

Developing a Zero Waste Kitchen

Practical tips for
minimising food waste



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Introduction

This is a comprehensive guide to help kitchens reduce food waste and promote sustainability. Implementing these strategies can minimise waste, save costs, enhance efficiency and contribute to a more sustainable kitchen.

Food waste is a global challenge, with one-third of all food produced being wasted annually. This wastage depletes resources, increases greenhouse gas emissions, and exacerbates food insecurity. Winnow helps address the issue by offering technology to track food waste and provide actionable insights.

In this e-book, we explore five key areas for waste reduction: spoilage and damage, trimmings, overproduction, plate waste, and reworking ingredients. Each Section presents specific strategies, tips, and practical examples for a sustainable kitchen.

Whether you are a chef, kitchen manager, or foodservice operator, this e-book equips you with the knowledge and tools to make informed decisions, streamline operations, and minimise food waste. Let's embark on a journey toward a more sustainable future, one plate at a time

The importance of reliable data

Commercial kitchens have a powerful tool at their disposal to tackle food waste - the data provided by Winnow reports. Chef can analyse this data to gain valuable insights into their kitchen's waste patterns and identify major sources of waste. Highly consistent tracking increases the accuracy and reliability of these insights. Every time you throw food away, it should be logged as a specific item.

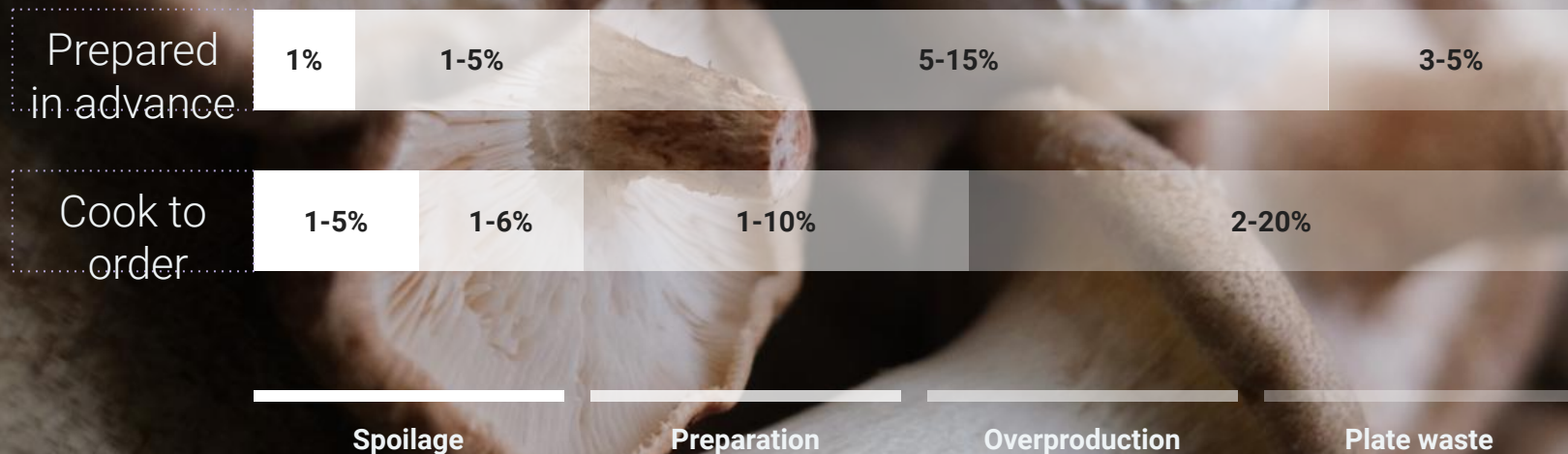
This is called Categorisation, and it is important for data quality. More data means more accurate daily reports and helps you to get the most out of Winnow. By categorising different types of waste as spoilage, trimmings, overproduction and plate waste - chefs can obtain a granular view of waste generation. This level of detail helps to pinpoint the specific areas and processes where waste is most abundant.

Drawing inspiration from successful waste reduction efforts, this e-book provides a collection of tips that have proven effective for other clients.

While not all tips may be suitable for every kitchen, they serve as a source of inspiration and can be adapted to fit specific circumstances. These shared experiences and success stories have helped many kitchens identify areas for improvement and make smart reductions in their food waste.



In kitchens 5%-15% of the food you buy is wasted



1.

Spoilage and damage

This category includes ingredients and food items that were never used in food preparation and were thrown away. In most commercial kitchens, this accounts for 10-15% of overall food waste.

Here are some tips to help reduce inventory food waste:



Label products with dates to ensure oldest items are used first



Regularly check the expiry dates on deliveries to ensure that you have sufficient shelf life until planned usage.



Maintain appropriate temperatures
Set a routine to check fridge and freezer temperatures, ensuring they are within the recommended ranges - +3°C (37°F) to +5°C (41°F) for the fridge and -18°C (-0.4°F) or below for the freezer.

