National Human Exposure Assessment Survey (NHEXAS)

Arizona Study

Quality Systems and Implementation Plan for Human Exposure Assessment

The University of Arizona
Tucson, Arizona 85721

Cooperative Agreement CR 821560

Standard Operating Procedure **SOP-UA-D-21.0**

Title: Cleaning: Food Diary Follow Up

Source: The University of Arizona

U.S. Environmental Protection Agency
Office of Research and Development
Human Exposure & Atmospheric Sciences Division
Human Exposure Research Branch

Notice: *The U.S. Environmental Protection Agency (EPA), through its Office of Research and Development (ORD), partially funded and collaborated in the research described here. This protocol is part of the Quality Systems Implementation Plan (QSIP) that was reviewed by the EPA and approved for use in this demonstration/scoping study. Mention of trade names or commercial products does not constitute endorsement or recommendation by EPA for use.*

Cleaning: Food Diary Follow Up

1.0 Purpose and Applicability

The purpose of this procedure is to define the particular steps involved in cleaning the electronic data generated from data entry of the Food Diary Follow Up Questionnaire. It applies to electronic data corresponding to the Food Diary Follow Up Questionnaire that was scanned and verified by the Data Staff for NHEXAS Arizona, the Border Study, or other Health and the Environment projects.

2.0 Definitions

2.1 BORDER STUDY: An alias for "Total Human Exposure Arizona: A Comparison of the Border Communities and the State" conducted in Arizona by the University of Arizona/Battelle/Illinois Institute of Technology consortium.

2.2 DATA CLEANING: The process of locating and correcting data processing and field technician errors. They can be individual level errors in the electronic and physical data, or they can be system level errors in the data collection, packaging, coding, entry, and cleaning procedures themselves. This process is also referred to as "data validation."

2.3 DATA, ELECTRONIC: Data stored on some type of magnetic or optical medium (for example: floppy disk, hard disk).

2.4 DATA, ENTERED: Electronic data scanned into a data file using Teleform scanning software. Entered data are the product of "data entry."

2.5 DATA, VERIFIED: Electronic data that has cleared through the Teleform Verification process. In the Verification process Teleform reviews all of the entered data and displays any possible errors. These potential errors are reviewed by a Data Technician. Once all of the errors are fixed the data is saved to an ASCII file.

2.6 DATA CLEANING BATCH: A collection of electronic data, along with their corresponding physical forms. Data cleaning batches are formed after one or more data processing batches (see DATA PROCESSING BATCH below) are scanned. The data cleaning batches are then cleaned (see DATA CLEANING) and appended to the master database (as described in UA-D-44.X). Each data cleaning batch is assigned a numeric descriptor of the form MMDDYY, where MM is the month the batch was created, DD is the day the batch was created, and YY is the year the batch was created. If more than one batch is created on the same day, each batch after the first is assigned a descriptor of the form MMDDYY_N, where N denotes the batch as being the Nth batch created that day.

2.7 HEALTH AND ENVIRONMENT PROJECTS (or H&E): An umbrella title for all projects funded to M.D. Lebowitz and/or M.K. O'Rourke (or their designees) which

examine purported or real relationships among environmental factors and any aspect of human health.

2.8 HRP SITE: The **H**ealth **R**elated **P**rofessions building, located at 1435 North Fremont Avenue; Tucson, AZ 85719. This is an annex of the Arizona Prevention Center and the primary site of NHEXAS Arizona, the Border Study, or other Health and the Environment projects.

2.9 MASS DATA MASSAGE PROCESS (or MDM) = The data processing program used by NHEXAS Arizona, the Border Study, and other Health and Environment projects.

2.10 NHEXAS Arizona: Acronym for **N**ational **H**uman **EX**posure **A**ssessment **S**urvey, a research project conducted in Arizona by the University of Arizona/Battelle/Illinois Institute of Technology consortium.

3.0 References

SOP UA-D-44.X (Operation Manual of the Mass Data Massage Program) (This Volume)

4.0 Discussion

A copy of the Food Diary Follow Up Questionnaire is given in Appendix A. This copy has each variable labeled for easy reference. Questionnaires and Forms are reviewed for completeness and accuracy prior to being transferred to the data section of the project. These checks are designed to generate flawless forms and questionnaires prior to data entry. Once entered and verified the data is subject to logic checks through the application of Dictionaries and other projects. A copy of the Dictionary for the Food Diary Follow Up Questionnaire is given in Appendix B. This dictionary defines the file structure for the Food Diary Follow Up Questionnaire database, as well as the logic and range checks that are performed on each field. For further reference, see SOP# UA-D-4.X.

Sometimes despite all best efforts, errors are found in data. These errors must be corrected to produce a valid database. At this time, all anticipated problems have been addressed. "Cleaning" protocols are developed concurrently with data entry to address the unanticipated problems. Specific corrections will be documented as outlined in SOP # UA-D-38.X.

5.0 Responsibilities

The Project Data Coordinator is responsible for writing the data cleaning instructions for the Food Diary Follow Up Questionnaire when data problems are found during the data entry process.

6.0 Materials and Reagents

6.1 Local Area Network
6.2 Purple Pen
6.3 Copy of Data Dictionary for specific form.

7.0 Procedure

7.1 Steps Followed

I. Data Technicians

A. Entering data

1. Scan and verify the form as described in UA-D-34.X.

B. Cleaning Data

1. Log into UNIX environment.
2. Type "data" to run the Data Cleaning program.
3. Select form type:

   a. The user will enter "3" for Questionnaires.
   b. The MDM will then prompt the user for a specific questionnaire. The user will then enter "5" for Diet Diary Qx.

4. The *MDM* shall prompt the user for an action. The user then selects an operation from a given list. Operations include:

   a. Create a new batch
   b. Clean existing batch
   c. QA an existing batch
   d. [Examine Descriptive Master Database]

5. The user will select the Clean existing batch option:

   a. The *MDM* will list all possible batches to clean.
   b. If there are no batches, the program will inform the user, and prompt the user to press the <enter> key, which will return the user to the previous menu.
   c. If there are batches to be cleaned, the user will be prompted for a specific batch.
   d. Once a batch is selected, it is preprocessed (checking for errors) for cleaning, and the user is given information regarding the status of the preprocessing.
   e. If no errors are found within in the data, the *MDM* will send mail to the Data Coordinator informing him of the newly cleaned batch.

f. If errors are found in the data, the user is informed as to the number of errors found within the batch.

   i. For each error found in the batch, the user will be shown the key variables to locate the record containing the error, which is displayed between dashed lines.
   ii. The user is then prompted for an action, the action being either the changing the erroneous value, the skipping of the error, a manual change to a different variable in the current record, a manual change to any variable in any record, or the user may quit.

g. If the user wishes to change the erroneous value:

   i. Then "C" must be entered.
   ii. The variable name is then displayed, and the *MDM* prompts for a new value.
   iii. Once a new value is given, the user is given the option to accept the value given, to accept a value formatted by the *MDM*, or to abort the operation.
   iv. If the operation is not aborted, the user is prompted for a reason for the change. Once a reason is given, the update is completed.

h. If the user wishes to skip the error:

   i. He/she must enter "S".
   ii. This will cause the *MDM* to skip the current error, but not the current record.

i. If the user wishes to change the value of a different variable in the current record:

   i. He/she must enter "M".
   ii. The user will then be prompted for the number of changes to be made.
   iii. Once this number is entered, the *MDM* will then prompt for the variable to be changed.
   iv. Once a valid variable is specified, the user is prompted for the new value.
   v. Once a new value is given, the user is given the following options:

      aa. Accept the value given
      bb. Accept a value formatted by the *MDM*
      cc. Abort the operation.

vi. If the operation is not aborted, the user is prompted for a reason for the change. Once a reason is given, the update is completed.

j. If the user wishes to change the value of a variable in a different record:

i. He/she must enter "R".
ii. The user will then be prompted for the number of changes to be made.
iii. Once this number is entered, the *MDM* will then prompt for the key variable values of the record to be modified.
iv. Once valid values are given, the *MDM* prompts the user for the variable to be changed.
v. Once a valid variable is specified, the user is prompted for the new value.
vi. Once a new value is given, the user is given the following options:

aa. Accept the value given
bb. Accept a value formatted by the *MDM*,
cc. Abort the operation.

vii. If the operation is not aborted, the user is prompted for a reason for the change.
viii. Once a reason is given, the update is completed.

k. If the user wishes to quit, he/she must hit the "Q" key. The user is then returned to the menu defined in I.B.4.

