



# ASA24

Automated Self-Administered 24-Hour Dietary Assessment Tool

---

## Instructions for the ASA24® Researcher Website:

**ASA24-2016 (released March 2016)**

**ASA24-Canada-2016 (released October 2016)**

**ASA24-Australia-2016 (released December 2016)**

**ASA24-2014 (released February 2014)**

**ASA24-2014 Kids (released February 2014)**

**ASA24-Canada-2014 (released April 2014)**

Updated May 2019

*ASA24 is a registered trademark of HHS.*

## Table of Contents

1. About ASA24 .....	1
2. Key Considerations for Researchers.....	2
3. System Requirements.....	5
4. Getting Started with ASA24: Create a Researcher Account .....	5
5. Create a New Study .....	6
Study Parameters .....	7
6. Provide Study Staff Access to ASA24.....	12
7. Create Respondent Accounts .....	12
Respondent Accounts Setup Wizard (for Recall studies only).....	13
Import File.....	21
Managing Respondent Accounts.....	30
8. Monitoring Study Progress .....	32
Respondents Tab .....	32
Recall/Record (Started)Tab.....	33
Recall/Record (Not Started) Tab .....	34
Filtering Grids .....	35
Viewing the Respondent Nutrition Report .....	35
36	
9. Data Analysis.....	37
Obtaining Analytic Files .....	40
10. Key Terms .....	42
11. Tips for Managing Studies Using ASA24 .....	46
Pilot Studies.....	46
Large Studies (100,000 or more Respondents) with Waves.....	46
Multi-site Studies.....	46
Adding Respondents.....	46
Adding Recalls or Records.....	46

## *ASA24 Researcher Instructions*

Access from a Study Website .....	46
12. Helpful Links .....	47
Appendix A: ASA24 Researcher Agreement .....	48
Appendix B: Nutrients and Food Groups Included in ASA24 Analysis Reports .....	52
Appendix C: Data Dictionaries for Analysis Files .....	59
Appendix D: Modules .....	60
Location Module .....	60
Food Source Module .....	60
TV/Computer Use Module .....	61
Ate With Module .....	61
Supplement Module .....	61
Respondent Nutrition Report Module .....	62

**Tables**

Table 7 - 1. Recalls and Attempts, single attempt/recall .....25

Table 7 - 2. Recalls and Attempts, multiple attempts/recall.....25

Table 7 - 3. Import File Specifications .....27

Table 7 - 4. Sample Import File for Scheduled Study (passwords generated by the ASA24 system) .....28

Table 7 - 5. Sample Import File for Scheduled Study (passwords provided by Researcher) .....28

Table 7 - 6. Sample Import File for Unscheduled Recall and Food Records Studies (passwords generated by the ASA24 system).....28

Table 7 - 7. Sample Import File for Unscheduled Recall and Food Records Studies (passwords provided by Researcher) .....28

Table 9 - 1. Data File Names for ASA24-2016 Versions .....38

Table 9 - 2. Data File Names for ASA24-2014 Versions .....38

Table B - 1. Nutrient, Food Group, and Supplement Databases by Respondent Website version  
52

**Figures**

Figure 2 - 1. Links on the Researcher Website to additional ASA24 resources on the NCI website. ....3

Figure 4 - 1. Registering to Use the ASA24 System.....6

Figure 5 - 1. Create a New Study .....7

Figure 5 - 2. Modules.....11

Figure 7 - 1. Respondent Accounts .....13

Figure 7 - 2. Outline of the Steps in the Respondent Account Wizard .....14

Figure 7 - 3. Step 1: Determine a starting ID number.....15

Figure 7 - 4. Step 2: Determine number of Respondents .....15

Figure 7 - 5. Step 3: Determine number of recalls.....16

Figure 7 - 6. Step 4: Recall Distribution.....16

Figure 7 - 7. Step 4a: Number of recalls per Respondent on weekend days .....17

Figure 7 - 8. Step 5: Days between recalls .....17

## ASA24 Researcher Instructions

Figure 7 - 9. Step 6: Attempts .....	18
Figure 7 - 10. Step 7: Staged Starts .....	19
Figure 7 - 11. Confirmation.....	20
Figure 7 - 12. Step 8: Password creation.....	21
Figure 7 - 13. Import File .....	22
Figure 7 - 14. Pop-up Message Following Successful Import File Upload.....	29
Figure 7 - 15. Username/Password files available on Create Respondent Account page.....	30
Figure 7 - 16. Manage Respondent Accounts.....	31
Figure 8 - 1. Track Recall/Record, by Respondents .....	33
Figure 8 - 2. Track Recall/Record, by Recall/Record (Started) .....	34
Figure 8 - 3. Track Recall/Record, by Recall/Record (Started) .....	35
Figure 8 - 4. Respondent Nutrition Report.....	36
Figure 9 - 1. Analytic Files Tab .....	40
Figure 9 - 2. Viewing Analyses for a Single Respondent .....	41
Figure 9 - 3. Viewing Recall or Record Analyses for a Specified Time Period .....	42

### 1. About ASA24

The Automated Self-Administered 24-hour (ASA24) Dietary Assessment Tool is a web-based tool that enables multiple, automatically coded self-administered 24-hour recalls. The ASA24-2016, ASA24-Canada-2016, and ASA24-Australia-2016 can also be used as a food record, also called a food diary.

The National Cancer Institute (NCI) provides ASA24 to the research community at no cost.

ASA24 is comprised of two websites:

1. The **Respondent website** is used to collect intake data from study participants: <https://asa24.nci.nih.gov>
2. The **Researcher website** is used to manage study logistics and access applied nutrient and food group data files: <https://asa24.nci.nih.gov/researchersite>

The Researcher website serves a variety of users, collectively referred to as Researchers in this document, including:

- ◆ Researchers conducting epidemiologic, interventional, behavioral or clinical research
- ◆ Clinicians collecting 24-hour recalls or food records from patients to obtain complete nutrient analysis
- ◆ Educators having students analyse intake or compare diet assessment methods

Researchers determine whether recalls or food records best suit their needs as well as how, when and how many intakes should be collected to produce optimal data. Information about choosing an assessment method can be found in the NCI Dietary Assessment Primer at <https://dietassessmentprimer.cancer.gov>.

The ASA24 instrument:

- ◆ Flows as per modified United States Department of Agriculture (USDA) [Automated Multiple-Pass Method \(AMPM\)](#)<sup>1</sup> for 24-hour recalls which was further adapted for collection of food records.
- ◆ Allows Researchers to specify timing of a recall, either from midnight-to-midnight or for the past 24-hours from time of login.
- ◆ Asks Respondents to report eating occasion and time of consumption.
- ◆ Allows Respondents to search and filter to find foods, drinks and supplements.
- ◆ Asks detailed questions about food form, preparation, portion size, and additions so that food codes can be assigned.
- ◆ Uses images to assist Respondents in reporting portion size.

## ASA24 Researcher Instructions

- ◆ Prompts Respondents to add or modify food, drink, and supplement choices at multiple points during the recall or record.
- ◆ Includes optional modules to query where meals were eaten, whether meals were eaten alone or with others, television and computer use during meals, and source of foods consumed.
- ◆ Are available in English and Spanish for the U.S. versions; in English and French for ASA24-Canada-2016; and in English only for ASA24-Australia-2016 and ASA24-Canada-2014. When Respondents log in to the site, they can choose their preferred language from available options. Regardless of the language used to complete the recall or record, all data on the Researcher website will be in English.
- ◆ Is accessible by individuals using assistive technologies, such as screen readers.
- ◆ Offers an optional Respondent Nutrition Reports (RNRs) for ASA24 U.S. versions, and ASA24-Canada-2016, which researchers can choose to make available to Respondents.  
**Note:** The optional RNRs in ASA24-Canada-2016 are available only for recalls and records started after April 10, 2019.

The U.S. version of ASA24-2016 will be supported through **January 2020**; ASA24-Canada-2016 will be supported through **April 2020**. Researchers currently using these ASA24 versions for studies that will continue beyond these dates will need to transition to most current ASA24 versions. To do so, request a new study using the ASA24 Researcher website. More information can be found at <https://epi.grants.cancer.gov/asa24/resources/faq.html#transition>.

Information about the current and previous versions of the ASA24 Respondent websites, the Respondent website methodology, and ASA24 system requirements is available on NCI's ASA24 website at <https://epi.grants.cancer.gov/asa24/>.

The remainder of this document provides detailed instructions on the use of the Researcher website. Instructions for earlier versions of the Researcher website are available at <https://epi.grants.cancer.gov/asa24/researcher/instructions.html>.

## 2. Key Considerations for Researchers

Definitions for ASA24-specific terms and abbreviations can be found in the [Key Terms](#) section at the end of this document. In this section, the first occurrence of each key term is linked to its definition in the Key Terms section.

General information about the ASA24 system is available on the NCI's ASA24 Informational website at <https://epi.grants.cancer.gov/asa24/>. This website includes resources, such as

## ASA24 Researcher Instructions

Frequently Asked Questions (FAQs), documents that can be used for funding and ethics proposals, help documents to provide to study Respondents, a list of known ASA24 issues and workarounds, links to relevant publications, and SAS code. Links to these resources are also available on the Researcher website.

Sample analysis files and [data dictionaries](#) are available for download from the NCI website (<https://epi.grants.cancer.gov/asa24/researcher/sample.html>) and the Researcher website under the **Resources Tab** (Figure 2-1). Links to the data dictionaries can be found in [Appendix C](#). A Listserv is available to current and potential Researchers to communicate with one another at <https://list.nih.gov/cgi-bin/wa.exe?A0=ASA24-L>

**Figure 2 - 1. Links on the Researcher Website to additional ASA24 resources on the NCI website.**

The screenshot shows the top navigation bar of the NCI website with the NIH logo and the text 'NATIONAL CANCER INSTITUTE Automated Self-Administered 24-Hour Dietary Assessment Tool'. A navigation menu includes 'My Studies', 'Study Details', 'Respondent Accounts', 'Track Recall / Record', 'Analytic Files', and 'Resources'. The 'Resources' page content includes a 'What is this page?' section with a tip to visit <https://epi.grants.cancer.gov/asa24/>. The 'Resources' section lists links for 'Frequently Asked Questions (FAQs)', 'Known Issues and Workarounds', 'Considerations for Using the ASA24 Dietary Assessment Tool', 'Sample Analysis Files and Data Dictionaries', 'ASA24 Instructions for Study Staff & Respondents', 'Resources Related to the Healthy Eating Index (HEI)', 'Reviewing & Cleaning ASA24 Data', 'Researcher Instructions', and 'Join ASA24 Listserv'. The footer contains links for 'Privacy Statement', 'Accessibility', 'FOIA', 'Download Acrobat Reader', 'Department of Health and Human Services', 'National Health Institutes', 'National Cancer Institutes', and 'USA.gov', along with the NIH logo and the slogan 'NIH... Turning Discovery Into Health®'.

### Should my study use *scheduled* or *unscheduled* recalls?

When setting up a 24-hour recall study, Researchers can select either [scheduled](#) or [unscheduled](#) (i.e. ad hoc) administration. Whether to use *scheduled* or *unscheduled* recalls should be determined before creating Respondent usernames and passwords.

*It is important to note that, once Respondent accounts have been created, a study cannot be changed between unscheduled and scheduled. To switch, you must delete existing Respondent accounts, update the Study Type setting, and then create new Respondent accounts.*

## ASA24 Researcher Instructions

In a study with *scheduled* recalls, the pre-determined intake dates are designated during the initial study setup using either the [Respondent Accounts Wizard](#) or the [Import File](#) (see [Create Respondent Accounts](#)). The Respondent website will permit Respondent access only on the reporting dates corresponding to the scheduled intake dates. Dates can be specified for multiple attempts for each recall in case the Respondent does not complete the recall on the first assigned date.

In some cases, *unscheduled* recalls may be preferred due to the unpredictable nature of clinic visits or classes. In a study with *unscheduled* recalls, Respondent access to ASA24 is not limited as long as the Respondent has not reached the maximum number of recalls specified by the Researcher and/or the intake date falls within the study dates specified by the Researcher.

### **Should my study use *consecutive-* or *single-day* records?**

A food record can be comprised of one/*single* day or multiple *consecutive* days as determined by the Researcher. Whether to use *consecutive-* or *single-* day records should be decided before creating Respondent usernames and passwords.

*It is important to note that, once Respondent accounts have been created, a study cannot be changed between consecutive- and single-day records. To switch, you must delete existing Respondent accounts, update the Study Type setting, and then create new Respondent accounts.*

When selecting *consecutive*-day records, Researchers must specify the number of consecutive days within a food record. This refers to the maximum number of consecutive days for which Respondents will report. If collecting multiple consecutive-day records, the number of consecutive days for each record will be the same.

As a different study setting, Researchers are asked to specify the number of food records to be completed by Respondents.

### **How are issues experienced by Respondents resolved?**

It is the responsibility of the Researcher to provide technical assistance to their Respondents. To support Respondent questions about the instrument, it is recommended that study staff familiarize themselves with the instrument.

The ASA24 Help Desk (<https://epi.grants.cancer.gov/asa24/support/contact.html>) is available to Researchers only. The help desk supports issues with the Researcher website and can work with Researchers to resolve Respondent issues. To report a bug in ASA24, go to <https://epi.grants.cancer.gov/asa24/support/report.html>.

Common issues include:

## ASA24 Researcher Instructions

- Login trouble: Researchers can reset and unlock Respondent accounts via the Researcher website. Access is denied to Respondents if the intake date falls outside the dates of the study as defined by the Researcher; in this case, Researchers can update the dates on the **Study Details** tab.
- Forgotten foods: The AMPM methodology implemented by ASA24 provides multiple opportunities to report items. Sometimes Respondents remember a food or drink they consumed after completing an intake day. For recalls, the Respondent cannot log back in to modify the data. For records, Respondents can log back in up to 24-hours after the last recording day to make changes to any day within the record.

To capture a missing item(s) after the recall or record is closed out, a Researcher can enter the item(s) in a new intake and combine the intakes outside of ASA24. When combining, the "foodnum" and "codenum" variables will need to be adjusted.

### 3. System Requirements

The ASA24 Researcher website is designed to optimally display on a monitor size at least 10 inches. Additionally, a screen resolution of 1024 x 768 or larger is recommended for optimal display of the data grids.

Because data entered on one screen may affect the display of data on another screen, ASA24 does not support the use of the **Back** or **Forward** buttons of your web browser.

The Respondent websites for the 2016 versions of ASA24 were designed to display on all size screens, including mobile devices such as smartphones. A recent version of a web browser capable of displaying HTML5 is required.

Versions of the ASA24 Respondent Website prior to 2016 were designed to optimally display on a monitor size greater than 10 inches. Additionally, for versions of the ASA24 Respondent website prior to 2016, a screen resolution of 1024 x 768 or larger is recommended for optimal display of the data grids and the Microsoft Silverlight plug-in is required. Browsers supporting Silverlight can be found at: <https://www.microsoft.com/getsilverlight/>.

### 4. Getting Started with ASA24: Create a Researcher Account

The first step to using ASA24 for your study is to create a Researcher website account by visiting <https://asa24.nci.nih.gov/researchersite> and selecting the **Register** button. Complete the short form by providing contact information (Figure 4-1) and select **Submit**.