1. Spoilage and damage



Before placing new orders, it is crucial to **conduct an inventory check to assess the existing stock**. This helps avoid over-ordering and ensures efficient utilisation of ingredients. Linking inventory management to production planning and forecasting allows for better control and reduction of waste



Ask yourself why certain items are repeatedly thrown away and find solutions to minimise waste in those specific areas. Additionally, limit the use of infrequent ingredients that are part of only one dish, as they are more challenging to manage and may lead to spoilage

2. Trimming

Trimming is the inedible remainder of food items, for example, watermelon rind, fish and pork bones. These account for 15-20% of the total food waste from commercial kitchens. Here are some tried and tested methods to reduce trimming waste:

I

When selecting fruits, **opt for varieties that require less trimming**, such as apples, guavas, strawberries, grapes, and cherries. Serving fruits with their peel can save both time and labor, reducing the amount of waste generated during the preparation process.

II

Consider **purchasing pre-trimmed ingredients** to save on labor and reduce waste. Additionally, repurpose trimmings creatively, such as using fish trimmings to make fish cakes or meat trimmings for patties



2.

Trimmings

III

Instead of discarding fruit and seafood trimmings, **find decorative uses** for them. For instance, serve food in a carved fruit bowl, like pineapple rice, or use fish heads or crab shells to decorate dishes.

IV

Don't let vegetable and fruit trimmings go to waste. Use them to **create flavorful broth bases** by combining items like prawn shells, fish and meat bones, vegetable stems, corn cobs, onion and garlic skins. Additionally, repurpose trimmings as garnishes or ingredients in other dishes



3.

Overproduction

Overproduction is any food prepared for customers but was never actually served and ended up in the bin. This category makes up 30-70% of a kitchen's food waste. This is a large proportion so making reductions can have a huge impact.



Monitor the number of covers to adjust production accordingly.



Discuss data from Winnow reports with your team, conveying the number of covers and reviewing production quantities. Set daily goals for waste reduction and encourage collaboration.



Opt for shallower containers when presenting buffet items. This maintains the appearance of abundance while minimising the quantity of food wasted.



Embrace on-demand food preparation at live stations to avoid overproduction. This approach allows guests to customise their orders while minimising excess food.

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Monitor leftover food and plate waste to identify unpopular dishes. Consider replacing or modifying these dishes based on customer feedback. Start by reducing portion sizes to gauge their impact on customer satisfaction.



Batch production: Prepare food in smaller, batch-by-batch quantities during meal service rather than pre-preparing large quantities. This ensures fresher food and minimises waste.



Reduce the size or fill level of containers, especially for highly perishable and high-value items, during the final hour of buffet service. Coordinate with front-of-house and kitchen staff to plan replenishment effectively.

4.

Plate waste

Plate waste refers to the uneaten food left on customers' plates after a meal. Addressing plate waste is crucial for reducing food waste in a kitchen. In this Section, we will explore strategies to minimise plate waste through portion control, menu adjustments, guest engagement, and creative repurposing.

a. Learn how to implement portion control measures

to encourage guests to take only what they can consume, reducing plate waste without compromising guest satisfaction.

b. Explore methods to engage with guests and raise awareness about food waste

including displaying informative posters, providing incentives for clean plate campaigns, and collaborating with the service team to promote responsible dining habits.

c. Offering a choice of portion sizes can cater to different appetites

and help prevent overeating, resulting in reduced plate waste and increased customer satisfaction.



4.

Plate waste

d. **Giving your guests the power to choose for themselves**

Encouraging your guests to portion their own food, and take away any unfinished food helps to reduce waste.

e. **Learn how the colour and shape of the plate can influence guest behaviour**

We have found that guests don't feel the need to fill non-white (eg. red) plates completely. So changing the colour of the plate can alter their behaviour.

f. **Menu review**

If some items are frequently wasted, take them off the menu or swap them in for something else



5. Reworking ingredients

Reworking food involves transforming leftover ingredients and trimmings into new dishes, maximising their utilisation and minimising waste. In this Section, we will explore creative ways to repurpose various food items, reducing waste and adding value to your culinary operations.

5.1

Measure food waste on a daily basis

Discover how to engineer a daily special promo menu based on leftover items from buffets, ensuring that no ingredient goes to waste while enticing customers with unique offerings.

5.2

Increase supplier delivery frequency

Learn how to rework boiled and scrambled eggs into delicious salads and fried rice, providing exciting alternatives to minimise waste.



5. Reworking ingredients

5.3

Simplify your menus

Explore techniques to repurpose leftover rice into comforting congee, flavorful fried rice, or hearty rice-based casseroles, transforming excess rice into satisfying dishes.

5.4

Plan for re-work

Discover creative ways to repurpose leftover sausages, bacon, meat carvings, and cold cuts, such as using them in pizzas, fried rice, or pasta dishes.