7.2 Steps which are unique to the Food Diary Follow Up Questionnaire.

7.2.1 For each meal eaten, the subject must indicate where the meal was prepared and eaten. If the subject does not indicate both of these, the missing bubble for the location is filled.

8.0 Records

8.1 All records are automatically generated by the *data* processing program.
8.2 Records of all the forms in a cleaning batch are printed out when the batch is created. This list is then attached to the cleaning batch.
8.3 Records of the changes made to the data are located in the following directory tarred with their associated batch: /rsc53/NHEXAZdata/master/qx/fdf/data.
8.4 Records of the cleaning batches which have been appended to the master data base are located in the following directory: /rsc53/NHEXAZdata/master/qx/fdf. The list is kept in the file "read.me".

8.5 All changes to the hard copy of the form must be dated and completed in purple or red ink.

Inclusions:

Appendix A: Food Diary Follow Up Questionnaire (5 pages)
Appendix B: Food Diary Follow Up Dictionary (30 pages)

Appendix A: Food Diary Follow Up Questionnaire

HHID HHID F.S. IRN #
HHIDFS IRN

ADULT FOOD DIARY FOLLOW UP

National Human Exposure Assessment Survey

FIRST Name (ONLY): FNAME

Date of Completion: MO / DAY / YR EVNTDATE

INSTRUCTIONS

- Please use the **black, felt tip pen** provided in the notebook when you complete this questionnaire.
- Please follow the special guidelines typed in ***bold italics***. They tell you to either ***Continue*** to the question below, or to ***GO TO*** a given question.
- Please answer questions printed on a white background only. Shaded areas are for office use only.
- **Multiple Choice Questions**: Please fill in the appropriate bubble(s) (○) that appear to the left of each response.

  For example: How old is the puppy? ***Fill in ONE bubble.*** ○ 1 week ● 2 weeks ○ 3 weeks

  Please shade bubbles like this: ● **and *not* like this:** ⊗ ✓
- **Open Ended Questions**: Please write your answer on the line(s) or in the box(es) provided. Please write your numbers in the boxes using a block style without touching the sides of the boxes.

  For example: 0 1 2 3 4 5 6 7 8 9

  For example: How old is the puppy? ..... 2 week(s)
- **If You Make a Mistake**: For multiple choice, cross out the incorrect answer(s). For open-ended questions, cross out the incorrect value(s) and write the correct value(s) above or beside the boxes.

  For example: How old is the puppy? ***Fill in ONE bubble.*** ⊗ 1 week ● 2 weeks ○ 3 weeks

  For example: How old is the puppy? ..... ~~14~~ 15 week(s)
- If you wish to not answer a question, then please draw a line through it, *but not through the answer space.*

  For example: ~~How old is the puppy?~~ ..... week(s)

All data gathered in this questionnaire is kept strictly confidential. ***Thank you for your time and support!***

Public reporting burden for this collection of information is estimated to average 5 minutes per response, and to require 0 hours of recordkeeping. This includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 401 M St., S.W., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington D.C. 20503. OMB Clearance #: 2080-0053 Expires: 07/31/98

Data Use Only:	0 1	2 3	4 5	6 7	8 9	A B	C D	E F	G H	I J
	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○

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Study Participants: Please begin on page 3 (next page). PAGE 2

Adult Food Follow Up

DESIGNATED PARTICIPANT

If the participant is LESS THAN 10 YEARS OLD, what is the first name of the individual who is providing the answers for the designated respondent?

FIRST Name (ONLY): G_FNAME

IRN #: G_IRN

What is the relationship of this individual to the person for whom the responses are provided? ***Fill in ONE bubble.***

- ○ 1. Self
- ○ 2. Guardian G_relat
- ○ 3. Other (Specify: _____)

OFFICE USE ONLY

_____

☐ QC
☐ X's.R
☐ Y's.N
☐ Z's.M

☐ QC
☐ -5.R
☐ -8.N
☐ -9.M

_____

○ 55.R ○ Relat. Code
○ 88.N
○ 99.M
G_relat

Comments: _____

Chain of Custody initiated _____ Consigned to packet on [ ]: __/__/__ Box UA-G-4-2.0

OFFICE USE ONLY

Form Type: 07 ITEMNUM
NHEXAS Form ID: UA-T-1.0-8.0

Study: STUDY
○ 1. NHEXAS
○ 2. Border
○ 3. _____
○ 4. _____
○ 5. _____

STAGE **Stage #:** Collapse **Collapsed?** Y N 8 ○ ○ ○

Admin. Method: Adnmeth
○ 1. Tech _____ **Admin. by:** _____ Init.
○ 2. Self
○ 3. Guardian
○ 4. Other
Tech. ID

Form Status:
○ 1.Cmp
○ 2.N Cmp
○ 3.P Cmp
○ 4.Re-col
○ 5.Ref
○ 7.Dest
○ 8.N/A
○ 9.Miss

QCBY Tech. ID | QCDATE MO / DAY / YR

QC: _____ Init.

QA: _____ Init. QABY | QADATE

DEBY Tech. ID | DEDATE MO / DAY / YR Tech ID

DE: _____ Init.

DP Batch: DPBATCH

QXV: QFFA1

FORMSTAT

Data Use Only: 0 1 | 2 3 | 4 5 | 6 7 | 8 9 | A B | C D | E F | G H | I J

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HHID: | FS: | IRN:

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Adult Food Follow Up

COMPLETE THIS ON THE SAME DAY THE FOOD SAMPLES ARE COLLECTED.

1. Was breakfast eaten? ***Fill in ONE bubble.***
   - ○ 1. Yes ..... ***Continue below***
   - ○ 2. No ..... ***GO TO Question # 4 (this page below)***

Breakfas

2. Where was your breakfast prepared and eaten? ***Read choices and shade bubble for PREPARED and EATEN for the location(s) that apply.***

	PREPARED	EATEN
a. Home	○ P B-home	○ E
b. Restaurant or cafeteria	○ P B-restau	○ E
c. Work site	○ P B-work	○ E
d. School or day care center	○ P B-school	○ E
e. Other: _____	○ P B-other	○ E

3. How often do you eat a breakfast like the one you described in the diary? ***Read choices and fill in ONE bubble.***
   - ○ 1. 6 to 7 times per week
   - ○ 2. 1 to 5 times per week
   - ○ 3. Less than once a week

Br-often

4. Was lunch eaten? ***Fill in ONE bubble.***
   - ○ 1. Yes ..... ***Continue below***
   - ○ 2. No ..... ***GO TO Question # 7 (next page)***

lunch

5. Where was your lunch prepared and eaten? ***Read choices and fill in bubble for PREPARED and EATEN for the location(s) that apply.***

	PREPARED	EATEN
a. Home	○ P L-home	○ E
b. Restaurant or cafeteria	○ P L-restau	○ E
c. Work site	○ P L-work	○ E
d. School or day care center	○ P L-school	○ E
e. Other: _____	○ P L-other	○ E

6. How often do you eat a lunch like the one you described in the diary? ***Read choices and fill in ONE bubble.***
   - ○ 1. 6 to 7 times per week
   - ○ 2. 1 to 5 times per week
   - ○ 3. Less than once a week

Ln-often

OFFICE USE ONLY

R	N	M
○ 55	○ 88	○ 99

○ Loc.

B-other

R	N	M
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99

R	N	M
○ 55	○ 88	○ 99

R	N	M
○ 55	○ 88	○ 99

○ Loc.

