Orientation to the 2020 Version of ASA24

https://epi.grants.cancer.gov/asa24
Using WebEx and Webinar Training Logistics

- All lines will be in listen-only mode
- Submit questions at any time during the presentation. Type into the Q&A Panel and select Host
- A moderator will ask the question on your behalf during the Q&A portions of the training
- This training webinar is being recorded and will be posted at a later date
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This webinar is being recorded and will be available for later viewing, along with answers to questions at https://epi.grants.cancer.gov/asa24
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Outline for today’s webinar

- Overview of the Automated Self-Administered 24-hour Dietary Assessment Tool (ASA24)
- Information about the new U.S. version: ASA24-2020
- Information about upcoming enhancements
- Common questions
- Discussion and questions
What is ASA24?

• Fully automated, web-based, self-administered 24-hour dietary assessment tool
  • Web-based system for probing, coding, and calculation of intakes
• Developed by NCI and Westat
  • Format based on Automated Multiple-Pass Method (AMPM) interviewer-administered recalls collected in NHANES
• Publicly available at no cost to researchers, clinicians, and educators
• Allows collection of multiple recalls or records in large-scale nutrition research
Overview of the ASA24 System

Researchers register a study

Respondents complete dietary recalls or records

Researchers monitor responses and obtain data analysis
ASA24 by the numbers

- From June 2009 through August 2020
- More than 7,300 studies registered
- More than 572,000 recalls/record days collected

### Usage by version

<table>
<thead>
<tr>
<th></th>
<th>ASA24-2016</th>
<th>ASA24-2018</th>
<th>ASA24-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies registered</td>
<td>2,917</td>
<td>1,814</td>
<td>385</td>
</tr>
<tr>
<td>Recalls/records</td>
<td>209,428</td>
<td>102,907</td>
<td>10,546</td>
</tr>
<tr>
<td>collected</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studies registered</td>
<td>55</td>
<td>82</td>
<td>64</td>
</tr>
<tr>
<td>per month</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How ASA24 is being used?

- Clinical: 66%
- Demo/testing: 15%
- Research: 11%
- Teaching: 3%
- Other: 5%

Publications using ASA24:
https://epi.grants.cancer.gov/asa24/resources/publications.html
How long does it take to complete a 24-hour recall?

*Information based on active versions of the ASA24 system*
ASA24 contains many options and optional modules for research studies.

- Multiple vs. single logins
- Completion time restricted to 24 hours
- Supplements
- Midnight-to-midnight vs. past 24 hours
- Food source
- Electronic device use during meals
- Location of meals
- With whom meals were eaten
New to ASA24-2020 (U.S. version only)

Updated foods and supplements to reflect these databases:

- Food and Nutrient Database for Dietary Studies (FNDDS) 2015-16
- Food Patterns Equivalents Database (FPED) 2015-16
- National Health and Nutrition Examination Survey (NHANES) Dietary Supplement Database (DSD) 2015-16

Features

- New Respondent Nutrition Report
- Improved search function
Respondent Nutrition Report

Caloric Intake By Meal

Day(s)
From: Dec 28, 2016 12:00:00 AM
To: Dec 28, 2016 11:59:59 PM

Daily Calories
Allowance: 2,000
Eaten: 1,967

Calories
Amount Eaten: 1,967 kcal

Limit: 2,000 kcal
New to ASA24-2020:
Revised Respondent Nutrition Report

Total Calorie Consumption

- **CALORIES**
  - 300 calories over target

- **PERCENT OF CALORIES**
  - **CARBOHYDRATE**
    - Eaten: 53%
    - Target Range: 45-65%
  - **PROTEIN**
    - Eaten: 14%
    - Target Range: 10-35%
  - **FAT**
    - Eaten: 27%
    - Target Range: 20-35%
  - **ALCOHOL**
    - Eaten: 6%
    - Target Range: Limit Intake

**Calories**
Most foods and many beverages contain calories. A person’s calorie needs each day depend on factors such as age, gender, height, weight, and level of physical activity. In addition, a need to lose, maintain, or gain weight affects how many calories should be consumed. The target range for percent of calories from carbohydrates, protein, and fat listed here represent the range that is associated with providing adequate intakes of essential nutrients and a reduced risk of chronic disease.

