- non-judgmental attitude of interviewer, that is, no indication of approval or disapproval of any foods or drinks reported
- ensuring privacy during the interview and informing participant of the confidentiality of all information collected from the participant

Acknowledgments must be given to Paul Elliott, Queenie Chan and Claire Robertson*. Imperial College London, Faculty of Medicine. *University of Westminster

3.4 Schedule for collection of dietary data

Four 24-hour dietary recalls are to be collected. The first is at the first visit, the second when the participant returns the following day to complete the first 24-hour urine collection, and the third and fourth at a similar pair of visits 2-3 weeks later. Since amount and kind of food consumed may be different on work days and days off for some participants, it is important to obtain a representative sample. Therefore, one of the 4 days of recall is to represent a day off. Usually this is a Sunday, hence one of the visits would be scheduled on a Monday. If it's not possible to schedule a visit to include a recall from a participant's day off, try to schedule the visit to reflect the spouse/partner's day off (if applicable). It is important in scheduling the second pair of visits to be sure that the distribution of recalls includes one and only one day off. Information on participant's (or spouse's) usual day or days off is contained in the Questionnaire (Form Q1F) and is to be made known to the person scheduling next visits.

3.5 Conducting the Interview

3.5.1 Be professional

The participant's answers are the main source of dietary data and therefore very important. As a **Dietary Interviewer** you convey this importance by having a professional demeanor, by maintaining control of the situation, and by focusing on content of the interview. Do not let the interview be interrupted by coworkers or telephone calls.

Be friendly but not familiar. Be attentive and genuinely interested in the participant's responses. Be aware of your tone of voice. Do not sound judgmental, patronizing, or condescending. Always be polite. Remember, you represent INTERMAP as well as your field center and yourself.

3.5.2 Prepare for the interview

Before beginning the interview, take some time to make sure you are thoroughly prepared. Review your *Addendum* and other materials given to you during training until you fully understand all forms and responsibilities for your job. Understand the purpose and meaning of data items on the forms. If you do not understand something, ask the **Site Nutritionist** or **Country Nutritionist** for clarification.

3.5.3 Practice

Practice doing interviews until you are comfortable using tape recorder, forms, *Food Check List* (where applicable), *List of Commonly Forgotten Foods*, and *Foods Commonly Eaten Together*, and probing for questions about foods and amounts. Practice helps to build your self confidence so that you can deal with all situations you may encounter when you interview for INTERMAP. Your ability to work comfortably helps keep your participants interested in the interview and helps your interviews go smoothly. Participants can quickly lose interest if you are disorganized.

3.5.4 Organize your materials

Check to make sure you have sufficient quantities of all necessary materials, and that your materials are organized in an orderly way. Clear away materials from previous interviews so that you have a clean work surface. This allows you to focus on the present interview and protects the privacy of previous participants. Load the tape recorder and position it to record.

3.5.5 Beginning the interview

When you first contact a participant, your initial task is to establish a friendly but professional relationship. Your own confident and professional manner reassures the participant and sets a tone that enables you to complete the interview in an efficient manner. Introduce yourself.

3.5.6. Establishing rapport

Rapport is the term used to describe personal inter-communication between you and the participant. Rapport provides the foundation for good interviewing. Your voice, your introductory remarks, and the way you answer participant questions strongly influences the rapport that develops between you and the participant. What you say and how you say it sets the tone for a friendly, cooperative, and businesslike relationship that continues to develop throughout the initial interview and subsequent interviews.

Call participants by name to personalize the experience. Use the preferred form of address (e.g. Miss Jones). In general, this means avoiding use of first name only. You want to avoid offending participants by assuming familiarity. Tell participants your own name. A name badge may be helpful.

You begin your rapport-building process with your introduction and it must be continued throughout the interview. Through accepting and understanding behavior and your interest in the participant, you can create a friendly atmosphere enabling the participant to talk freely and fully.

Occasionally rapport may be broken during the interview for some reason. For example, the participant may feel that a question is too personal. If this happens, take time to reassure the participant that he/she may speak freely without fear. Remind him/her that all information collected is confidential.