## ASA24 Researcher Instructions

You will receive two emails from [ASA24Helpdesk@westat.com](mailto:ASA24Helpdesk@westat.com). One will contain a username and a temporary password. The second will contain general information about using ASA24.

Once you log in with the temporary password, you will be prompted to change the password. You may then create a new study or explore the site.

Figure 4 - 1. Registering to Use the ASA24 System

The screenshot shows the 'Create Researcher Account' form on the National Cancer Institute's Automated Self-Administered 24-Hour Dietary Assessment Tool. The form includes a header with the NIH logo and navigation links. A left sidebar provides instructions and tips. The main form area contains input fields for First Name, Last Name, Organization, Phone Number, Email Address, Confirm Email Address, and a CAPTCHA question 'Solve: 7 + 1 = ?'. There are 'Cancel' and 'Submit' buttons at the bottom. The footer contains links for Privacy Statement, Accessibility, FOIA, and Download Acrobat Reader, along with departmental and organizational information.

**NATIONAL CANCER INSTITUTE**  
Automated Self-Administered  
24-Hour Dietary Assessment Tool

v1.2.0.0 [Report a Bug](#) | [FAQs](#) | [Contact Us](#)

**What is this page?**  
This page allows you to create a Researcher Account which is needed to register to use ASA24 in a study, clinical setting or classroom.

**Tips**  
Once you complete the form to the right, check your email for messages from [ASA24Helpdesk@westat.com](mailto:ASA24Helpdesk@westat.com) with the details needed to complete the account creation process.

**Create Researcher Account**

\*First Name

\*Last Name

\*Organization

\*Phone Number

\*Email Address

\*Confirm Email Address

\*Solve: 7 + 1 =  ?

[Privacy Statement](#) | [Accessibility](#) | [FOIA](#) | [Download Acrobat Reader](#)  
Department of Health and Human Services | National Health Institutes | National Cancer Institutes | USA.gov  
NIH... Turning Discovery Into Health®

## 5. Create a New Study

To create a study, visit the **My Studies** tab and select the **Create a New Study** button. This button will take you to a form (Figure 5-1) where you will configure your study by specifying [parameters as defined below](#).

Figure 5 - 1. Create a New Study

**NATIONAL CANCER INSTITUTE**  
Automated Self-Administered  
24-Hour Dietary Assessment Tool

[v1.12.4.0 Profile](#) | [Report a Bug](#) | [FAQs](#) | [Contact Us](#) | [Log Out](#)

My Studies
Study Details
Respondent Accounts
Track Recall / Record
Analytic Files
Resources

**What is this page?**

This page allows you to create a new ASA24 study.

**Tips**

Once a study has been created, these study settings cannot be changed:

- Study abbreviation
- Version of ASA24
- Tool
- For Record studies only: Study type (Consecutive vs. Non-consecutive).

Note: For Recall studies, the study type can change between Scheduled and Unscheduled after a study is created, but only prior to creating respondent accounts.

You will be notified via email when your study has been successfully created. The next step is to create Respondent Accounts.

**Resources**

[Researcher Instructions: Setting Up a Study](#)

[Researcher Instructions: Key Terms](#)

[Frequently Asked Questions \(FAQs\)](#)

### Create a New Study

Complete the form and submit to make a new study request

\*Study name   
(Limit 80 characters)

\*Study description   
(Limit 400 characters)

\*Study abbreviation   
(3-6 characters) ?

\*ASA24 version   
? ?

\*Number of respondents   
?

\*Tool  Recall  Record ?

\*Study start date   
? ?

\*Study end date   
? ?

**Researcher affiliation using ASA24 (check all that apply) ?**

Private practitioner

Government agency

University/college researcher

University/college student

Managed care organization

Contractor

Other

**What's the purpose of your study? ?**

Research

Teaching

Clinical practice

Demonstration or testing

Other

**Modules ?**

Location ?

Ate With ?

Source ?

TV/Computer Use ?

Supplements ?

Respondent Nutrition Report ?

[Privacy Statement](#) | [Accessibility](#) | [FOIA](#) | [Download Acrobat Reader](#)

[Department of Health and Human Services](#) | [National Health Institutes](#) | [National Cancer Institutes](#) | [USA.gov](#)

*NIH...Turning Discovery Into Health®*

## Study Parameters

Select the question mark “?” next to each field on the form for additional information.

**Study Abbreviation:** This 3-6-digit code, unique in ASA24, can be made up of letters and numbers. It is used to construct unique usernames. Respondent usernames are a combination

## ASA24 Researcher Instructions

of the *study abbreviation* and a number known as the Study ID that is specified during the Respondent Account creation process. For example, if a study's abbreviation is FRUIT, sample usernames may be FRUIT101 or FRUIT1001. For this reason, it is a good idea to choose an abbreviation that will be meaningful to your Respondents.

**Study Description:** This field has a 200-word limit. The description will only be viewed by the Researcher, their study staff, and the ASA24 Help Desk ([ASA24Helpdesk@westat.com](mailto:ASA24Helpdesk@westat.com)) staff.

**Example:**

*This is a cohort study with 100,000 Respondents investigating diet and risk for later chronic diseases, including cardiovascular disease, diabetes, and a variety of cancers. The baseline data will be collected over the next five years and the follow-up will be conducted subsequently.*

**Number of Respondents:** The anticipated number of Respondents participating in a study. This information can be updated as needed after a study has begun.

**Tool:** Choose the type of intake tool to be collected, either a 24-hour recall or food record. The option to use the ASA24 system as a food record became available with the 2016 versions of the ASA24 system. The tool selected will determine which parameters follow. For more information about how to select a tool, see the Dietary Assessment Primer (<https://dietassessmentprimer.cancer.gov/>).

**For studies using ASA24 as a 24-hour recall, the following parameters apply:**

**Study Type:** Choose whether your recalls will be *scheduled* or *unscheduled*.

When *scheduled*, the Researcher will designate specific intake dates for each Respondent. Respondents will only be allowed to log in to the Respondent website on the reporting dates corresponding to these intake dates.

When *unscheduled*, Respondents can access ASA24 on any day during the study period defined by the *start and end dates*. When a Respondent reaches the maximum number of recalls as determined by the Researcher, access to ASA24 will be denied. *Unscheduled* recalls may be preferred in clinical or classroom settings due to the unpredictable nature of the visits/classes or in a study in which the Researchers prefer more internal controls related to scheduling recalls.

**Note that study type cannot be changed once Respondent accounts have been created.**

**Number of Recalls (per Respondent):** This number defines the maximum number of recalls allowed for each Respondent. ASA24 does not impose any limit on this number.

## ASA24 Researcher Instructions

Recalls that have been started but not completed are counted toward the maximum. This parameter can be changed after a study has begun.

**Intake Time Frame:** Studies can be set up so that Respondents are prompted to report their intake for one of two time periods:

1. From *Midnight to Midnight* the previous day. That is, the day before the reporting date.

or

2. For the *Last 24 Hours*. That is, the 24 hours preceding the Respondent's first login time on the reporting date.

**Number of Logins Allowed:** Respondents can complete their recalls either in one session (i.e., one login with no breaks greater than 30 minutes to avoid the automatic timeout) or in multiple sessions. The number of sessions a Respondent uses for each recall will be displayed on the **Track Recall/Record** tab. This parameter can be changed after a study has begun.

**Time Provided to Complete Recall:** This field refers to the time frame (either 24 or 32 hours) in which the Respondent can complete their recall. The options available are dependent on the selection made for *intake time frame*.

If the *intake time frame* is *midnight to midnight*, Researchers choose between allowing Respondents 24 or 32 hours to complete their recalls. If 24 hours, Respondents must complete their report by midnight. If 32 hours, Respondents have until 8:00 a.m. the day after the reporting date to complete the recall. These rules apply to both *scheduled* and *unscheduled* Studies.

If the *intake time frame* is *last 24 hours*, Respondents must complete their recalls by midnight on the day the recall is started.

This parameter can be updated after a study has begun.

## ASA24 Researcher Instructions

*ASA24 uses the local date and time of the Respondent's computer to verify that the Respondent is completing an intake within the time period specified by the Researcher. If Respondents try to log in outside a study's start and end dates, reach their maximum number of recalls, or try to log in on a date not scheduled, this will result in the following message: "Our records show that you have already completed all your recalls. If you need clarification, check back with the person who asked you to complete ASA24. Thanks for your participation."*

*Consecutive recalls are possible under specific conditions determined during study setup. See [Key Terms](#) for details on allowing consecutive recalls.*

**For studies using ASA24 as a food record (2016 versions only), the following parameters apply:**

**Number of Records (per Respondent):** This field defines the maximum number of records allowed for each Respondent. ASA24 does not impose any limit on this. This parameter can be changed after a study has begun.

**Study Type:** Records can be comprised of multiple *consecutive* days or a *single*-day.

Select *consecutive* if Respondents are to report for two or more consecutive days in a record. A *consecutive* record begins on the first day a Respondent logs in.

Select *single*-day if Respondents are to report only one day in a record. By choosing this option and specifying a value for **Number of Records** greater than 1, Respondents can complete multiple nonconsecutive, *single*-day records.

For either study type, Respondents can login to edit the record one day after the record's last day.

Please note that study type cannot be changed once Respondent Accounts have been created.

**Number of Consecutive Days** For *consecutive*-day records, specify the maximum number of intake days in one record. If collecting multiple *consecutive*-day records, this number will apply to all records. For example, to collect a three-day record enter "3" as the maximum number of *consecutive* days. Any subsequent records will also be three-day food records.

**Study Start and End Dates:** These dates define the reporting period. The Study Start Date is the first date that Respondents may log in to the Respondent website to complete a recall. The

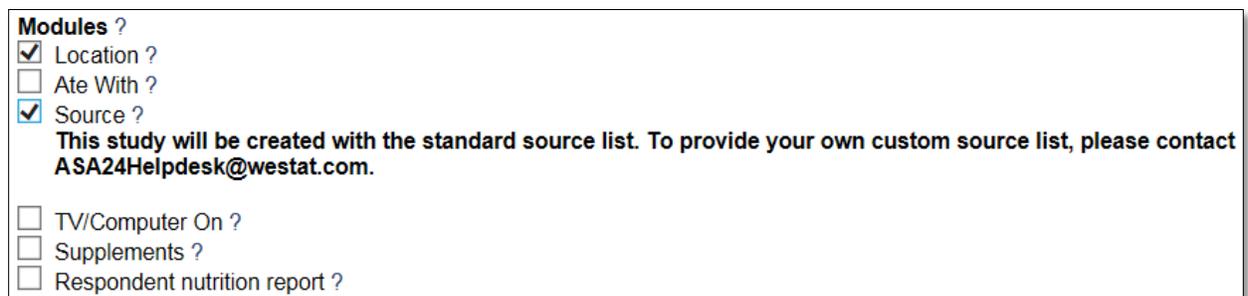
## ASA24 Researcher Instructions

Study End Date is the last date that Respondents may log in to complete a recall or record. Respondents will be unable to log in outside the reporting period.

**Researcher affiliation(s)** and **Purpose of the study** are collected for internal informational use only and do not affect study administration.

**Modules:** There are six modules that can be integrated in the ASA24 instrument. Select the checkbox to turn on/off the feature (Figure 5-2). Select the question mark “?” next to each module description on the form for additional information. Module selections can be updated after a study has begun.

**Figure 5 - 2. Modules**



**Modules ?**

- Location ?
- Ate With ?
- Source ?

**This study will be created with the standard source list. To provide your own custom source list, please contact ASA24Helpdesk@westat.com.**

- TV/Computer On ?
- Supplements ?
- Respondent nutrition report ?

- When the *location* module is checked, Respondents are prompted to select where they ate their meal from a standard list. This module is checked by default as it may provide context to aid Respondents in recalling what they ate at a meal. This module can be turned off. See [Appendix D](#) for the list of location values.
- When the *ate with* module is checked, Respondents are prompted to report who they ate their meal with. See [Appendix D](#) for allowable responses.
- When the *source* module is checked, Respondents are asked to select where each food and beverage was obtained from a standard list. When turned on, the location module must also be selected. Because source is asked for all items, the amount of time to complete a recall or record day will increase. See [Appendix D](#) for the list of source values.
- When the *TV/Computer* module is checked, Respondents are prompted to report whether they used electronics at their meal. See [Appendix D](#) for allowable responses.
- When the *supplements* module is turned on, Respondents are specifically reminded to include both foods and supplements when reporting intakes. For example, when this module is off, one instruction reads, “Search for foods and beverages,” and when on, it reads, “Search for foods, beverages, and supplements.” Regardless of whether this is turned on or off, Respondents can report supplements.

## ASA24 Researcher Instructions

- The Respondent Nutrition Report (RNR) describes how a Respondent's intake for a day compares to dietary guidance. This report is available for the ASA24-2016 U.S. version and in ASA24-Canada-2016. When turned on for recall studies, Respondents can generate the RNR after completing their intake report. If generated, the Researcher can access a copy of the report via the **Track Recall/Record** tab. When turned on for record studies, the RNR is available only to the Researcher via the **Track Recall/Record** tab; the Researcher can then share the RNR with Respondents.
- See [Appendix D](#) for more information on modules.

### 6. Provide Study Staff Access to ASA24

The ASA24 considers the person who sets up a study the primary ASA24 Researcher. This Researcher can grant others access to their study.

It is strongly recommended that principal investigators be granted access even if research assistants or other personnel are managing the ASA24 aspect of a study. This allows for continuity of data receipt and management in the event that study staff leave the project. Only those individuals with emails entered in the study staff section will receive important communications about version changes and retiring of old data.

Staff members who are added to the study can log in to the Researcher website with most of the same rights as the primary Researcher to complete study setup tasks, monitor study progress, and request and download analytic output files. Only the primary Researcher can delete a study (and corresponding data); other study staff can perform all other actions within the Researcher website.

To add new study staff, navigate to the **Study Details** tab and select the **Manage Study Staff** button. From here, you can create accounts for new staff and manage access for staff members who already have ASA24 accounts. Select the relevant study from the drop-down menu at the top of the tab. Next, select **Add Study Staff** and provide basic contact information for the staff member. Once added, an email is sent to the staff member to provide information about logging in to the site.

### 7. Create Respondent Accounts

Each Respondent must have a username and password assigned in order to log in to the Respondent website to complete their intake(s).

## ASA24 Researcher Instructions

Navigate to the **Respondent Accounts** tab to create Respondent accounts (Figure 7-1). Respondent accounts can be created in two ways: (1) a manual file upload or (2) a step-by-step “wizard,” available for recall studies only.

