



HOW-TO GUIDE

Undertaking a Detailed Food Waste Survey - Centrally Plated System

What do I need for a food waste survey?



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

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

Relationship between food waste surveys



How to perform a detailed food survey for a centrally plated 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**

Though the meals are plated in the main kitchen, it is still necessary to look at the provision of food in a sample ward. 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.

Part of the survey will need to be undertaken in the main kitchen where the meals are plated.

- **Determine if any of the meal components are provided in bulk to the wards e.g. porridge at breakfast or soup**

In many facilities using centrally plated systems, breakfast is provided in bulk containers to the ward, where it is plated. Other food such as cereal and bread may also be provided by the ward kitchen. In such cases, the main work required will need to be undertaken in the ward kitchen.

How to perform a detailed food survey for a centrally plated system



On the day of the survey - in ward kitchen:

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.

Meals provided in bulk or provided from the ward kitchen (breakfast or soup round):

2. Weigh each bulk container of food provided to the ward. Record the quantity of each type of food as **prepared food** in your worksheet.
3. After all of the meals are plated, re-weigh each bulk container of food. Record this quantity as **unserved food**.
4. For meal components supplied in bulk from the ward kitchen e.g. cereals, measure the weight of the container before the start of service and at the end of service, to determine the quantity of these foods provided.
5. Undertake survey as from **step 7** below.

Meals centrally plated and provided to the wards:

6. After the plated meals have been provided to the patients, record if any meals have not been provided to patients. Try to determine the reasons for these meals not being provided to a patient e.g. patient discharged, absent due to procedure. Record the weight of these meals as **untouched food**.
7. 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**.
8. Collect and weigh the food on the remaining patient plates. The easiest way to do this is to scrape the food into a container, which is then weighed. 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 food type may be unpopular.
9. As a check, weigh the food waste bin at the end of service. This will help to verify your results.
10. Remember to weigh any plates, bowls, etc., used in providing food. This will allow you to determine the net weight of food provided.
11. 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.

The hospital may have a policy of trays being returned to the main kitchen for clearing. In this case make sure to undertake the above steps in a designated area of the main kitchen.





How to do a detailed food survey for a centrally plated system continued



On the day of the survey - in main catering kitchen:

1. Weigh a number of examples of the different plated meals. If different sized meals are available to order then make sure to weigh each of these options. Record the number of each type of meal that was ordered for the ward.

Where possible zero or tare the scales with an empty plate, to give the weight of food only. If you do not have an empty plate to hand, later weigh an empty plate and subtract this from the meal weight value when analysing your data.

2. Weigh any unserved food left over after the plating process. Another staff member may need to remain in the main kitchen after the plating process to capture and weigh this food. Alternatively you may request the kitchen staff to weigh this food.



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.



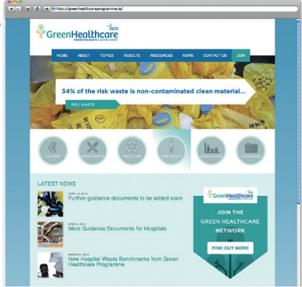
Where possible try to collect all unused milk separately. Weigh or record the volume in a jug. You could be surprised how much milk is thrown away unnecessarily each day!



After the survey:

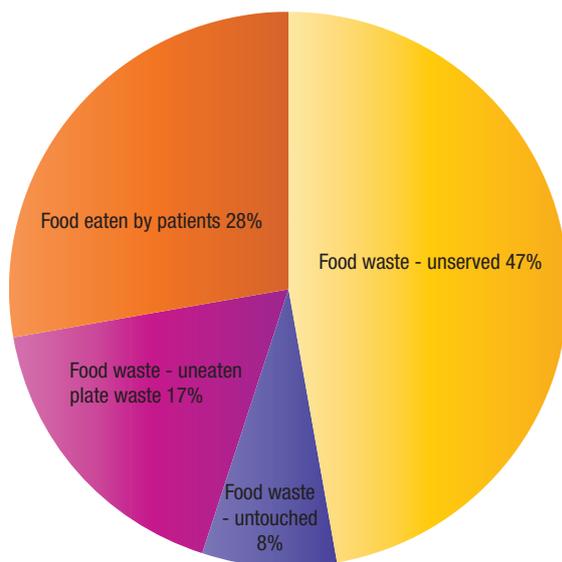
You will need to analyse the information you have gathered during the survey. Some important things to remember:

- Multiply the net weight of the different meals by the number of each option ordered, to get the quantity of food served or provided to the ward.
- Total the quantity of each type of food waste generated and subtract this 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.
- Any problems or issues with the food ordering system can be observed by the level of untouched food portions generated. A high level of untouched food waste may indicate the need to review the communication system between ward staff ordering food and medical staff.
- Expressing the results in easy to read graphs may help you to convey the results to others. Some example graphs are shown below.



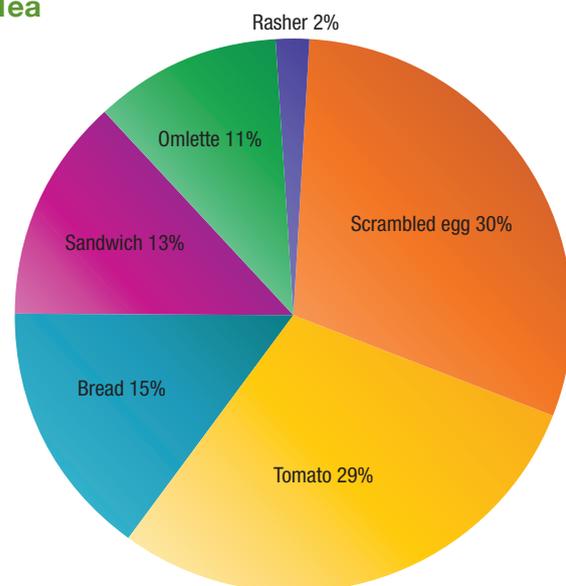
The GHCP has developed a calculation sheet which may help you to analyse your data. It can be found in the food waste section of the GHCP website. www.greenhealthcare.ie

Breakfast



This graph shows how the food provided at breakfast is managed - how much is eaten and how much is wasted. (By recording the quantity of food that is provided at breakfast and the quantity of food waste it is possible to determine the quantity or proportion of the food that was eaten by patients.)

Tea



This graph shows the quantity of each type of food that was left on patients' plates after tea. The majority of the food waste was scrambled egg and tomatoes. This could suggest that the provided portion of these foods is too high or that the food is unpopular, as in the case of tomato. Can tomato be replaced with another more popular type of food with the same nutritive value?

“Using up” unserved food from a central plating system:

Unserved food after plating patient meals can be sent to the canteen to be “used up”. As the quantity of this type of food generated each day will be unknown, since the number of patients eating may change, the amount of food prepared for the canteen should accommodate this. Otherwise, the food from the plating process may still end up getting disposed of later. In other words, by keeping a track of the typical quantities and types of food not served to the patients, the amounts cooked for the canteen can be adjusted.

The best scenario is where minimal food is left over from the plating process and does not have to be used up.