3.5.7. Giving an introduction to the study

Begin the interview with a brief introduction to the study. Explain the purpose of the study and the central importance of the information to be obtained from the participant in the study. Be sure not to "hint" which foods or nutrients you believe are good or bad for blood pressure or other aspects of health. The purpose of this introduction is to establish rapport with and inform the participant and secure his/her cooperation. This is to be done at the start of the first day of the first pair of visits.

Refer to the *Country Addendum* for an appropriate introduction for your country.

Explain to the participant that information on dietary habits is being collected from a large group of people in _____ (name country) and also other countries, in order to learn more about the way in which different foods may influence blood pressure and cardiovascular health. Explain that all information is confidential and that results are to be analyzed by computer and no person's name goes into the computer. The goal is to help provide better dietary advice to people in _____ (name country) and worldwide for better health. Emphasize the importance of the individual participant's giving complete and accurate dietary information.

Request permission to tape record the interview. Explain that this allows the research team to have clarifying information if ever needed. Assure the participant that after the dietary recalls have been processed through quality control, the tape recording is erased. If the participant refuses, do not insist. Note the refusal on the Dietary Interview Tracking form.

Explain to the participant that you are going to ask him/her to recall in detail everything that he/she has eaten or drunk in the 24 hours on the day before the interview. For example, if the **24-hour Dietary Recall** interview is conducted on a Monday, the dietary recall period covers the 24-hour period starting with the first thing he/she ate or drank from midnight Saturday and ending with the last thing he/she ate or drank before midnight Sunday. This means that if the participant went to bed after midnight on Saturday but ate/drank something just before going to bed, start the recall there. If on the other hand, the participant was asleep at midnight, start with the first thing the participant ate/drank after arising on Sunday. It is helpful to keep a set of "cue" cards for every interview day to help you describe the time period of the recall. For example:

> Today is Monday. Please tell me everything you ate and drank from Saturday midnight (day before yesterday) to midnight Sunday (yesterday).
>
> Today is Tuesday. Please tell me everything you ate and drank from Sunday midnight (day before yesterday) to midnight Monday (yesterday).
>
> Today is Wednesday. Please tell me everything you ate and drank from Monday midnight (day before yesterday) to midnight Tuesday (yesterday).

If the participant works at night and sleeps during the day (shift worker), the recall begins with the first intake on arising and continues until the last intake of food during the next 24 hours, regardless of time of day. Don't forget that some people wake during their usual sleeping hours,

snack, and return to sleep. If this snack is during the 24 hours included in the recall, be sure to enter the food or drink consumed then.

Explain that you need to collect four 24-hour recalls in order to get the best information possible on his/her usual dietary intake. The first dietary interview takes place during the first clinic visit and the second when the participant returns the next day to complete the 24-hour urine collection. The third and fourth dietary interviews are to be conducted at a similar pair of visits 2-3 weeks later.

Explain that a complete and accurate dietary interview usually takes about 25-50 minutes and that his/her willingness to participate in the study is much appreciated.

At some centers financial or other incentives are to be given to participants to help insure completion of all four 24-hour recalls and as a token of our appreciation for the time the participant spends. This needs to be explained at the first visit in those centers, with schedule of payments described. Discuss with your Clinic Coordinator who will explain this to the participant.

If the participant has agreed to have the interview taped, **turn on the tape recorder**. State your name and staff I.D. number and the participant I.D. number (not his/her name). Record the current time on Recall Form Part B using the 24-hour clock.

Next begin the dietary recall following the detailed instructions in this *Manual* and the *Country Addendum*.

3.6 Guidelines for questioning and probing

Collecting accurate and reliable data requires that every participant understands exactly what information he/she is to provide. The goal is always to obtain an accurate report of all foods and beverages taken during the previous 24 hours. Flexibility is appropriate because participants respond differently to different cues and probing. This is an important distinction from standardized structured questionnaires where the questions must always be asked (or read) in exactly the same manner. Do not impose a fixed sequence on the order foods are reported. Some participants may prefer starting with the last thing they ate, others with first thing. Additional items in a meal may be remembered during the course of the interview.

