

# Reporting on the amounts of food surplus redistributed (weight and meal equivalents; WRAP guidance)

## Background

Increasing the amount of food surplus that is redistributed from food businesses is a key strand of the strategy to reduce food waste, to deliver the [Courtauld Commitment 2025 \(Courtauld 2025\) target](#) and ultimately the [Sustainable Development Goal 12.3](#). There has been a significant increase in activities aimed at achieving this, with good progress being made over recent years ([Surplus Food Redistribution in the UK; 2015 to 2017](#)). However, WRAPs [research](#) shows food redistributed from manufacturers and retailers could increase further by more than 200,000 tonnes, and there is potential to source greater amounts of surplus food from other parts of the supply chain such as primary production and the hospitality and food service sector.

Many organisations, including Governments, WRAP itself, food businesses and those involved in carrying out the redistribution of surplus food, are reporting in some form on the amounts of food that are redistributed. There is currently inconsistency in how the amount of food redistributed is being conveyed, and the Courtauld 2025 [Redistribution Working Group](#) agreed that this should be addressed.

This guidance note stems from the discussions with the Working Group, and applies to all instances where the amounts of food surplus redistributed are referred to (including for example at a UK and national level, annual reporting from individual organisations and the outcomes from specific projects or interventions).

## Recommendations

There are two main ways the amounts of food redistributed are referred to:

- As a weight (tonnes; kilogrammes)
- As an equivalent number of meals

In many cases only the latter is used, but **good practice is to report as a weight (kilogrammes or tonnes depending on the quantities being referred to), either alone or in combination with the equivalent number of meals.**

A range of different factors for the conversion of weight in to the number of equivalent meals have been used (for example 420g, 450g, 470g and 500g), quite often without providing a reference source, which makes comparisons difficult and risks causing confusion and undermining credibility.

Following consultation with the C2025 Redistribution Working Group, a review of relevant scientific literature and reference books and discussion with Public Health England, **WRAP recommends the use of 420g as an 'average' meal size**, for the purposes of illustrating the amounts of food being redistributed. There is no official figure for an 'average' meal weight (due to the many factors that influence that, such as the meal occasion, the meal type, the individual), but there is research that can be used to derive a defensible factor for expressing food surplus as 'meal equivalents'. See the Annex for more detail on this.

When expressing the amount of food surplus that is redistributed as an equivalent number of meals, it is important to be clear that:

- The number given does not imply that this many *balanced* meals could be made from the food surplus, but illustrates what the amount of food surplus might equate to.
- The word 'equivalent' is used to reinforce the above point, for example:
  - 'Last year we provided 400 tonnes of food surplus to redistribution charities, the equivalent of around 950,000 meals'

Where space permits (for example in annual reports) the following footnote can be added:

- Based on the assumption of an average meal weighing 420g (calculated from the average of a range of typical meal weights, using data derived from Food Portion Sizes, FSA 2008). This does not imply that this many balanced meals could be made from the food surplus, but illustrates what the amount of food surplus might equate to.

## Summary of guidance

When referring to how much food surplus has been redistributed:

- Report as a weight (kilogrammes or tonnes depending on the quantities being referred to), either alone or in combination with the equivalent number of meals
- If reporting as the equivalent number of meals, use a conversion factor of 420g for an 'average' meal size
- Be clear that the number of meals quoted does not imply that this many *balanced* meals could be made from the food surplus, but illustrates what the amount of food surplus might equate to
- Use 'equivalent to x million meals' or 'the equivalent of x million meals' to reinforce the above point
- Where space allows make use of the above footnote (or this guidance note)

## **Annex - Further detail on the factor used to estimate meal equivalents**

There is no official figure for an 'average' meal weight (due to the many factors that influence that, such as the meal occasion, the meal type, the individual), but there is research that can be used to derive a factor for expressing food surplus as 'meal equivalents'.

Table 1 combines published data on average portion sizes in to a number of different meals, and gives an average of these meals (420g). Different combinations of foods for different meals will of course give different weights, and therefore a different average weight, but for the purposes of conveying the amounts of food being redistributed in a more meaningful way, WRAP believes this approach and factor is defensible.

It should also be noted that WRAP has changed the factor used to convert tonnes of food surplus to 'meal equivalents'. Previously a factor of 500g for an average meal weight has been used, based on research by Horizons Foodservice, who estimated average meal weight for the hospitality sector [see [here](#)], through an analysis of recommended portion sizes for schools and actual meals served in pubs / restaurants.

**Table 1:** Weights for a range of meals, derived from two reference sources

|                              | g per adult serving |            |
|------------------------------|---------------------|------------|
|                              | Ref 1               | Ref 2      |
| Chicken pie                  | 150                 | 140        |
| Potato chips                 | 165                 | 153        |
| Mixed vegetables             | 90                  | 84         |
|                              | <b>405</b>          | <b>377</b> |
| Chilli con carne             | 220                 | 226        |
| Rice                         | 180                 | 180        |
|                              | <b>400</b>          | <b>406</b> |
| Cottage pie / Shepherd's pie | 310                 |            |
| Cabbage                      | 95                  |            |
|                              | <b>405</b>          |            |
| Lasagne                      | <b>420</b>          |            |
| Chicken tikka                | 200                 |            |
| Rice                         | 180                 |            |
| Chapati                      | 55                  |            |
|                              | <b>435</b>          |            |
| Spaghetti Bolognese          | <b>470</b>          |            |
| Mousakka                     | 330                 |            |
| Potato chips                 | 165                 |            |
|                              | <b>495</b>          |            |
| Cottage pie / Shepherd's pie | 310                 |            |
| Baked beans                  | 135                 |            |
|                              | <b>445</b>          |            |
| Macaroni cheese              | 220                 |            |
| Broccoli                     | 85                  |            |
|                              | <b>305</b>          |            |
|                              | 420                 |            |
| Fish pie                     | 271                 |            |
| Chips                        | 153                 |            |
| Peas                         | 58                  |            |
|                              | <b>482</b>          |            |
| Fish and chips               | 323                 |            |
| Mushy peas                   | 87                  |            |
|                              | <b>410</b>          |            |
| <b>Average</b>               | <b>420</b>          |            |

Ref 1 - Food Portion Sizes (FSA; 2008)

Ref 2 - CALCULATION AND COLLATION OF TYPICAL FOOD PORTION SIZES FOR ADULTS AGED 19-64 AND OLDER PEOPLE AGED 65 AND OVER ([WRIEDEN et al; 2006](#))

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