Twenty-four Hour Physical Activity Recall (24PAR) System

Interviewer Training Materials/Protocol

Charles E. Matthews, PhD Nutritional Epidemiology Branch Division of Cancer Epidemiology and Genetics National Cancer Institute 6120 Executive Blvd EPS 3028 Bethesda, MD 20892-7335

email: charles.matthews2@nih.gov phone: 240.381.0155

Acknowledgements

This training manual was developed / adapted from existing physical activity interviewing methods that are publicly available or that have been shared with our investigative team; including the original validation study for the Minnesota Leisure-time Physical Activity Questionnaire (H.L. Taylor. J Chron Dis 31:741, 1978), and materials generously shared in print (Sallis, MSSE 29:S89, 1997), and via personal communication (Project Active 7DPAR Training Materials; H.W. Kohl, S.N. Blair) for conducting interviews using the Seven-day Physical Activity Recall.

In addition, important contributions to this effort were provided by our study staff, including Cara Hanby, Stacey Peterson, and Sara Hollis and the co-authors listed on this report.

The Twenty-four Hour Physical Activity Recall (24PAR)

Introduction

The Twenty-four hour Physical Activity Recall (24PAR) is a semi-structured interviewer administered assessment method that seeks to estimate time use in both active and sedentary behaviors for an individual in the previous day (i.e., last 24 hours). The interviewer systematically leads the interviewee back through the previous 24-hour period (midnight to midnight), obtaining information about time spent sleeping and sitting, and doing upright/standing activities, as well as highly active sitting activities such as cycling or weight lifting. Each behavior that is recorded will be assigned a general location (i.e., at home, in the community, at work or school) during the course of the interview, and many behaviors (e.g., recreation/exercise and sitting) will be assigned more specific settings and purpose labels. This organizational framework was developed so that information collected during the interview can be "mapped" to major elements of the social-ecological model proposed by Owen and colleagues (N. Owen, ESSR 28:153, 2000). Hereafter, we refer to this structure as the Owen Framework. This contextual information will be obtained by the system through a combination of embedded labels associated with the activity/behavior selection and through overt choices among the various behaviors during the interview.

Each activity/behavior included in the 24PAR is either selected directly–or derived from –the Compendium of Physical Activities, which facilitates the development of daily energy expenditure estimates using the MET values associated with each activity and the duration reports from the respondent.

The goal of the 24PAR is not to enumerate each of the individual activity bouts that an individual does each day, but to reasonably quantify where and why the respondent spent their time in the previous day.

The purpose of this manual is to standardize the methods that the interviewers use to obtain 24PAR information so that; 1) there is good agreement among interviewers, and 2) interviewer methods are consistently employed over-time.

Anatomy of the 24PAR Interview

Below are the series of steps that will take place, from the interviewer's perspective, for each recall. These steps provide a snapshot of the big-picture. In the following sections we will outline the details.

- 1. Create a good environment for the interview
- 2. Enter the participants identification information (ID, name) and the sequence of the particular recall for the individual (e.g., 1st, 2nd, etc)
- 2. Introduce the 24PAR to the participant
- 3. Ask questions about work and school
- 4. Ask questions about sleeping,
- 5. Begin the interview portion of the 24PAR
 - a. Obtain information for each segment of the day (morning, afternoon, evening)
 - b. Select behavioral and duration data within each segment
- 6. Complete the interviewer's Summary of the interview

INTERVIEWING TECHNIQUES

Introduction. The job of the interviewer is to conduct each 24PAR in a consistent way, using a memory facilitating but objective interviewing technique, while keeping the interview from becoming overly tedious for the participant. To be consistent each time, interviewers should follow the general structure of the 24PAR interview script. To maximize the participant's success in recalling past activity, the interviewer must facilitate the recall of these activity memories by eliciting contextual cues in a particular portion of the recall day. To conduct the interview in an objective way interviewers should not be judgmental of the participant's responses and should not assume they know the answers the participant is attempting to report.

Keeping the interview from bogging down in excessive detail and maintaining the participant's motivation to recall the details of their busy lives will be the biggest challenge in conducting the interview.

Facilitate recall of past activities. The most challenging element of the 24PAR for the interviewee will be trying to recall the duration of their activities on the previous day. An important tool for helping the participant recall their activities will be *"setting the stage"* to help "bring the participant back" to a specific period of time in the recall day.

