

It is estimated that in the UK, the hospitality sector wasted £3 billion of food in 2016, with 0.92 million tonnes of food and 1.3 million tonnes of packaging being binned.

- A third of all food produced in the world for human consumption is wasted through the supply chain.
- New EU targets, which the UK Government should agree to, are aiming for a 50% reduction in food waste by 2030

## Top tips

Here are some simple tips to reduce food waste in your business:



### Monitor

- Monitor and measure your food waste: look at trimmings, overproduction/spoilage and plate waste separately.
- Record the data electronically (where possible). Record daily stats and then monthly you can analyse for trends.

### Out of date items/over-ordering

- Check daily orders reflect the peaks and troughs of the week.
- Order items like salad according to the seasons.



### Plate waste

- Look at what comes back on plates most often. Talk to customers about what is being left and why.
- Offer doggy bags as standard.
- Reduce plate and serving spoon sizes for canteens with high plate waste.

### Over production

- Batch cook.
- Adjust for days of the week.
- Be comfortable running out of some higher value items.
- Consider offering fewer food lines to reduce waste.



### Food waste diversion options available in Bristol

- Community Fridges  
<https://www.bristolfoodnetwork.org/blog/bristol-food-network-supporting-bristol-community-fridge-network/>
- Too Good To Go App <https://toogoodtogo.co.uk/en-gb>
- Olio <https://olioex.com>

### Trimmings

- Review if peeling could be less wasteful.
- Look for recipes for the peelings.
- Is onsite composting an option?

### Staff engagement – depending on your business, consider...

- Incentivising staff
- Setting targets
- A monitoring system
- Creating a culture of less waste

## SPECIAL OFFER!!

### Food waste monitoring offers for Going for Gold

- 10% off for the first 6 months of a contract with Chefs Eye Tech  
Quote code: G4GBRISTOL  
<http://chefseyetech.com/>



© Refill

## Packaging and plastics

Since Blue Planet 2 and now Hugh's War on Waste plastics and packaging is in the spotlight with businesses and customers. If you are looking at ways to show your customers you are committed to reducing plastics and packaging – here are some easy wins. You could also retweet campaign messages to show your support.

- Offer free tap water bottle refills to people and join the Refill movement so people know you offer this. Join at [Refill.org](http://Refill.org) and request a sticker
- Encourage customers to bring a reusable coffee cup and lunch box with clear messaging. Refill More is coming soon.
- Research has demonstrated that charging extra for disposables works better than discounts as a way to encourage people to bring reusables.
- Replace cling film with reusable containers. The upfront costs will be outweighed by the longer term savings.
- Be wary of switching to packaging made of compostable or bioplastics. These can't go into food waste kerbside collections and if they do, will only get pulled out during a depackaging process. They also don't breakdown if they become litter.

These tips came from Refill – for more ideas head to the [Refill.org](http://Refill.org) website.

## Case studies

### Bristol businesses tackling food waste

To demonstrate how businesses of different sizes practically reduce their food waste we have gathered case studies from a range of Bristol businesses. Case studies include large scale caterers, cafés and restaurants. In partnership with Chefs Eye Tech we also ran a food waste monitoring pilot with three businesses over a 3 month period (Jan–March 2019): Bristol University Churchill Hall, Tincan Coffee and Thali café. The pilot enabled each business to monitor their food waste impacts and take action to reduce this.

### About the Chefs Eye Tech trial

The Chefs Eye Tech system includes a set of weighing scales with a tablet dashboard that takes a picture of the weighed food. All the data is then uploaded to an online dashboard where the information can be monitored and compared to look for trends in food waste. In other trials, using the Chefs Eye System has been proven to reduce avoidable food waste by 23%, and help lower purchasing costs by 2%.

Over the three month trial period in Bristol, participants measured their preparation, production, and plate waste separately at the end of each service. At the end of each month they were given a report by the Chefs Eye team and feedback on areas where they had high levels of waste or where significant trends had presented over the weeks. With this information participants could choose to monitor particular areas more closely to see what was becoming food waste, e.g. what food types were becoming plate waste, and then take measures to reduce them.