**Figure 7 - 1. Respondent Accounts**

The screenshot displays the NIH Automated Self-Administered 24-Hour Dietary Assessment Tool interface. The top navigation bar includes tabs for 'My Studies', 'Study Details', 'Respondent Accounts', 'Track Recall / Record', 'Analytic Files', and 'Resources'. The 'Respondent Accounts' tab is active. The main content area is titled 'Create Respondent Accounts' and contains the following sections:

- Manage Respondent Accounts** button.
- What is this page?** section explaining the purpose of the page and providing instructions on how to create Respondent Accounts.
- Tips** section providing additional guidance.
- Resources** section with links to 'Researcher Instructions: Create Respondent Accounts (Wizard)', 'Import File template for Uploading Respondents', 'Researcher Instructions: Create Respondent Accounts (Import File)', and 'ASA24 Respondent Website'.
- Create Respondent Accounts** wizard steps:
  - Select a Study:** A dropdown menu is set to 'Rec: Recalls'. A message states: 'Your study's tool is an **Unscheduled Recall**. You have 21 Respondent accounts and your last upload was on 10/10/2018.'
  - Select how you want to create Respondent Accounts:**
    - Option A: 'Use a wizard to set Respondent Username and Passwords and set parameters for Respondent access to the ASA24 Respondent Web site.' This option is selected, and a **Start Wizard** button is visible.
    - Option B: 'Upload an existing Username and Password .csv file.' This option includes a file selection button labeled 'Choose File' and a message 'No file chosen'.
  - Upload the completed Import File (.csv)** button.
  - 3. The Username and Password files generated previously for this study, if any, are available below. Also available are import files reflecting the settings chosen for Respondent Accounts created using the wizard. The wizard-generated files can be used for subsequent manual uploads of additional accounts, if desired. Click on the file name to save that file.**
- Created Files** table:

File Name	File Contains	File Creation Date	Delete
<a href="#">Rec_2018_10_10_14_53_50_UNPW</a>	Usernames and Passwords	10/10/2018 14:53	<a href="#">X</a>

The footer of the page contains links for 'Privacy Statement', 'Accessibility', 'FOIA', 'Download Acrobat Reader', 'Department of Health and Human Services', 'National Health Institutes', 'National Cancer Institutes', and 'USA.gov'. The NIH logo and tagline 'NIH... Turning Discovery Into Health®' are also present.

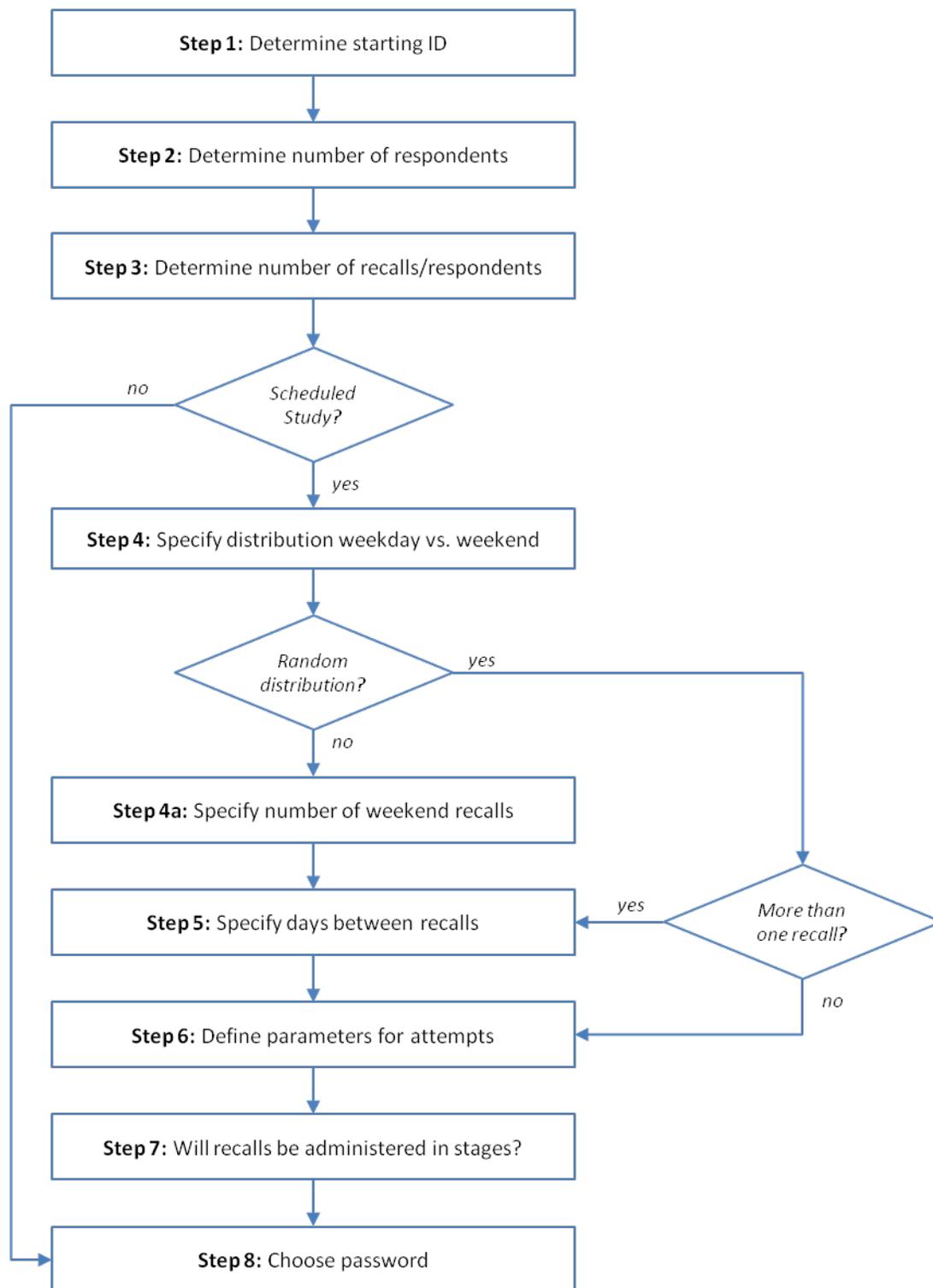
### Respondent Accounts Setup Wizard (for Recall studies only)

The Wizard walks you through a series of steps before generating accounts (Figure 7-2). It may be helpful to consider the parameters described below before launching the Wizard. The Wizard is only available for studies using ASA24 as a recall.

Once you are ready to start the Wizard, go to the **Respondent Accounts** tab. On the first screen, check that the correct study is selected in the dropdown box at the top of the screen. Then select the **Start Wizard** button and follow the prompts in each step.

**Figure 7 - 2. Outline of the Steps in the Respondent Account Wizard**

Description of each step follows.



## ASA24 Researcher Instructions

**Step 1:** Determine a starting ID number. This number will represent the first Respondent account number in the series. If your study abbreviation is FRUIT, and you select a starting Respondent number of 100, the first Respondent username will be FRUIT100. Subsequent usernames will be FRUIT101, FRUIT102, etc.

If you wish to use a distinct range of usernames for testing purposes only (e.g., in the 500-550 range), you will need to complete the Wizard twice, entering different starting ID numbers for test usernames as well as active Respondent usernames. Refer to [How can a Researcher test or pilot the ASA24 system?](#) in the [Key Considerations for Researchers](#) for more information.

**Figure 7 - 3. Step 1: Determine a starting ID number**

The screenshot shows a web form titled "Respondent Account Creation" with a sub-header "Step 1: Starting ID Number". The instructions state: "Respondent Usernames consist of the study abbreviation (Sc24HR) and an ID number. The wizard will use a starting ID number and create a range of Usernames based on the number of accounts you specify in subsequent steps. Indicate the starting ID number to be used below." There is a text input field with the value "2001" and a label "\*Starting ID Number:". Below the field, an example "(e.g. 1001)" is shown, and further down, "Example Sc24HR2001" is displayed. At the bottom right, there are two buttons: "Cancel" and "Next".

**Step 2:** Determine the number of Respondents who will participate in the study (Figure 7-4). The Wizard can be used to create accounts for additional Respondents later if necessary.

**Figure 7 - 4. Step 2: Determine number of Respondents**

The screenshot shows a web form titled "Respondent Account Creation" with a sub-header "Step 2: Number of Respondents". The instructions state: "All Respondent Accounts can be created at once or you can create some now and add more later as needed. Specify below the number of Respondent Accounts to be created at this time." There is a text input field with a label "\*Number of Respondent Accounts:". At the bottom right, there are three buttons: "Cancel", "Back", and "Next".

## ASA24 Researcher Instructions

**Step 3:** Determine the number of recalls allowed per Respondent (Figure 7-5). If the number of recalls is 5, once a Respondent has started 5 recalls, they will not be able to start or complete any more. This number can be updated later if needed.

**Figure 7 - 5. Step 3: Determine number of recalls**

Respondent Account Creation

**Step 3: Number of recalls per respondent**

Below is the number of recalls **per Respondent** specified when the study was created or updated. Edit the number of recalls per respondent below if necessary and select Next. (Note: In a later step, the number of attempts allowed for each recall can be specified).

\*Number of Recalls:

**Note: Steps 4 through 7 apply only to Scheduled studies. For Unscheduled studies, skip to Step 8.**

**Step 4:** Determine the number of recalls being collected for weekday intake days (Monday through Thursday) versus weekend intake days (Friday, Saturday, Sunday) for each Respondent (Figure 7-6). Recalls may be randomly distributed throughout the week or the number to be completed for weekend intake days (Friday, Saturday, and Sunday) may be specified (in this case, the remaining recalls will be scheduled for weekday intake days).

**Figure 7 - 6. Step 4: Recall Distribution**

Respondent Account Creation

**Step 4: Recall Distribution**

Recalls per Respondent can be randomly distributed across all days of the week, including weekdays and weekend days. Alternatively, specify the number of recalls per respondent to be scheduled on weekends days (Friday, Saturday, and Sunday) and the remaining recalls will be randomly distributed on weekdays.

If the study includes only one recall per respondent, choose "Randomly distribute" to spread all recalls for the study across all days of the week; choose "Specify the number of weekend recalls" to schedule all recalls on weekend days.

\*Distribution of Recalls:

Randomly distribute recalls per respondent across all days of the week

Specify the number of weekend recalls per respondent

## ASA24 Researcher Instructions

**Step 4a:** The number of weekend recalls may be zero for studies in which Respondents will complete all recalls for weekday intake days; similarly, the number of recalls for weekend intake days may be the total number of recalls per Respondent, which would allow for recalls only for weekend intake days and no weekday intake days (Figure 7-7).

**Figure 7 - 7. Step 4a: Number of recalls per Respondent on weekend days**

**Respondent Account Creation**

---

**Step 4a: Number of recalls per respondent on weekend days**

Of the total number of recalls per Respondent, specify the number to be scheduled on weekend days (Friday, Saturday, Sunday). For example, if your study includes 10 recalls per Respondent and you would like 2 of the 10 recalls to be scheduled on weekend days, enter 2.

If your study includes only one recall per Respondent, indicate 1 in the box below to schedule all recalls for the study on weekend days.

**\*Number of recalls per respondent on weekend days**

CancelBackNext

**Step 5:** Determine the number of days between recalls (Figure 7-8). For *Midnight to Midnight* recalls where consecutive days are desired, Respondents must finish reporting in 24 hours, the number of days between recalls must be zero, and the number of attempts must be one. For *Midnight to Midnight* recalls where Respondents must finish reporting in 32 hours, consecutive recalls are not possible and the number of days between recalls must therefore be larger than zero.

To space recalls evenly, specify the necessary interval between recalls. For example, if you would like each Respondent to complete 3 recalls over a 3-month study timeframe and also want recalls to be spaced evenly throughout the study period, enter 30 days between recalls.

**Figure 7 - 8. Step 5: Days between recalls**

**Respondent Account Creation**

---

**Step 5: Number of days between recalls**

Specify the number of days between recalls. For example, for monthly recalls, enter 30.

**\*Number of days between recalls**

CancelBackNext

## ASA24 Researcher Instructions

**Step 6:** Determine the number of attempts each Respondent is allowed for each recall and the number of days between each attempt (Figure 7-9). Specify one attempt to limit Respondents to a single date to complete each recall or the desired number of multiple attempts. To schedule attempts for consecutive days, specify one day between attempts.

**Figure 7 - 9. Step 6: Attempts**

**Respondent Account Creation**

**Step 6: Attempts**

Because Respondents may not complete recalls on their initial scheduled dates, it may be helpful to allow multiple chances or "attempts" to complete each recall. Below, specify the number of attempts to allow for each recall. The number of attempts must be reasonable considering the number of days between recalls (specified in the previous step). Next, specify the number of days between attempts.

For example, if Respondents are to be given 3 attempts to complete each recall and subsequent attempts after the initial scheduled dates are to occur every 2 days, enter 3 in the first box and 2 in the second box.

**\*Number of attempts each Respondent is allowed for each recall**

**\*Number of days between each attempt**

**Note:** If you specified recalls on weekend days, the first attempts for these recalls will be scheduled on weekend days. However, subsequent attempts may not fall on weekend days, depending on the other settings specified (e.g., days between recalls and attempts). Review the file created in the final step to ensure that the schedule generated in the final step meets the needs of the study.

**Step 7:** Determine whether recalls will be administered in stages. (Figure 7-10). In a large study having all Respondents start their recalls at the same time may be difficult for study staff to manage and support Respondents. Therefore, it may be advantageous to Researchers to stage recalls over a period of weeks or months so that a manageable number of Respondents is completing recalls at a given time. Any number of stages can be created, as long as each stage falls within the study period.

Figure 7 - 10. Step 7: Staged Starts

**Respondent Account Creation**

**Step 7: Staged Starts**

Depending on the nature of the study, breaking the study population into smaller groups and spreading their recalls across "stages" may be useful for creating a more manageable workload (e.g., for contacting Respondents and monitoring their progress). For example, a study of 400 respondents can be broken into 4 stages, with 100 Respondents scheduled to begin the study and complete their first recalls in the first week, and the 3 remaining stages of 100 Respondents each to begin the study in the following three weeks. In addition, a time period for each stage can be specified so that recalls for the Respondents within a stage will be spread out across the specified dates.

To set stages, specify the dates for each stage below. Use the Add Stage button to add a stage. Select the Delete button to delete a stage and select the Edit button to edit a stage. The system will evenly distribute the total number of Respondents in the study among all stages specified.

To have all Respondents start on the same date, specify only one stage and enter the same date in both date fields.

		Stage	Start Date	End Date
<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	1	06/05/2016	06/11/2016
<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	2	06/12/2016	06/18/2016
<input type="button" value="Edit"/>	<input type="button" value="Delete"/>	3	06/19/2016	06/25/2016
<input type="button" value="Add stage"/>	<input type="button" value="Cancel"/>		<input type="text" value=""/>	<input type="text" value=""/>

Once you have completed the steps outlined above, a summary of your selections will be presented on a single screen (Figure 7-11). It is important to review this screen carefully; use the **Back** button provided on the screen (rather than the browser's **Back** button) to make changes if necessary.

Figure 7 - 11. Confirmation

**Respondent Account Creation**

---

**Confirmation**

Starting ID number 2001

Number of respondent accounts 300

Number of recalls 2

Recall distribution Number of weekend recalls specified

Number of recalls per respondent on weekend days 1

Number of days between recalls 90

Number of attempts each respondent is allowed for each recall 2

Number of days between each attempt 7

Stages

(6/5/2016 - 6/11/2016)

(6/12/2016 - 6/18/2016)

(6/19/2016 - 6/25/2016)

Cancel
Back
Next

**Step 8:** Choose between randomly generated passwords (e.g. blaCKhaWk421!) for all Respondents or passwords based on a relevant root word (e.g. Pizzas10) (Figure 7-12). Researchers who choose to specify Respondent passwords when setting up accounts should choose strong, but meaningful and relatively easy-to-remember passwords. Strong passwords can be difficult for Respondents to remember and to type accurately. Respondents may also misplace or lose usernames and passwords provided to them. It can be helpful for Researchers to encourage Respondents to copy and paste usernames and passwords from an e-mail with instructions for completing recalls or records.

