Using a Self-Administered Web-Based System to Replace the Interviewer: The Automated Self-Administered 24-Hour Dietary Recall (ASA24)

Gordon Willis,* Nancy Potischman,* Sharon I.Kirkpatrick,* Frances E. Thompson,* Beth Mittl,** Thea Palmer Zimmerman,** Christopher Bingley,** Amy F. Subar*

willisg@mail.nih.gov

* National Cancer Institute, NIH
** Westat
Measuring dietary intake

- Traditional 24-hour recalls
  - Highest quality, least biased method
- BUT previously not feasible in large-scale research
  - Expensive: trained interviewers, multiple days
- NCI’s response: ASA24
  - Lower-cost means to obtain high-quality dietary data
ASA24 System

- **Respondent site (data collection)**
  - Fully automated, web-based, self-administered 24-hour recall
  - Complete system for probing (detailed questions), coding, and calculation of respondent intakes
  - Based on recalls collected in NHANES using USDA’s Automated Multiple Pass Method (AMPM)

- **Researcher site (project administration)**
  - Study registration: Adaptable to a variety of designs and applications
  - Monitor data collection
  - Obtain and analyze data
*AMPM: Automated Multiple Pass Method
BCM: Baylor College of Medicine
DSD: Dietary Supplement Database

FNDDS: Food and Nutrient Database for Dietary Surveys
MPED: MyPyramid Equivalents Database
NHANES: National Health and Nutrition Examination Survey
• Web-based tool: provides a low-cost means of collecting high-quality dietary intake data; supported by validation research

<table>
<thead>
<tr>
<th>Version</th>
<th>Release date</th>
<th>Researcher users</th>
<th>Recalls collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASA24-Beta</td>
<td>September 2009</td>
<td>&gt; 250</td>
<td>50,000</td>
</tr>
<tr>
<td>ASA24-2011</td>
<td>September 2011</td>
<td>&gt; 237</td>
<td>30,000</td>
</tr>
<tr>
<td>ASA24-Kids-2012</td>
<td>September 2012</td>
<td>&gt; 10</td>
<td>450</td>
</tr>
<tr>
<td>ASA24-2013</td>
<td>Expected: Spring 2013</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>--</strong></td>
<td><strong>~ 500</strong></td>
<td><strong>~80,000</strong></td>
</tr>
</tbody>
</table>

• Adaptations: Canada (underway); Australia (under consideration)
• Seeking funding for *mobile-device-compatible version* from multiple ICs and Offices
More information on ASA24

- www.riskfactor.cancer.gov/tools/instruments/asa24

- Links to:
  - FAQs
  - Demo version of respondent site
  - Researcher instructions and researcher website for registering a new study
  - ASA24 Researcher Portal