Feeling inspired to take action in your food business? Then head to the Going for Gold website: [www.goingforgoldbristol.co.uk](http://www.goingforgoldbristol.co.uk)

- for information on the latest business breakfasts
- to share your actions
- to check out the other guides and support information, including on procurement
- for a guide to food waste disposal and companies in Bristol

# CAFÉS/RESTAURANTS

## Friska

<https://friskafood.com>

### SNAPSHOT

**Friska uses bonuses to incentivise staff to reduce food waste and has a formula to manage pre-packaged food in the chillers.**

### Background

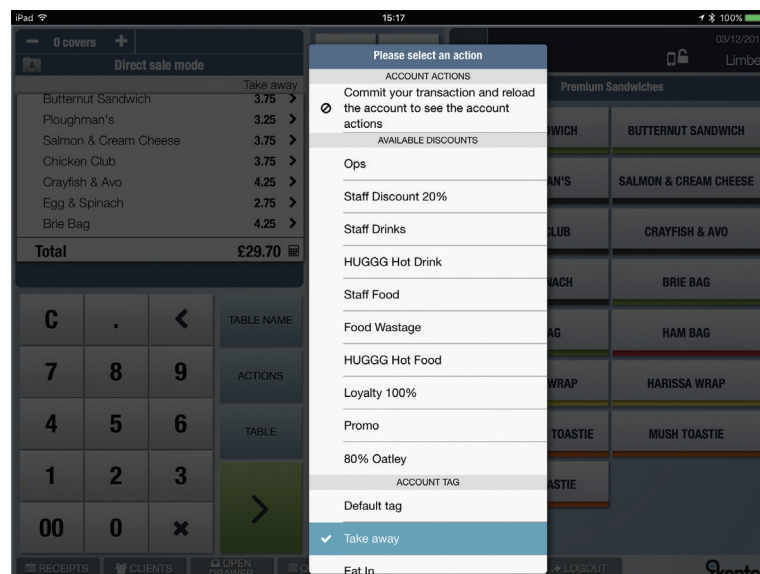
Friska is a quick-serve restaurant chain that started in Bristol and now has seven outlets in Bristol and another three around the country. Their business comprises 85% takeaway lines with a range from snack pots and sandwiches to hot boxes.

### Motivations

Friska perceive food waste as commercially costly and as a responsible company they feel that everyone should do their bit.

### Methods

They have been monitoring food waste for many years by recording any unsold items through their till system and recording kitchen waste through their bespoke custom monitoring system.



As a business they work on a margin of food waste costing 2% of the overall revenue. Each Friska outlet gets bonuses based on their gross margin, so teams are incentivised to tackle food waste as it negatively affects their margins and bonuses.

Their biggest challenge is forecasting pre-packaged cold food for their quick-serve chillers. Whilst selling out of lines avoids food waste, it also means that the store could have potentially sold more. The Friska formula to manage this is to aim for one item of wastage a day. So, if food waste = 0, they should increase production by 1 for future days. If food waste = 3, they reduce by 2. They use the Olio app to give away leftover items for free.

### TIPS

Record data electronically, even if this means typing up manual records. Use Olio to give away unsold food .

### Advice

One of the founders of Friska, Griff Holland, suggests that manual recording is a waste of time – unless it is electronically recorded a business can't analyse the data or find insights into the trends of when food is becoming waste. Also, he recommends using bonuses to focus the team to tackle food waste.

## Poco Tapas Bar

<https://pocotapasbar.com/>

### SNAPSHOT

Poco uses a Nose to Tail/Root to Fruit ethos to aim for minimal food becoming waste or even compost.

### FACTS AND STATS

#### COVERS

550–750 per week

#### STAFF

17 employees plus  
3 directors

#### FOOD WASTE

30kg plate waste,  
90kg compost per week  
(average)

### Background

Poco began as a festival caterer, setting up a café in St Pauls in 2011. The founding team include well-known chef Tom Hunt. The ethos of the business is seasonality, locality and sustainability.