Begin the recall by explaining what you will do during the interview. Ask the participant to remember yesterday, what he/she did, where he/she went. Then go to questions about what was eaten:

For example:

"I am going to ask you to remember everything you ate or drank yesterday. I want to know what you ate, when you ate it, where you ate it, how much you ate and how it was prepared or cooked. For example, at 8:00 I had this, at 10:00 that. I can help you estimate the amounts by using these (indicate food models and other aids). We will start with a

general list and then go back and fill in the details. At the end of this interview, I plan to review with you what I have recorded, so that I can be sure that I have included everything you have told me, and to check that we have listed everything you ate or drank during those 24 hours. I intend also to ask you if you take any supplements, for example mineral or vitamin tablets or tonics. Before we begin to record what you ate or drank yesterday, it might be helpful, as a reminder, to describe what yesterday was like for you — where you went, what you did." After the participant refreshes his/her memory by describing yesterday's activities, then begin recording intake. "Let us begin now. You may begin with the first thing you ate yesterday after you got up or start from the last thing you ate, whichever is easier for you."

Explain to the participant that he or she is to describe the food or drink that was actually eaten. Food left on the plate is not included. All items swallowed should be recorded including those eaten while preparing meals, tasting, or cleaning up. Sauces and condiments added at the table are to be included.

3.6.1 Asking the questions

Always remain neutral. During the entire interview you must always maintain a completely neutral attitude. As a **Dietary Interviewer**, you must never allow anything in your words or manner to express criticism, surprise, approval, or disapproval of the questions you ask or of the answers participants give.

Lead the interview. An important part of your role as a **Dietary Interviewer** is to get the participant actively involved in the interview, to lead him/her to talk comfortably and freely in response to your questions. While encouraging the participant to talk freely, however, you must carefully avoid saying or doing anything to influence the content of the participant's answers. No matter what topics you ask about, no matter how strongly you agree or disagree with participant answers, and no matter how interesting, unusual, or discouraging you find those answers to be, you must always maintain the same neutral and professional stance during the interview. You are there to ask for and record participant's answers, not to influence or advise in any way.

Use open-ended questions. Use open-ended questions, i.e., those which do not suggest an answer but which guide the participant to report actual intake. For example, "What did you have for lunch?" is a closed-ended question versus the open-ended question, "What did you eat or drink next?"

3.6.2. Probing

Note: Examples given below are North American. Country specific examples are given in your *Country Addendum*.

Probing has two major functions. First, probing motivates participants to enlarge or clarify their descriptions of foods and amounts eaten. Second, probing focuses participant answer so that

irrelevant and unnecessary information can be avoided. All this must be done, however, without introducing bias or antagonizing the participant.

The quality of the interview depends a great deal on your ability to probe meaningfully and successfully. During training, we discuss appropriate probing techniques for each specific part of the dietary interview.

In everyday social conversation, people normally speak in vague and loose terms. It is understandable that participants may at first respond to dietary questions in a way which is not clear or specific. Write down the foods and beverages exactly as described by the participant, then probe for specific details. Use food models, ruler, measuring cups, dishes, and spoons to help the participant be more specific about amounts of foods eaten.

3.6.3 Probing methods should be neutral

Always use neutral probes. Remember the reason for probing is to motivate the participant to fully describe the food or amount, without introducing bias. The potential for bias is great in use of probes. Under pressure of the interviewing situation, you may quite unintentionally imply that some answers are more acceptable than others or may hint that a participant might want to consider this or include that in giving responses. You must be careful not to do this.

Participant: I had a cup of coffee at 9:00 a.m.

Neutral Probe: Did you add anything to your coffee?

Non-Neutral Probe: Did you add cream and sugar?

The non-neutral probe suggests a specific answer to the participant and thus leads the participant toward that answer, rather than leaving the range of possible responses completely open for the participant to specify.

3.6.4 Use open-ended versus closed-ended probes

Open-ended probes allow the participant to elaborate on the foods he/she ate. In some cases, the participant will not respond to open-ended probes, so you might have to progress from open-ended probes to closed-ended probes.