The interviewer must attempt to elicit contextual cues related to where the participant was, what they were doing, who they were with, or how they traveled from one place to another. Recollection of discrete events in long-term memory may be enhanced when the context or more salient aspects of the recall period is reconstructed, perhaps owing to the manner in which these memories are stored in the memory of respondents. It shouldn't be surprising that the way memories are cataloged in long-term memory may not be of the same organization that we use to ask the participant about the activity (i.e., by type, intensity, and duration of activity). The success of the interviewer in "setting the

stage" for the participant to remember what they did in the recent past has the potential to make it easier for the respondent to recall what they did, and may enhance the accuracy of the information provided. Helping respondents be successful in their recall effort may help them maintain motivation to do the necessary (and taxing) recall work during the interview.

During the interview, the interviewer should be making mental (or physical) notes to amass important contextual information that is volunteered during the interview (e.g., travel, special events, sickness, etc). Often, these contextual cues may be used in later portions of the interview to facilitate recall and clarify responses.

Open-ended questions that can help "set the stage":

- Where did you go, or what did you do yesterday morning?
- Who did you go with?
- Where did you go after lunch? How did you get there?
- You said that you ate dinner at 7 PM, what did you eat? Who did you eat with?
- Did you watch a particular TV show last night?
- What did you do next?

Limit Bias During the Interview. The primary goal of the interviewer is to gather accurate unbiased information from the participant. "Bias" in this case would be a systematic error introduced during the interview by the interviewer (i.e., over-, or under-reporting of activity). Bias can enter the interview process if subjective physical activity information is recorded by the interviewer, or if different interviewing methods are employed for different participants. Subjective information can enter the 24PAR via the interviewer when they overlay their perceptions of the activity information reported by the participant.

To minimize the introduction of bias into the 24PAR, the interviewer should:

- always follow the structure of the 24PAR script,
- use objective open-ended interview prompts for each interview,
- classify activity intensities in a consistent way, and
- record activity duration in a consistent manner.

Be Objective During the Interview. Maintaining objectivity during the interview is realized by asking non-leading, open-ended questions, and a consistent application of the basic 24PAR methods. The interviewer should be an impartial facilitator of events, allowing the participant to make most of the definitive judgments about the behaviors they engaged and for how long. However, probing to refine activity durations (i.e., excluding time spent resting) is an important objective for the interviewer.

As the interviewee responds during the interview, the interviewer should remain neutral, replying with "OK", rather than "good".

The interviewee should always use open-ended questions, only resorting to more specific questions when clarifying a response (i.e., "you said you did 1 hour of moderate yard work this yesterday, was this 1 hour of continuous activity, or did you take some breaks?").

Managing the interview. Aside from facilitating the recall of past activity events, the most challenging aspect of administering the 24PAR is maintaining control of the interview. The interviewer should control the pace of the interview by not getting side tracked in unnecessary conversation, or too much detail. Participants, often in an effort to recall each of the individual bouts of activity they did, get bogged down in unnecessary detail.

If the participant is getting overly detailed remind them that you are primarily interested in the time they spent doing activities lasting at least 5 minutes in a given segment of the day.

If the individual cannot recall the specific duration of their activity, remind them that you are expecting an "average duration", not the "exact duration", and ask them "How much time in general?", or "About how long?, or "Make your best guess".

When the participant cannot recall specific details about their activities remind them that it is reasonable that they can't recall, but that they should make their best guess.

Preparation of the Respondent for the Interview

Explain the basic 24PAR concepts.

Each of the following points should be explained to the participant before and during the interview. Following the structure of the 24PAR interview script will ensure that the basic 24PAR concepts are explained to each participant each time the 24PAR is administered. As respondents know and understand the 24PAR recall process (after multiple interviews) the introductory text can be shortened as needed.

Report Actual Behavior. Ask the participant to report what they <u>actually did</u> in the past 24-hours, not what they "usually do", or what they did the day before.

Provide a Broad Outline for Recall Process. Indicate to participants that you will be asking about how they spent their time yesterday, from the time they got out of bed in the morning until the time they went to bed last night (or until midnight) and that the recall will focus separately on three segments of the day (e.g., morning, afternoon, evening).

Bouts of activity. Many physical activities occur irregularly and in short bursts of activity throughout the day. In order to simplify the interview and give it definable behavioral parameters, a single bout of physical activity should only be recorded if it

was done for <u>at least 5 minutes</u> in <u>one segment of the day</u>. This time may be accumulated in several bouts during the given segment of the day.