**Alcohol**
Alcoholic beverage intake is not recommended in the Dietary Guidelines for Americans. If alcohol is consumed, it should be in moderation—up to one drink per day for women and up to two drinks per day for men—and only by adults of legal drinking age. There are also many circumstances in which individuals should not drink, such as during pregnancy.

**Sources**
"It is very informative and the colors and graphs make it easy to identify the important information."

"I like that it had the little extension that tells me that I am over."

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**Total Calorie Consumption**

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**Sources**

“I think it is good. It is not overwhelming. The text at the bottom is really good. It advises me on what are some good eating habits.”
### Nutrients and Foods to Limit

<table>
<thead>
<tr>
<th>Added Sugars (g)</th>
<th>Saturated Fats (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EATEN</strong> 166 g</td>
<td><strong>EATEN</strong> 21 g</td>
</tr>
<tr>
<td><strong>LIMIT</strong> 50 g</td>
<td><strong>LIMIT</strong> 22 g</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alcohol (drinks)</th>
<th>Sodium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONSUMED</strong> 1 drink</td>
<td><strong>EATEN</strong> 2,982 mg</td>
</tr>
<tr>
<td><strong>LIMIT</strong> 1 drink</td>
<td><strong>LIMIT</strong> 2,300 mg</td>
</tr>
</tbody>
</table>

Many of the foods and beverages we eat contain sodium, saturated fats, and added sugars (sweeteners added to foods/beverages during processing or by consumers). Making careful choices keeps amounts of these components within their limits while meeting nutrient needs to achieve a healthy eating pattern.

Enhanced Search Tool

- Improved food list matching
- Improved multi-food match, e.g. carrots and peas
- Refine the popularity scoring within search algorithm
What is next for ASA24?

- Migration to the cloud
- New module that will collect time of waking and sleeping
- New tool to add foods, beverages & supplements to ASA24
- Redesign of the researcher website
Researcher website redesign

Goals

- Visual refresh / make the site feel clean & modern
- Improve overall user experience
- Improve navigation
  - Make things easier to find
  - Enable further expansion
- “Unbury” the rich help information
In this step you control how your study is run. If you're not sure what to choose, start with a suggested study configuration. You can then customize it to suit your needs.

Suggested Study Configurations

- **Scheduled Recall Study A.** A short sentence or two describing this configuration and why you'd want to use it.
- **Scheduled Recall Study B.** A short sentence or two describing this configuration. A short sentence or two describing this configuration and why you'd want to use it.
- **Unscheduled Recall Study.** A short sentence or two describing this configuration. A short sentence or two describing this configuration and why you'd want to use it.
- **Record Study A.** A short sentence or two describing this configuration. A short sentence or two describing this configuration and why you'd want to use it.
- **Record Study B.** A short sentence or two describing this configuration. A short sentence or two describing this configuration and why you'd want to use it.

Related: View Diet Primer in a new window

Cancel   Apply Configuration
## Track Respondents

### Filter by user name:
- **Type any part of username**
- **Filter**
- **Clear Filters**

### Select All, Deselect All, Export Selected, Export All

<table>
<thead>
<tr>
<th>Select</th>
<th>Username</th>
<th>Completed Records</th>
<th>Records Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organic151</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Organic152</td>
<td>0</td>
<td>4</td>
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<tr>
<td></td>
<td>Organic153</td>
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<tr>
<td></td>
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<tr>
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<td>4</td>
</tr>
<tr>
<td></td>
<td>Organic156</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Organic157</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

**Show number of respondents:** 25
Edit Study Modules

Check modules to enable/disable them in your study.