5. Reworking ingredients

5.5

Transform leftover bread and pastries

into delectable bread puddings, crispy croutons, or versatile breadcrumbs, minimising waste while adding texture and flavor to other dishes.

5.6

Explore ways to rework fruits

into refreshing juices, vibrant fruit salads, comforting soups, or infused water, providing delightful alternatives for excess fruits.



5. Reworking ingredients

5.7

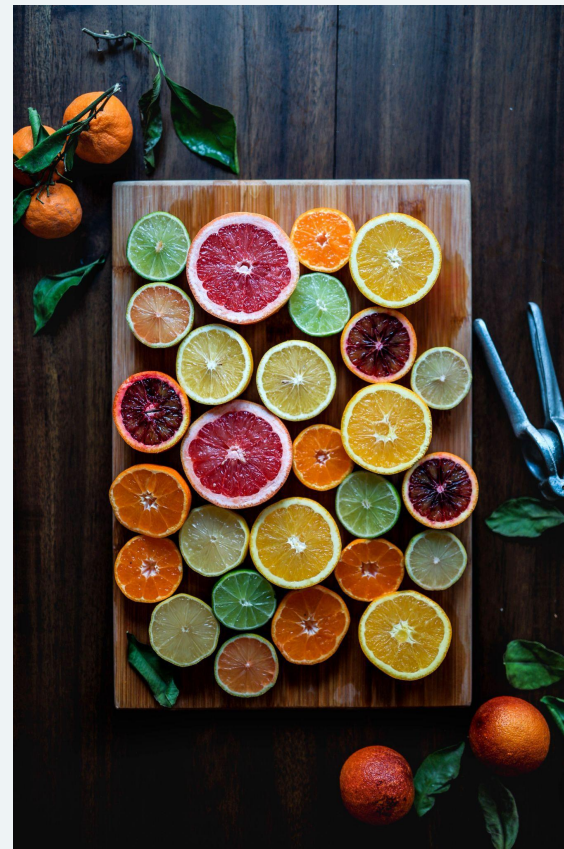
Discover methods to repurpose seafood trimmings

into flavorful soups, refreshing salads, hearty pizzas, aromatic curries, or tantalising pasta dishes, ensuring no seafood goes to waste.

5.8

Rework fresh vegetable trimmings

from the salad bar into hot dishes such as mashed potatoes, potato gratin, potato salad, or roasted tomatoes, maximising the use of these ingredients.





Your zero waste kitchen

By delving into the various aspects of food waste reduction, you have taken an important step towards a more sustainable kitchen. Yet, don't forget that reducing food waste is an ongoing journey which requires continuous commitment.

We encourage you to adapt and customise these strategies and tips to fit into your unique kitchen. Every kitchen is different, and the solutions that work for one may not be suitable for another. Embrace experimentation and creativity - don't hesitate to explore new methods of reducing food waste!

We would love to hear from you! If you come up with novel approaches or discover extra methods to make significant food waste reductions, please reach out to us.

Your insights and experiences are valuable not only for your own kitchen but also for the wider community of chefs and foodservice operators striving for sustainability. Together, we can create a collective impact and drive positive change in the industry.

Thank you for your dedication to minimising food waste and embracing sustainable practices. By making smart decisions, leveraging data, and fostering a culture of waste reduction, you are making a tangible difference in reducing both your environmental impact and your costs.

Keep up the great work, and let's continue our journey towards a greener, more sustainable food system.



About Winnow

Winnow was founded with a simple belief that food is too valuable to waste. Yet measuring food waste is a challenge for all commercial kitchens with up to 20% of all food purchased going to waste (typically 5%-15%).

Our mission is to connect the commercial kitchen, create a movement of chefs, and inspire others to see that food is too valuable to waste.

Winnow develops Artificial Intelligence (AI) tools to help chefs run more profitable and sustainable kitchens by cutting food waste in half.

From city centre hotels to casinos and cruise ships, Winnow offers a solution for every kitchen. Our analytics platform and reporting suite helps teams pinpoint waste quickly, allowing enterprises to drive significant waste reductions at scale.

Our hardware options range from simple digital measurement tools to our AI enabled Winnow Vision which 'learns to see' food being thrown in the bin. We understand that achieving and improving profitability in a professional kitchen can be a challenge. We will work with you every step of the way.

Get in touch to continue the conversation
[**info@winnowsolutions.com**](mailto:info@winnowsolutions.com)



Can Winnow Help You?

1. Interested in reducing food waste and cost?
2. Want to gain better understanding of food waste in your kitchens?
3. Are you spending ~100K\$/year on food in each of your kitchens?
4. Do you prepare some or most of your food in advance?
5. Does your organisation have more than 10 sites with kitchens?

If you answered yes to all of these questions, speak to one of our food waste experts to find out what reducing food waste could mean for your business.

[Get a Free Consultation](#)