For example, even though walking up stairs is reasonably vigorous activity – usually climbing a flight of stairs at home only takes 10-20 seconds to complete - so, walking up stairs should not be recorded, unless the total duration in one segment of the day is at least 5 minutes (perhaps 10 trips up the stairs).

Similarly, walking around the house to get dressed or to make a meal requires only intermittent walking and should be recorded as household walking.

Care should be taken, by probing the respondent's about their reporting, so that these intermittent walking activities are not reported in excess. Often an interviewer may allow respondents to report very short bouts of activity, but may not enter the information reported into the database if the 5 minute threshold within a segment of the day is not met.

Lighter self-care activities such as getting dressed, bathing, or grooming should be entered into a single category (i.e., "self-care standing...").

Similarly, all food preparation and serving activities (e.g., cooking, setting table, washing dishes) should be entered as single selection (i.e., meal preparation).

IMPORTANT DEFINITIONS

Work. For the purposes of this project, work will be defined as working for pay.

Sleeping. Sleeping is broadly defined as the amount of time an individual spent in bed – not the actual amount of time they were asleep. Sleep time should be recorded as the time the individual got into bed for the night and the time they got out of bed in the morning.

Short intervals of getting out of bed in the night (less than 15 minutes) do not need to be recorded, unless the individual does a substantial amount of activity (e.g., more than 5 minutes of activity). Information about behavior done within the sleeping periods should be recorded (on paper) and added at the end of the interview (Summary tab)

Naps. Naps are broadly defined as sleeping that occurs outside of the in/out of bed times during the day. Naps can be recorded using the pull-down lists within each segment of the day.

Sitting. Sitting time should be recorded for periods when someone is sitting, reclining and lying down, such as watching TV or sitting and doing light upper body work (eating, desk-work, driving, riding in car or bus/train). Some activities done while sitting or reclining, on occasion, may be recorded as an active behavior. For example, exercise,

sports and active recreational pursuits will be coded as "active" behaviors by the system (e.g., weight lifting, cycling).

Segments of the day. In order to help the participant recall their activities the interviewer will query the respondent about activities they did in the morning, afternoon, and evening of the recall day.

- **Morning** is considered from the time the participant "got out of bed" for the day, until just before lunch, but not including lunch.
- Afternoon is considered from lunchtime (including eating) until just before the evening meal, but not including the evening meal.
- **Evening** is considered the time between the evening meal (including eating) until getting into bed for the night.

These are just general guidelines that work for most people. If the individual did not have regular meals;

- use 12 noon as the onset of the afternoon
- use 6 PM as the onset of the evening
- or, a meaningful break in the time segment for the respondent (e.g., getting home from work).

Irregular Schedules. If the individual worked at night and slept during the day, use the meals as the individual considers them, given their particular schedule, regardless of the actual time of day. For example, if the individual worked a late-shift, slept during the day, and effectively got out of bed and ate breakfast in the evening hours – their "morning" would be recorded as such even though the actual time of day would be the evening.

CLASSIFICATION OF ACTIVITIES

Interviewers will need to know how to appropriately find and classify relatively common physical activities, particularly common household and occupational activities. To do this reliably and quickly during the recall, interviewers must; (1) be familiar with the structure of the 24PAR computer interface, (2) understand the Owen Framework (see below), and (3) be familiar with the organization and content of Compendium of physical activities published by Ainsworth and colleagues (1993 & 2000).

The 24PAR computer interface for entering physical activity information is divided into five major columns to simplify the process of finding activities that took place within a specific social domain (e.g, at home or work).

Each of these categories, except recreation, sports and exercise, are designed to be *location-specific*.

The 5 categories are;

• House-Indoor - activities done inside the house.

- House-Outdoor activities done out of the house, but that were done on "household" property.
- Community activities done away from home, but not at work, school or volunteer locaitons
- Work/School/Volunteer activities done at work (for pay), at school, or at a volunteer work location.
- Recreation/Exercise/Sports activities done for fitness, exercise, or recreation. When reported, location information will be assessed separately.

Activities reported during the interview should only be placed into one of these five categories. <u>That is, each activity should be mutually exclusive, so that a single activity is not entered more than once</u>.