Once the Wizard has been completed, two files are available for download: 1) a Username and Password File and, 2) an Import File. The Import File contains the SubjectID, Reporting Dates, Attempt Dates, Intake Dates and Passwords. If desired, this file can be downloaded, updated, and then uploaded to make modifications to the schedule of dates (see [Import File](#) below).

Figure 7 - 12. Step 8: Password creation

Respondent Account Creation

---

**Step 8: Password creation**

There are two password options for password creation. A root word (e.g., Pizzas) can be specified and the system will generate random extensions to create secure passwords (e.g., Pizzas&556). This root word must contain only alphanumeric characters and must be between four and six characters in length. Alternatively, the system can generate random secure passwords (e.g. blaCKhaWk421!). Select the option you would like to use below.

Provide a root word (4-6 characters)

System generated password

---

*For Scheduled studies: Researchers should carefully review the schedule provided in the Import File to ensure that it is consistent with expectations. The Wizard is designed to create a recall schedule that matches all elements selected by the Researcher during completion of the Wizard, while correcting for entries that present logic conflicts (e.g., requesting more weekend recalls than total number of recalls). However, there are several parameters used to calculate the recall schedule (number of recalls per Respondent, number of attempts per recall, number of weekend Intake Dates, and spacing of recalls throughout the study period), and it is therefore important to confirm that each selection corresponds with the schedule anticipated by the Researcher.*

To make changes, the Researcher can run the Wizard again with different selections. Alternatively, this file can be downloaded, updated and then uploaded to make modifications to the schedule of dates (see Import File below).

### Import File

The Import File must be used to create Respondents accounts for food record studies. It can also be used to define accounts for recalls instead of using the Wizard. There are six steps to using the Import File template to create accounts.

Figure 7 - 13. Import File

**NATIONAL CANCER INSTITUTE**  
Automated Self-Administered  
24-Hour Dietary Assessment Tool

v2.2.0.0 Profile | Report a Bug | FAQs | Contact Us | Log Out

My Studies | Study Details | Respondent Accounts | Track Recall / Record | Analytic Files | Resources

**Manage Respondent Accounts**

**What is this page?**  
This page allows you to create Respondent Accounts to distribute to your Respondents.  
Respondent Accounts can be created by:  
A. Using the Respondent Accounts Wizard ([see more](#))  
B. Completing the Import File template and uploading it ([see more](#))  
Once Accounts are successfully created, Respondent Usernames and Passwords will be available for download.  
**Tip**  
Select the study from the drop-down menu at the top of the page to create Respondent Accounts.  
Note: For Recall studies, the study type (Scheduled or Unscheduled) and the Intake Time Frame cannot be changed once at least one respondent account is created and a recall is started. To change these study details, all Respondent Accounts must be deleted.

**Resources**  
[Researcher Instructions: Create Respondent Accounts \(Wizard\)](#)  
[Import File template for Uploading Respondents](#)  
[Researcher Instructions: Create Respondent Accounts \(Import File\)](#)  
[ASA24 Respondent Website](#)

**Create Respondent Accounts**

1. Select a Study: [Rec16: Rec2016 ▼] Your study's tool is an **Unscheduled Recall**  
You have 11 Respondent accounts and your last upload was on 11/27/2018.

2. Select how you want to create Respondent Accounts:

A. Use a wizard to set Respondent Username and Passwords and set parameters for Respondent access to the ASA24 Respondent Web site.  
**Start Wizard**  
OR

B. Upload an existing Username and Password .csv file.  
Choose File No file chosen  
**Upload the completed Import File (.csv)**

3. The Username and Password files generated previously for this study, if any, are available below. Also available are import files reflecting the settings chosen for Respondent Accounts created using the wizard. The wizard-generated files can be used for subsequent manual uploads of additional accounts, if desired. Click on the file name to save that file.

**Created Files**

File Name	File Contains	File Creation Date	Delete
<a href="#">Rec16_2018_11_27_05_59_36_UNPW</a>	Usernames and Passwords	11/27/2018 09:59	<a href="#">X</a>
<a href="#">Template_Rec16_2018_11_27_05_59_30</a>	Wizard Created Schedule Files	11/27/2018 09:59	<a href="#">X</a>

Privacy Statement | Accessibility | FOIA | Download Acrobat Reader  
Department of Health and Human Services | National Health Institutes | National Cancer Institutes | USA.gov  
NIH...Turning Discovery Into Health

**Step 1:** Download the Import File template from the **Respondent Accounts** tab (Figure 7-13).

The Import File template is an Excel workbook with multiple worksheets and is described in more detail in the next section.

**Step 2:** Populate the Import File template with your study details

**Step 3:** From Excel, save the populated Import File as a CSV file.

**Step 4:** From the **Respondent Accounts** tab, select the study for which you want to create accounts.

**Step 5:** Upload the CSV file. Once the file is validated, ASA24 will generate a file containing usernames and passwords. If there are errors, accounts will not be created. Detailed information on uploading is described in the next section.

## ASA24 Researcher Instructions

**Step 6:** Download the username and password file. Researchers are responsible for assigning and securely distributing account information to their Respondents. After the initial Import File has been uploaded and validated, Researchers can upload additional files to add new Respondents or to update new Intake Dates for existing Respondents in a *scheduled* study. Researchers can change the number of Respondents or the number of recalls or records per Respondent by editing the study settings using the **Study Details** tab. Such changes should be done prior to attempting to upload new CSV files.

### Detailed information for completing the Import File

The Import File must be structured as described in this section.

A template of the Import File is available for download from the Researcher website. The template is an Excel file to enable the inclusion of instructions. Because the template is an Excel file, it is referred to as a workbook. The workbook includes five worksheets as indicated by the tabs along the bottom. The first worksheet, *ImportFile\_Template*, is the template where Researchers enter Respondent data. The next three worksheets include sample data for a scheduled recall study, an unscheduled recall study, and a food record (both *consecutive-* and *single-day*) study. The fifth worksheet provides troubleshooting tips.

You may populate the template worksheet with your data using Excel, but the *ImportFile\_Template* worksheet must be saved as a CSV file before it can be uploaded to the Researcher website. Note that when saving an Excel workbook as a CSV file, only the data in the active sheet are retained. Make sure the worksheet *ImportFile\_Template* is the active sheet before saving. The additional worksheets (i.e., sample data and troubleshooting tips) will not be retained in the CSV file, so you may wish to save a copy of the Excel workbook for future use and reference.

- ◆ Before populating and uploading the Import File, ensure that you have selected the correct study type (i.e. *scheduled* or *unscheduled* for recalls, *consecutive-* or *single-day* for records) within the **Study Details** tab. The study type determines which fields in the Import File need to be populated.
  - For *scheduled* recall studies, the Import File must include complete information for StudySubjectID, Recall Number, Attempt, and Intake Date. Each row represents one recall attempt for one Respondent.
  - For *unscheduled* recall studies, only StudySubjectID is required. Providing a password is optional. Leave the Recall Number, Attempt, and Intake Date columns blank. Complete only one row per Respondent, regardless of the number of recalls each Respondent is to complete.
  - For *consecutive-* or *single-day* food record studies, only StudySubjectID is required. Leave the Recall Number, Attempt, and Intake Date columns blank. Complete only

## ASA24 Researcher Instructions

one row per Respondent, regardless of the number of records each Respondent is to complete.

ASA24 will reject the file when uploaded if it contains unexpected data for the study type.

**Once accounts have been created, the study type (*scheduled or unscheduled for recalls; consecutive- or single-day for records*) cannot be changed.**

The Import File columns are described below:

- ◆ **StudySubjectID:** *Applies to all study types and is required.* It must be a number. ASA24 uses StudySubjectIDs to generate unique usernames for Respondents. Usernames are comprised of the Study Abbreviation (provided at study creation) and the StudySubjectID. Usernames are used in all ASA24 reports and files. When the numeric StudySubjectID is combined with the abbreviation, it becomes an alphanumeric value. Therefore, when sorted, StudySubjectID values of 1, 2, 3, 10, 12, 100 for the study FRUIT, for example, result in usernames FRUIT1, FRUIT2, FRUIT3, FRUIT10, FRUIT12, and FRUIT100. Researchers may wish to use leading zeroes in StudySubjectIDs to enable ordinal sorting. For example, StudySubjectID values of 001, 002, 003, 010, 012, 100 result in usernames FRUIT001, FRUIT002, FRUIT003, FRUIT010, FRUIT012, and FRUIT100.
- ◆ **Recall and Attempt Numbers:** *Fill in for scheduled recall studies only.* The Import File must include one row for each RecallNumber/Attempt combination for every study Respondent. For example:
  - For a study with four recalls per Respondent and one attempt per recall, there will be four rows for each recall to be completed by a StudySubjectID. (Table 7-1).
  - For a study with two recalls per Respondent and three attempts per recall, there will be six rows per StudySubjectID with three rows per Recall Number, and in the Attempts column each row will be numbered consecutively from 1 to 3 (Table 7-2).

**Table 7 - 1. Recalls and Attempts, single attempt/recall**

StudySubjectID	RecallNumber	Attempt	IntakeDate	Password
1001	1	1		
1001	2	1		
1001	3	1		
1001	4	1		
1002	1	1		
1002	2	1		
1002	3	1		
1002	4	1		

**Table 7 - 2. Recalls and Attempts, multiple attempts/recall**

StudySubjectID	RecallNumber	Attempt	IntakeDate	Password
1001	1	1		
1001	1	2		
1001	1	3		
1001	2	1		
1001	2	2		
1001	2	3		
1002	1	1		
1002	1	2		
1002	1	3		
1002	2	1		
1002	2	2		
1002	2	3		

- ◆ **Reporting and Intake Date:** *Fill in for scheduled recall studies only.* The Researcher specifies the date(s) on which Respondents should report. The reporting date (the date on which the Respondent will access the ASA24 system to complete the recall) will be calculated by ASA24. The earliest allowable intake date is the day prior to uploading of the Import File. In this case, the reporting date would be the current date.
- ◆ **Password:** The Researcher may choose to supply a password for each StudySubjectID or leave the Password column blank. Researchers should choose passwords that are strong, but meaningful and relatively easy to remember. Strong passwords can be difficult for Respondents to remember and type accurately. If passwords are not supplied, they will be generated by ASA24 during the upload process.
  - ASA24-generated passwords will have at least one upper case letter, one lower case letter, and one special character. If you plan to mail usernames and passwords to Respondents using hard copies, you might want to specify passwords that are easier to decipher (e.g., Apples8#). If passwords are emailed

## *ASA24 Researcher Instructions*

to Respondents, you may want to suggest that they copy and paste the password and username when logging in.

For security purposes, Respondent website accounts are locked after five login attempts with an invalid password. The Researcher can unlock Respondent accounts under the **Manage Respondent** tab by selecting the **Manage Respondent Accounts** button.

Import File columns are summarized in Table 7-3.

**Table 7 - 3. Import File Specifications**

StudySubjectID	<ul style="list-style-type: none"> <li>▪ Required for all studies</li> <li>▪ Unique identifier for each study Respondent assigned by Researcher</li> <li>▪ Numbers only; up to 24 digits*</li> </ul>
Recall Number	<ul style="list-style-type: none"> <li>▪ Required for Scheduled recall studies only; blank for Unscheduled recall and food record studies</li> <li>▪ Positive integer</li> <li>▪ Must be less than or equal to the maximum number of recalls selected in Study Details</li> </ul>
Attempt	<ul style="list-style-type: none"> <li>▪ Required for Scheduled recall studies only; blank for Unscheduled recall and food record studies</li> <li>▪ Positive integer</li> </ul>
Intake Date(s)	<ul style="list-style-type: none"> <li>▪ Required for Scheduled recall studies only; blank for Unscheduled recall and food record studies</li> <li>▪ Format: mm/dd/yyyy</li> <li>▪ Must be within the study start date and end date provided by Researcher <i>The earliest allowable Intake Date is the date prior to uploading of the Import File (i.e., yesterday) (see <a href="#">Intake Date</a> and <a href="#">Reporting Date in Key Terms</a>)</i></li> </ul>
Password	<ul style="list-style-type: none"> <li>▪ For all study types, may be specified by the Researcher or left blank to be generated by ASA24.</li> <li>▪ 8-14 characters</li> <li>▪ At least one special character (no single or double quotes, vertical bar, comma, or backslash)</li> <li>▪ A combination of letters and numbers <b>and/or</b> a combination of upper-case and lowercase letters</li> <li>▪ Examples of valid passwords: Storage!3, #TqBfJoTID\$, or 2hrd2Gs!</li> <li>▪ Examples of invalid passwords: funnybunny! [must include an uppercase letter and/or a number to be valid] \$3rT\$ [too short] 2easyToForget [must include a special character]</li> </ul>

\* **NOTE:** Although Excel provides a convenient way to view CSV files, passwords with special characters may not display correctly due to automatic formatting applied by Excel. Also, a StudySubjectID that contains more than 15 digits may not show completely depending upon column width. The file is best viewed using a text editor, such as Windows Notepad or TextEdit (or SimpleText) for Mac.

Notes regarding the format of the **Import File:**

- ◆ Column headers cannot be changed (however, headers are not case sensitive).
- ◆ No extra headers or columns are permitted.
- ◆ Blank rows for file readability are permitted.

## ASA24 Researcher Instructions

Sample populated spreadsheets appear in Table 7-4 and Table 7-5 (Scheduled recall studies) and Table 7-6 and Table 7-7 (Unscheduled recall and food record studies).

