

24-HOUR RECALL INSTRUCTIONS

OBTAINING A 24-HOUR RECALL

The 24-hour recall aims to provide a complete record of all food and drink eaten on the previous day between midnight and midnight. The time element is important, as there may be respondents who work shifts or that have unusual time schedules meaning that their dietary patterns are not typical.

The 24-hour recall is collected in three phases (Triple Pass):

1. A quick list of foods eaten or drunk.

Respondents are asked to report everything that they had to eat or drink on the previous day between midnight and midnight. This recall session is not interrupted. At the end of the recall, respondents are invited to add any additional items not initially recalled.

2. Collection of detailed information concerning the items in the quick list.

For each item of food or drink, respondents are asked to provide additional detail.

- a) The time at which the food or drink was consumed.
- b) A full description of the food or drink, including brand name where available.
- c) Any foods likely to be eaten in combination e.g. milk in coffee
- d) Recipes and other combinations of foods e.g. sandwiches
- e) The quantity consumed, based on household measures, photographs of different portion sizes of foods or weights.
- f) Any leftovers or second helpings.

3. A recall review in which respondents are given an opportunity to provide additional information and for the interviewer to prompt for information about foods or drink not mentioned.

The interviewer reviews all the food eaten and drunk in chronological order, prompts for any additional eating or drinking occasions or foods/drink possibly consumed and clarifies any ambiguities regarding type of food eaten or portion size. Finally the interviewer asks the respondent to name the place where each food or drink item was consumed. All of the information gathered is recorded by the interviewer on the record sheet in the booklet called Food Consumption Record: Individual 24-hour recall.

The 24-hour recall protocol

In order to standardise the 24-hour recall method, you need to follow the protocol. This is a separate document called Protocol for the Completion of a Food Consumption Record: Individual 24-hour recall. This provides full details to enable you to carry out the recall, including exactly what to say, the order in which the recall should be carried out, the information you need to collect and when to refer to other materials such as prompt cards. **It is very important that the protocol is followed at every interview, even when you feel confident with the method.**

The 24-hour questions – collection of some additional information at the end of the recall

When the 24-hr recall has been completed, respondents are asked questions regarding drinking water and dietary supplements (this includes vitamin, mineral and sports supplements). If they have taken any dietary supplements, you need to record the name and brand directly from the container e.g. Superdrug Multivitamins and zinc. In addition, if the strength of the supplement is specified on the front of the container, you need to record this e.g. Boots Vitamin C 500mg. 'Nutritionally complete' supplements, which tend to be used as meal replacements e.g. Slimfast, Ensure, should be recorded on the record sheet. Respondents are also asked whether or not the day recalled was typical of their usual food consumption, or if it was unusual or restricted in any way and if so for what reason. Please note, some of the questions in this section are for you to answer.

The Interviewer feedback questionnaire

Finally, there is an interviewer evaluation to be filled in by you as soon as possible after each 24-hour recall interview. It is very important, as it gives an indication of how complete or accurate you feel the information given by the respondent is.

Food coding

Every item of food and drink recorded during the 24-hour recall has to be coded by you. Coding is not done as part of the interview but as a separate exercise afterwards. It is vital to code the previous 24-hour recall before visiting the respondent for the next interview. This is so that you can gather any extra information needed or resolve any queries as early as possible. Do not leave all the coding of the 24-hour recalls until the end. Instructions on allocating food and portion codes can be found in the document 24-hr Recall Coding Instructions.

LOGISTICS

Each respondent will be asked to provide four 24-hour recalls; with the third being conducted by telephone where appropriate.

Within the household

In some households you will be required to conduct 24-hour recalls with two people. Within the limits of cultural constraints and social sensitivity, where there are two adults we would prefer these to be conducted separately. However, where a respondent is not sure of the full details of the food he/she ate it will be necessary to refer to someone else in the house for clarification.

Home interviews

You should aim to sit opposite the respondent. When you are probing for details of foods consumed and their brand names, respondents may offer to show you items from their food store. This is very useful in identifying exactly what has been consumed. Make a note during the recall so that you can collect all the information at the end rather than disrupting the interview by the respondent repeatedly going into the kitchen. You should copy down full details of the product, in terms of name, brand name and specific type (where appropriate) e.g. *"I can't believe it's not butter", 70% vegetable fat spread or Tesco's High Juice, no added sugar, blackcurrant and apple.*

Telephone interviews

If you feel that a telephone recall is appropriate, then after conducting the second 24-hour recall in person, you should inform the respondent that you will telephone some time within the next few days to conduct a further 24-hour recall. Do not inform them as to exactly when you will be telephoning. Leave the Food Atlas and copies of cards 1 and 2 with them for use during the telephone 24-hour recall. During the telephone recall or before leaving after completing the second 24-hour recall you will need to arrange a time to visit to do the fourth and final 24-hour recall in person.