Each of the five major categories contains several sub-categories of activities that should enhance the ability of the interviewer to quickly find specific activities in the database. Also, the sub-categories will enable more specific assignment of the context and purpose of the behavior.

The sub-categories of activities and a few examples within some of the locations/domain are based on the Owen Framework and structure of the Compendium of activities and are listed below.

House – Indoor (75 behaviors in pull-down list).

- Home activities (HA) meal preparation, child-care, chores
- Home repair (HR) remodeling, carpentry, etc.
- Self-care (SC) –eating, grooming (bathing, etc), toileting.
- Music playing (MP)
- Leisure time (LT)
- Work (WRK)
- Religious activities (R)
- Education (EDU)
- Volunteer (VOL)

House – Outdoor (74 behaviors in pull-down list).

- Home activities (HA) playing with children, meal preparation, elder care
- Self-care (SC) -eating, grooming (bathing, etc), toileting.
- Leisure time (LT)
- Music playing (MP)
- Religious activities (R)
- Work (WRK)
- Education (EDU)
- Volunteer (VOL)

Community (124 behaviors in pull-down list).

• Transportation (T) – transit between locations (active or sedentary)

- Home activities (HA) food shopping, playing with children, elder care
- Religious activities (R) services, eating/talking, walking (at church)
- Self-care (SC) –eating, grooming (bathing, etc), toileting.
- Music playing (MP)
- Leisure time (LT)
- Work (WRK)
- Education (EDU)
- Volunteer (VOL)

Work/ School / Volunteer (68 behaviors in pull-down list).

- Work (for pay, WRK) standing, walking, lifting/carrying
- School/Education (EDU)
- Volunteer (no pay, VOL) standing, walking, playing with children

Recreation / Exercise / Sports (109 behaviors in pull-down list).

- Bicycling (B) by type, not stationary
- Conditioning exercise (CE) stationary cycling, weight training, ex. machines
- Dancing (D) social or aerobic dance, by type
- Fishing and hunting (FH) by mode and type of animal
- Running (R) jogging, running (by speed, mph & min/mile), cross-country
- Sports (S) by type
- Water activities (WA) by type (boating, skiing, swimming, etc)
- Winter activities (WI) by type (ice skating, x-country or downhill ski, sledding)
- Walking (WLK) by situation (birdwatching, backpacking, walking dog, or by speed).

Please note, location information for recreation, exercise, and sports activity will be recorded separately (e.g., at home, at work, etc)

Many of the behaviors in the pull-down lists include an indicator for body position ("sit" or "stand"). Select the "sit" behaviors to record a sedentary behavior and "stand" to indicate an active behavior. If not body position is indicated, the behavior in the list is coded as "active". Classification of the individual behaviors will take place when the data are scored.

To aid the interviewer in finding the specific activities in the activities database, each activity sub category in the database (in each activity domain) has been coded with a "search code" using the initials of the activity categories listed above.

For example, in order to find and enter lawn-mowing activity using the 24PAR interface, the interviewer would:

- 1. Place the cursor in the top activity cell in the House Outdoor activity domain/column (the activities list will "pop up").
- 2. Type in the Search Code for Lawn and Garden activities. "LG", followed by a space (hit the space bar once).
- 3. Then, type in the first letter of the major descriptor of the activity of interest, in

this case "m" for mow lawn. All of the lawn mowing options should appear in the pop up window.

- 4. Scroll through the mow lawn options until the correct option appears [riding, walking with push mower, walking with self-propelled mower, or walking with hand-mower (i.e., no engine)].
- 5. Place the cursor on the correct type of mowing, then hit enter. This activity will be selected, and the cursor will move to the activity duration box to allow the interviewer to enter the length of time the respondent spent mowing the lawn (excluding water breaks of course!).

HOW DO WE DEAL WITH MULTI-TASKING?

Multi-tasking involves doing more than one behavior at the same time (or over a small period of time, e.g., an hour). Sometimes it can be difficult for respondents to split up their behaviors to fit our classification scheme. For example, someone could be reading the paper and eating breakfast at the same time. Should this be coded as eating or reading?

Since multitasking can lead to double counting of time, interviewers should pay careful attention to time reports when sorting out these issues.

Activities can be classified as primary, secondary, or tertiary activities when social aspects of behavior are layered into the possible classification scheme. Our challenge will be to consistently make a determination of the primary activity the person was engaged in, and record that information in the 24PAR database. We will not record secondary or tertiary behaviors.