**Table 7 - 4. Sample Import File for Scheduled Study (passwords generated by the ASA24 system)**

StudySubjectID	RecallNumber	Attempt	IntakeDate	Password
1001	1	1	6/1/2016	
1001	1	2	7/1/2016	
1001	2	1	9/1/2016	
1001	2	2	10/1/2016	
1002	1	1	6/1/2016	
1002	1	2	7/1/2016	
1002	2	1	9/1/2016	
1002	2	2	10/1/2016	

**Table 7 - 5. Sample Import File for Scheduled Study (passwords provided by Researcher)**

StudySubjectID	RecallNumber	Attempt	IntakeDate	Password
1001	1	1	6/1/2016	Banana2#
1001	1	2	7/1/2016	Banana2#
1001	2	1	9/1/2016	Banana2#
1001	2	2	10/1/2016	Banana2#
1002	1	1	6/1/2016	Mango\$30
1002	1	2	7/1/2016	Mango\$30
1002	2	1	9/1/2016	Mango\$30
1002	2	2	10/1/2016	Mango\$30

**Table 7 - 6. Sample Import File for Unscheduled Recall and Food Records Studies (passwords generated by the ASA24 system)**

StudySubjectID	RecallNumber	Attempt	IntakeDate	Password
1001				
1002				
1003				
1004				
1005				

**Table 7 - 7. Sample Import File for Unscheduled Recall and Food Records Studies (passwords provided by Researcher)**

StudySubjectID	RecallNumber	Attempt	IntakeDate	Password
1001				Banana2#
1002				Mango\$30
1003				Carrot6#
1004				Apple\$50
1005				Turnip3\$

### Detailed information for uploading the Import File

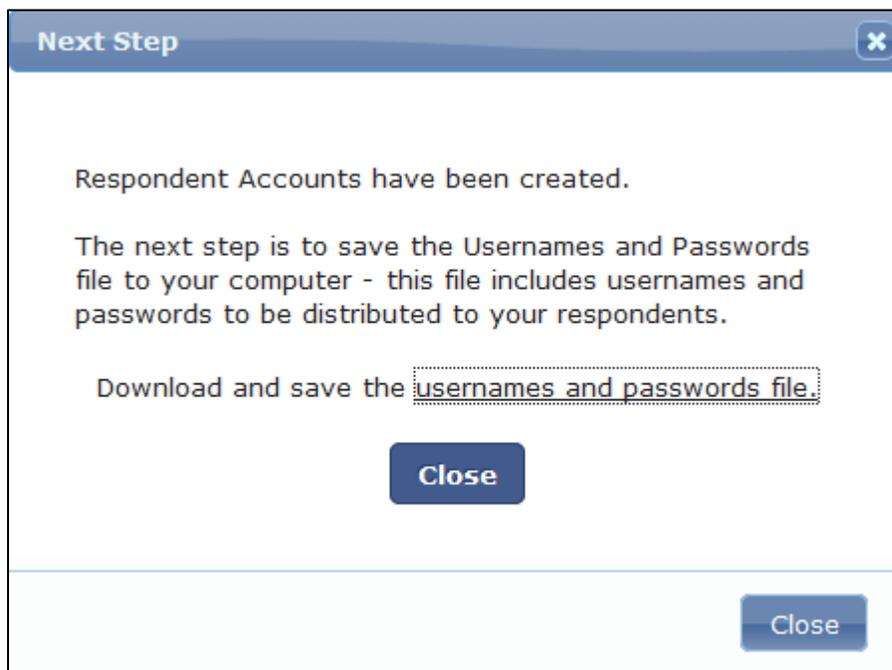
Once you have populated the Import File with the required information for the study type, save the worksheet ImportFile\_Template as a CSV file. Use the Excel **Save as** command and select CSV as the file type. Only the active sheet will be converted to CSV so be sure that the ImportFile\_Template is the active sheet. The additional worksheets including sample data and troubleshooting tips will not appear in the CSV file.

Upload the CSV file to the Researcher website from the **Respondent Accounts** tab and select **Browse** to locate the CSV file on your computer. Once you locate the file, select the **Upload the completed Import File (.csv)** button.

If ASA24 detects problems with the uploaded file, information about the errors will be provided immediately. Errors should be fixed on the original worksheet and then uploaded again as a CSV file once corrected.

When the file has been uploaded successfully, a pop-up message alerts the Researcher with a link to the Username and Password file (Figure 7-14).

**Figure 7 - 14. Pop-up Message Following Successful Import File Upload.**



This file is available for download from the **Respondent Accounts** tab (Figure 7-15).

Figure 7 - 15. Username/Password files available on Create Respondent Account page

**NATIONAL CANCER INSTITUTE**  
Automated Self-Administered  
24-Hour Dietary Assessment Tool

v2.2.0.0 Profile | Report a Bug | FAQs | Contact Us | Log Out

My Studies | Study Details | Respondent Accounts | Track Recall / Record | Analytic Files | Resources

**Manage Respondent Accounts**

**Create Respondent Accounts**

1. Select a Study: [Rec16: Rec2016 ▼] Your study's tool is an **Unscheduled Recall**  
You have 11 Respondent accounts and your last upload was on 11/27/2018.

2. Select how you want to create Respondent Accounts:

A. Use a wizard to set Respondent Username and Passwords and set parameters for Respondent access to the ASA24 Respondent Web site.

**Start Wizard**

OR

B. Upload an existing Username and Password .csv file.

Choose File No file chosen

**Upload the completed Import File (.csv)**

3. The Username and Password files generated previously for this study, if any, are available below. Also available are import files reflecting the settings chosen for Respondent Accounts created using the wizard. The wizard-generated files can be used for subsequent manual uploads of additional accounts, if desired. Click on the file name to save that file.

**Created Files**

File Name	File Contents	File Creation Date	Delete
<a href="#">Rec16 2018 11 27 05 59 36 UNPW</a>	Usernames and Passwords	11/27/2018 09:59	<a href="#">X</a>
<a href="#">Template Rec16 2018 11 27 05 59 30</a>	Wizard Created Schedule Files	11/27/2018 09:59	<a href="#">X</a>

Privacy Statement | Accessibility | FOIA | Download Acrobat Reader  
Department of Health and Human Services | National Health Institutes | National Cancer Institutes | USA.gov  
NIH...Turning Discovery Into Health

The first Username and Password file created for a study will contain information for a demonstration account in the last line. The demo username will be of the form, *study abbreviation\_DemoUser*. For example, FRUIT\_DemoUser. This account can be used to complete one or more practice recall or food records. Demo\_User accounts do not appear in the study reports or analysis output files.

### Managing Respondent Accounts

Once Respondent accounts have been created, study staff can make necessary changes, including deleting accounts, changing passwords, or locking or unlocking accounts on the Manage Respondent Accounts page of the **Respondent Accounts** tab (Figure 17-16). The **Respondent Accounts** tab includes both the Manage Respondent Accounts and Create Respondent Accounts pages; to toggle between them, select the **Create Respondent Accounts**

button on the Manage Respondent Accounts page or the **Manage Respondent Accounts** button if you are on the Create Respondent Accounts page.

**Figure 7 - 16. Manage Respondent Accounts**

**NATIONAL CANCER INSTITUTE**  
Automated Self-Administered  
24-Hour Dietary Assessment Tool

v1.12.4.0 Profile | Report a Bug | FAQs | Contact Us | Log Out

**My Studies** | **Study Details** | **Respondent Accounts** | **Track Recall / Record** | **Analytic Files** | **Resources**

**Manage Respondent Accounts**

Selected study: Rec: Recalls

**Find Respondent**

Respondent Username:  **Go**

[Delete Selected](#) | [Select All](#) | [Deselect All](#)

Select	Respondent Username	Last Login	Locked	Reset Password
<input type="checkbox"/>	Rec300	N/A	<input type="checkbox"/>	
<input type="checkbox"/>	Rec301	N/A	<input type="checkbox"/>	
<input type="checkbox"/>	Rec302	N/A	<input type="checkbox"/>	
<input type="checkbox"/>	Rec303	N/A	<input type="checkbox"/>	
<input type="checkbox"/>	Rec304	N/A	<input type="checkbox"/>	

Number of respondents per page: 5

**Save**

**What is this page?**  
This page allows you to manage details of existing Respondent accounts, including:

- Resetting Respondent passwords
- Locking or unlocking Respondent accounts
- Deleting Respondent data

**Tips**  
Select the study to manage Respondent Accounts from the drop-down menu at the top of the page.  
**Unlock** a Respondent's account if it is locked due to multiple incorrect login attempts.  
**Lock** a Respondent's account to prevent access to the Respondent Web site or if a Respondent has asked to be removed from a study.  
Note that Respondent data cannot be retrieved once deleted.

**Resources**  
[Researcher Instructions: Manage Respondent Accounts](#)

[Privacy Statement](#) | [Accessibility](#) | [FOIA](#) | [Download Acrobat Reader](#)  
Department of Health and Human Services | National Health Institutes | National Cancer Institutes | USA.gov  
NIH... Turning Discovery Into Health®

- ◆ To find a Respondent, enter the username in the box and select the **Go** button. The table will display the details for the username entered.
- ◆ To delete a Respondent, select the check box in the **Select** column next to the Respondent username and select the **Delete Selected** link above the table. Note that all data associated with the Respondent username will be deleted from the study and cannot be retrieved.
- ◆ To lock a Respondent's account, select the check box in the **Locked** column in the row with the Respondent's name and select the **Save** button below the table. Locking the account prevents the Respondent from accessing the ASA24 Respondent website.
- ◆ To unlock a Respondent's account, deselect the check box in the **Locked** column in the row with the Respondent's name (this box should be checked if the account is already locked) and select the **Save** button below the table. A Respondent's account may be

locked manually to prevent access (see above) or automatically as a result of 5 failed login attempts.

- ◆ To reset a Respondent's password, select the key  icon in the **Reset Password** column in the row with the Respondent's name. You will then be prompted to enter a new password.
- ◆ To select all Respondents in the table, use the **Select All** link above the table.

## 8. Monitoring Study Progress

The **Track Recalls/Records** tab can be used by Researchers to monitor completion of recalls or records for a selected study. On this tab, recalls or records may be filtered on a number of parameters selected by the Researcher, including user name, date completed and completion status. Researchers may switch the table view to a Respondent-level (number of completed recalls or records for each Respondent, etc.), recall/record-level summary (Recall/Record (Started), and Recall/Record (Not Started)), to obtain specific information for each recall or record by each Respondent.

### Respondents Tab

Using the **Respondents** tab (Figure 8-1), data can be viewed for all Respondents, for a specific Respondent, or for a subset of recalls/records by filtering on specific start and end dates. Respondent-level data contain summary information about Respondents (i.e., one row per Respondent). Viewing Respondent-level data enables a Researcher to identify the overall status of a Respondent (e.g., date of next *scheduled* recall, number of recalls or records completed).

Column fields in the reports generated using the **Respondents** tab (Figure 8-1) are as follows (note that some fields do not apply to *unscheduled* studies or to studies collecting records):

- ◆ Username
- ◆ Next Recall/Record (for Scheduled recall studies only)
- ◆ Next Attempt (for Scheduled recall studies only)
- ◆ Next Reporting Date (for Scheduled recall studies only)
- ◆ Completed Recall/Record

**Figure 8 - 1. Track Recall/Record, by Respondents**

The screenshot shows the NIH Automated Self-Administered 24-Hour Dietary Assessment Tool interface. The main navigation bar includes 'My Studies', 'Study Details', 'Respondent Accounts', 'Track Recall / Record', 'Analytic Files', and 'Resources'. The 'Track Recall / Record' section is active, showing a dropdown for 'Selected study' set to 'latest latest'. Below this are tabs for 'Respondents', 'Recall / Record (Started)', and 'Recall / Record (Not Started)'. The 'Recall / Record (Started)' tab is selected, displaying a table of respondents. The table has columns for 'Select', 'Username', 'Next Recall/Record', 'Next Attempt', 'Next Reporting Date', and 'Completed Recall/Record'. The table shows 5 respondents with usernames: latest\_DemoUser, latest6000, latest6001, latest6002, and latest6003. Below the table is a pagination control showing 'Number of respondents per page: 5' and 'Previous 1 2 Next'. The footer contains links for 'Privacy Statement', 'Accessibility', 'ESQs', 'Download Acrobat Reader', and 'Department of Health and Human Services | National Health Institutes | National Cancer Institute | USA.gov'.

## Recall/Record (Started)Tab

Using the **Recall/Record (Started)** tab (Figure 8-2), Researchers can also filter by recalls/records completed during a specific date range, for a specific Respondent, or by completion status.

Column fields in the reports generated using the **Recall/Record (Started)** tab include the following:

- ◆ Username
- ◆ Reporting Date
- ◆ Completion Status
- ◆ Number of Sessions (number of logins)
- ◆ Total Session Duration
- ◆ Language (in which the recall/record was completed)
- ◆ Calories (consumed during recall/record day)
- ◆ Number of Eating Occasions (i.e. meals, snacks, drinks)
- ◆ Number of Food Codes
- ◆ Nutrition Report (also known as the Respondent Nutrition Report)

**Figure 8 - 2. Track Recall/Record, by Recall/Record (Started)**

The screenshot shows the 'Track Recall / Record' interface. At the top, it says 'NATIONAL CANCER INSTITUTE Automated Self-Administered 24-Hour Dietary Assessment Tool'. The navigation bar includes 'My Studies', 'Study Details', 'Respondent Accounts', 'Track Recall / Record', 'Analytic Files', and 'Resources'. The 'Track Recall / Record' section is active, showing a dropdown for 'Selected study: argon: Argon'. There are three tabs: 'Respondents', 'Recall / Record (Started)', and 'Recall / Record (Not Started)'. The 'Recall / Record (Started)' tab is selected. Below the tabs, there's a note: 'The table below includes recall and record days that have been started. This means the Respondent at least logged into ASA24 to start a recall/record.' There are input fields for 'Username', 'Recall/Record Dates between:' (with 'Start Date:' and 'End Date:' sub-fields), and 'Completion Status' (with radio buttons for 'Quit' and 'Completed'). A 'Filter' button is present. Below that, it says 'Notes: Below includes recalls started as of 04/02/2019 12:07 PM. Nutrient and food group database values last updated 01/04/2017 12:00 AM.' There are buttons for 'Select All', 'Deselect All', 'Export Selected', 'Export All', and 'Delete Selected'. Below that, it says 'Displaying 16 to 20 of 147 total recalls'. A table follows with columns: 'Select', 'Username', 'Reporting Date', 'Completion Status', 'Number of Sessions', 'Total Session Duration', 'Language', 'Calories (kcal)', 'Number of Eating Occasions', 'Number of Food Codes', and 'Nutrition Report'. The table contains five rows of data. At the bottom, there's a 'Number of recalls per page: 5' dropdown and pagination controls (Previous, 1, 2, 3, 4, 5, ..., 30, Next). At the very bottom, there's a footer with 'Privacy Statement | Accessibility | FAQs | Download Acrobat Reader' and 'Department of Health and Human Services | National Health Institutes | National Cancer Institutes | USA.gov'.

Select	Username	Reporting Date	Completion Status	Number of Sessions	Total Session Duration	Language	Calories (kcal)	Number of Eating Occasions	Number of Food Codes	Nutrition Report
<input type="checkbox"/>	argon106	3/15/2019	Complete	2	59	ENG	2488.48	5	28	<a href="#">View</a>
<input type="checkbox"/>	argon109	9/12/2018	Complete	1	6	ENG	4575.12	1	5	
<input type="checkbox"/>	argon107	9/12/2018	Complete	1	11	ENG	13,361	1	2	
<input type="checkbox"/>	argon108	9/12/2018	Quit	1	0	ENG	0	1	0	
<input type="checkbox"/>	argon108	12/7/2018	Quit	1	0	ENG	0	0	0	

This screen is useful for obtaining past or future information about respondents' recalls/records that have been started. The tab provides information about whether the respondent completed reporting for the day or if the respondent started but did not complete reporting for that day.

Grids viewed using this tab will include as many rows per respondent as there are recalls or records and attempts (e.g., two recalls with four attempts would have eight rows). For *unscheduled* recalls and food records there can only be one attempt per recall/record, so this is equivalent to one row per recall/record.