### Motivations

The driver for Poco team reduce food waste is the knowledge that one third of food created for human consumption is wasted.

### Methods

They have adopted the 'Nose to Tail'/'Root to Fruit' policy for preparing veg and animals, as coined by St John's restaurant in London. This means that they use all parts of an animal and vegetable with recipes such as:

- pigs head terrine and suet dumplings
- fish skeletons for stock
- radish leaves for salads
- Non-peeled veg

Due to their flexible menu, they can create 'rescue recipes' to use short-life items up.



Poco uses courgette flowers as part of their 'Root to Fruit' ethos.

To reduce plate waste, they recommend customers order tapas in rounds rather than over ordering and offer doggy bags for any leftover food. They also engage with their customers to understand why things are becoming waste e.g. too much chutney on a cheese platter.

Coffee grounds are bagged up and left at the door for customers to take to their allotments.

### Monitoring

All food that does become waste is weighed and results collated into an online chart so it can be monitored against the menu. This allows them to see how it fluctuates depending on how busy they are and what they are cooking e.g. Brussel sprout stalks that can't be used.

### Advice

Weigh food waste and look at what is going in the bin. Don't be afraid to experiment with recipes that tackle food waste and talk to customers about what they are not eating on their plate.

### TIPS

Offer doggy bags to all customers for any leftover food.

## Tincan Coffee

<http://tincancoffee.co.uk/>

### SNAPSHOT

**Tincan Coffee** reuse breakfast items to create new lunch lines – like filled croissants and cakes made from pastries.

### FACTS AND STATS

#### COVERS

**160–260 per day**

#### STAFF

**10 (6 full time)**

#### FOOD WASTE

**22–42 kg per week**

### Background

Tincan Coffee has two coffee shops in Bristol. Their North Street branch has a kitchen and serves brunch from 8am–3pm. They serve between 160–260 covers a day. The Tincan Coffee participated in the food waste pilot from mid-January to mid-March 2019 which coincided with a new chef starting who had a strong waste minimisation ethos.

### Motivations

Everyone in the team hates wasting food and as a small business they don't want to waste money either. Head Chef Eduardo says:

*“As a Chef you can't just cook the food and go home. You have to look after the customers, everyone around you and the environment too. I live on this planet and I want to have children and for them to have a home.”*

### Methods: Reduction

Due to the size of the kitchen they arrange daily deliveries so food gets regularly used and replaced. Brunch is made to order.

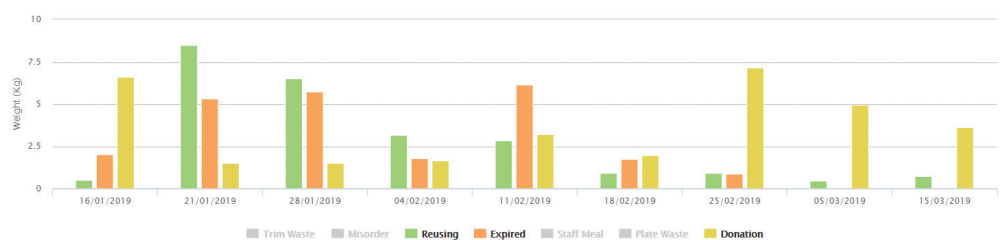
To avoid fresh pastries becoming waste, croissants are turned into lunch items with mozzarella and tomato fillings. Pastries and muffins are used to make cakes.