We will code only the <u>primary activities</u> and provisionally will always select the most physically active behaviors as the "primary" activity, if/when multitasking is reported. So, if a male respondent was at home standing in his kitchen and cooking dinner for his family, talking on the phone to a realtor, and serving as the sole child care provider at the time, there could be three possible activities to classify (standing-meal prep, talking on the phone, child care). However, the primary active behavior would be meal preparation, a household activity since it was the most active behavior of the three. Talking on the phone would be secondary, and child care could be the tertiary behavior if child care was indicated only by general presence in the home.

If someone was watching television while walking on their treadmill, walking would be the primary behavior, television secondary.

Making a determination of the primary sedentary behavior may be more challenging when several sedentary behaviors are reported at once, but provisionally, the behavior that was the respondents' "primary focus" during the period of multitasking may provide a useful way to make this determination.

At least two strategies might be helpful in helping respondents split up their time, when the primary task switches from one behavior to another in a short period of time (e.g., reading the paper, checking email, and watching TV). First, interviewers should try to get a "best estimate" of the amount of time spent in each (primary) behavior in multitask period, assuming that there is the potential for frequent switching during a period of multitasking. Alternatively, if the respondent is unable to make a direct time estimate, sometimes is it productive to ask for the proportion of time spent in each behavior in a fixed time period ("about how much time in that hour, what percentage of time were you doing each activity?")

We are not alone in this challenge, and we will need to identify prevalent issues and revisit our decision rules, and refine our approach to ensure consistency.

WHAT TO DO WHEN ACTIVITIES CANNOT BE CLASSIFIED?

In the event that an interviewer is unable to classify an activity during the interview, they should write down the activity, its duration, and time of day, and continue with the interview. Following the interview, they should use the available activity listings or the compendium to identify the appropriate activity. There are five spaces for unclassifiable activities in the recall summary section of the 24PAR data entry screen.

Enter a description of the activity, the 5-digit compendium code, duration, location, setting, purpose, and segment of the day.

PROBE TO REFINE INFORMATION REPORTED

Duration reports. It's important to probe the duration reported to help refine the information provided, particularly exercise and sport activities such as swimming laps or playing tennis that have predictable rest periods. For example, an individual may report swimming ("being in the pool for 45 minutes"), but they may have only been actively swimming laps for 35 minutes. Similarly, competitive sports such as tennis often entail multiple breaks, lower intensity warm-up periods, as well as higher intensity competitive periods.

For each exercise or sport reported, specifically ask for the overall time spent doing the activity, and then refine the estimate by asking to exclude break periods. Lower intensity warm-up or cool-down periods may be entered separately if possible.

24PAR DATA ENTRY GUIDELINES

The 24PAR data collection form should be used as a template from which to administer each interview.

Always keep a pencil and paper on hand during the interview to record information that you are not able to enter into the computer. However, the computer interface should be the primary mode of recording information. The 24PAR Notes Page (see Appendix 2 has been created to assist in this process).

You can enter information collected in your notes (e.g., unclassifiable/hard to find activities) following the interview phone call.

Recording Types and Time Spent in Activity

• Record time spent in sitting and physical activities to the nearest 5-minutes (i.e., 0:05, 0:10, 0:25, 1:00, 1:15 hours, etc...).

You must type in the hour as 0 even if there are no hours in the duration reported, as the interface requires this form of entry.

Getting Started

1) Open Microsoft Access database.

2) In the "Objects" section, choose "Forms" (upper left part of screen).

3) Select "Survey" (on right side of screen). This opens the 24PAR data entry interface.
4) There are five page "tabs" just below the ID & Respondent initials (Resp Initials), Sequence, and Date banner. The tabs include: Begin Interview, Morning, Afternoon, Evening, and Summary). You can move between the "pages" of the interface by clicking these tabs.

Contact and Call Information.

At the top of the data entry screen (over all tabs) is a place to record the participant's ID number, their initials (to help sort out possible duplicate records and ID problems) and the call sequence.

The call sequence will indicate the call intended for the first weekday (WKDay1) or second weekday (WKDay2), or the weekend day (WKEnd) assigned.

An ID, initials, and sequence must be entered before the program will allow you to proceed.

The date that the call was made is recorded in the database automatically using sytem date on your computer. Therefore, the date on your computer must be correct. <u>Verify</u> that the computer date is correct before you complete your first recall. If the date is incorrect, set your computer's date to the correct date before you complete the first recall. Please check periodically to be sure your computer date remains correct.