## Recall/Record (Not Started) Tab

Using the **Recall/Record (Not Started)** tab (Figure 8-4), Researchers can view the list of usernames with un-started recalls/records. Column fields in the reports generated using the **Recall/Record (Not Started)** tab, are the similar to those in **Recall/Record (Started)**:

- ◆ Username
- ◆ Reporting Date
- ◆ Completion Status
- ◆ Number of Sessions (number of logins)
- ◆ Total Session Duration
- ◆ Language (in which the recall/record was completed)

## ASA24 Researcher Instructions

- ◆ Calories (consumed during recall/record day)
- ◆ Number of Eating Occasions (i.e. meals, snacks, drinks)
- ◆ Number of Food Codes
- ◆ Nutrition Report (also known as the Respondent Nutrition Report)

Figure 8 - 3. Track Recall/Record, by Recall/Record (Started)

The screenshot shows the NIH Automated Self-Administered 24-Hour Dietary Assessment Tool interface. The main content area is titled 'Track Recall / Record' and shows a table of recall records for the study 'argon-Argon'. The table has columns for Select, Username, Reporting Date, Completion Status, Number of Sessions, Total Session Duration, Language, Calories (kcal), Number of Eating Occasions, Number of Food Codes, and Nutrition Report. The table displays five rows of data, all with a 'Not Started' completion status and zero values for sessions, duration, calories, and eating occasions. The interface also includes a search filter for 'Username' and a 'Filter' button. A note indicates that the table includes recall and record days that have not been started. The page footer contains links for Privacy Statement, Accessibility, FOIA, and Download Acrobat Reader, along with the Department of Health and Human Services, National Health Institutes, National Cancer Institute, and USA.gov information.

Select	Username	Reporting Date	Completion Status	Number of Sessions	Total Session Duration	Language	Calories (kcal)	Number of Eating Occasions	Number of Food Codes	Nutrition Report
<input type="checkbox"/>	argon111		Not Started	0	0		0	0	0	
<input type="checkbox"/>	argon113		Not Started	0	0		0	0	0	
<input type="checkbox"/>	argon114		Not Started	0	0		0	0	0	
<input type="checkbox"/>	argon115		Not Started	0	0		0	0	0	
<input type="checkbox"/>	argon116		Not Started	0	0		0	0	0	

### Filtering Grids

To filter for recalls/records completed by a specific Respondent, enter the Respondent's username in the corresponding field on the page. Then select any other relevant search criteria – i.e., date range, and completion status, and use the **Filter** button at the bottom of the tab to display the selections. To clear and start a new search or view information for all Respondents, use the **Filter Options (Clear Filter)** link to the right of the **Filter** button.

### Viewing the Respondent Nutrition Report

Respondent Nutrition Reports (RNRs) are available for the U.S. versions of ASA24, and for ASA24-Canada-2016. If Researchers have selected the RNR option during study setup for recall or record studies, a report is generated by the system to provide feedback regarding food group and nutrient intakes in relation to country-specific dietary guidance. For recall studies, if the Respondent has indicated they would like to view their nutrition profile during their recall, an RNR will be displayed to the Respondent after the recall is completed. For both recalls and records, RNRs will only be provided if Respondents answered the questions on age and sex, and if female, whether pregnant or not, at the beginning of the recall.

## ASA24 Researcher Instructions

Researchers can view an RNR provided to a Respondent by selecting the view link in the **Nutrition Report** column (**Figure 8-4**). After selecting **View** on the row for a Username, a new page will open with the contents of the report. For both recalls and food records, the report is provided to the Researcher instantly upon Respondents completion of the intake information. For food records, the report will only be available to the Researcher on the Researcher website and may be distributed to the Respondent by the Researcher. This is to ensure that Respondents do not react to the reporting process by changing their intakes on previous or subsequent record reporting days. Sample reports are available at <https://epi.grants.cancer.gov/asa24/respondent/sample-nutrition-report.pdf>. More information on the RNR is available at <https://epi.grants.cancer.gov/asa24/respondent/nutrition-report.html>.

**Figure 8 - 4. Respondent Nutrition Report**

**NATIONAL CANCER INSTITUTE**  
Automated Self-Administered  
24-Hour Dietary Assessment Tool

My Studies | Study Details | Respondent Accounts | Track Recall / Record | Analytic Files | Resources

Track Recall / Record  
Selected study: argon.Argon

Respondents | Recall / Record (Started) | Recall / Record (Not Started)

The table below includes recall and record days that have been started. This means the Respondent at least logged into ASA24 to start a recall/record.

Username:  Completion Status:  Quit  Completed Filter Options [Clear Filter]

Recall/Record Dates between:  
Start Date:  End Date:  Filter

Notes: Below includes recalls started as of 04/02/2019 12:07 PM. Nutrient and food group database values last updated 01/04/2017 12:00 AM.

Select All | Deselect All | Export Selected | Export All | Delete Selected

Displaying 16 to 20 of 147 total recalls

Select	Username	Reporting Date	Completion Status	Number of Sessions	Total Session Duration	Language	Calories (kcal)	Number of Eating Occasions	Number of Food Codes	Nutrition Report
<input type="checkbox"/>	argon106	3/15/2019	Complete	2	59	ENG	2486.46	5	26	<a href="#">View</a>
<input type="checkbox"/>	argon109	9/12/2018	Complete	1	6	ENG	4575.12	1	5	
<input type="checkbox"/>	argon107	9/12/2018	Complete	1	11	ENG	13,361	1	2	
<input type="checkbox"/>	argon108	9/12/2018	Quit	1	0	ENG	0	1	0	
<input type="checkbox"/>	argon108	12/7/2018	Quit	1	0	ENG	0	0	0	

Number of recalls per page: 5

Previous 1 2 3 4 5 ... 30 Next

Privacy Statement | Accessibility | EDA | Download Acrobat Reader  
Department of Health and Human Services | National Health Institutes | National Cancer Institute | USA.gov  
NIH... Turning Discovery Into Health

### 9. Data Analysis

Researchers can obtain food and nutrient analysis output files from the **Analytic File** tab. Files can be requested for all Respondents, for one Respondent, or for a specific date range.

For the 2016 and 2014 versions of the ASA24 system, Researchers can access the Researcher website at any time once a study has begun to obtain analytic output files, including nutrient and food group analyses.

For ASA24-2016 and ASA24-Canada-2016, these files include nutrients and the Food Pattern Equivalents data (FPED).

For ASA24-Canada-2016:

- Output files for recalls and records collected before April 10, 2019 will NOT provide data on Canadian food groups.
- Output files for recalls and records collected after April 10, 2019 will provide data on Canadian food groups for studies was created after May 31, 2018.

The four Canadian Food Groups are: Grain products; Vegetables and fruit; Milk and alternatives; and Meat and alternatives. These food groupings reflect the 2007 "Eating Well with Canada's Food Guide."

For ASA24-Australia-2016, output files include nutrients only.

For ASA24-2014 and ASA24-Kids-2014, the files include nutrients and MyPyramid Equivalents data (MPED). For ASA24-Canada-2014, files include nutrients only.

- ◆ Data dictionaries applicable to the 2016 and 2014 versions of ASA24 are in [Appendix C](#).
- ◆ Sample output files can be found at <https://epi.grants.cancer.gov/asa24/Researcher/sample.html>.
- ◆ The food, supplement, and nutrient databases applied to the ASA24 versions are described in [Appendix B](#). See the databases used for all versions of ASA24 at <https://epi.grants.cancer.gov/asa24/comparison.html>.
- ◆ Additional information on the FNDDS, MPED and FPED are available from the U.S. Department of Agriculture's website at <https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/food-surveys-research-group/>.

**Table 9 - 1. Data File Names for ASA24-2016 Versions**

Analysis Filename	Content Description
Responses	Data by Respondent, by day, providing probe questions and answers.
Items	Data by <b>food and beverage item</b> , providing food codes, gram weights, nutrient and food group values.
Totals	Data by Respondent, by day, providing total nutrient and food group values for <b>foods and beverages</b> .
INS	Data by <b>supplement</b> , providing supplement codes, gram weights and nutrient values.
TS	Data by Respondent, by day, providing total nutrient values for <b>supplements</b> .
TNS	Data by Respondent, by day, providing total nutrient and food group values for <b>foods, beverages, and supplements combined</b> .

**Table 9 - 2. Data File Names for ASA24-2014 Versions**

Analysis Filename	Content Description
MS	Data by Respondent, by day, providing probe questions and answers.
INF	Data by <b>food and beverage item</b> , providing food codes, gram weights, nutrient and food group values.
TN	Data by Respondent, by day, providing total nutrients for <b>foods and beverages</b> .
INFMYPHEI	MyPyramid HEI Analysis File by individual <b>food and beverage</b> , providing food codes, gram weights, MyPyramid Equivalents and HEI Whole Fruit variable
TNMYPHEI	MyPyramid HEI Analysis File totals file, by Respondent, by day, providing total daily nutrients, MyPyramid Equivalents and HEI Whole Fruit variable
INS	Data by <b>supplement</b> , providing supplement codes, gram weights and nutrient values.
TS	Data by Respondent, by day, providing total nutrient values for <b>supplements</b> .
TNS	Data by Respondent, by day, providing total nutrient and food group values for <b>foods, beverages, and supplements combined</b> .

**NOTE:** The naming convention used for reports is:  
 AbbreviatedStudyName\_ReportSequenceNumber\_ReportType.csv

## ASA24 Researcher Instructions

### INF:

- ◆ **Individual Foods and Pyramid Equivalents:** This file contains a row that specifies the associated food codes, gram weights, and nutrient values based on a database associated with each ASA24 version. For U.S. versions this is FNDDS; for Canadian versions it is the Canadian Nutrient File; and for the Australian version it is the AUSNUT database. It also includes the MyPyramid Equivalents (for the U.S. versions) or Food Patterns Equivalents for the U.S. version of ASA24-2016 and ASA24-Canada-2016 and Eating Well with Canada's Food Guide (2007) for ASA24-Canada-2016. MyPyramid Equivalents or Food Patterns Equivalents can be used by Researchers to derive Healthy Eating Index (HEI) variables and scores. Learn more about [SAS code](#) available for calculating HEI scores at <https://epi.grants.cancer.gov/asa24/resources/hei.html>.

### TN:

- ◆ **Daily Total Pyramid Equivalents:** This file contains MyPyramid Equivalents (MPED) or Food Patterns Equivalents (FPED) from all foods reported, by Respondent per day (row), as well as total nutrient values for foods from FNDDS. MPED and FPED data are not available for ASA24-Canada-2014 or ASA24-Australia-2016. MPED and FPED data can be used by Researchers to derive HEI variables and scores. As of the time of this documentation, food group equivalents are not available for the Canadian version.

For studies using ASA24 versions prior to 2016, in which the optional **supplements module** is selected, or when 2016 Respondents report supplements, Researchers will also receive up to three additional analytic files:

### INS:

- ◆ **Individual Supplements:** National Health and Nutrition Examination Survey Dietary Supplement Database (NHANES-DSD) supplement codes for U.S. versions, Licensed Natural Product Database and NHANES-DSD supplement codes for Canadian version and AUSNUT supplement codes for Australian version and nutrients for each supplement reported by each Respondent, by recording day.

### TS:

- ◆ **Daily Total Supplements:** Nutrients from all supplements in a given day, by Respondent and recording day.

### TNS:

- ◆ **Daily Total Nutrients from Foods and Supplements:** Nutrients from foods and supplements, by Respondent and recording day; this file includes only intakes that have an entry in the Individual Supplements file.

### Obtaining Analytic Files

Researchers request analysis output files on the **Analytic Files** tab (Figure 9-1). Be sure to choose the study of interest from the **Selected study** drop-down menu. Studies started before May 31, 2018 do not have the option to filter analytic files by specific start and end dates. For these studies, requests for files for all respondents (batch processed) will be overnight requests.

Figure 9 - 1. Analytic Files Tab

The screenshot shows the NIH National Cancer Institute's Automated Self-Administered 24-Hour Dietary Assessment Tool interface. The top navigation bar includes links for Profile, Report a Bug, FAQs, Contact Us, and Log Out. The main navigation menu has tabs for My Studies, Study Details, Respondent Accounts, Track Recall / Record, Analytic Files (selected), and Resources. The Analytic Files section features a 'Selected study' dropdown menu set to 'Rec: Recalls'. Below this, there are three radio button options for data inclusion: 'All Respondents (batch)' (selected), 'One Respondent', and 'Recall/Record dates between'. Two buttons are present: 'Download analysis files' and 'Download data dictionaries'. A note states that information will be downloaded in zip format, with a link to 7Zip software. A sidebar on the left provides instructions, tips, and resources. The footer contains privacy and accessibility information, along with the NIH logo and tagline.

- ◆ The **All Respondents (batch)** option generates output files for all recalls/records completed to date for all study Respondents.
- ◆ The **Respondent** option (Figure 9-2) generates output files for all recalls/records completed to date for a particular Respondent.
- ◆ Data files are provided in CSV format and can be opened using Excel or imported into statistical software.

## Figure 9 - 2. Viewing Analyses for a Single Respondent

The screenshot displays the NIH Automated Self-Administered 24-Hour Dietary Assessment Tool interface. At the top, the NIH logo is on the left, and the text 'NATIONAL CANCER INSTITUTE Automated Self-Administered 24-Hour Dietary Assessment Tool' is in the center. On the right, there are links for 'v1.12.4.0 Profile', 'Report a Bug', 'FAQs', 'Contact Us', and 'Log Out'. Below this is a navigation bar with tabs for 'My Studies', 'Study Details', 'Respondent Accounts', 'Track Recall / Record', 'Analytic Files', and 'Resources'. The 'Analytic Files' tab is active. On the left side of the main content area, there is a 'What is this page?' section with a description and 'Tips'. The main content area is titled 'Analytic Files' and includes a 'Selected study:' dropdown menu set to 'Rec: Recalls'. Below this, there is a section 'Select the data to be included in the analysis files (select one option only):' with three radio button options: 'All Respondents (batch)', 'One Respondent - User Name:' (with an input field), and 'Recall/Record dates between'. There are two buttons: 'Download analysis files' and 'Download data dictionaries'. A note at the bottom states: 'The information will be downloaded in zip format. A free version of the 7zip software can be found at the [7Zip Web site](#)'. At the very bottom, there are links for 'Privacy Statement', 'Accessibility', 'FOIA', and 'Download Acrobat Reader', followed by 'Department of Health and Human Services | National Health Institutes | National Cancer Institutes | USA.gov' and the NIH logo with the tagline 'NIH... Turning Discovery Into Health®'.

A Researcher can also view analyses for recalls or records completed between a specified range of dates (Figure 9-3).

Figure 9 - 3. Viewing Recall or Record Analyses for a Specified Time Period

The screenshot displays the ASA24 Researcher Instructions interface. At the top, the NIH logo and 'NATIONAL CANCER INSTITUTE Automated Self-Administered 24-Hour Dietary Assessment Tool' are visible. A navigation bar includes 'My Studies', 'Study Details', 'Respondent Accounts', 'Track Recall / Record', 'Analytic Files', and 'Resources'. The 'Track Recall / Record' section is active, showing 'Analytic Files' with a 'Selected study' dropdown set to 'Rec: Recalls'. Below this, there are radio buttons for 'All Respondents (batch)', 'One Respondent', and 'Recall/Record dates between - Date Start: [ ] Date End: [ ]'. Two buttons, 'Download analysis files' and 'Download data dictionaries', are present. A footer contains links for 'Privacy Statement', 'Accessibility', 'FOIA', 'Download Acrobat Reader', 'Department of Health and Human Services', 'National Health Institutes', 'National Cancer Institutes', and 'USA.gov', along with the NIH logo and tagline 'NIH... Turning Discovery Into Health®'.