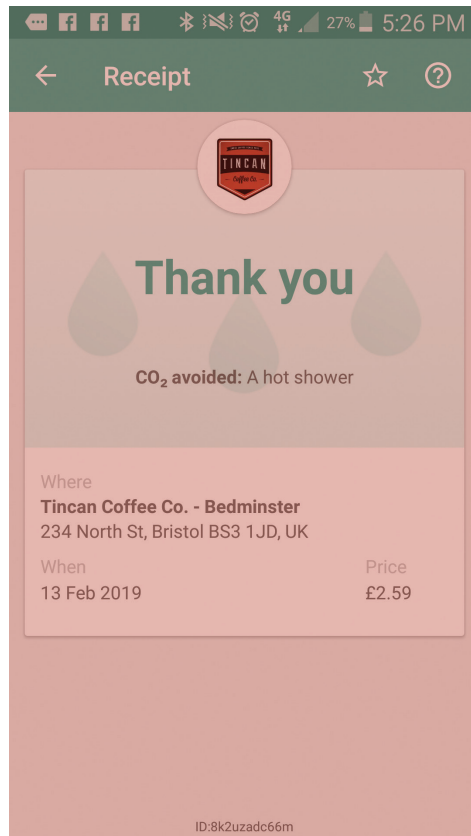
The dark choc loaf was made with surplus muffins and pastries

The front of house team has a 'cake book' which holds all cake use by dates. This allows them to promote the cakes that need eating first before they bring other cakes out for sale.

In the late afternoons, anything that is left, is either discounted or made available on the “Too Good to Go” app, where people get a magic bag of food worth £5.95 at the reduced price of £2.50.



This graph from the Chefs Eye Tech software shows how much food waste reduced with the use of the Too Good to Go app



The Carbon savings displayed on the Too Good to Go app

### Methods: Recording waste

Tincan uses Izettle Pro. software to record data as they cashing up. They also joined the three month pilot with Chefs Eye to verify their monitoring processes.

The management team do a monthly stock take and monitor their Gross Profit which has helped highlight high food waste.

### Advice

One of the owners, Jessie Nicolson, recommends leading by example with a top-down ethos of waste reduction so people know you care.

The front-of house manager, Victoria Simpson, recommends *“being comfortable with selling out of lines like cake, as long as there are others available. Less choice is better than waste.”*

#### TIPS

Manage expiry dates of cakes with a book and discounts and don't be afraid to sell out of lines to avoid waste.

## Thali Café

<https://www.thethalirestaurant.co.uk/>

### SNAPSHOT

Thali Café batch cook in one kitchen for use across their suite of restaurants, and assess service peak trends to avoid over prep.

### FACTS AND STATS

COVERS  
300–400 average  
across 5 sites per day

STAFF  
83 people

FOOD WASTE  
100–120 kgs per week

### Background

Thali Café is a Bristol-based Indian restaurant chain with four sites around Bristol. They employ around 80 people. For consistent quality across the business the food preparation is done in a central production kitchen. Thali café participated in the food waste pilot from mid-January to mid-March 2019, and used the opportunity to double-check their existing food monitoring system.

### Motivations

Thali Café is committed to waste reduction and has been pioneering the Tiffin collection scheme for many years.

They understand that it is not just the ingredients and the food preparation that is wasted but also the energy used through chilling and transportation that are being wasted.

### Methods: Recording waste

Each restaurant measures food waste at the end of the day and records this in a central online Excel spreadsheet which all the core team can access and monitor.

Thali Café also trialed the Chefs Eye software to check their existing processes.

They don't punish people or give rewards but build trust with the team so people can be honest about how much is left.

### Methods: Reduction

Having one kitchen reduces food waste because fresh produce is kept in one place for production. In the restaurants, batch cooking is the key to waste minimisation. The biggest challenge is teaching new staff when to reheat curries based on peak times and forecast covers for each day of the week.

### Advice

Head Chef, Pepe Blanco, says *“Don't be afraid to run out of food, especially the expensive dishes”*. Thali Café would expect to run out of their lamb and paneer dishes on a service as these are expensive dishes to waste.

### TIPS

Understanding the peaks of service for each day is essential to avoid over preparation.



# CATERERS

## Baxterstorey

<https://baxterstorey.com/>

### SNAPSHOT

BaxterStorey have a programme of training that they deliver in bitesize 20 minute chunks at the end of service.

### FACTS AND STATS

Since 2014 BaxterStorey have achieved a 41.61% reduction in food waste and prevented 6,222 tonnes of food becoming waste.

### TIPS

Butternut squash peelings make great crisps.

Orange peelings are the basis for marmalade.