L-other

R	N	M
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99
○ 55	○ 88	○ 99

R	N	M
○ 55	○ 88	○ 99

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Data Use Only:	0 1	2 3	4 5	6 7	8 9	A B	C D	E F	G H	I J
	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○

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Adult Food Follow Up

7. Was dinner eaten? ***Fill in ONE bubble.***

- ○ 1. Yes ..... ***Continue below***
- ○ 2. No ..... ***GO TO Question # 10 (this page below)***

Dinner

8. Where was your dinner prepared and eaten? ***Read choices and shade bubble for PREPARED and EATEN for the location(s) that apply.***

		PREPARED	EATEN
a.	Home	○ P D-home	E
b.	Restaurant or cafeteria	○ P D-restaU	E
c.	Work site	○ P D-workO	E
d.	School or day care center	○ P D-schoolO	E
e.	Other: _____	○ P D-other	○ E

9. How often do you eat a dinner like the one you described in the diary? ***Read choices and fill in ONE bubble.***

- ○ 1. 6 to 7 times per week
- ○ 2. 1 to 5 times per week
- ○ 3. Less than once a week

Dn-often

10. Please think back. Were there any foods or beverages that you could not or did not collect for us? ***Please list identity, source, and amount of each missing food.***

a. At breakfast:

- ○ 1. Yes ..... ***Please LIST below*** B-nocoll
- ○ 2. No ..... ***GO TO Question # 10 b***

b. At lunch:

- ○ 1. Yes ..... ***Please LIST below*** L-nocoll
- ○ 2. No ..... ***GO TO Question # 10 c***

c. At Dinner:

- ○ 1. Yes ..... ***Please LIST below*** D-nocoll
- ○ 2. No ..... ***GO TO Question # 10 d (next page)***

OFFICE USE ONLY

R ○55 N ○88 M ○99

O Loc

D-other

R ○55 N ○88 M ○99

R ○55 N ○88 M ○99

R ○55 N ○88 M ○99

B-Food 1 1

B-Food 2 2

B-Food 3 3

R ○55 N ○88 M ○99

L-Food 1 1

L-Food 2 2

L-Food 3 3

R ○55 N ○88 M ○99

D-Food 1 1

D-Food 2 2

D-Food 3 3

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Data Use Only: 0 ● 1 ○ | 2 ○ 3 ○ | 4 ○ 5 ○ | 6 ○ 7 ○ | 8 ○ 9 ○ | A ○ B ○ | C ○ D ○ | E ○ F ○ | G ○ H ○ | I ○ J ○

HHID: FS: IRN:

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Adult Food Follow Up

10. *(Continued)* Please think back. Were there any foods or beverages that you could not or did not collect for us?

d. For snacks -- include beverages such as coffee or tea

- ○ 1. Yes ..... *Please LIST below*
- ○ 2. No ..... *GO TO Question # 11* S_nocoll

_____

_____

_____

11. Did you, for any reason, eat *more or less* food than usual? ***Read choices and fill in ONE bubble.***

- ○ 1. More food than usual..... *Continue below*
- ○ 2. Less food than usual ..... *Continue below* Moreless
- ○ 3. Same as usual ..... *GO TO Question # 13 (this page below)*

12. Because of... ***Read choices and fill in bubbles of ALL THAT APPLY.***

- ○ 1. Travel or vacation
- ○ 2. Weight control diet
- ○ 3. Illness or medical condition
- ○ 4. Work or school schedule
- ○ 5. Entertainment or social occasion MI_why
- ○ 6. Because of the food collection study
- ○ 7. Ease/quickness of preparation
- ○ 8. Other (Specify:_____)

13. Did you, for any reason, eat *different* foods than your usual diet? ***Fill in ONE bubble.***

- ○ 1. Yes ..... *Continue below*
- ○ 2. No ..... *STOP HERE* Dif_Food

14. Because of... ***Read choices and fill in bubbles of ALL THAT APPLY.***

- ○ 1. Travel or vacation
- ○ 2. Weight control diet Dif_why
- ○ 3. Illness or medical condition
- ○ 4. Work or school schedule
- ○ 5. Entertainment or social occasion
- ○ 6. Because of the food collection study
- ○ 7. Ease/quickness of preparation
- ○ 8. Other (Specify:_____)

OFFICE USE ONLY

R N M
○ 55 ○ 88 ○ 99

S_Food 1
S. Food 1

S_Food 2
S. Food 2

S_Food 3
S. Food 3

R N M
○ 55 ○ 88 ○ 99

R N M
○ 55 ○ 88 ○ 99

O Resp.
MI_othrd

R N M
○ 55 ○ 88 ○ 99

R N M
○ 55 ○ 88 ○ 99

O Resp.
Df_othrd

Thank you for your participation!

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Pagelink QC: Init:_____

Data Use Only:	0 1	2 3	4 5	6 7	8 9	A B	C D	E F	G H	I J
	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○	○ ○

Appendix B: Food Diary Follow Up Dictionary

* Dictionary reviewed by Mary Kay 05/07/96
* Last updated by Jared on 06/25/97
K HHID (F6.0) ' ', HHIDFS (A1) ' ', IRN (F2.0) ' ', Evntdt_m (F2.0) ' ', Evntdt_d (F2.0) ' ', Evntdt_y (F2.0) ' '

Q HHID 1 1 I6
T Household Identification

Q HHIDFS 1 7 A1
T Household Family Schism
Y 'A' First Schism - default value

Q IRN 1 8 I2
T Interview Respondent Number
R (01,10)

Q Fname 1 10 A15
T First Name

*Q Evntdate 1 25 A8
* T Date of Completion:
* mm/dd/yy

Q Evntdt_M 1 25 I2
T Date of Completion (Month)
R (01,12)

Q Evntdt_D 1 28 I2
T Date of Completion (Day)
R (01,31)

Q Evntdt_Y 1 31 I2
T Date of Completion (Year)
R (95,99)

Q Gfname 1 33 A15
T If the participant is less than 10 years old, what is the first name of the individual who is providing answers for the designated respondent?

Q G_IRN 1 48 I2
T Guardian IRN #
Y -5 Refused
Y -8 N/A
Y -9 Missing
R (01,10)
P G_relat (F3.0) ' ', Gfname (A15) ' '

Q G_relat 1 50 I3
T What is the relationship of this individual to the person for whom the responces are provided?

```
Y 001  Self
Y 002  Guardian
Y 003  Other
Y 055  R
Y 088  N
Y 099  M
P Gfname (A15) ' ', G_IRN (F2.0) ' '
L X (any(Gfname,"YYYYYYYYYYYYYYY") and G_relat=088) and (G_IRN=-8)
L X not(any(Gfname,"YYYYYYYYYYYYYYY")) and not(any(G_IRN,-8) and
+ F not(any(G_relat,088)))

Q G_relato   1  53 I2
T What is the relationship of this individual to the person for whom the responces are provided?: Other
code
Y -5  Refused
Y -8  N/A
Y -9 Missing Value
R (01,10)
P Gfname (A15) ' ', G_relat (F3.0) ' '
L X (any(G_relat,001,002,088,099) and G_relato=-8)
L X (G_relat=003) and (range(G_relato,01,20))
L X (G_relat=055 and G_relato=-8)

Q Itemnum    1  55 A2
T Form Type
Y '06'  Adult Follow Up
Y '07'  Pediatric Follow Up

Q Study      1  57 I14
T Study
Y 00000000000001   NHEXAS
Y 00000000000002   Border
Y 00000000000003   _____
Y 00000000000004   _____
Y 00000000000005   _____

Q Stage      1  71 I1
T Stage #:
R (1,4)

Q Collapse   1  72 I2
T Collapsed?
Y 01  Y
Y 02  N
Y 08  N/A
P Stage (F1.0) ' '
L X (any(Stage,1,4,8) and Collapse = 08)
L X (any(Stage,2,3) and any(Collapse,01,02))

Q Admnmeth   1  74 I2
T Admin. Method
Y 01  Tech
```

Y 02 Self
Y 03 Guardian
Y 04 Other

Q TechID 1 76 I2
T Tech ID
P Admnmeth (F2.0) ' '
Y -8 Default (Not Applicable)
Y -9 Missing

Information intentionally withheld due to confidentiality issues.