- **Location**
  - The Location Module asks the Respondent where they ate each meal or snack. The choices are:
    - Home
    - Fast food Restaurant
    - Other Restaurant
  - See more...
  - This property can be changed later

- **Ate With Others**
  - The Ate With Module asks the Respondent if anyone was present at each meal and snack, and if so, was it a family member or someone else.
  - This property can be changed later

- **Source**
  - The Source Module asks a question about the source of each food and drink consumed. The choices are:
    - Supermarket or grocery store
    - Convenience store
    - Other store (any type)
  - See more...
  - This property can be changed later
Troubleshooting

• Check Researcher Instructions or Researcher Website
  https://epi.grants.cancer.gov/asa24/researcher/instructions.html

• Visit NCI Website (http://epi.grants.cancer.gov/asa24/), including:
  • Frequently Asked Questions
    https://epi.grants.cancer.gov/asa24/resources/faq.html
  • Known Issues & Workarounds
    https://epi.grants.cancer.gov/asa24/resources/issues.html
Getting Help

- **Contact the ASA24 Helpdesk:**
  - Request help: [https://epi.grants.cancer.gov/asa24/support/contact.html](https://epi.grants.cancer.gov/asa24/support/contact.html)
  - Send an email to: ASA24Helpdesk@westat.com

- **Send message to ASA24 Listserv**
  - Subscribe at [https://list.nih.gov/cgi-bin/wa.exe?A0=ASA24-L](https://list.nih.gov/cgi-bin/wa.exe?A0=ASA24-L)
Common questions
Why isn’t ASA24 available in more languages?

- ASA24 is available in English and Spanish in the U.S. version
- Available in English and French in the Canadian version
- ASA24 could be translated to other languages
  - Requires some additional funding
  - If interested in translation or other adaptations contact ASA24 Helpdesk or Kirsten Herrick
How can ASA24 best be adapted to ask mothers to recall the feeding of infants (birth to 12 months)?

- ASA24 can be used to collect:
  - Time and quantity of expressed breastmilk, formula, and complementary foods
  - Time of direct breast feeding (nutrient content and volume of breastmilk is problematic)

- Potential challenges with ASA24
  - Very small portion sizes
  - Pureed table foods

- Advice
  - Pilot test ASA24 with your population
  - Consider using questionnaires to supplement data collection

Currently, we do not have any plans to develop a version of ASA24 to meet the unique needs to this population.
How are dietary supplements handled?

- Supplements are entered in ASA24 just like foods. Respondents are asked to report amount in doses.
- Respondents can search for them and add them to any meal.
- Respondents can also enter a meal that is called “just a supplement”.

How is composition updated?

- Supplement data in ASA24-2020 is from NHANES Dietary Supplement Database 2015-16.
- Each version of ASA24 uses the most up to date version of the NHANES Dietary Supplement Database.
When will ASA24 be compatible with NDSR?

- ASA24 is based on federally funded and maintained databases that are free for use.
- NDSR is based on a proprietary databases that charge a fee for use.
- The analytic files that ASA24 generate, provide nutrient values at the food level.
  - This would result in the release of NDSR proprietary information.
- Another dietary assessment tool – Diet History Questionnaire (DHQ) includes NDSR nutrient values.
How many study participants can access ASA24 simultaneously?

- ASA24 can support 300 simultaneous users
- Migration to the cloud should increase this number
- If you have a large study and anticipate heavy traffic, we advise staggering the days you have respondents using the system
Is there any way to calculate individual Healthy Eating Index (HEI) score with ASA24?

- YES!

- Person level
  - Across multiple days
  - Each day

- Group level
  - One day on everyone: Population ratio method
  - Multiple days on everyone: Markov Chain Monte Carlo method (MCMC)
  - Best to have a statistician on board

- https://epi.grants.cancer.gov/asa24/resources/hei.html
Can ASA24 be adapted for other countries or ethnic groups?

- Yes! Canadian and Australian versions already exist
- Adaptations have access to ASA24 infrastructure and updates
- System is designed to make adaptations possible
  - Translation alone – easiest modification
- Other modifications involving modification of probes, foods, supplements, nutrient and food group databases – more complex
  - Require significant additional funding
  - In-kind funding
Questions?