If you do not feel that a telephone recall is appropriate (e.g. because the respondent is elderly and/or had difficulty using the food atlas at the personal recalls), you should arrange a time to do the third recall in person.

Interviewing children

A parent/carer should be present at the 24-hour recalls carried out on children under 16 years of age. Telephone interviews, if not conducted with the parent/carer should similarly be conducted with a parent/carer near at hand. With very young children (under 5), the parent/carer will provide all the information. With slightly older children (between 5 and 12) the majority of the information given will still come from the parent/carer, with the child perhaps making some additions. Older children (of 12 years and over) will themselves be very knowledgeable about their own diets and will be able to provide much of the information required.

At the beginning of the interview it is important to establish expectations regarding the degree of participation of the parent/carer. Based on your assessment of the child's capabilities (probably largely related to age) you should either ask the child to provide you with the majority of the information and the parent/carer to fill in the gaps or vice versa. Where the child is old enough, you should seek his/her agreement with statements or additions made by the parent/carer.

There will be occasions when the parent/carer is unable to provide sufficient information e.g. young children have eaten at a friend's or relative's house. If you feel there are gaps in the recall, please make a note of this in your feedback.

Be wary of young children (12 years and younger) estimating the amount they had to eat. They invariably overestimate. Confirm portion sizes with the parent/carer.

Queries

If you have questions regarding any aspect of the 24 hour recall, please call the nutrition team at King's College, London on:

020 7848 3048

This is an answering machine service where you can leave a message at anytime and a member of the team will get back to you as soon as possible.

DESCRIPTION OF FOOD AND DRINK

In general the following information is required:

BOX 1

- What **type** of food or drink was it?
- **How was it bought?** – fresh, canned, frozen, dehydrated etc?
- Was the item smoked or not e.g. ham, bacon etc.
- Was it homemade – if so – what were the ingredients?
- How was it **cooked** – boiled, poached, fried etc?
- If it was cooked in fat, fat was used in pastry or cakes or any other dish, or if any fat was added to e.g. a sandwich or baked potato, what sort of fat or oil was used?
- If it was a dried / dehydrated product e.g. hot chocolate was it reconstituted using water, milk (specify type e.g. skimmed, semi-skimmed, whole) or both? etc
- Was the item **coated** before cooking? E.g. flour, batter, egg, breadcrumbs
- Was it unsweetened, or sweetened with sugar or artificial sweeteners e.g. Candarel?
- Was it low or reduced fat / low or reduced calorie?

This is not a comprehensive list, but offers a guide as to the type of information required.

Prompts and probing

All of the information is collected with a series of neutral prompts to encourage recall. You should ask **neutral questions** which do not encourage a specific response.

So, for individual foods, you should not say specifically “was that boiled or fried?” but “how was that cooked?” For additional foods, you should not presuppose consumption of foods in specific combinations, for example you should say, “what else did you have with that?” rather than “did you have butter on your potatoes?”

However, where initial neutral prompts do not lead to further information it may be necessary to list a series of specific options e.g. “was that boiled, fried, roasted, grilled etc?” Always list the options.

Where foods come in different varieties e.g. low fat, low calorie, caffeine free etc, always refer to the “standard” variety first as well as the low fat/low calorie variety i.e. “so was that standard or diet coke?”

Food Description Prompt Sheet for Interviewers

For many foods, there is a certain amount of detail that should be collected in addition to that specified in **Box 1** on the previous page. These foods can be found on the separate Food Description Prompt Sheet for Interviewers. The foods are arranged in alphabetical order along with the information that is required.

Commonly Consumed Additional Food Prompts

Included in the Food Description Prompt Sheet for Interviewers is a table called Commonly Consumed Additional Food Prompts. This lists foods frequently eaten in combination with other foods e.g. sugar on cereal, butter on potatoes, jam on toast. Use this list to probe for foods that a respondent may forget.

Usual eating habits

In the CAPI interview, you will obtain some information regarding the respondent's usual eating habits. You can transcribe this information into the front of the 24-hour recall booklet. This can then be referred to during the recall thereby reducing the burden on both interviewer and respondent when asking about frequently consumed foods such as tea, coffee and bread.

For example, if the respondent says they had tea, you can ask, *“Was that your usual tea?”* If they say yes, you need to confirm the eating habits details with them *“Your usual tea is a cup of weak tea with a dash of whole milk and no sugar. Is that what you had?”* Then you can record ‘tea, usual’ on the recall.