The Begin and End fields on the top banner record the time that the first question is answered (1. Work,...), again using the system time on the computer, and time at which the Summary tab is selected.

The date and time information here is fully automated and should not be modified by the interviewers, as long as the date is correct.

G	Survey - Microsoft Access _ =										
	20	Home Create External Data Database Tools Comparison		x							
		j Cut Image: Second									
Vi	ew	Pate Format Painter B T U A Or Hit Steele More Steele Stee									
Vi	ws	Clipboard 75 Font 73 Rich Text Records Sort & Filter Window Find									
>>		ID Number 101 Resp Initials: CM Sequence: WKDay2 V Date 7/8/2009 Begin 13:36 End 13:38		A							
	.0	Begin Interview Morning Afternoon Evening Summary									
Navigation Pane		We're going to do a 24-hour recall together. I will be asking about how you spent your time yesterday. Let's start with some questions about your work or school activities. 1. Did you work (for pay) yesterday? (Y/N) Image: Comparison of the school activities. 2. Did you go to school yesterday? Image: Comparison of the school activities. 3. Did you go to school yesterday. By sleeping, Imean the time you got into bed at night until the time you got out of bed in the morning. You may not have actually been asleep the whole time you were in bed. You may have been reading or watching TV for some of this time. 3. What time did you get out of bed yesterday? (enter time) Image:									
		cord: H 4 [2 of 2 → H H 3 1% No Filter Search 4 III	•								
_	n Viev			_							
1	sta	👔 🔮 24PAR interviewer t 🥻 🍘 Microsoft Outlook W 🔁 3 Windows Explorer 🔹 🖉 Microsoft Access - P Search Desktop 🖉 🐔 🖉 🚏 🖓 😂 🖉	1:41 P	4							

• Begin interview

- Introduce general recall procedures and begin the interview.
- Ask questions 1 to 4 and enter data as reported.
- Enter "time to bed" and time "out of bed". Record sleep time to the nearest quarter hour (e.g., 7:00, 7:15, 7:30, or 7:45). Record AM & PM indications.
- Click "Morning Activities" button, or tab at top of screen to continue.

	Survey - Microsoft Access _ 🖉 🗙											
	🕑 🕼 Home Create External Data Database Tools 🛞 – 🗸 X											
Vie		A Cut A Cut										
»		ID Number 101 Resp Initials: CM Sequence: WKDay2 V Date 7/8/2009 Begin 13:36 End 13:38										
	.0	Begin Interview Morning A thereone Tevening Summary										
We're going to do a 24-hour recall together. I will be asking about how you spent your time yesterday. Let's start with some questions about your work or school activities. 1. Did you work (for pay) yesterday? (Y/N) Yes No 2. Did you go to school yesterday? Yes No Now lets talk about your sleeping yesterday. By sleeping, I mean the time you got into bed at night until the time you got out of bed in the morning. You may not have actually been asleep the whole time you were in bed. You may have been reading or watching TV for some of this time. 3. What time did you go to bed last night? (enter time) 10:30p As we go through the rest of the interview, remember that there are no right and wrong answers, and you can add new information as you remember it. I am going to ask you about how you spent your time yesterday, starting when you got out of bed in the morning until you go to into bed last night. In doing this, I want you to recail what you actually did, not what you usually do. Morning Attivities												
Forn	, Viev		1 (L ¥									
2	sta	🕷 🖗 24PAR interviewer t 🛛 🍘 Microsoft Outlook W 🗋 😂 Windows Explorer 🔹 🖗 Microsoft Access - P 🛛 Search Desklop 🖉 🖓 🖉 🖉 🖉 🖉 🖉 🖉 🖉 🖉 🖉 🖉 🖉 🖉 🖉	¥1 PM									

Morning

- Ask for time participant ate lunch. If no lunch was eaten, enter 12-noon, or a time that is relevant for the respondent, to define morning time period (adjust as necessary for shift-workers). Include A & P indicators for lunchtime (e.g., AM, PM).
- This will provide an estimate of the amount of time in the segment.
- In this segment include activities done up until the break period, but not after the break demarcation. That is, do not including eating lunch in the morning time period.
- Ask the respondent to verbally review, in general (details will come later) what they did, where they went, etc. yesterday morning – from the time they got out of bed until lunchtime. Record this information on the interview worksheet if necessary.
- After they have provided the basic outline, begin to obtain reports of their specific behaviors in each of the broad location categories.

