# WWEIA, NHANES Dietary Data: Data Preparation Steps for Dietary Analysis



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#### HOW TO USE DIETARY DATA

- Where do I find the data?
- What data do I want?
- How do I download the data?
- What do I need to know about the data?
- What other information do I need to analyze the data

#### WHERE DO YOU FIND THE DATA

Two websites are key to finding WWEIA, NHANES data

The Food Surveys Research Group Website <a href="https://www.ars.usda.gov/ba/bhnrc/fsrg">www.ars.usda.gov/ba/bhnrc/fsrg</a>

The NHANES Website <a href="https://www.cdc.gov/nchs/nhanes.htm">www.cdc.gov/nchs/nhanes.htm</a>

#### BUILD YOUR ANALYSIS FILES

- Download the files needed
- Select the variables you want to keep
- Merge the files to create two master files,
  - -- for foods
  - -- for total nutrient intake

#### WHAT DATA DO I WANT?

#### Five Types of Data

- Demographic
- Dietary data
- Examination
- Laboratory
- Questionnaire

#### DOWNLOAD FILES

#### Demographics, Exam, Lab, Questionnaire

- Documentation
  - Codebook
  - Frequencies
- Data

#### Dietary data

- Documentation
- Codebook and Frequencies
- Data

#### DOCUMENTATION

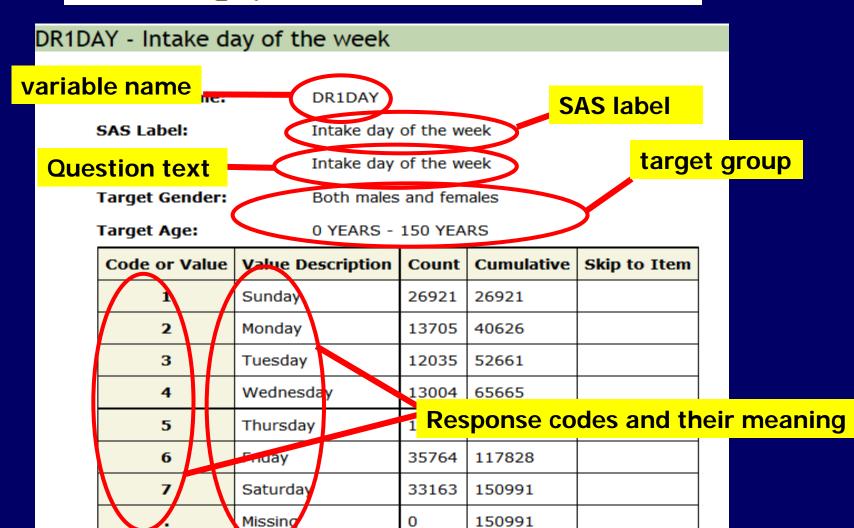
- Html-format file
- Describes the survey component
- Identifies eligible sample
- Describes protocol, editing, quality control, and any special issues for that component

#### National Health and Nutrition Examination Survey

2009 - 2010 Data Documentation, Codebook, and Frequencies

Individual Foods -- First Day (DR1IFF\_F)

Data File: DR1IFF\_F.xpt



#### **FREQUENCIES**

For each variable in the file, a listing of the frequency of responses

Code or Value	Value Description		Count	Cumulative		Skip to Item
1	Sunday		26921	2	6921	
2	Monday		13705	4	0626	
3	Tuesday		12035	5	2661	
4	Wednesday		13004	6	5665	
5	Thursday		16399	8	2064	
6	Friday		35764	1	17828	
7	Saturday		33163	1	50991	
•	Missing	1	0	1	50991	

 Useful in deciding whether a variable is a viable variable in your analysis

# ESSENTIAL DATA FOR DIETARY ANALYSIS

#### Six Files:

Demographic File [DEMO\_F]

Total Nutrients File Day 1 [DRX1TOT\_F]

Total Nutrients File Day 2 [DRX2TOT\_F]

Individual Foods File Day 1 [DRX1IFF\_F]

Individual Foods File Day 2 [DRX2IFF\_F]

Food and Nutrient Database for Dietary Studies 5.0 (FNDDS 5.0) @ www.ars.usda.gov/ba/bhnrc/fsrg

#### DEMOGRAPHIC FILE

- 1 record per sample person
- Demographic characteristics -age, gender, education, race, ethnicity
- Interview language, proxy used
- Sample weights -- use WTMEC2YR

#### TOTAL NUTRIENTS FILE

- 1 record for each day of intake for each sample person
- Total daily amounts for 64 nutrients or food components
- Number of food records that day
- Day of week of intake
- Data on salt use
- Dietary recall status Identifies participants with complete and reliable intakes

### INDIVIDUAL FOODS FILE

- 1 record for each food reported
- Food and meal identifiers
  - Food code
  - How food eaten in combination or not
  - Meal code
  - Time of eating
  - Where food eaten
- Quantity consumed
- Nutrients supplied by the food portion

#### **FNDDS**

- Essential for analysis of the 2009-2010 food data
  - to equate gram quantities to common portions
  - to determine which specific foods are represented by a food code

### OTHER SELECTED DIETARY-RELATED DATA

- Body Measurements
- Reproductive Health
- Weight History 8-15yrs
- Weight History 16+
- HDL Cholesterol
- Total Cholesterol
- Triglyceride, LDL, APO B
- Physical Activity

[BMX\_F]

[RHQ\_F]

[WHQMEC\_F]

[WHQ\_F]

[HDL\_F]

[TCHOL\_F]

[TRIGLY\_F]

[PAQ\_F]

#### DIETARY-RELATED DATA

- Body Measures height, weight, BMI
- Reproductive Health lactation status
- Weight History self-reported height and weight, and weight assessment

#### DIETARY-RELATED DATA

- Cardiovascular disease lab components
  - HDL Cholesterol
  - Total Cholesterol
  - Triglyceride, LDL, APO B -
- Physical Activity activity levels, TV or computer use

#### SUPPLEMENTAL FILES

- Dietary Web tutorial
- Analytic Guidelines
- Survey Content Document
- General Documentation
- Variable List

#### 4 MASTER FILES CREATED

- IFF1 and IFF2
  - -- Foods file with demographic data
- TOTNUT1 and TOTNUT2
  - -- Nutrients file with demographic data and selected dietary-related variables

#### FILES CONTENT

- SAS files, created with SAS v9.2
- Only records for Dietary Recall Status = 1
- Breast-fed children excluded from both files

#### What's On The CD

## What We Eat in America, NHANES Workshop CD





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