Q Formstat 1 78 I2
T Form Status
Y 01 Cmp
Y 02 N Cmp
Y 03 P Cmp
Y 04 Re-col
Y 05 Ref
Y 07 Dest
Y 08 N/A
Y 09 Miss

Q QCBY 1 80 I2
T QC By

Information intentionally withheld due to confidentiality issues.

```
*Q QCDATE    1  82 A8
*T QC Date

Q QCDATE_M   1    82   I2
T QC Date: Month
R (01,12)

Q QCDATE_D   1    85   I2
T QC Date: Day
R (01,31)

Q QCDATE_Y   1    88   I2
T QC Date: Year
R (95,99)

Q QABY       1  90 I2
T QA By
```

Information intentionally withheld due to confidentiality issues.

```
*Q QADATE    1  92 A8
*T QA Date

Q QADATE_M   1    92   I2
T QA Date: Month
R (01,12)

Q QADATE_D   1    95   I2
T QA Date: Day
R (01,31)

Q QADATE_Y   1    98   I2
T QA Date: Year
R (95,99)

Q DEBY       1 100 I2
T DE By
```

Information intentionally withheld due to confidentiality issues.

```
*Q DEDATE    1 102 A8
*T DE Date

Q DEDATE_M   1    102   I2
T DE Date: Month
R (01,12)

Q DEDATE_D   1    105   I2
T DE Date: Day
R (01,31)

Q DEDATE_Y   1    108   I2
T DE Date: Year
R (96,99)

Q DPBATCH    1 110 A3
T DP Batch

Q QXV        1 113 A5
T QVX
Y 'QFFA1'  Default Value
```

* The missing value was left out of all of the Prepared and Eaten logic checks
* because it is possible to have a valid answer AND the missing bubble filled in.
* This is because if either the Prepared or Eaten Variable is missing the missing bubble is filled in.

```
Q Breakfas  1 118 I3
T Was Breakfast eaten
V q1
Y 001  Yes
Y 002  No
Y 055  Refused
Y 088  N/A
Y 099  Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(Breakfas,001,002,055,099))
L X (Formstat=03 and any(Breakfas,001,002,055,088,099))
L X (any(Formstat,02,05,09) and Breakfas=088)

Q B_preph  1 121 I1
T Where was your breakfast prepared and eaten? Prepared: home
V q2a1
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' ', Bhom_ref (F1.0) ' ', Bhom_na (F1.0) ' '
L X (Breakfas=002 or Bhom_ref=1 or Bhom_na=1) and B_preph = 0
L X (Breakfas=001 and Bhom_ref=0 and Bhom_na=0) and any(B_preph,0,1)

Q B_eatenh  1 122 I1
T Where was your breakfast prepared and eaten? Eaten : home
V q2a2
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' ', Bhom_ref (F1.0) ' ', Bhom_na (F1.0) ' '
L X (Breakfas=002 or Bhom_ref=1 or Bhom_na=1) and B_eatenh = 0
L X (Breakfas=001 and Bhom_ref=0 and Bhom_na=0) and any(B_eatenh,0,1)

Q Bhom_ref  1 123 I1
T Where was your breakfast prepared and eaten? Refused : home
V q2ar
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088,099) and Bhom_ref = 0)
L X (Breakfas = 001 and any(Bhom_ref,0,1))
L X (Breakfas = 055 and Bhom_ref = 1)

Q Bhom_na  1 124 I1
T Where was your breakfast prepared and eaten? Non_App : home
V q2an
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088) and Bhom_na = 1)
L X (Breakfas = 001 and any(Bhom_na,0,1))
L X (Breakfas = 055 and Bhom_na = 0)

Q Bhom_mis  1 125 I1
```

T Where was your breakfast prepared and eaten? Missing : home
V q2am
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,055,088,099) and Bhom_mis = 0)
L X (Breakfas = 001 and any(Bhom_mis,0,1))

Q B_prepr 1 126 I1
T Where was your breakfast prepared and eaten? Prepared : restauraunt
V q2b1
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' ', Bres_ref (F1.0) ' ', Bres_na (F1.0) ' '
L X (Breakfas=002 or Bres_ref=1 or Bres_na=1) and B_prepr = 0
L X (Breakfas=001 and Bres_ref=0 and Bres_na=0) and any(B_prepr,0,1)

Q B_eatenr 1 127 I1
T Where was your breakfast prepared and eaten? Eaten : retaurant
V q2b2
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' ', Bres_ref (F1.0) ' ', Bres_na (F1.0) ' '
L X (Breakfas=002 or Bres_ref=1 or Bres_na=1) and B_eatenr= 0
L X (Breakfas=001 and Bres_ref=0 and Bres_na=0) and any(B_eatenr,0,1)

Q Bres_ref 1 128 I1
T Where was your breakfast prepared and eaten? Refused : restaurant
V q2br
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088,099) and Bres_ref = 0)
L X (Breakfas = 001 and any(Bres_ref,0,1))
L X (Breakfas = 055 and Bres_ref = 1)

Q Bres_na 1 129 I1
T Where was your breakfast prepared and eaten? Non_App : restaurant
V q2bn
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088) and Bres_na = 1)
L X (Breakfas = 001 and any(Bres_na,0,1))
L X (Breakfas = 055 and Bres_na = 0)

Q Bres_mis 1 130 I1
T Where was your breakfast prepared and eaten? Missing : retaurant
V q2bm
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '

```
L X (any(Breakfas,002,055,088,099) and Bres_mis = 0)
L X (Breakfas = 001 and any(Bres_mis,0,1))

Q B_prepw   1 131 I1
T Where was your breakfast prepared and eaten? Prepared : work site
V q2c1
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' ', Bwor_ref (F1.0) ' ', Bwor_na (F1.0) ' '
L X (Breakfas=002 or Bwor_ref=1 or Bwor_na=1) and B_prepw = 0
L X (Breakfas=001 and Bwor_ref=0 and Bwor_na=0) and any(B_prepw,0,1)

Q B_eatenw   1 132 I1
T Where was your breakfast prepared and eaten? Eaten : work site
V q2c2
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' ', Bwor_ref (F1.0) ' ', Bwor_na (F1.0) ' '
L X (Breakfas=002 or Bwor_ref=1 or Bwor_na=1) and B_eatenw= 0
L X (Breakfas=001 and Bwor_ref=0 and Bwor_na=0) and any(B_eatenw,0,1)

Q Bwor_ref   1 133 I1
T Where was your breakfast prepared and eaten? Refused : work site
V q2cr
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088,099) and Bwor_ref = 0)
L X (Breakfas = 001 and any(Bwor_ref,0,1))
L X (Breakfas = 055 and Bwor_ref = 1)

Q Bwor_na   1 134 I1
T Where was your breakfast prepared and eaten? Non_App : work site
V q2cn
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088) and Bwor_na = 1)
L X (Breakfas = 001 and any(Bwor_na,0,1))
L X (Breakfas = 055 and Bwor_na = 0)

Q Bwor_mis   1 135 I1
T Where was your breakfast prepared and eaten? Missing : work site
V q2cr
Y 1  Checked
Y 0  Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,055,088,099) and Bwor_mis = 0)
L X (Breakfas = 001 and any(Bwor_mis,0,1))

Q B_preps   1 136 I1
T Where was your breakfast prepared and eaten? Prepared : school
```

V q2d1
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' ', Bsch_ref (F1.0) ' ', Bsch_na (F1.0) ' '
L X (Breakfas=002 or Bsch_ref=1 or Bsch_na=1) and B_preps= 0
L X (Breakfas=001 and Bsch_ref=0 and Bsch_na=0) and any(B_preps,0,1)

Q B_eatens 1 137 I1
T Where was your breakfast prepared and eaten? Eaten : school
V q2d2
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' ', Bsch_ref (F1.0) ' ', Bsch_na (F1.0) ' '
L X (Breakfas=002 or Bsch_ref=1 or Bsch_na=1) and B_eatens=0
L X (Breakfas=001 and Bsch_ref=0 and Bsch_na=0) and any(B_eatens,0,1)

Q Bsch_ref 1 138 I1
T Where was your breakfast prepared and eaten? Refused : school
V q2dr
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088,099) and Bsch_ref = 0)
L X (Breakfas = 001 and any(Bsch_ref,0,1))
L X (Breakfas = 055 and Bsch_ref = 1)

Q Bsch_na 1 139 I1
T Where was your breakfast prepared and eaten? Non_App : school
V q2dn
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088) and Bsch_na = 1)
L X (Breakfas = 001 and any(Bsch_na,0,1))
L X (Breakfas = 055 and Bsch_na = 0)

Q Bsch_mis 1 140 I1
T Where was your breakfast prepared and eaten? Missing : school
V q2dm
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,055,088,099) and Bsch_mis = 0)
L X (Breakfas = 001 and any(Bsch_mis,0,1))

Q B_prepo 1 141 I1
T Where was your breakfast prepared and eaten? Prepared : other
V q2e1
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' ', Both_ref (F1.0) ' ', Both_na (F1.0) ' '
L X (Breakfas=002 or Both_ref=1 or Both_na=1) and B_prepo=0