Participant: I had a grapefruit for breakfast.

Interviewer: Did you have anything on your grapefruit? (open-ended)

Participant: Yes, sweetener.

Interviewer: Could you be more specific? What type of sweetener? (open-ended)

Participant: I don't know what you mean.

Interviewer: You said you added sweetener to your grapefruit. Did you add sugar, honey, Sweet 'n Low, Equal or some other sweetener? (closed-ended)

3.6.5 Use of neutral probes

There are several different neutral probes which appear as part of a normal conversation that can be used to stimulate a fuller, clearer response.

- **An expression of interest and understanding.** By saying such things as "uh-huh"or "I see" or "yes," the **Dietary Interviewer** acknowledges the response.

- **An expectant pause.** The simplest way to convey to a participant that you know he/she has begun to answer the question, but has more to say, is to be silent. By "listening to the silence," you allow the participant to collect his/her thoughts.

- **Repeating the question.** When the participant does not seem to understand the question, or misinterprets it, or seems unable to decide, or strays from the subject, it is often useful to repeat the question. Many participants, when hearing the question for the second time, realize what kind of answer is needed.

- **Repeating participant's reply.** Simply repeating what the participant has said is often an excellent probe. Hearing the response often stimulates the participant to further thought.

- **A neutral question or comment.** Neutral questions or comments are often used to obtain clearer and fuller responses. The following are suggestions for probing questions that may help explore many types of insufficient answers.

Probes to clarify:

"What do you mean, exactly?"

"What do you mean by that?"

"Could you please explain that? I don't think I quite understand."

Probes for specificity:

"Could you be more specific about that?"

"Tell me more about that."

Probes for completeness:

"Anything else?"

"Anything else you can think of?"

3.6.6 Additional guidelines for probing

The following rules and examples provide further guidance to help you select probes that do not bias participant's answers.

Don't ask "Do you mean _____ or _____?" Such a probe suggests only two possible answers, when the participant may be thinking about other possibilities. Use probes for clarity and specificity when a participant's answers are unclear.

Interviewer: Did you add anything to your baked potato? (open-ended)

Participant: Uh, what do you mean?

Interviewer: Some people add butter or margarine, sour cream, or other toppings to potatoes. (Close-ended, but neutral)

Participant: Oh, yeah! I used sour cream!

Interviewer: Did you add anything else to the potato? (open-ended)

Don't try to sum up in your own words what someone has said because this may suggest to the participant that YOUR idea of his/her response is the "right answer." Be careful not to impose conventional meal times on someone else. Use probes for completeness to make certain that you've obtained full answers.

Non-neutral: What did you have for breakfast? (assumes the participant ate breakfast)

Neutral: What was the first thing you ate or drank yesterday? (or, if starting from the evening before, the neutral question would be "What was the last thing you ate yesterday?" Followed by "What was the last thing before that?")

Probe for foods eaten with other foods, e.g. french fries with a fast-food hamburger, catsup with french fries, ice cream with birthday cake, but try to use open ended questions. Refer to the *List*

of Foods Commonly Eaten Together and the *List of Commonly Forgotten Foods* in the *Country Addendum*.

Interviewer: You said that you had popcorn at the movies. Did you have anything with your popcorn?

Probe for additions to foods, e.g., cream added to coffee, sugar added to cereal. (Refer to *Food Checklist* in *Country Addendum*.)

Interviewer: You said you had toast for breakfast. Did you put anything on your toast?

Probe for all eating periods during the day. For example, clearing the table may be a time when a participant "nibbles" on left-overs from the family's dinner. Baking cookies may be a time when a participant tastes a bit of dough. Driving to work may be a time when he/she usually drinks a cup of coffee. Work breaks may be a time to grab something out of a vending machine. Watching TV may be a time to snack. Feeding the baby and sharing food with children are other occasions for snacking. Try to capture every eating situation during the day and night so that every bit of food consumption is recorded, even if it is a tiny amount.

Encourage the participant to think about the activities he/she did the previous day as a focus of the dietary interview. If he/she is able to recall those activities, he/she may be better able to recall eating/drinking something.