



# HOW-TO GUIDE

## Undertaking a Detailed Food Waste Survey - Bulk Food System



This How-To guide outlines how to undertake a detailed food waste survey in facilities operating a bulk food system. This How-To guide should be read in conjunction with the How-To assess overall food waste guide.

### Relationship between food waste surveys



Buckets/containers (to hold the waste/separate the waste streams)



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



A weighing scales (to weigh the waste)



Note pad and pen



## How to do a detailed food survey for a bulk food system

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.



### Before the survey

**Pick a ward in which to undertake the survey:** The ward can be a typical representative ward or a ward that generates a high level of food waste, either in total or per patient, as highlighted in the total food waste survey.

### On the day of the survey

1.	Ensure the food waste bin in the ward is empty. If the bin contains food waste from the night before, weigh the bin to ensure that you only record one day's worth of waste.
2.	Before the plating of meals, weigh each bulk container of food provided by the main kitchen. Record the quantity of each type of food separately as food provided in your notes.
3.	If possible weigh example portions of each type of meal. This information can be very beneficial to a number of staff, including catering and dietitians.
4.	After all of the meals are plated re-weigh each bulk container of food. Record this quantity as unserved food.
5.	Ensure that all plates are collected from the patients and returned to the ward kitchen without being cleared. Check each plate and put aside any meals that are still sealed (plastic wrap) or have not been touched in any part. Record the quantity of these meals as untouched food.
6.	Collect and weigh the food remaining on the patient plates. Record this quantity as uneaten food or plate waste. If you have time, as the plates are being cleared, separate the food into the different types of food i.e. put meat into one container, potato in another, mixed vegetables in another, etc. This can help you to identify foods which are not being consumed - too large a portion may be provided or the type of food may be unpopular.
7.	As a check, weigh the food waste bin at the end of service. This will help to verify your results.
8.	Remember to weigh all clean empty containers used for the bulk storage of food and any plates, bowls, etc., used in providing food. This will allow you to determine the net weight of food provided. Try to take pictures throughout the different steps of the survey. The photos will help you in determining the type of container used for each type of food.





## How to do a detailed food survey for a bulk food system continued

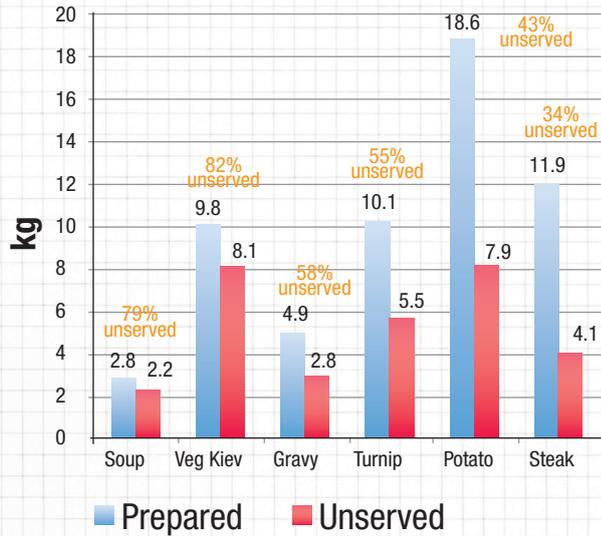


### After the survey

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

- Subtract the weight of the containers used to store the food to get the net weight of each type of food.
- Compare the quantity of food that is unserved with the quantity of the food that was provided.

This will help you to determine the level of excess food that is being provided to the wards. The quantity of food ordered and/or provided can then be reviewed accordingly. The easiest way to communicate this is to express the proportion of the food provided that was unserved.



For example if 2 kg of potatoes is provided and 1.5 kg is unserved, then 75% of the food provided is unserved. This high level indicates that the quantity of potatoes provided could be reduced.

- Total the quantity of each type of food waste generated and subtract from the quantity of food provided. This will give you an estimate of the quantity of food actually eaten by the patients. This information can be of real benefit in assessing the actual calorie intake of patients.
- Expressing the results in easy to read graphs may help you to convey the results to others.

For example the graph above outlines the quantity of food that was provided (prepared), and was unserved following service, as well as the proportion of the food that was unserved. It can be clearly seen that the quantity of veg kiev and soup that was provided was far in excess of what was required (Kiev: 82% unserved, soup: 79% unserved).



The GHCP has developed a calculation sheet which may help you to analyse your data. It can be found in the food waste section of the GHCP website. [www.greenhealthcare.ie/topics/food-waste](http://www.greenhealthcare.ie/topics/food-waste)



### Bulk food system: quick survey

If you do not have time to undertake a full detailed survey, then consider undertaking a quick survey, that only looks at the issue of unserved food waste in the wards.

In the main catering kitchen weigh the containers of each type of food provided to each ward. As the food is being placed in the heated trolley/bain-marie pop it on a scales- it will only take an extra couple of seconds.

Following the meal, request that ward staff do not dispose of any unserved food in the ward food bin. Instead ask them to place the containers back into the heated trolley or bain-maire and return them to the main catering kitchen. This will mean less work for staff, so they should be happy to comply.

When the trolleys are returned to the main kitchen look at each ward separately. Re-weigh each of the containers and record the food as unserved food waste.

If you are tight on time, you can just look at one ward at a time. However when equipment is set up and staff are available and familiar with the process, it is as easy to look at all the wards at once. You can also directly compare the different wards (same food provided, same day, etc.).

### Condiments

Condiments can be perishable (butter) or non-perishable (sugar, salt, pepper, jam, ketchup, etc.). In many GHCP facilities multiples of each condiment are automatically placed on trays. In general, for infection control reasons, any unused/unopened condiments cannot be reused and are automatically disposed of when the trays are returned for cleaning. Though each individual condiment may be inexpensive, when the number of condiments disposed of over an entire year is determined, the disposal of unused condiments can be an expensive practice.



**Record the number of each type of condiment that is unopened after each meal. Where possible also record the number of condiments provided (if a set amount is provided on each tray).**

### Tissues and liquids

Some healthcare facilities have a policy of placing tissue paper napkins and/or liquids (e.g.milk, tea) in the food waste bin.

While undertaking the food waste survey, ask staff not to place these items in the food waste bin and place in a separate container. This will allow you to measure food waste only.



**Where possible try to collect all unused milk separately. Weigh or record the volume in a jug. You'll be surprised how much milk is thrown away unnecessarily each day!**