L X (Breakfas=001 and Both_ref=0 and Both_na=0) and any(B_prepo,0,1)

Q B_eateno 1 142 I1
T Where was your breakfast prepared and eaten? Eaten : other
V q2e2
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' ', Both_ref (F1.0) ' ', Both_na (F1.0) ' '
L X (Breakfas=002 or Both_ref=1 or Both_na=1) and B_eateno=0
L X (Breakfas=001 and Both_ref=0 and Both_na=0) and any(B_eateno,0,1)

Q Both_ref 1 143 I1
T Where was your breakfast prepared and eaten? Refused : other
V q2er
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088,099) and Both_ref = 0)
L X (Breakfas = 001 and any(Both_ref,0,1))
L X (Breakfas = 055 and Both_ref = 1)

Q Both_na 1 144 I1
T Where was your breakfast prepared and eaten? Non_App : other
V q2en
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,088) and Both_na = 1)
L X (Breakfas = 001 and any(Both_na,0,1))
L X (Breakfas = 055 and Both_na = 0)

Q Both_mis 1 145 I1
T Where was your breakfast prepared and eaten? Missing : other
V q2em
Y 1 Checked
Y 0 Not checked
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,055,088,099) and Both_mis = 0)
L X (Breakfas = 001 and any(Both_mis,0,1))

Q B_othloc 1 146 I2
T Where was your breakfast prepared and eaten? Other location
V q2e3
Y -5 Refused
Y -8 N/A
Y -9 Missing
R (01,35)
P Breakfas (F3.0) ' '
L X ((Breakfas = 002 or B_prepo = 0 or B_eateno = 0) and B_othloc = -8)
L X (B_prepo=1 or B_eateno=1) and (range(B_othloc,01,35) or B_othloc=-9)