As with any study, Researchers should carefully assess the quality of the data. To assist with this, output files include a status flag to indicate whether a recall or record day was completed (i.e., whether the Respondent completed the recall/record through the last question). Refer to the data dictionaries for descriptions of the variables ([Appendix C](#)). Incomplete recalls or records may be deemed acceptable by a Researcher depending upon how far the Respondent got in completing their intake day and what data are missing (e.g., missing a valid response to the final question, which only queries whether intake was usual, as opposed to missing details on portion size). It is also possible that a Researcher may wish to exclude a recall or record coded as Complete by ASA24 because the data entered by the Respondent are of poor quality. Tips on reviewing output data are available at <https://epi.grants.cancer.gov/asa24/resources/cleaning.html>.

## 10. Key Terms

**ASA24 Help Desk:** The ASA24 Help Desk is monitored by NCI-designated staff charged with monitoring and maintaining the ASA24 Researcher and Respondent websites. The administrator provides general support to Researchers throughout study set-up and administration. Email [ASA24Helpdesk@westat.com](mailto:ASA24Helpdesk@westat.com) to contact the Help Desk.

## ASA24 Researcher Instructions

**Attempts:** For *scheduled* recall studies only (see below), Researchers can specify the number of times a Respondent can try to complete each recall. For example, for a study collecting 3 days of recall data, the Researcher may choose to allow the Respondent 4 attempts (i.e., 4 different dates) to complete each recall, resulting in a total of 12 attempts. This information will be specified by the Researcher as part of the study setup process.

**Consecutive Recalls:** Researchers may wish to have Respondents complete recalls for consecutive days, to obtain data for periods longer than 24 hours. However, given that it is possible to collect food records using all 2016 versions of ASA24, Researchers should consider if this is a better option than collecting Consecutive Recalls. Consecutive recalls are possible only under the following conditions:

- (1) Intake Time frame of Midnight to Midnight and Respondents must finish reporting in 24 hours OR
- (2) Intake Time frame of Last 24 Hours and Respondents logging in to the system at the exact same time each day.

For example, in a study with an Intake Time frame of Last 24 Hours, if a Respondent logs in at noon on Monday for the first recall and noon on Tuesday for the second recall, information on food and drinks consumed during the previous 48 hours will be captured. However, if a Respondent logs in at noon on Monday and 2:00 p.m. on Tuesday, information on food and drinks consumed from noon to 2:00 p.m. on Monday will be missing.

Consecutive recalls are not possible for studies with an Intake Time frame of Midnight to Midnight if Respondents must finish reporting in 32 hours.

**Consecutive-Day Record (records only):** For studies with Consecutive Records, Respondents report dietary intake for two or more consecutive days. A Consecutive Record will begin on the first day a Respondent logs in. If Researchers choose a Consecutive study type, they must specify the maximum **Number of Consecutive Days** that Respondents will report for a record. If collecting multiple consecutive day records, the number of consecutive days for each record must be the same. For example, a Researcher wishing to collect a three-day record would enter “3” as the maximum number of consecutive days. If they wanted to collect a second record within the same study, it will also be a three-day food record.

**Data Dictionary:** A data dictionary identifies the contents of an analytic file, including the names of the nutrient fields. Data dictionaries are available for download from the Researcher website and included as [Appendix C](#)

**Demo\_User Account:** For each registered study, a Demo\_User Account is provided within the first Usernames and Passwords file downloaded for a specific study, which enables Researchers to view customizations they make to the Respondent website (e.g., logo, welcome and thank-you text, optional modules) and to complete one or more practice recalls or records. The

## ASA24 Researcher Instructions

Demo\_User Account details are included in the first username/password file that is downloaded as part of the process of creating Respondent accounts. Data entered to the Respondent website using the Demo\_User Account do not appear in the study reports or analytic files.

**Intake Date (applies to recalls only):** The Intake Date is the date for which a Respondent will report their food and drink consumption. If a Respondent is providing intake information from Midnight to Midnight the previous day, then the Intake Date will be that day. If a Respondent is providing intake information for the Last 24 Hours, the Intake Period will generally span two calendar dates, and the Intake Date will be the later of the two dates.

**Intake Time frame (applies to recalls only):** The Intake Time frame refers to the 24-hour period for which Respondents will recall their food and drink consumption. The Time frame will be either: Midnight to Midnight or the Last 24 Hours, as defined by the Researcher during study setup.

**Single-day Record (applies to records only):** For studies with Single-day records, Respondents can report any number of nonconsecutive, single-day Records. For either study type.

**Recall/Record Number:** The Recall/Record Number for each recall or record completed by a Respondent is displayed in the analytic files that can be downloaded from the site (see [Data Analysis](#)).

**Reporting Date:** For recalls, the Reporting Date is the date on which the Respondent accesses ASA24 and reports food and drink intake for either the previous day from Midnight to Midnight or for the Last 24 Hours. For records, the reporting date can be the same day as the intake date. The Reporting Date for an intake is displayed on the output files that can be downloaded from the **Analytic Files** tab.

**Researcher:** The term “Researcher” denotes a Researcher, clinician, instructor, member of the study staff, or other health professional accessing the ASA24 Researcher website.

**Respondent:** The term “Respondent” includes anyone completing a recall on the ASA24 Respondent website. In any given study or research findings, Researchers may choose to use other terms such as participant or study subject; this term is meant to encompass these and other synonyms.

**Respondent Nutrition Reports:** If Researchers have selected this option, which is only available to those using the 2016 U.S. version of ASA24 and ASA24-Canada-2016 with recalls/records collected after April 10, 2019, Respondents are provided with the opportunity to obtain formatted reports that provide information on how their daily intake of nutrients and food groups compares to country-specific dietary guidance. These reports are also available to Researchers.

## ASA24 Researcher Instructions

**Scheduled Recall Study (recalls only):** A Scheduled study is one in which Intake Dates are predetermined during study set-up and the ASA24 system permits access only on the applicable Reporting Dates. By limiting access, the Scheduled study approach is helpful in ensuring that Respondents complete their recalls on the dates desired by the Researcher. Reporting Dates can be generated by the Respondent Accounts Wizard or accessed through the **Track Recalls** tab that used the Intake Dates from the uploaded Import File. For Scheduled studies, dates can be set for multiple attempts (i.e., backup dates) for each recall in case the Respondent does not complete the recall on the assigned date.

**Session:** Throughout the ASA24 site, the term session is used to signify a period during which a Respondent is continuously logged in to the site. When setting up a study that will collect recalls, Researchers can choose whether Respondents will be allowed a single session per recall or multiple sessions. The ASA24 system will automatically log a Respondent out after 30 minutes of inactivity; this allows the Respondent to step away from their computer for a brief period while completing a recall within a single session. As records are to be completed in real time, it is expected that Respondents will log in and out of the website multiple times. Each of these sessions is recorded.

**Study Abbreviation:** The Study Abbreviation or Short Study Name is provided by the Researcher when setting up a new study. It must be unique to the ASA24 system and is composed of up to eight letters. The username for each Respondent in a study will be a combination of the Study Abbreviation and the StudyID.

**StudyID:** Researchers must supply an original study identifier for each Respondent, either through the Respondent Accounts Wizard or through the Import File. The StudyID is used on all reports and analytic files to enable the Researcher to link ASA24 data with other study data. It must be composed of numbers only, up to a maximum of 24 digits.

**Unscheduled Recall Study (applies to recalls only):** An Unscheduled Recall study is one in which Intake Dates and Reporting Dates are not scheduled within the ASA24 system, requiring the Researcher to manage the timing of recalls outside the ASA24 system. Researchers should bear in mind that when the Unscheduled study option is selected, Respondents' access to the ASA24 system will not be limited to certain dates.

**Username and Passwords:** Each ASA24 user must have a username and password to log into the Researcher or Respondent websites. Researchers and study staff are assigned usernames and passwords to access the Researcher Site. For Respondents, the username will be composed of the **Study Abbreviation** and the **StudyID** specified by the Researcher.

### 11. Tips for Managing Studies Using ASA24

#### Pilot Studies

Researchers are encouraged to conduct a pilot study to demonstrate or test the utility ASA24 in their study population. Researchers either can register the pilot study by entering all of the necessary information or by uploading dedicated StudySubjectIDs for piloting and testing. Refer to the instructions for [Registering to use the ASA24 system](#).

#### Large Studies (100,000 or more Respondents) with Waves

If desired to facilitate administration, Researchers can treat each wave of data collection (e.g., baseline and follow-up recalls or records) as a separate study. It will be possible to view information about all of the studies from the Researcher website. Data from the waves can be downloaded and combined.

#### Multi-site Studies

Researchers with multi-site studies can treat each site as a separate study. The coordinating center or principal investigator can have access to all sites and each site can designate particular staff to have access to their data. Alternatively, Researchers can have one large study with their own designation of site.

#### Adding Respondents

Researchers can append new Respondents to an existing study, as needed, by using the Respondent Accounts Wizard or uploading a new Import File (see [Setting Up a Study](#)). This is particularly useful for studies with rolling enrollment.

#### Adding Recalls or Records

To add additional recalls or records to an existing study, use the Respondent Accounts Wizard (recalls only) or upload a new **Import File** (see [Setting Up a Study](#)). All new Intake Dates must be from the present day forward.

#### Access from a Study Website

Some studies may have a centralized website for study Respondents. Please use the **Contact Us** function from the Researcher website to contact the ASA24 Help Desk ([ASA24Helpdesk@westat.com](mailto:ASA24Helpdesk@westat.com)) regarding single sign-on options to enable your Respondents to access ASA24 from your study website. A redirect to the ASA24 Respondent website can be provided, meaning the Respondent would not require an additional username and password to log in to and use the ASA24 system.

### 12. Helpful Links

- ◆ **NCI ASA24 Website**  
*Includes background information, downloadable resources for study participants and staff, descriptions of the different versions of ASA24, and FAQs*  
<https://epi.grants.cancer.gov/asa24/>
- ◆ **ASA24 Canada Website**  
<https://epi.grants.cancer.gov/asa24/respondent/canada-2016.html>
- ◆ **NCI ASA24 Australian version**  
<https://epi.grants.cancer.gov/asa24/respondent/australia.html>
- ◆ **ASA24 Researcher Website**  
<https://asa24.nci.nih.gov/researchersite/>
- ◆ Respondent Website demonstration - **Demonstration Versions of ASA24 Respondent Website** <https://asa24.nci.nih.gov/demo/>
- ◆ **Known Issues and Workarounds**  
<https://epi.grants.cancer.gov/asa24/resources/issues.html>
- ◆ **ASA24 Listserv**  
*Allows potential/current users to communicate with the ASA24 team and other users*  
<https://list.nih.gov/cgi-bin/wa.exe?A0=ASA24-L>

## **Appendix A: ASA24 Researcher Agreement**

Electronic Certification (E-Certification) and Agreement For use of the Automated Self-Administered 24-hour Recall ("**ASA24**") and Transfer of Data

Epidemiology and Genomics Research Program  
Division of Cancer Control and Population Sciences  
National Cancer Institute

### DEFINITIONS:

**NCI:** Epidemiology and Genomics Research Program, Division of Cancer Control and Population Sciences, National Cancer Institute, National Institutes of Health (NIH), an agency of the United States Public Health Service (PHS) within the Department of Health and Human Services (DHHS)

**RESEARCHER:** An organization, as represented by its academic or clinical Researchers conducting observational studies with human subjects. "RESEARCHER" may also include individual academic or clinical Researchers who conduct observational studies with human subjects under their own legal authority independent of an employer or parent organization.

**DATA:** is de-identified human dietary intake data collected by the NCI under auspices of NCI's Automated Self-Administered 24-hour Recall ("**ASA24**") program. "DATA" does not mean the ASA24 database, associated databases, or software used to create and run the **ASA24** website.

### RECITALS:

WHEREAS, the NCI has constructed a research tool in the form of an ASA24 computerized interview and database, and this database is intended to assist RESEARCHER and human subjects under the RESEARCHER's supervision with management of DATA associated with those human subjects; and

WHEREAS, the RESEARCHER intends to direct human subjects under RESEARCHER's supervision to submit dietary intake data to the ASA24 database; and,

WHEREAS, the NCI wishes the RESEARCHER to have access to DATA describing the human subjects under RESEARCHER's supervision;

In consideration of the above, the RESEARCHER and NCI agree to the following:

## ASA24 Researcher Instructions

1. The Researcher will be responsible for directing human subjects under its supervision to submit DATA to the NCI. NCI will store the DATA in the NCI's ASA24 database. NCI will maintain the DATA in the absence of identifying information; however, NCI will have the right to assign a unique alphanumeric username tag to records describing individual human subjects. NCI shall ensure that the nature of such tag will prevent NCI from determining human subject identities. The Researcher, but not NCI, will retain an encryption key for translating the tag to identify individual human subjects under Researcher's supervision. NCI will not have access to the key.
2. DATA submitted to the NCI is the property of the NCI for distribution purposes and shall be made available as a service to the research community.
3. The DATA will be used only for research, clinical and academic purposes. THIS DATA WILL NOT BE USED BY NCI TO TREAT OR DIAGNOSE HUMAN SUBJECTS. In the event that:
  - a) a party to this agreement is able to deduce the identity of an individual human subject whose information is a component of the DATA;

And,

  - b) the human subject is *not being supervised by or under care of* the party, then that party agrees it will not attempt to identify or contact such human subject and, furthermore, will notify the other party of its ability to make such identification.
4. Neither NCI nor RESEARCHER will use the DATA unless it has obtained all appropriate clearances to use the DATA, including but not limited to clearance by an Institutional Review Board or equivalent governing body. The use and handling of the DATA by either party will be performed in compliance with all applicable statutes and regulations.
5. The RESEARCHER may redistribute DATA to third parties for research, clinical, and academic purposes under conditions of use no less restrictive than those of this Agreement.

## ASA24 Researcher Instructions

6. The RESEARCHER agrees to acknowledge the source of the DATA in any publications reporting use of it.
7. NCI shall have the right to conduct quality assurance measures of the DATA including, but not limited to, reviews of system logic, evaluation of missing DATA, and summary statistics based on DATA across the entire system. No evaluation of, or publication based on, a single registered study will be performed by NCI. The NCI represents that its role in managing the DATA shall be primarily archival, and that the NCI will not conduct investigative activities with the DATA.
8. Any DATA delivered pursuant to this Agreement is understood to be experimental in nature. THE NCI MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE DATA WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS.
9. No indemnification for any loss, claim, damage, or liability is intended or provided by any party under this agreement. Each party shall be liable for any loss, claim damage, or liability that said party incurs as a result of said party's activities under this agreement, except that the NCI, as an agency of the United States, assumes liability only to the extent as provided under the Federal Tort Claims Act (28 U.S.C. Chapter 171). If the RESEARCHER is a component of or an agency of a State government then RESEARCHER assumes liability only to the extent authorized under the laws of the State or Commonwealth.
10. RESEARCHER agrees not to claim, infer, or imply endorsement of the RESEARCHER by the NCI and by the Government of the United States of America.
11. Upon request by the NCI, the RESEARCHER will perform any of the following as directed by the NCI: (a) immediately cease use of the DATA; (b) dispose of DATA provided by the NCI that is in the RESEARCHER's possession.