7)	Survey - Microsoft Access	_ a x											
"	V 🕼 Home Create External Data Database Tools	() _ = >											
iew iews	Paste J Format Painter → Copy Paste J Format Painter → Format Painter → Delete → → More → → Filter → → Delete → → → More → → → → → → → → → → → → → → → → → → →	í Selection ~ JAdvanced → Toggle Filter Windows ~ Windows ~											
	ID Number ##### Resp Initials: CM Sequence: WKDay2 ▼ Date 7/8/2009 Begin 13:3												
What time did you eat lunch yesterday? 11:30a (If no lunch, enter 12-noon) So, you got out of bed at 6:45a and ate lunch at 11:30a Think about where you were and what you did during this 4:45 hour period?													
	House-Indoor House-Outdoor Community Work/School/Volunteer Rec	reat/Sport/Exercise RPE Where											
		SUMMARY											
		Time Aveilable A 47											
		Time Available 4:45											
		Time Reported 0:00											
		Over/Under 4:45											
		4.45											
		Afternoon											
		Activities											
	Record: II 4 2 of 2 > > > > > > > > > > > > > > > > > >												
rm View	View Start 🖉 24PAR interviewer t 🌾 Microsoft Outlook W 🔁 3 Windows Explorer 🚽 🗭 Microsoft Access - P Search Desktop	₽ ŢŢ\$\$\$* ₽ ŢŢ\$\$\$* ₽ Ţ\$\$											

• Morning (continued)

- Review the SUMMARY information on the right side of the screen to identify major reporting problems.
 - "Time Available" = total time available in period (i.e., time between start of period (time out of bed) until meal time (lunch).
 - "Time Reported" = total time reported in all activities

- "Over/Under" = difference between "Time Reported" and "Time Available".
- Refine times reported so that activity time reported is not greater than time available. That is, so that "Over/Under" time is not "+".
- Refine time reported so that they are as close as possible to correct (within ~ 1 hours), but do not let the interview get bogged down in accounting for these times.
- Click "Afternoon Activities" button or use tab to proceed.

• Afternoon

- Ask for time participant ate evening meal. If no meal was eaten, enter
 6:00P, or a time that is relevant for the respondent, to define afternoon time period (adjust as necessary for shift-workers).
- Ask the respondent to verbally review, in general (details will come later) what they did, where they went, etc. yesterday afternoon – from the midday break point time until the evening meal (or evening break).
- After they have provided the basic outline, begin to obtain reports of their active and sedentary behaviors for each activity location/domain.
- Include activities done up until, but not including eating. Eating the meal is the break point of the period.
- Review the SUMMARY information at bottom right of the screen to identify major reporting problems.
- Click "Evening Activities" button, or use tab to proceed.

Or Out o		🔊 - 🕲 - 🗧 Survey - Microsoft Access														
Part J Copy Image: Section of the sectin of the sectin of the sectin of the section of the sect	•	Home Create External Data Database Tools	 Image: Image: Ima													
Begin Interview Marming Afternoon Evening Summary What time did you eat dinner yesterday? Think about where you were and what you did during this 7:30 House-Indoor House-Outdoor Community Work/School Recreation/Excercise RPE Where V	*	Pate J Format Painter J For	Go To ▼ Select ▼													
Pegin interview Itoming Attemon Evening Summary What time did you eat dinner yesterday? 7:00p Think about where you were and what you did during this 7:00p House-Indoor House-Outdoor Community Work/School Recreation/Excercise RPE Where With time did you eat dinner yesterday? Think about where you were and what you did during this 7:30 House-Indoor House-Outdoor Community Work/School Recreation/Excercise RPE Where With time did you eat dinner yesterday? Work/School Recreation/Excercise RPE Work Work/School Recreation/Excercise Work		DNumber ##### Desploitals: CM Sequence WKDav2 x Date 7/8/2009 Begin 13:36 End 13:38														
House-Indoor House-Outdoor Community Work/School Recreation/Excercise RPE Where V																
House-Indoor House-Outdoor Community Work/School Recreation/Excercise RPE Where N																
INDUSCION		Think about where you were and what you did during this 7:30 hour period?														
Industry Industry <td< td=""><td></td><td></td><td></td></td<>																
Image: Search Image: Search<																
Image: Search Image: Search<																
Image: Second H 4 (2 of 2 > H + 15 Vicition Search + 4																
Image: Summary																
Image: Summary			₩													
Image: Search Imag																
Image: Search Imag	5	SUMMARY														
Image: Search Imag		Time Available 7:30														
Record: H4 (2 of 2)> H) H2 % No Filter Search 4																
Record: H 4 (2 of 2) > H > % No Filter Search 4																
Record: H4 (2 of 2) > H >B X No Filter Search 4		Over/Under 7:30														
Record: H 4 2 of 2 > > + > > X No Filter Search 4																
Record: H 4 [2 of 2] > H H2 K No Filter Search 4		Evening														
Record: H 4 2 of 2 > > > > > > > > > > > > > > > > > >																
	Re	rd: H 4 2 of 2 > > > > > H +R 😵 No Filter Search 4	→													
	orm Viev		2:28 PM													