### Background

BaxterStorey is an independent UK hospitality provider, with clients in Bristol including Burgess Salmon. Their ethos is based on a decentralised supply chain providing local, seasonal and fresh food. BaxterStorey is a founding member of the Hospitality and Food Service Agreement, a voluntary agreement to support the sector in reducing waste and recycling.

### Motivations

As well as being motivated by the environmental and social impact of food waste, BaxterStorey is also mindful of the economic impact and the cost to their clients that come with disposing of food waste generated within their facilities.

### Methods

BaxterStorey has developed a training programme called Green Flash. Rather than running an intense three-hour training session, modules are delivered to staff after food service in 20-minute bite size chunks.

As creative caterers, BaxterStorey see vegetable peelings as valuable ingredients: they often deep fry seasoned butternut squash peelings and use orange skins from orange juicers to make into marmalade for charity.

### Methods: Recording

Recording food waste is built into their accounting processes so chefs can't close off the week without providing food waste figures. Mike Hanson, Head of Sustainable Business, recites the old adage "*if you can't measure, you can't manage*". Just the act of measuring food waste makes staff more conscious and conscientious.

### Advice

Menu your plan based on the popularity of dishes. For example, you will sell half as much lasagna on a Friday if fish and chips is also on the menu, versus roast beef on a Tuesday.

For caterers operating Monday to Friday, Mike recommends adjusting milk and bread orders throughout the week. You won't need the same amount of milk on a Friday if you have surplus from the days before.

## Bristol University Halls

<http://www.bristol.ac.uk/accommodation/undergraduate/residences/churchill/>

### SNAPSHOT

**Bristol University Halls of Residence has discontinued and reduced dishes following monitoring of plate and over-production waste with significant savings.**

### FACTS AND STATS

COVERS

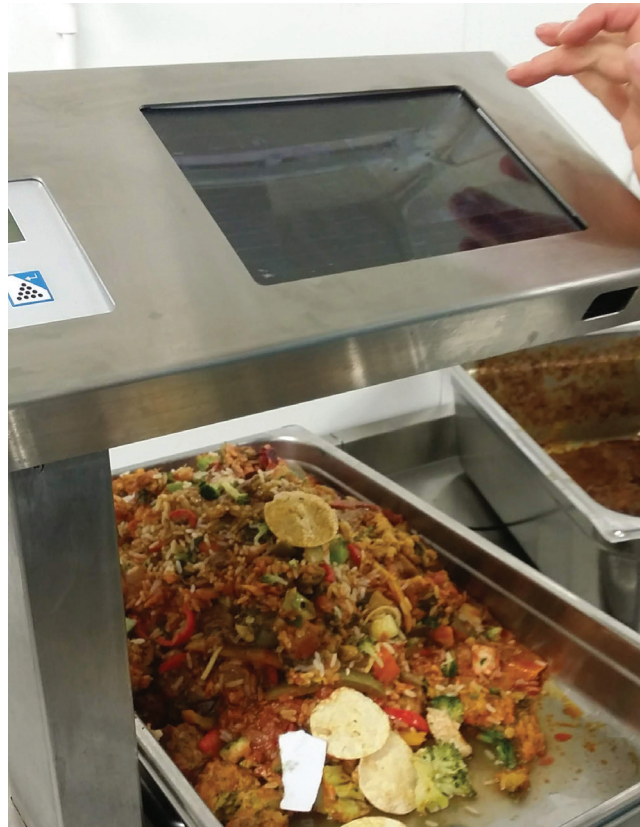
**700 per day**

FOOD WASTE

**460–496 kgs per week**

### Background

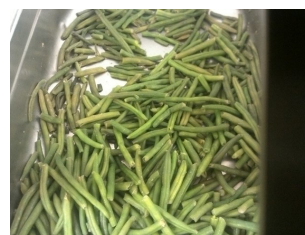
Churchill Hall is a University of Bristol serviced halls of residence that provides meals for up to 350 covers during both breakfast and dinner service. Churchill Halls joined the three month trial using the Chefs Eye system, and have now extended the trial for one year to all their catered halls.