Q Br_often 1 148 I3

```
T How often do you eat a breakfast like the one you described in the diary?
V q3
Y 001  6 to 7 times per week
Y 002  1 to 5 times per week
Y 003  Less than once a week
Y 055  Refused
Y 088  N/A
Y 099  Missing
P Breakfas (F3.0) ' '
L X (any(Breakfas,002,055,088,099) and Br_often = 088)
L X (Breakfas = 001 and any(Br_often,001,002,003,055,099))

* The missing value was left out of all of the Prepared and Eaten logic checks
* because it is possible to have a valid answer AND the missing bubble filled in.
* This is because if either the Prepared or Eaten Variable is missing the missing bubble is filled in.
Q Lunch      1 151 I3
T Was lunch eaten?
V q4
Y 001  Yes
Y 002  No
Y 055  Refused
Y 088  N/A
Y 099  Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(Lunch,001,002,055,099))
L X (Formstat=03 and any(Lunch,001,002,055,088,099))
L X (any(Formstat,02,05,09) and Lunch=088)

Q L_preph    1 154 I1
T Where was your lunch prepared and eaten? Prepared: home
Y 1  Checked
V q5a1
Y 0  Not checked
P Lunch (F3.0) ' ', Lhom_ref (F1.0) ' ', Lhom_na (F1.0) ' '
L X (Lunch=002 or Lhom_ref=1 or Lhom_na=1) and L_preph=0
L X (Lunch=001 and Lhom_ref=0 and Lhom_na=0) and any(L_preph,0,1)

Q L_eatenh   1 155 I1
T Where was your lunch prepared and eaten? Eaten : home
V q5a2
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Lhom_ref (F1.0) ' ', Lhom_na (F1.0) ' '
L X (Lunch=002 or Lhom_ref=1 or Lhom_na=1) and L_eatenh=0
L X (Lunch=001 and Lhom_ref=0 and Lhom_na=0) and any(L_eatenh,0,1)

Q Lhom_ref   1 156 I1
T Where was your lunch prepared and eaten? Refused : home
V q5ar
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
```

```
L X (any(Lunch,002,088,099) and Lhom_ref = 0)
L X (Lunch = 001 and any(Lhom_ref,0,1))
L X (Lunch = 055 and Lhom_ref = 1)

Q Lhom_na   1 157 I1
T Where was your lunch prepared and eaten? Non_App : home
V q5an
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088) and Lhom_na = 1)
L X (Lunch = 001 and any(Lhom_na,0,1))
L X (Lunch = 055 and Lhom_na = 0)

Q Lhom_mis   1 158 I1
T Where was your lunch prepared and eaten? Missing : home
V q5am
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,055,088,099) and Lhom_mis = 0)
L X (Lunch = 001 and any(Lhom_mis,0,1))

Q L_prepr   1 159 I1
T Where was your lunch prepared and eaten? Prepared : restauraunt
Y 1  Checked
V q5b1
Y 0  Not checked
P Lunch (F3.0) ' ', Lres_ref (F1.0) ' ', Lres_na (F1.0) ' '
L X (Lunch=002 or Lres_ref=1 or Lres_na=1) and L_prepr=0
L X (Lunch=001 and Lres_ref=0 and Lres_na=0) and any(L_prepr,0,1)

Q L_eatenr   1 160 I1
T Where was your lunch prepared and eaten? Eaten : retaurant
V q5b2
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Lres_ref (F1.0) ' ', Lres_na (F1.0) ' '
L X (Lunch=002 or Lres_ref=1 or Lres_na=1) and L_eatenr=0
L X (Lunch=001 and Lres_ref=0 and Lres_na=0) and any(L_eatenr,0,1)

Q Lres_ref   1 161 I1
T Where was your lunch prepared and eaten? Refused : restaurant
V q5br
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088,099) and Lres_ref = 0)
L X (Lunch = 001 and any(Lres_ref,0,1))
L X (Lunch = 055 and Lres_ref = 1)

Q Lres_na   1 162 I1
```

```
T Where was your lunch prepared and eaten? Non_App : restaurant
V q5bn
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088) and Lres_na = 1)
L X (Lunch = 001 and any(Lres_na,0,1))
L X (Lunch = 055 and Lres_na = 0)

Q Lres_mis   1 163 I1
T Where was your lunch prepared and eaten? Missing : retaurant
V q5bm
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,055,088,099) and Lres_mis = 0)
L X (Lunch = 001 and any(Lres_mis,0,1))

Q L_prepw    1 164 I1
T Where was your lunch prepared and eaten? Prepared : work site
V q5c1
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Lwor_ref (F1.0) ' ', Lwor_na (F1.0) ' '
L X (Lunch=002 or Lwor_ref=1 or Lwor_na=1) and L_prepw=0
L X (Lunch=001 and Lwor_ref=0 and Lwor_na=0) and any(B_prepw,0,1)

Q L_eatenw   1 165 I1
T Where was your lunch prepared and eaten? Eaten : work site
V q5c2
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Lwor_ref (F1.0) ' ', Lwor_na (F1.0) ' '
L X (Lunch=002 or Lwor_ref=1 or Lwor_na=1) and L_eatenw=0
L X (Lunch=001 and Lwor_ref=0 and Lwor_na=0) and any(L_eatenw,0,1)

Q Lwor_ref   1 166 I1
T Where was your lunch prepared and eaten? Refused : work site
V q5cr
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088,099) and Lwor_ref = 0)
L X (Lunch = 001 and any(Lwor_ref,0,1))
L X (Lunch = 055 and Lwor_ref = 1)

Q Lwor_na    1 167 I1
T Where was your lunch prepared and eaten? Non_App : work site
V q5cn
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
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```
L X (any(Lunch,002,088) and Lwor_na = 1)
L X (Lunch = 001 and any(Lwor_na,0,1))
L X (Lunch = 055 and Lwor_na = 0)

Q Lwor_mis  1 168 I1
T Where was your lunch prepared and eaten? Missing : work site
V q5cm
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,055,088,099) and Lwor_mis = 0)
L X (Lunch = 001 and any(Lwor_mis,0,1))

Q L_preps  1 169 I1
T Where was your lunch prepared and eaten? Prepared : school
V q5d1
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Lsch_ref (F1.0) ' ', Lsch_na (F1.0) ' '
L X (Lunch=002 or Lsch_ref=1 or Lsch_na=1) and L_preps=0
L X (Lunch=001 and Lsch_ref=0 and Lsch_na=0) and any(L_preps,0,1)

Q L_eatens  1 170 I1
T Where was your lunch prepared and eaten? Eaten : school
V q5d2
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Lsch_ref (F1.0) ' ', Lsch_na (F1.0) ' '
L X (Lunch=002 or Lsch_ref=1 or Lsch_na=1) and L_eatens=0
L X (Lunch=001 and Lsch_ref=0 and Lsch_na=0) and any(L_eatens,0,1)

Q Lsch_ref  1 171 I1
T Where was your lunch prepared and eaten? Refused : school
V q5dr
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088,099) and Lsch_ref = 0)
L X (Lunch = 001 and any(Lsch_ref,0,1))
L X (Lunch = 055 and Lsch_ref = 1)

Q Lsch_na  1 172 I1
T Where was your lunch prepared and eaten? Non_App : school
V q5dn
Y 1  Checked
Y 0  Not Checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088) and Lsch_na = 1)
L X (Lunch = 001 and any(Lsch_na,0,1))
L X (Lunch = 055 and Lsch_na = 0)

Q Lsch_mis  1 173 I1
```

```
T Where was your lunch prepared and eaten? Missing : school
V q5dm
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,055,088,099) and Lsch_mis = 0)
L X (Lunch = 001 and any(Lsch_mis,0,1))

Q L_prepo   1 174 I1
T Where was your lunch prepared and eaten? Prepared : other
V q5e1
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Loth_ref (F1.0) ' ', Loth_na (F1.0) ' '
L X (Lunch=002 or Loth_ref=1 or Loth_na=1) and L_prepo=0
L X (Lunch=001 and Loth_ref=0 and Loth_na=0) and any(L_prepo,0,1)

Q L_eateno   1 175 I1
T Where was your lunch prepared and eaten? Eaten : other
V q5e2
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' ', Loth_ref (F1.0) ' ', Loth_na (F1.0) ' '
L X (Lunch=002 or Loth_ref=1 or Loth_na=1) and L_eateno=0
L X (Lunch=001 and Loth_ref=0 and Loth_na=0) and any(L_eateno,0,1)

Q Loth_ref   1 176 I1
T Where was your lunch prepared and eaten? Refused : other
V q5er
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088,099) and Loth_ref = 0)
L X (Lunch = 001 and any(Loth_ref,0,1))
L X (Lunch = 055 and Loth_ref = 1)

Q Loth_na   1 177 I1
T Where was your lunch prepared and eaten? Non_App : other
V q5en
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
L X (any(Lunch,002,088) and Loth_na = 1)
L X (Lunch = 001 and any(Loth_na,0,1))
L X (Lunch = 055 and Loth_na = 0)

Q Loth_mis   1 178 I1
T Where was your lunch prepared and eaten? Missing : other
V q5em
Y 1  Checked
Y 0  Not checked
P Lunch (F3.0) ' '
```

```
L X (any(Lunch,002,055,088,099) and Loth_mis = 0)
L X (Lunch = 001 and any(Loth_mis,0,1))

Q L_othloc  1 179 I2
T Where was your lunch prepared and eaten? Other location
V q5e3
Y -5 Refused Value
Y -8 Default Value
Y -9 Missing Value
R (01,50)
P Lunch (F3.0) ' '
L X ((Lunch = 002 or L_prepo = 0 or L_eateno = 0) and L_othloc = -8)
L X (L_prepo=1 or L_eateno=1) and (range(L_othloc,01,50) or L_othloc=-9)

Q Ln_often  1 181 I3
T How often do you eat a lunch like the one you described in the diary?
V q6
Y 001  6 to 7 times per week
Y 002  1 to 5 times per week
Y 003  Less than once a week
Y 055  Refused
Y 088  N/A
Y 099  Missing
P Lunch (F3.0) ' '
L X (any(Lunch,002,055,088,099) and Ln_often = 088)
L X (Lunch = 001 and any(Ln_often,001,002,003,055,099))

* The missing value was left out of all of the Prepared and Eaten logic checks
* because it is possible to have a valid answer AND the missing bubble filled in.
* This is because if either the Prepared or Eaten Variable is missing the missing bubble is filled in.
Q Dinner    1 184 I3
T Was dinner eaten?
V q7
Y 001  Yes
Y 002  No
Y 055  Refused
Y 088  N/A
Y 099  Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(Dinner,001,002,055,099))
L X (Formstat=03 and any(Dinner,001,002,055,088,099))
L X (any(Formstat,02,05,09) and Dinner=088)

Q D_preph   1 187 I1
T Where was your dinner prepared and eaten? Prepared: home
V q8a1
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Dhom_ref (F1.0) ' ', Dhom_na (F1.0) ' '
L X (Dinner=002 or Dhom_ref=1 or Dhom_na=1) and D_preph=0
L X (Dinner=001 and Dhom_ref=0 and Dhom_na=0) and any(D_preph,0,1)
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Q D_eatenh  1 188 I1
T Where was your dinner prepared and eaten? Eaten : home
V q8a2
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Dhom_ref (F1.0) ' ', Dhom_na (F1.0) ' '
L X (Dinner=002 or Dhom_ref=1 or Dhom_na=1) and D_eatenh=0
L X (Dinner=001 and Dhom_ref=0 and Dhom_na=0) and any(D_eatenh,0,1)

Q Dhom_ref  1 189 I1
T Where was your dinner prepared and eaten? Refused : home
V q8ar
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088,099) and Dhom_ref = 0)
L X (Dinner= 001 and any(Dhom_ref,0,1))
L X (Dinner= 055 and Dhom_ref = 1)

Q Dhom_na  1 190 I1
T Where was your dinner prepared and eaten? Non_App : home
V q8an
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088) and Dhom_na = 1)
L X (Dinner= 001 and any(Dhom_na,0,1))
L X (Dinner= 055 and Dhom_na = 0)

Q Dhom_mis  1 191 I1
T Where was your dinner prepared and eaten? Missing : home
V q8am
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,055,088,099) and Dhom_mis = 0)
L X (Dinner= 001 and any(Dhom_mis,0,1))

Q D_prepr  1 192 I1
T Where was your dinner prepared and eaten? Prepared : restauraunt
V q8b1
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Dres_ref (F1.0) ' ', Dres_na (F1.0) ' '
L X (Dinner=002 or Dres_ref=1 or Dres_na=1) and D_prepr=0
L X (Dinner=001 and Dres_ref=0 and Dres_na=0) and any(D_prepr,0,1)

Q D_eatenr  1 193 I1
T Where was your dinner prepared and eaten? Eaten : retaurant
V q8b2
Y 1  Checked
Y 0  Not checked
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P Dinner (F3.0) ' ', Dres_ref (F1.0) ' ', Dres_na (F1.0) ' '
L X (Dinner=002 or Dres_ref=1 or Dres_na=1) and D_eatenr=0
L X (Dinner=001 and Dres_ref=0 and Dres_na=0) and any(D_eatenr,0,1)

Q Dres_ref  1 194 I1
T Where was your dinner prepared and eaten? Refused : restaurant
V q8br
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088,099) and Dres_ref = 0)
L X (Dinner= 001 and any(Dres_ref,0,1))
L X (Dinner= 055 and Dres_ref = 1)

Q Dres_na   1 195 I1
T Where was your dinner prepared and eaten? Non_App : restaurant
V q8bn
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088) and Dres_na = 1)
L X (Dinner= 001 and any(Dres_na,0,1))
L X (Dinner= 055 and Dres_na = 0)

Q Dres_mis  1 196 I1
T Where was your dinner prepared and eaten? Missing : retaurant
V q8bm
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,055,088,099) and Dres_mis = 0)
L X (Dinner= 001 and any(Dres_mis,0,1))

Q D_prepw   1 197 I1
T Where was your dinner prepared and eaten? Prepared : work site
V q8c1
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Dwor_ref (F1.0) ' ', Dwor_na (F1.0) ' '
L X (Dinner=002 or Dwor_ref=1 or Dwor_na=1) and D_prepw=0
L X (Dinner=001 and Dwor_ref=0 and Dwor_na=0) and any(D_prepw,0,1)

Q D_eatenw  1 198 I1
T Where was your dinner prepared and eaten? Eaten : work site
V q8c2
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Dwor_ref (F1.0) ' ', Dwor_na (F1.0) ' '
L X (Dinner=002 or Dwor_ref=1 or Dwor_na=1) and D_eatenw=0
L X (Dinner=001 and Dwor_ref=0 and Dwor_na=0) and any(D_eatenw,0,1)

Q Dwor_ref  1 199 I1
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T Where was your dinner prepared and eaten? Refused : work site
V q8cr
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088,099) and Dwor_ref = 0)
L X (Dinner= 001 and any(Dwor_ref,0,1))
L X (Dinner= 055 and Dwor_ref = 1)

Q Dwor_na   1 200 I1
T Where was your dinner prepared and eaten? Non_App : work site
V q8cn
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088) and Dwor_na = 1)
L X (Dinner= 001 and any(Dwor_na,0,1))
L X (Dinner= 055 and Dwor_na = 0)

Q Dwor_mis   1 201 I1
T Where was your dinner prepared and eaten? Missing : work site
V q8cm
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,055,088,099) and Dwor_mis = 0)
L X (Dinner= 001 and any(Dwor_mis,0,1))

Q D_preps   1 202 I1
T Where was your dinner prepared and eaten? Prepared : school
V q8d1
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Dsch_ref (F1.0) ' ', Dsch_na (F1.0) ' '
L X (Dinner=002 or Dsch_ref=1 or Dsch_na=1) and D_preps=0
L X (Dinner=001 and Dsch_ref=0 and Dsch_na=0) and any(D_preps,0,1)

Q D_eatens   1 203 I1
T Where was your dinner prepared and eaten? Eaten : school
V q8d2
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Dsch_ref (F1.0) ' ', Dsch_na (F1.0) ' '
L X (Dinner=002 or Dsch_ref=1 or Dsch_na=1) and D_eatens=0
L X (Dinner=001 and Dsch_ref=0 and Dsch_na=0) and any(D_eatens,0,1)

Q Dsch_ref   1 204 I1
T Where was your dinner prepared and eaten? Refused : school
V q8dr
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
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L X (any(Dinner,002,088,099) and Dsch_ref = 0)
L X (Dinner= 001 and any(Dsch_ref,0,1))
L X (Dinner= 055 and Dsch_ref = 1)

Q Dsch_na   1 205 I1
T Where was your dinner prepared and eaten? Non_App : school
V q8dn
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088) and Dsch_na = 1)
L X (Dinner= 001 and any(Dsch_na,0,1))
L X (Dinner= 055 and Dsch_na = 0)

Q Dsch_mis   1 206 I1
T Where was your dinner prepared and eaten? Missing : school
V q8dm
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,055,088,099) and Dsch_mis = 0)
L X (Dinner= 001 and any(Dsch_mis,0,1))

Q D_prepo   1 207 I1
T Where was your dinner prepared and eaten? Prepared : other
V q8e1
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Doth_ref (F1.0) ' ', Doth_na (F1.0) ' '
L X (Dinner=002 or Doth_ref=1 or Doth_na=1) and D_prepo=0
L X (Dinner=001 and Doth_ref=0 and Doth_na=0) and any(D_prepo,0,1)

Q D_eateno   1 208 I1
T Where was your dinner prepared and eaten? Eaten : other
V q8e2
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' ', Doth_ref (F1.0) ' ', Doth_na (F1.0) ' '
L X (Dinner=002 or Doth_ref=1 or Doth_na=1) and D_eateno=0
L X (Dinner=001 and Doth_ref=0 and Doth_na=0) and any(D_eateno,0,1)

Q Doth_ref   1 209 I1
T Where was your dinner prepared and eaten? Refused : other
V q8er
Y 1  Checked
Y 0  Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088,099) and Doth_ref = 0)
L X (Dinner= 001 and any(Doth_ref,0,1))
L X (Dinner= 055 and Doth_ref = 1)

Q Doth_na   1 210 I1
```