• Evening

- Repeat the approach above.
- o Review SUMMARY information at bottom right of screen to identify major reporting problems. Refine reports as necessary.
 Click "To Summary" button, or use tab to proceed.

57	← (¹ ← ² → Survey - Microsoft Access													
Home Create External Data Database Tools														
iews	↓ Sout ↓ Sout ↓ Sout ↓ Wayset ↓ Juget ↓ Juget													
	lumber ##### Resp Initials: CM Sequence: WKDay2 ✓ Date 7/8/2009 Begin 13:36 End 13:38 Interview Morning Afternoon Evening Summary													
Earlier you said you ate dinner at 7:00p and went to bed at 10:30p. Do not record activities occuring after 12-midnight. Think about where you were and what you were doing in this 3:30 hour period.														
	House-Indoor House-Outdoor Community Work/School Recreation/Excercise Effort Where													
		 												
		~												
		~												
	Time Available 3:30													
	Time Reported 0:00													
	Over/Under 3:30													
	Summary													
Re	Image: Contract of the search Image: Contract of the search]												
rm Vie		• • • •												
sta	🖉 24PAR intervi 🍘 Microsoft Cuti 😋 3 Windows 🗭 Microsoft Acc 🕞 Microsoft Excel Search Desktop 🖉 🕄 🔍 🔍 🔍	2:31 8												

• Summary

- o Indicate reliability of the interview before you end the call.
- End call.
- If recall was unreliable, comment why you thought so.
- Rate your opinion of subject's level of effort in making recall (i.e., how hard they "tried" on the interview, not how hard it was for them).
- Enter any activities you were unable to classify during the interview.
- Click "Exit" or "Make more calls" button as needed.

Survey - Microsoft Access											σ x							
	C.	Home	Create Ex	ternal Data Da	tabase Tool	s											- 1	≠ x
View		Paste S Fo Clipboa	py rmat Painter	BIUA	v 🔄 v 🗄 Font		Image: second	Refresh All *	Save Celete • Records	Σ Totals	2↓ Z↓ 2⊘	Filter	Selection Cartery Cartery	Size to Switch Fit Form Windows Window	Find	abc Replace ➡ Go To ▼ ↓ Select ▼ Find		
»		ID Number	+#####	Resp Initials:	CM	Sequence:	WKDay2 🗸	Date	7/8/2	009 Be	qin 🗌	13:3	36 End	14:32				÷.
				Afternoon Eveni	ng Sumn							-						
		Do you think this recall reliable?																
		If recall w	as unreliabl	e, please com	ment:						 Very 							
n Pane		Please I	ist any activ	rities which you	ı were ur	nable to class	ify or that were o	done in th	e middle o	of sleep pe	eriod							
Navigation Pane				Descripti	on	Code	Duration	2=A 3=E	forning fternoon vening leep				Exi	t				
		1											Mak	-				
		2						Ļ					more					
		3																
		4																
		5																
	Reco	ord: 14 4 2 of	2 1 1 10	🖹 No Filter 🛽	earch	•						1						•
Form	_			X	Y												308	
2	sta	rt 🚽 🖭	24PAR intervi	🥖 Microsoft O	utl 📔	3 Windows	💌 🌠 Microsoft Acc	🗵	ficrosoft Exce	Search	Desktop			۶ 2	r 🕻 🄇 🔊	₽₽⊑₫	2:3	82 PM