

# VISIDA CMS Guide

## 1. CMS Overview

Before we begin with the coding process, let me first introduce you to each of the pages in the VISIDA CMS.



Clicking here will take you to the homepage for the CMS. On this page a user will see a complete overview of all comments made on any record in households to which they are assigned. The coding progress of each study the user is assigned to is also shown here. To return to this page from any point in the CMS, click the VISIDA button in the top left hand corner.

### Eating Occasion

This tab will open all eating occasions in a list view and allow for records to be filtered by record type, study, household and participant. Additionally, records can be filtered by identification and quantification status, and food items can be searched by matching food composition description and/or key words in comments. From this list view, food items can be accessed directly for identification and quantification.

### Recipe

This tab will open all recipes in a list view and allow for records to be filtered by study and household. Additionally, recipes can be searched by ingredient and recipe name, or key words in comments. From this list view, recipes can be accessed directly for coding.

### Households

This tab will open the household view and allow for the data from a household to be viewed in their entirety in a timeline style. Records can be filtered by participant or the user can choose to view or hide recipes. This page is very helpful for reviewing data once coded and is where new records can be added, participants changed and food items hidden or their record type changed (if required).

### Food Composition Database

This tab allows users to view the food composition database that has been set for the study. Study Coordinators can also use this page to download a food composition table template and create a custom table for study use.

Review ▾

This tab contains Intake Export, Recipe Export and Explore Intake pages

Export Intake Data

This page allows for all intake data and the related nutrient breakdown to be reviewed and exported as a csv file. Data can be exported from one household at a time or for several studies at once. Intake data can be exported by day, eating occasion or food item.

Export Recipe Data

This page allows for all recipes and their ingredients to be reviewed and exported as a csv file. Data can be exported from one household at a time or for several studies at once.

Explore Intake

This page allows you to view the nutrient breakdown of all participant intake in comparison to the nutrient recommendations set on study set up. It provides insight into an individual's nutritional adequacy and allows the user to delve further into the food source breakdown of each nutrient.

analyst @outlook.com  
analyst

In the top right hand corner the user will see their username and permission level.

Report an Issue

Also in this corner is the 'Report and Issue' button. This can be used to report any error or bugs that occur while the user is using the system.

Log out

Also in this corner is the 'Log out' button, clicking this will return the user to the log in screen.

## 1.1 The Coding Process

Let's look a little closer at the recommended data coding process before we demonstrate how to do this in the system.

**Step 1:** Identify and quantify recipes

**Step 2:** Identify and quantify eat records and leftovers

**Step 3:** Review and check for errors

**Step 4:** Compare to recommendations (optional)

Based on our experience, we recommend that identification tasks are batched together and completed before moving on to quantifications.

This is split by the category of data collection, with recipes identification and quantification completed before moving on to the eating occasions.

As the quantification options available for a given food item are dependent on their match in the food composition database, for example, quantifying an item using volume measure is only possible if there is density data for the food item, food items need to be identified first before quantified.

Batching identification tasks, followed by quantification tasks assists with this process.

Batching tasks in this manner also reduces cognitive load on the analyst by focusing on one task at a time rather than switching between identification and quantification for each food item.

Of course this process is only a recommendation and you are free to identify and then quantify each item if you choose.

## 2. Coding Recipes

When coding intake data we recommend starting with recipes first. This way when you move on to coding eating occasions you can use the recipes to identify linked food items. Follow the steps below to learn how to locate a specific household for coding and navigate search functions on the recipe list view.

### Steps

1. Click **'Recipe.'**
2. Use the **'Study'** drop down to select a study.
3. Use the **'Household'** drop down to select a household.
4. To find specific recipes or recipes with specific ingredients, use the **'Search food:'** search bar and type the recipe name or ingredient you are looking for.
5. To find recipes with specific comments made to them, use the **'Search comments:'** search bar and type the key word or exact comment you are looking for.
6. Click **'Search'** to apply these filters to the data.
7. Click **'Choose Days'** if wanting to look only at specific days, select the relevant dates and click **'Ok.'**
8. When you are ready to begin coding, click on the recipe you wish to code.