T Where was your dinner prepared and eaten? Non_App : other
V q8en
Y 1 Checked
Y 0 Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,088) and Doth_na = 1)
L X (Dinner= 001 and any(Doth_na,0,1))
L X (Dinner= 055 and Doth_na = 0)

Q Doth_mis 1 211 I1
T Where was your dinner prepared and eaten? Missing : other
V q8em
Y 1 Checked
Y 0 Not checked
P Dinner (F3.0) ' '
L X (any(Dinner,002,055,088,099) and Doth_mis = 0)
L X (Dinner= 001 and any(Doth_mis,0,1))

Q D_othloc 1 212 I2
T Where was your dinner prepared and eaten? Other location
V q8e3
Y -5 Refused
Y -8 N/A
Y -9 Missing
R (01,50)
P Dinner (F3.0) ' ', D_prepo (F1.0) ' ', D_eateno (F1.0) ' '
L X ((Dinner = 002 or D_prepo = 0 or D_eateno = 0) and D_othloc = -8)
L X (D_prepo=1 or D_eateno=1) and (range(D_othloc,01,50) or D_othloc=-9)

Q Dn_often 1 214 I3
T How often do you eat a dinner like the one you described in the diary?
V q9
Y 001 6 to 7 times per week
Y 002 1 to 5 times per week
Y 003 Less than once a week
Y 055 Refused
Y 088 N/A
Y 099 Missing
L X (any(Dinner,002,055,088,099) and Dn_often = 088)
L X (Dinner = 001 and any(Dn_often,001,002,003,055,099))

Q B_nocoll 1 217 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At breakfast:
V q10a
Y 001 Yes
Y 002 No
Y 055 Refused
Y 088 N/A
Y 099 Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(B_nocoll,001,002,055,099))

L X (Formstat=03 and any(B_nocoll,001,002,055,088,099))
L X (any(Formstat,02,05,09) and B_nocoll=088)

Q B_food1 1 220 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At breakfast: food 1
V q10a1
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P B_nocoll (F3.0) ' '
L X (B_nocoll=001 and (range(B_food1,001,999) or any(B_food1,-55,-99)))
L X (any(B_nocoll,002,055,088,099) and B_food1 = -88)

Q B_food2 1 223 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At breakfast: food 2
V q10a2
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P B_nocoll (F3.0) ' '
L X (B_nocoll=001 and (range(B_food2,001,999) or any(B_food2,-55,-88,-99)))
L X (any(B_nocoll,002,055,088,099) and B_food2 = -88)

Q B_food3 1 226 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At breakfast: food 3
V q10a3
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P B_nocoll (F3.0) ' '
L X (B_nocoll=001 and (range(B_food3,001,999) or any(B_food3,-55,-88,-99)))
L X (any(B_nocoll,002,055,088,099) and B_food3 = -88)

Q L_nocoll 1 229 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At lunch:
V q10b
Y 001 Yes
Y 002 No
Y 055 Refused
Y 088 N/A
Y 099 Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(L_nocoll,001,002,055,099))
L X (Formstat=03 and any(L_nocoll,001,002,055,088,099))
L X (any(Formstat,02,05,09) and L_nocoll=088)

Q L_food1 1 232 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At lunch: food 1
V q10b1
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P L_nocoll (F3.0) ' '
L X (L_nocoll=001 and (range(L_food1,001,999) or any(L_food1,-55,-99)))
L X (any(L_nocoll,002,055,088,099) and L_food1 = -88)

Q L_food2 1 235 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At lunch: food 2
V q10b2
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P L_nocoll (F3.0) ' '
L X (L_nocoll=001 and (range(L_food2,001,999) or any(L_food2,-55,-88,-99)))
L X (any(L_nocoll,002,055,088,099) and L_food2 = -88)

Q L_food3 1 238 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At lunch: food 3
V q10b3
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P L_nocoll (F3.0) ' '
L X (L_nocoll=001 and (range(L_food2,001,999) or any(L_food3,-55,-88,-99)))
L X (any(L_nocoll,002,055,088,099) and L_food3 = -88)

Q D_nocoll 1 241 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At dinner:
V q10c
Y 001 Yes
Y 002 No
Y 055 Refused
Y 088 N/A
Y 099 Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(D_nocoll,001,002,055,099))
L X (Formstat=03 and any(D_nocoll,001,002,055,088,099))
L X (any(Formstat,02,05,09) and D_nocoll=088)

Q D_food1 1 244 I3

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T Please think back. Were there any foods or beverages that you could not or did not collect for us? At
dinner: food 1
V q10c1
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P D_nocoll (F3.0) ' '
L X (D_nocoll=001 and (range(D_food1,001,999) or any(D_food1,-55,-99)))
L X (any(D_nocoll,002,055,088,099) and D_food1 = -88)

