



# **HOW-TO GUIDE**

Assessing Overall Food Waste

What do I need for a food waste survey?

A weighing scales (to weigh the waste)

Camera (to take pictures, to help remember/document your findings)

Note pad and pen





This 'How-To' guide outlines important basic information on food waste and how to undertake a total food waste survey. It is recommended to use this guide first to get a picture of where and how much food waste is being generated in the hospital. A more detailed survey can then be carried out using one of the two How-To guides developed for bulk food or centrally plated systems, depending on what system you use.

# Relationship between food waste surveys



Overall food waste survey (undertake first)

Depending on what system you operate



Detailed food waste survey
- bulk food system

Detailed food waste survey - centrally plated system



#### Why carry out a food waste survey?

Food waste can be a significant issue in any healthcare facility providing food to patients, residents or the public.

Until relatively recently food waste was essentially unseen, as it was disposed of in the general waste bin or using macerators. With the advent of the Food Waste Regulations, managers began to see the volume of food waste generated and the cost to take brown bins away.

In many healthcare facilities food waste is managed and disposed of by staff at the ward level. As a result catering staff, who are in charge of the efficient provision of food, do not get to see the quantity and type of food waste generated.

By carrying out a food waste survey, you can get a better picture of the food waste generated in your facility - the quantity generated in different areas, why it is generated and how it can be reduced. This can result in identifying significant savings for your facility.

## Work out how much food waste is costing you!

The true cost of food waste dwarves waste management costs - this cost lies in the purchasing of the food itself and the energy and staff costs to prepare it.

The purchase price of a kilogramme of food varies from high cost for meat and fish down to lower prices for foods like porridge and bread. On average, the cost to purchase food is €2 per kilogramme, so valuable food waste costs a minimum of €2 per kg.







# How to undertake a total food waste survey

This survey identifies the quantity of food waste generated in each area of the hospital where food is provided and food waste is generated. The survey will help you to identify the areas producing the largest quantity of food waste. You can then focus your food waste reduction measures on these areas.

The food waste survey should be undertaken on a **typical day** (usually mid week) for a full day. Where resources allow repeat the survey for a full week or over a number of days. The steps outlined below should be repeated for each of the meals.



#### Day before the survey:

Inform staff in the ward kitchens or areas where food waste is stored, that a survey will be taking place the next day, and that they should:

- carry on as normal and not change any of their practices

1.

- not dispose of food waste before the survey team has weighed it

It will also allow you to reassure staff that you only wish to determine the quantity of waste generated in each area and that they are not being audited or checked.

Compile a list of all of the areas with food waste bins and prepare a sheet, where you can record your weights data for each meal. Group the areas by floor or building to make it easier to identify the areas to visit.

#### On the day of the survey:

## Ensure that all food waste bins are empty at the start of the survey.

- 1. You can request staff to ensure all bins are empty before breakfast preparation commences. It is still best to check all the bins at the start of the survey. If you come across food waste in a bin make sure to weigh it.
- Weigh the food waste bin in each area after each of the meals (breakfast, soup if provided, lunch and tea), and record the value in your worksheet.
- Make sure to note if the food bin is missing a lid or is a different variety from the one used elsewhere in the hospital (e.g. mayo bucket or food tray)
- **3.** Ask staff the number of patients actually eating at each meal. This will allow you to assess the waste generated per patient in each area.
- 4. Make sure to check with staff if and when the bin has been emptied during the day e.g. after each meal or once at the end of the day. This is to ensure that you aren't double counting any food waste.
- **5.** Weigh a typical empty food waste bin. If other types of bins are used to store waste make sure to weigh these as well.

Don't forget to measure the food waste from the staff and public canteens and kitchen.

Naturally these are significant sources of food waste and should not be forgotten about when looking at measures to reduce food waste.







kg food waste

produced per ward

13%

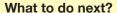
# How to undertake a total food waste survey continued



## After the survey - analyse your data:

You will need to analyse the information you have gathered during the survey. Some important things to remember when analysing your information:

- Subtract the weight of the empty food bin to get the actual quantity of food waste generated.
- If the food waste bin is only emptied once a day, make sure to subtract
  the weight recorded at the earlier meal, to get the actual waste generated
  at each meal. Likewise, if there was food waste in the bin at the start of
  the day subtract this from the breakfast value.
- The number of patients in each ward can vary. So make sure to express the food waste quantity per patient for each meal in each area, to allow you to compare like with like.
- Expressing the results in easy-to-read graphs may help you to convey the results to others. For example, the graph above makes it clear which wards produce the highest quantity of waste.
- Is there a consistent level of waste generated per patient eating? What is the reason for a ward or area having a very high level of food waste generation compared to others?



Using the information gathered in the detailed survey, you could consider undertaking a detailed food waste survey in your facility. This will help to determine the type of food waste generated and why food waste is generated.

Use one of the two How-To undertake a detailed food waste survey' guides, depending on whether your food supply system is bulk or centrally plated.

Ideally the survey should be carried out in a number of wards or, where resources are limited, in a selected ward. The selected ward could be representative of normal activity, or could have the highest level of food waste generated per patient, as identified in the overall survey. It is always best to focus resources on those areas generating the largest quantity of waste first.



Certain types of food waste have no value, for example meat bones, onion skins, etc. However, much of it does have value, and this is the type of food waste which should be focussed on for reduction. It is referred to as Valuable Food Waste in this guide.

Valuable food waste is generated in both the service of patients and canteens. The types of valuable food waste that can arise include:

Unserved food waste - food provided in bulk, that is not served to patients, and left in containers at the end of service. This food waste is usually disposed of straight from the container. Where bulk food systems are used the unserved food waste is generated in the wards. For centrally plated systems it is generated in the main kitchen.

Untouched food waste – this is plated food that was never touched or consumed in any part. For example, a patient is absent from the ward for a procedure, a patient is discharged, or a patient refuses a tray as feeling unwell, etc.



**Plate waste** - this is the food remaining on plates after a meal is finished.