Any false or misleading statements made, presented, or submitted to the Government, including any relevant omissions, under this Agreement are subject to all applicable civil and criminal statutes including Federal statutes 31 U.S.C. §§ 3801 3812 (civil liability) and 18 U.S.C. § 1001 (criminal liability including fine(s) and/or imprisonment).

## *ASA24 Researcher Instructions*

By accepting the terms of this agreement, the RESEARCHER certifies that the information submitted by the RESEARCHER is true, complete and accurate to the best of RESEARCHER's knowledge. The person accepting the terms of this agreement for the RESEARCHER has the requisite power and authority to accept the terms of this Agreement.

**ASA24** is a registered trademark of DHHS.

**Appendix B: Nutrients and Food Groups Included in ASA24 Analysis Reports**

Nutrients in ASA24 U.S. versions are provided by USDA’s Food and Nutrient Database for Dietary Surveys (FNDDS), while the food group data is provided by USDA’s MyPyramid Equivalents Database (MPED) and the Food Patterns Equivalents Database (FPED).

The Canadian Nutrients file is partly based on FNDDS and the Canadian Nutrient File, while the food group data, for studies using ASA24-Canada-2016, are provided by Eating Well with Canada’s Food Guide (2007).

The Australian Food, Supplement and Nutrient Database (AUSNUT) is used for ASA24 Australia.

The following table lists the versions of FNDDS, MPED and FPED used for the ASA24 versions discussed in this document.

**Table B - 1. Nutrient, Food Group, and Supplement Databases by Respondent Website version**

	<b>ASA24-2014</b> <b>ASA24-Kids-2014</b> <b>ASA24-Canada-2014</b>	<b>ASA24-2016</b> <b>ASA24-Canada-2016</b> <b>ASA24-Australia-2016</b>
<b>Food codes and nutrient values</b>	Food and Nutrient Database for Dietary Surveys (FNDDS), version 4.1. The nutrients included are listed below.  Canada: Canadian Nutrient File (CNF2015) which is in part based on FNDDS 4.1	ASA24-2016: Food and Nutrient Database for Dietary Surveys (FNDDS), 2011-12  ASA24-Canada-2016: Canadian Nutrient File (CNF2015) supplemented with FNDDS 2009-10 (version 5.0) and 2011-12  ASA24-Australia-2016: Australian Food, Supplement and Nutrient Database (AUSNUT) 2011-13 Nutrient File*

## ASA24 Researcher Instructions

<b>MyPyramid Equivalents</b>	<p>MyPyramid Equivalents Database (MPED) version 2.0 supplemented with the USDA Center for Nutrition Policy and Promotion MPED Addendum to allow compatibility with FNDDS 4.1; nutritionists on the ASA24 team imputed values for 9 food codes for which MyPyramid Equivalents have not yet been assigned by USDA.</p> <p>Canada: not available</p>	<p>ASA24-2016 and ASA24-Canada-2016: Food Patterns Equivalents Database (FPED) 2011-12 and Eating Well with Canada's Food Guide (2007).</p> <p>ASA24-Australia-2016: Not available</p>
<b>Supplement codes and nutrient values</b>	<p>National Health and Nutrition Examination Survey (NHANES) Dietary Supplements Database, 2007-2008.</p> <p>Canada: Licensed Natural Health Products Database; some linked to the 2007-2008 NHANES Dietary Supplement Database</p>	<p>National Health and Nutrition Examination Survey (NHANES) Dietary Supplements Database, 2011-12</p> <p>Canada: Licensed Natural Health Products Database; some linked to the 2007-2008 NHANES Dietary Supplement Database</p> <p>Australia: AUSNUT 2011-13 Supplement Nutrient File</p>

\*Australian version does not include the following nutrients: energy (without dietary fiber), available carbohydrate (without sugar alcohols), starch, ash, total long chain omega 3 fatty acids, total trans fatty acids, pro-vitamin A, niacin derived equivalents, iodine, tryptophan.

Information about the nutrient and food group databases is available using the links below:

- [FNDDS](#)
- [FPED 2011-2012](#)
- [MPED version 2.0](#)
- Eating Well with Canada's Food Guide (2007).
- [AUSNUT 2011-13](#)

### List of Nutrients and Food Groups Included in the ASA24 Analysis Reports

Researchers, clinicians, and educators can use the ASA24 system to analyze 65 nutrients and 37 food groups (U.S. and Canadian versions), and 4 Canadian food groups (Canadian version only)

## ASA24 Researcher Instructions

from food recall or record data. Analyses for ASA24-Australia-2016 provide 41 nutrients and no food groups.

**NOTE:** ASA24-Australia-2016 is based on the [Australian Food, Supplement and Nutrient Database \(AUSNUT\) 2011-13](#). The AUSNUT file does not contain some nutrients that are included in the U.S. databases used to create ASA24; therefore, 24 of the nutrient variables in the analytic files contain no data. Missing nutrients in the Australian version are noted with an \* below. Additionally, ten nutrients (energy without dietary fibre, available carbohydrate without sugar alcohols, starch, ash, total long chain omega 3 fatty acids, total trans fatty acids, pro-vitamin A, Niacin derived equivalents, iodine, tryptophan) that are included in the AUSNUT file are not available in ASA24-Australia2016. Note also that there is currently no food group database associated with the Australian version.

More information is available on the nutrient and food group databases used for all versions of ASA24 at <https://epi.grants.cancer.gov/asa24/comparison.html>.

A full description of the FPED categories can be viewed at [https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/fped/FPED\\_2011\\_12\\_Fact\\_Sheet.pdf](https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/fped/FPED_2011_12_Fact_Sheet.pdf) and MPED version 2.0 categories can be viewed at [https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/mped/mped2\\_doc.pdf](https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/mped/mped2_doc.pdf).

## ASA24 Researcher Instructions

The ASA24 data analysis files provide data on the following nutrients and food groups:

### NUTRIENTS

*Note: An asterisk in the list below denotes nutrients not available in the Australian version of ASA24.*

#### Macronutrients & Energy

Energy (kcal; kJ in AUS version)

Protein (g)

Total Fat (g)

Carbohydrate (g)

Water (g)

Alcohol (g)

Sugars, total (g)

Fiber, total dietary (g)

#### Vitamins

Folate, total (mcg)

Folic acid (mcg)

Folate, food (mcg)

Folate, DFE (mcg\_DFE)

Niacin (mg)

Retinol (mcg)

Riboflavin (mg)

Thiamin (mg)

Vitamin A, RAE (mcg\_RAE)

Vitamin B-6 (mcg)

Vitamin B-12 (mcg)

Added Vitamin B-12 (mcg)\*

Vitamin C (mg)

Vitamin D (D2 + D3) (mcg)\*

Vitamin E, alpha-tocopherol (mg)

Added Vitamin E (mg)

Vitamin K, phylloquinone (mcg)\*

#### Minerals

Calcium (mg)

Copper (mg)\*

Iron (mg)

Magnesium (mg)

Phosphorus (mg)

Potassium (mg)

Sodium (mg)

Selenium (mcg)

Zinc (mg)

#### Carotenoids

$\alpha$  Carotene (mcg)\*

$\beta$  Carotene (mcg)

$\beta$  Cryptoxanthin (mcg)\*

Lycopene (mcg)\*

Lutein + Zeaxanthin (mcg)\*

#### Fats and Cholesterol

Total Fat (g)

Cholesterol (mg)

Fatty acids, total saturated (g) Choline, total (mg)\*

Fatty acids, total monounsaturated (g)

Fatty acids, total polyunsaturated (g)

**Specific Fatty Acids**

4:0, Butanoic acid (g)\*

6:0, Hexanoic acid (g)\*

8:0, Octanoic acid (g)\*

10:0, Decanoic acid (g)\*

12:0, Dodecanoic acid (g)\*

14:0, Tetradecanoic acid (g)\*

16:0, Hexadecanoic acid (g)\*

18:0, Octadecanoic acid (g)\*

16:1, Hexadecenoic acid, undifferentiated (g)\*

18:1, Octadecenoic acid, undifferentiated (g)\*

20:1, Eicosenoic acid, undifferentiated (g)\*

22:1, Docosenoic acid, undifferentiated (g)\*

18:2, Octadecadienoic acid (g)

18:3, Octadecatrienoic acid (g)

18:4, Octadecatetraenoic acid (g)\*

20:4, Eicosatetraenoic acid (g)\*

20:5 n-3, Eicosapentaenoic acid [EPA] (g)

22:5 n-3, Docosapentaenoic acid [DPA] (g)

22:6 n-3, Docosahexaenoic acid [DHA] (g)

**Other Substances**

Caffeine (mg)

Theobromine (mg)\*

**FOOD GROUP EQUIVALENTS** (U.S and Canadian versions only)

4 Fruit categories expressed in cup equivalents including:

- Total fruits
- Whole or cut citrus, melons, berries (excludes juices)
- Whole or cut other fruits (excludes juices)
- Fruit juices

10 Vegetable categories expressed in cup equivalents including:

- Total vegetable (excludes legumes)
- Dark green vegetables
- Total red and orange vegetables
- Tomatoes and tomato products
- Other red and orange vegetables (excludes tomatoes)
- Total starchy vegetables
- White potatoes
- Other starchy vegetables (excludes white potatoes)
- All other vegetables
- Legumes (beans and peas) computed as vegetables

3 Grain categories expressed in ounce equivalents including:

- Total whole and refined grains
- Total whole grains
- Total refined grains

12 Protein categories expressed in ounce equivalents including:

- Total protein foods (includes meat, poultry, seafood, eggs, soy, nuts and seeds; excludes legumes)
- Total meat, poultry, and seafood (excludes eggs, soy, nuts and seeds, and legumes)
- Beef, veal, pork, lamb and game meat
- Cured meats
- Organ meat
- Poultry

Seafood high in n-3 fatty acids

Seafood low in n-3 fatty acids

Eggs and egg substitutes

Soy products excluding soy milk

Peanuts, tree nuts and seeds (excludes coconut)

Beans and peas (legumes) computed as protein foods

4 Dairy categories expressed in cup equivalents including:

Total milk, yogurt, cheese, and whey

Milk products (includes calcium-fortified soy milk)

Yogurt

Cheese

2 Fat categories expressed in grams including:

Oils (includes fats naturally present in nuts, seeds, seafood, and vegetable sources; except palm, coconut, and hydrogenated oils)

Solid fats (includes fats naturally present in meat, poultry, eggs, dairy, palm and coconut oils and hydrogenated oils)

1 Added Sugar category expressed in teaspoon equivalents

1 Alcohol category expressed as number of drinks

4 Eating Well with Canada's Food Guide (2007) groups expressed in Canadian food guide servings (ASA24-Canada-2016 only)

Grain products

Vegetables and fruit

Milk and alternatives

Meat and alternatives

## **Appendix C: Data Dictionaries for Analysis Files**

The following sample Analysis files and Data dictionaries for the 2014 and 2016 versions of ASA24 are available on the NCI ASA24 Website at

<https://epi.grants.cancer.gov/asa24/researcher/sample.html>.

1. The response selections made by participants (**Responses files**)
2. Nutrient information for individual foods (**INF**)-ASA24-2014 versions only
3. Nutrient and food group information for individual foods (**Items files**)
4. Total nutrient information for an intake day (**My Selection files**) -ASA24-2014 versions only
5. Total nutrient and food group information for an intake day (**Totals files**)
6. Nutrient information for individual supplements (**INS files**)
7. Total nutrients for supplements for an intake day (**TS files**).
8. Total nutrients for foods and supplements for an intake day (TNS files).

## Appendix D: Modules

This section lists optional ASA24 modules which may be administered to Respondents.

### Location Module

The **Location** module is activated by default because the recall of location may provide context to aid Respondents in recalling what they ate at a meal. This module can be turned off by the Researcher.

Location choices are:

- ◆ Home
- ◆ Fast food Restaurant
- ◆ Other Restaurant
- ◆ Cafeteria
- ◆ Bar or Tavern
- ◆ Work (not in Cafeteria)
- ◆ Car
- ◆ Sports or entertainment venue
- ◆ Someplace else
- ◆ School, cafeteria
- ◆ School, not in cafeteria
- ◆ Don't know

### Food Source Module

The **Food Source** module queries where Respondents obtained each reported food or most of the ingredients for it. Because this source is asked for each food reported, selecting this module increases the time it takes to complete a recall or record.

If the food source module is selected, the location module must also be selected. If the location value is Restaurant for the meal, source is not asked for any of the foods at that meal.

Researchers may contact the **ASA24 Help Desk** ([ASA24Helpdesk@westat.com](mailto:ASA24Helpdesk@westat.com)) to create a custom source list.

Food Source choices are:

- ◆ Supermarket or grocery store
- ◆ Convenience store
- ◆ Other store (any type)

## ASA24 Researcher Instructions

- ◆ Produce stand, farmer’s market, orchard, or community supported agriculture (CSA) organization
- ◆ Fast food or drive-thru restaurant
- ◆ Other restaurant, bar or tavern
- ◆ School cafeteria
- ◆ Other cafeteria
- ◆ Grown or caught by you or someone you know
- ◆ Sport, recreation, or entertainment venue
- ◆ Soup kitchen, shelter, or food pantry
- ◆ Street vendor or vending truck
- ◆ Vending machine
- ◆ Child care center, day care, or camp
- ◆ Residential dining facility or adult day care center
- ◆ Other
- ◆ Don’t know

### TV/Computer Use Module

The **TV and Computer Use** module collects information about TV and computer use during meals. Respondents can select multiple answers.

TV and Computer Use choices are:

- ◆ Watching TV
- ◆ Using a Computer or laptop
- ◆ Using a mobile phone or tablet
- ◆ Neither of these

### Ate With Module

The **Ate With** module collects information about who the Respondent ate with.

Ate With responses are:

- Yes (Indicate if Family Member or Other)
- No

### Supplement Module

When the **Supplement** module is turned on, some text on the Respondent website is changed to include the word “supplements” to remind Respondents to report them. For example, “Did you report all the foods, drinks, *and supplements?*”. In ASA24 versions prior to 2016, if the

## *ASA24 Researcher Instructions*

Supplement module is turned on, Respondents report supplements after reporting foods and beverages. In the 2016 versions of ASA24, Respondents can report supplements just as they do for foods and beverages, regardless if this module is turned on. However, if this module is turned on in ASA24-2016, reminders to include supplements are included.

### **Respondent Nutrition Report Module**

Researchers can choose to provide reports to Respondents that compare daily nutrient and food group intakes to dietary guidance for ASA24-2016 (U.S. version and Canadian version only for recalls/records collected after April 10, 2019).

If this module is turned on for a recall study, at the time a Respondent completes reporting for a recall, they will be asked if they would like a report. If yes, they will be asked to answer questions about sex and age and a downloadable report will immediately be generated for that day.

For a record study, Researchers can turn on the module and the nutrition report will be generated and available via the Researcher website only. The Researcher is responsible for downloading or printing the report and distributing it to Respondents. View a sample report at <https://epi.grants.cancer.gov/asa24/respondent/nutrition-report.html>.