Update on . . .

What We Eat in America, NHANES

Alanna Moshfegh
Research Leader
Food Surveys Research Center
Beltsville Human Nutrition Research Center
ARS, USDA

May 4, 2010
NHANES Consortium Meeting via Web
Survey Integration Responsibilities

- DHHS – sample design and survey operations
- USDA -- dietary methodology, data collection and processing, nutrient values of food
- DHHS and USDA – jointly release dietary data
Dietary Intake Component

... since 2002

Two 24-hr dietary recalls
Day 1: in-person in MEC
Day 2: telephone
Bilingual dietary interviewers
USDA Automated Multiple-Pass Method

Step 1
Quick List
... listing of all foods and beverages

Step 2
Forgotten Foods
... Probes for forgotten food items

Step 3
Time & Occasion
... Ask for each food

Step 4
Detail Cycle
... Standardized probes and questions for each food

Step 5
Final Probe
... A final probe for anything else
Results of AMPM Validation Study

Energy intake was under-reported by:
11% overall
<3% for normal weight
16% for over weight

* Significant at <5%

Source: Moshfegh et al, AJCN 2008:88:324-32
What We Eat in America, NHANES
Data Release Schedule

- **2007-2008 data** – planned for late summer 2010
  FNDDS 4.0 (based on SR 22) – planned for early summer 2010

  FNDDS 3.0 (based on SR 20) – May 2008

- **2003-2004 data** – October 2006
  FNDDS 2.0 (based on SR 18) – June 2006

- **2001-2002 data** – October 2004
  FNDDS 1.0 (based on SR 16.1) – June 2004
Food and Nutrient Database for Dietary Studies

- database of foods, their nutrient values, and weights for foods reported in WWEIA
- used to analyze data from WWEIA
- values for 64 nutrients/components based on USDA National Nutrient Database for Standard Reference
- New FNDDS is released with each two-year release of WWEIA
Additions to FNDDS

FNDDS 1.0  (WWEIA, NHANES 2001-2002)
- Vitamin A -- as retinol activity equivalents (RAE)
- Vitamin E -- as alpha-tocopherol (mg)
- Folate -- as dietary folate equivalents (μg)
  - folic acid (μg) and food folate (μg)
- 5 individual carotenoids: alpha carotene, beta carotene, beta cryptoxanthin, lycopene, and lutein + zeaxanthin (μg)
- Total sugars (g)
- Vitamin K (μg)

FNDDS 2.0  (WWEIA, NHANES 2003-2004)
- Added vitamin E (mg)
- Added vitamin B-12 (μg)

FNDDS 3.0  (WWEIA, NHANES 2005-2006)
- Choline, total (mg)
- Vitamin D (D2 + D3) (μg) as a supplement to FNDDS 3.0

FNDDS 4.0  (WWEIA, NHANES 2007-2008)
- Vitamin D (D2 + D3) (μg)
What We Eat in America, NHANES Data Products

- Reports comparing usual nutrient intakes to Dietary Reference Intakes
  - WWEIA, NHANES 2001-2002: Usual Nutrient Intakes Compared to 1997 DRIs
  - WWEIA, NHANES 2005-2006: Usual Nutrient Intakes Compared to 1997 DRIs for Vitamin D, Ca, P, and Mg

- Summarized data tables
  - WWEIA, NHANES 2005-2006—28 tables
  - WWEIA, NHANES 2003-2004
  - WWEIA, NHANES 2001-2002

- Peer-reviewed scientific journal articles

To keep informed about dietary data products...

- Join the FSRG Listserv at:
  
  www.ars.usda.gov/ba/bhnrc/fsrg
Thank you

Alanna Moshfegh
Alanna.Moshfegh@ars.usda.gov
301-504-0170