If it is not the respondent's usual tea (often the case if it is drunk outside the home), you must probe as normal i.e. strength of tea, any milk or sugar etc.

Evidence of probing

Recording on the record sheet where you have probed helps clear up ambiguities that may arise when it comes to coding a particular food or drink.

- If a respondent does NOT eat something typically eaten in combination with another food or they break their usual eating habit e.g. they have toast, but no spread, record “no spread” on the recall to indicate that you have probed for that food.
- For foods where low fat or low calorie varieties are available as well as “standard” versions e.g. yoghurts, soft drinks etc, if the respondent has the “standard” version, record “standard” on the recall to show that you have probed for the different types.
- If you have probed and the respondent does not know or cannot remember exactly what they had to eat or drink, indicate this by recording **P -** on the recall (this stands for a negative response when probed).

School meals

When collecting information about children's school lunch, initially follow the same procedures as for any other meal. However, if a child eats a dish that is a recipe, it is important to confirm with the school the exact recipe name of the dish. Young children will not always call a dish by its correct name e.g. cottage pie may be called shepherds pie.

In addition, young children, where the parent/carer usually recalls the food eaten, may find it difficult to remember some, if not most, of what they had to eat at school and how much. If this is the case you should try to obtain menu information from the school as quickly as possible. You should use this information to prompt the child as soon after the recall as possible, ideally the same day or day after. Whenever possible, this additional prompting

for school meals can be done with the child/parent over the telephone rather than as an extra visit. If the child still cannot remember or you are concerned about the accuracy of the detail recalled, mention this in your feedback questionnaire including the name of the school.

Meals on Wheels

Descriptions of the components of the meal (for example mashed potato, carrots and chicken breast etc) and details on portion sizes and leftovers using the food atlas or household measures should be obtained from the respondent. Councils employ private catering companies to provide meals on wheels. Please obtain the name and telephone number of the catering company that provided the meals, this will help the nutrition team at KCL with any queries. You should be able to get this information from the respondent as they will usually be given a menu with the company name etc on it.

Recipes

For homemade dishes, for example beef stew, you should write 'beef stew, recipe [number]' against this entry under food description on the record sheet. Then, on the recipe sheets, you need to record the following information:

- List of ingredients
Record details about the ingredients in the same way you would if the food was eaten on its own. For example, if tomatoes were used, were they fresh or tinned. If oil was used, what type? If meat, what animal and what cut?
Probe for ingredients they might have forgotten e.g. water, oil, herbs, spices
- Amounts of ingredients
This can be in household measures, weights or using photographs in the food atlas (see Estimation of Portion Size)
- Cooking method
Record some brief information on how the dish was prepared and cooked. This can sometimes elicit extra or forgotten detail. So if the respondent says they fried something, remember to ask if it was in oil and the type used. If they stewed or boiled a dish, remember to ask about how much water they used. If they mashed a potato, did they use any milk or spread?

If another member of the household prepared the dish, you should try and get the relevant information from them.

Ethnic foods

When collecting information about ethnic foods it is important to obtain as much information about a food/recipe that is 'unusual'. It is important to check the spelling of the names of ethnic foods as many have unusual spellings and/or alternative names. For example, okra (a vegetable grown in South America, West Indies and India; used in soups and stews) is also called lady's finger; 'moong' beans are also spelt 'mung' beans. Therefore, you should ask for packets or containers (if available) to check the spelling if you or the respondent are not sure. There is also a list of common South Asian foods/dishes at the end of the [Food Description Prompt Sheet for Interviewers](#) to help with this.

Composite dishes

When a food is composed of several different foods e.g. a sandwich or a salad these should be recorded separately. For example, a sandwich would be split into bread, spread and filling. The individual components and the amount of each component should be recorded on a separate line under 'description of food or drink' on the record sheet.

Takeaway foods and fast foods

If the respondent consumes takeaway or fast foods, wherever possible, in addition to other information collected please record the name and address of the food outlet and the price of the item. This will help the nutrition team at KCL with any queries.

Food and drink consumed over a long period of time

The respondent may eat or drink something over an extended period of time such as sipping a litre of water throughout the day, or a few glasses of wine over an evening. If it is too difficult to separate specific amounts consumed at specific times, you can record the time period and the amount consumed over that period e.g. 13:00 – 16:00, ½ litre of bottled water.