Q D_food2   1 247 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At
dinner: food 2
V q10c2
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P D_nocoll (F3.0) ' '
L X (D_nocoll=001 and (range(D_food2,001,999) or any(D_food2,-55,-88,-99)))
L X (any(D_nocoll,002,055,088,099) and D_food2 = -88)

Q D_food3   1 250 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? At
dinner: food 3
V q10c3
Y -55 Refused Value
Y -88 Default Value
Y -99 Missing Value
R (001,999)
P D_nocoll (F3.0) ' '
L X (D_nocoll=001 and (range(D_food3,001,999) or any(D_food3,-55,-88,-99)))
L X (any(D_nocoll,002,055,088,099) and D_food3 = -88)

Q S_nocoll   1 253 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? For
snacks:
V q10d
Y 001  Yes
Y 002  No
Y 055  Refused
Y 088  N/A
Y 099  Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(S_nocoll,001,002,055,099))
L X (Formstat=03 and any(S_nocoll,001,002,055,088,099))
L X (any(Formstat,02,05,09) and S_nocoll=088)

Q S_food1   1 256 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? For
snacks: food 1
```

V q10d1
Y -55 Refused Value
Y -88 N/A
Y -99 Missing Value
R (001,999)
P S_nocoll (F3.0) ' '
L X (S_nocoll=001 and (range(S_food1,001,999) or any(S_food1,-55,-99)))
L X (any(S_nocoll,002,055,088,099) and S_food1 = -88)

Q S_food2 1 259 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? For snacks: food 2
V q10d2
Y -55 Refused Value
Y -88 N/A
Y -99 Missing Value
R (001,999)
P S_nocoll (F3.0) ' '
L X (S_nocoll=001 and (range(S_food2,001,999) or any(S_food2,-55,-88,-99)))
L X (any(S_nocoll,002,055,088,099) and S_food2 = -88)

Q S_food3 1 262 I3
T Please think back. Were there any foods or beverages that you could not or did not collect for us? For snacks: food 3
V q10d3
Y -55 Refused Value
Y -88 N/A
Y -99 Missing Value
R (001,999)
P S_nocoll (F3.0) ' '
L X (S_nocoll=001 and (range(S_food3,001,999) or any(S_food3,-55,-88,-99)))
L X (any(S_nocoll,002,055,088,099) and S_food3 = -88)

Q Moreless 1 265 I3
T Did you, for any reason, eat more or less food than usual?
V q11
Y 001 More food than usual
Y 002 Less food than usual
Y 003 Same as usual
Y 055 Refused
Y 088 Not Applicable
Y 099 Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(Moreless,001,002,003,055,099))
L X (Formstat=03 and any(Moreless,001,002,003,055,088,099))
L X (any(Formstat,02,05,09) and Moreless=088)

Q ml_travl 1 268 I1
T Because of... travel or vacation
V q12a1
Y 1 Checked
Y 0 Not checked

```
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_travl=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_travl,0,1)

Q ml_weigh   1 269 I1
T Because of... travel or vacation
V q12a2
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_weigh=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_weigh,0,1)

Q ml_ill    1 270 I1
T Because of... weight control diet
V q12a3
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_ill=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_ill,0,1)

Q ml_work   1 271 I1
T Because of... work or school schedule
V q12a4
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_work=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_work,0,1)

Q ml_soc    1 272 I1
T Because of... entertainment or social occasion
V q12a5
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_soc=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_soc,0,1)

Q ml_study  1 273 I1
T Because of... because of the food collectoin study
V q12a6
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_study=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_study,0,1)

Q ml_ease   1 274 I1
T Because of... ease/quickness of preparation
V q12a7
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Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_ease=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_ease,0,1)

Q ml_othr   1 275 I1
T Because of... other
V q12a8
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' ', ml_ref (F1.0) ' ', ml_na (F1.0) ' ', ml_mis (F1.0) ' '
L X (Moreless=003 or ml_ref=1 or ml_na=1 or ml_mis=1) and ml_othr=0
L X (any(Moreless,001,002) and ml_ref=0 and ml_na=0 and ml_mis=0) and any(ml_othr,0,1)

Q ml_ref    1 276 I1
T Because of... refused
V q12ar
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' '
L X (any(Moreless,003,088,099) and ml_ref = 0)
L X (any(Moreless,001,002) and any(ml_ref,0,1))
L X (Moreless= 055 and ml_ref = 1)

Q ml_na     1 277 I1
T Because of... non-applicable
V q12an
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' '
L X (any(Moreless,003,088,099) and ml_na = 1)
L X (any(Moreless,001,002) and any(ml_na,1,0))
L X (Dinner= 055 and ml_na = 0)

Q ml_mis    1 278 I1
T Because of... missing
V q12am
Y 1  Checked
Y 0  Not checked
P Moreless (F3.0) ' '
L X (any(Moreless,003,088,099) and ml_mis = 0)
L X (any(Moreless,001,002) and any(ml_mis,1,0))

Q Ml_othcd  1 279 I2
T Because of... other (code)
V q12a8o
Y -5  Refused
Y -8  N/A
Y -9  Missing
R (01,20)
P Moreless (F3.0) ' '
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L X (any(Moreless,003,088) or ml_othr = 0) and Ml_othcd = -8
L X (ml_othr=1 and range(Ml_othcd,01,20))

Q Dif_food  1 281 I3
T Did you, for any reason, eat different foods than your usual diet?
V q13
Y 001  Yes
Y 002  No
Y 055  Refused
Y 088  N/A
Y 099  Missing
P Formstat (F3.0) ' '
L X (Formstat=01 and any(Dif_food,001,002,055,099))
L X (Formstat=03 and any(Dif_food,001,002,055,088,099))
L X (any(Formstat,02,05,09) and Dif_food=088)

Q df_travl  1 284 I1
T Because of... travel or vacation
V q14a1
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_travl=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_travl,0,1)

Q df_weigh  1 285 I1
T Because of... weight control diet
V q14a2
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_weigh=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_weigh,0,1)

Q df_ill  1 286 I1
T Because of... illness or mental condition
V q14a3
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_ill=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_ill,0,1)

Q df_work  1 287 I1
T Because of... work or school schedule
V q14a4
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_work=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_work,0,1)
```

```
Q df_soc    1 288 I1
T Because of... entertainment or social occasion
V q14a5
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_soc=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_soc,0,1)

Q df_study   1 289 I1
T Because of... because of the food collection study
V q14a6
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_study=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_study,0,1)

Q df_ease    1 290 I1
T Because of... ease/quickness of preparation
V q14a7
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_ease=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_ease,0,1)

Q df_othr    1 291 I1
T Because of... other
V q14a8
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' ', df_ref (F1.0) ' ', df_na (F1.0) ' ', df_mis (F1.0) ' '
L X (Dif_food=003 or df_ref=1 or df_na=1 or df_mis=1) and df_othr=0
L X (any(Dif_food,001,002) and df_ref=0 and df_na=0 and df_mis=0) and any(df_othr,0,1)

Q df_ref     1 292 I1
T Because of... refused
V q14r
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' '
L X (any(Dif_food,002,055,088,099) and df_ref = 0)
L X (Dif_food = 001 and any(df_ref,0,1))
L X (Dif_food= 055 and ml_ref = 1)

Q df_na      1 293 I1
T Because of... non-applicable
V q14n
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' '
```

```
L X (any(Dif_food,002,055,088,099) and df_na = 1)
L X (Dif_food = 001 and any(df_na,0,1))
L X (Dif_food = 055 and df_na=0)

Q df_mis    1 294 I1
T Because of... missing
V q14m
Y 1  Checked
Y 0  Not checked
P Dif_food (F3.0) ' '
L X (any(Dif_food,002,055,088,099) and df_mis = 0)
L X (Dif_food = 001 and any(df_mis,0,1))

Q Df_othcd   1 295 I2
T Because of... other (code)
V q14a8o
Y -5 Refused Value
Y -8 Default Value
Y -9 Missing Value
R (01,20)
P Dif_food (F3.0) ' '
L X ((Dif_food = 002 or df_othr = 0) and Df_othcd = -8)
L X (df_othr=1 and (range(df_othcd,01,20) or any(df_othcd,-5,-9)))
```