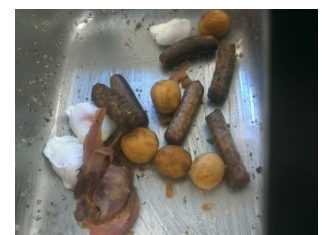
The Chefs Eye system has a set of scales with a tablet interface that takes a photo of the food waste and records the type and weight on an online dashboard.



Onion peelings



Over-production of vegetables



Over-production of breakfast items

### Motivations

As well as the sustainability impacts and costs of overproduction, Churchill Hall is looking to develop a food court style service so they are keen to understand more about where food waste is occurring.

### Methods: Recording waste

The university collected different waste types separately in chaffing dishes and weighed them at the end of service. This produced separate entries and pictures for over-production waste, peelings and plate waste.

**Methods: Reduction**

During the 3 month project period Churchill Hall was able to reduce the over produced food items’ volume (still edible but unserved food items) by 22% a month – equating to 150kg and £250 compared to the first month of using the system. The biggest reductions were achieved on desserts where over production was reduced by 70%, and salads, where a 42% (26kg/week) reduction was achieved.

By reviewing the data on the Chefs Eye dashboard, the Head Chef, Rob Smith, has reduced:

- hot breakfast items
- vegetables for dinner
- vegetarian dishes
- the size of serving spoons
- and stopped serving some dishes altogether.

To reduce their food waste costs, Churchill Halls are now composting their raw peelings, egg shells and coffee grinds on site.

Plate waste was identified as a major issue so an awareness day was organised to collect information on which items were specifically left uneaten on students’ plates and why this was occurring. The students’ feedback was captured through surveys on portion sizes, food quality and service method (self-service vs served food).



**Advice**

The Residential Catering Manager, Kate Butler, recommends listening to what customers say and to be open to suggestions.

Also, if forecasting numbers is hard then batch cook food rather than overcook, and plan menus so items can be used on the following day e.g. blast chilling chicken for salads.

**TIPS**

Engage with customers on what and why items are being left.

## St Monica Trust

<https://www.stmonicastrust.org.uk>

### SNAPSHOT

**St Monica Trust reduced portion sizes to suit guest appetites and reduced their food lines to reduce waste. Started their own on-site community fridge for staff.**

### FACTS AND STATS

#### COVERS

**600–700 per day**

#### CATERING STAFF

**250**

#### FOOD WASTE

**355kg for John Wills House for February 2019**

### Background

St Monica Trust is a care home provider with three properties around Bristol and two more in the South West.

### Motivations

When the current Catering Development Manager, Adrian Kirikmaa, joined the organisation each kitchen had a macerator so food waste was put down the sink. One weekend a macerator stopped working and Adrian was shocked at the bags of food waste that had built up over the weekend, so he started putting in measures to record and reduce it.

### Methods: Recording waste

Moving from macerating to a compost food collection from GENeco allowed them to weigh the food waste, but this didn't identify the types of food being wasted. By using the Chefs Eye System in one kitchen, St Monica's was able to also understand what food groups were being wasted and when.

### Methods: Reduction

To tackle plate waste, the menu was revised to become a lighter, healthier menu. Smaller plates were used for service so the portions were reduced making them more suited to the appetite of the guests. The range of menu options were also reduced to reduce production waste.

Adrian noted that, unlike commercial kitchens, there wasn't a focus on the financial impacts of food waste. To change the culture in the kitchen he brought in chefs from more commercial backgrounds and set targets for a 10% food waste reduction.

By monitoring the data, Adrian could see that veg trimmings accounted for 40% of all food waste. They have now started composting on site which has reduced their food waste collection costs.

Any surplus cooked food is boxed up and put in their onsite community fridges for care home staff take home for a small donation. St Monica's even won the Waste2Zero "food redistribution" award for this initiative.

### Advice

If you are a big company, monitor your waste, it will save you money. Even paying for software like Chefs Eye and a food waste collection service is cheaper than binning food.

### TIPS

If possible consider composting peelings on-site to reduce food waste collection costs.



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