Underreporting

When asking people to report what they have had to eat and drink, many people tend to report less than they have actually consumed. This is why we use the triple pass 24 hour recall protocol and allow lots of opportunities for prompting respondents. Underreporting is particularly common in:

- Young white men
- Asian women
- Overweight respondents

BRAND NAME

Where possible, you need to ask the respondent for the brand name of foods they have consumed e.g. Heinz baked beans, Kellogg's Cornflakes etc. If the respondent does not remember at first request, you may be able to get this information if the items are in their food store e.g. cupboard or fridge. This should be left until the end of the recall. Avoid repeatedly interrupting the recall by asking the respondent to go into the kitchen.

ESTIMATION OF PORTION SIZE

At the beginning of the interview the respondent is introduced to the process involved in the 24-hour recall and told that they will be asked to provide details of what they have eaten, and to give an estimate of the amount that they ate (portion size).

A portion size can be described in terms of:

- photographs in the food atlas
- household measures (e.g. one level teaspoon of sugar, 1 kit kat (2 sticks)
- weights (e.g. a 420g tin of baked beans, 125 g pot of yoghurt)

For the majority of respondents the photographs in the food atlas provide the most accurate estimate of portion size and should be used whenever possible.

However, some respondents such as the very young or elderly, find the photographs in the food atlas difficult to use and household measures or packages should be used as an alternative.

If the respondent has packaging with a weight on, ask to see the package as this will help with identification of the precise type of food and the size. Do NOT let respondents guess weights.

Use of food atlas

The Photographic Food Atlas contains 78 sets of photographs of portion sizes of a wide range of foods. It also provides additional guide photographs for other foods that come in defined portion sizes e.g. bread rolls and also photographs of a variety of household measures e.g. mugs, glasses etc. Some of the photographs show the food in more than one form e.g. Cheddar cheese on page 24 – a slice, square and grated pile of cheese are present on each plate. The slice, square and grated pile of cheese each have the same weight so the respondent still only needs to select one photograph. For the Yorkshire pudding on page 12 – the total weight of the two individual round puddings in each photograph is equal to the weight of the rectangular slice of Yorkshire pudding.

The respondent is asked to select the photograph in the food atlas which most closely resembles the amount that they ate. To help the respondent select the most appropriate photograph there is a full size photograph of the plates and bowl that were used in the photographs. This can be found in the front inside flap of the food atlas. The appropriate photograph of the plate or bowl should be visible while the respondent makes their selection.

Not all foods appear in the atlas, particularly those eaten by people from ethnic groups, so you will need to use household measures instead.

Spoon size

If a respondent describes the amount they had to eat in spoonfuls, it is important to determine the size of the spoon. Often respondents will say they used a tablespoon when what they actually used was a dessertspoon. To clarify the size of the spoon you should show the respondent the picture of a life size tablespoon, dessertspoon and teaspoon. This can be found in the front inside flap of the food atlas.

DO NOT use the photographs on page G20 of the food atlas. They are not life-size and cause confusion for many respondents.

Equivalent foods

As mentioned before, the atlas cannot be used for every food but, as it is a more accurate estimate of portion size than household measures, it should be used whenever possible. It may also be used for equivalent foods, that is a food of sufficiently similar shape and/or consistency. For example the photograph of meat curry with sauce on page 72 can be used for any type of meat, chicken or fish curry with sauce. Similarly the photographs of tins at the back of the book can be used for other tinned foods. In the front of the food atlas you will find a list of 'equivalent foods' which tells you other foods for which you can use the photos in the food atlas.

You should NOT use the photographs of one type of food to represent another unless it is on the equivalent foods list. For example, you would not use the photographs of fruit cake on page 8 for sponge cake (similarly, you would not use the photographs of sponge cake on page 11 for fruit cake).

Leftovers

After the respondent has selected a photograph it is important to remember to ask them whether they ate the whole portion. If not, it is necessary to find out what proportion was left and enter that in the 'leftovers' column. Again, amounts can be estimated using the food atlas, household measures or weights.

Second helpings

Second servings should be recorded in the following way. Record food or drink on a separate line of the record sheet under 'Description of food or drink' (in order to be able to see that it was a second helping) with the portion size (using the food atlas or household measures) of the second helping recorded in the 'amount' column.

PLACE NAME

Finally, the respondent is given a card (CARD 1) and asked to select a place name for each eating and drinking occasion. In some cases, it is important to ascertain the source of food, as well as the place. For example, the place "Home" appears on the card four times (options A-D), but each time, the source of the food or drink is different:

- A) Home, from their own food supply
- B) Home, a take-away brought in e.g. fish and chips
- C) Home, other food brought in, that they had to pay for e.g. meals on wheels (NOT takeaway)
- D) Home, other food brought in that was free e.g. a family member bringing round a cake.

When respondents are selecting a place name they should pick the place first. Only if there is more than one option for that place name, should they then pick a source.