## 2.1 Using the search feature

1. Open the 'Recipe' page
2. Use the study drop down to locate the study
3. Use the household drop down to locate the household



4. Click
5. Use the **Food item** search bar and type your item description



6. Click
7. This will bring up all recipes that have a matching description as a coded ingredient and any recipes saved under that name.

## 2.2 Naming Recipes and Applying Yield Factors

Recipe pages allow for recipe names, yield factors and retention factors to be set. Each recipe page also provides a nutrient breakdown for the recipe and lists any linked eating occasions. This lesson will demonstrate how to name recipes and set yield and retention factors.

### Steps

1. From the list view, click on a recipe to open it.
2. Use the ► icon on the voice recording playback panel to listen to the associated voice recording.
3. Use the zoom roll-over function to get a closer look at the final recipe image.
4. Enter the recipe name into the empty recipe box


Recipe:

and click the



to save.


5. Select a yield factor using the drop down box beneath the final recipe image. The yield factor chosen should best represent the recipe food type and cooking method.
6. The retention factors will automatically be applied, however if you need to change individual ingredient factors you can do this by clicking on the dropdown underneath each ingredient. This is useful when coding recipes that have more than one cooking method, like a salad with cooked meat.



7. Once set, click the  icon to save.

## 2.3 Coding ingredients

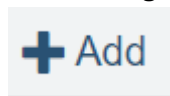
### Steps

#### Identifying ingredients



1. Click '**Analyze all ingredients**' this will bring the ingredients for that recipe in a list view.
2. Click on an ingredient to open the ingredient record page.
3. Use the  icon on the voice recording playback panel to listen to the associated voice recording.
4. If the transcript and/or English translation need to be corrected, the user can do this in the

boxes below. Click on the  icon to edit the text and the  icon to save.

5. To identify the item in the image the user can click on any underlined part of the translated text to bring up the auto-suggestions and click on the item from the list. Or, they can click



and search for the item directly in the food composition database. If the user needs help identifying an item, they can use the zoom roll-over to assist.

6. Drag the associated tag  to the food item and click the  icon.

7. Click  to mark this item as completely identified.


8. We recommend when coding data that all items in recipes are identified first and are then quantified as a separate step. This reduces the burden on the analyst by allowing them to focus on one task type at a time. However, you can identify and quantify at the same time if that is your preference.


#### Quantifying ingredients


1. To quantify the item, enter the quantity estimation by first selecting the measure type. Grams will be an option for all items, mL, tablespoons (15ml) and teaspoons (4ml) will be an option for items with a density. For some items, there will be other options to quantify with, such as the average weight for a natural serving. For example, for garlic, fresh, raw, this item can be quantified by number of garlic cloves present, where one glove is equal to 3 grams. If the food composition database you are using also has a corresponding measures database, this information can be added to your study during the set-up stage.

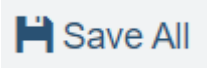
2. Next, enter a quantity. If using grams enter the number of grams here. If using an alternative measure such as spoons enter the number of spoons here and it will be converted to grams automatically in the Grams box.



3. If you need help quantifying the item, try using one of the available quantification tools. These include:

- **Onscreen ruler:** Access this by clicking on the  icon to open the image in a new tab. The CMS will automatically align the fiducial marker overlay with the four corners of the black outline on the fiducial marker card. If it needs to be corrected, move each corner to be as close as possible and click 'Save.' Then, click+hold+drag your mouse over the image to measure anything within the image. The measurement will appear in the top right-hand corner of the page.

- **Reference images:** Access the reference images by clicking on the  icon. Images will populate based on the identification the user has selected. They can also use the dropdown and/or search bar to locate something manually. Each food type will have a list of images and their actual weights. Compare the reference images with the food image to make a more accurate estimate of the food weight. To use a reference weight click 'Use Weight.'

- **Tagged comments:** If the user cannot quantify the item, they can click on the  next to the item to open the help menu. Click 'I cannot quantify this item.' This will open a text box and prompt the user to enter a comment about the item. Once saved, this comment will appear on the record with a tag and will appear in a list of alerts for the study coordinator so that they can manage the item.

4. To save all items, click the  icon.

5. When all ingredients in the record have been saved, click  in the bottom right hand corner or  in the bottom left hand corner to move to the next ingredient.

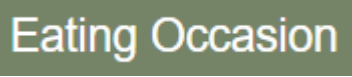
## 3. Coding and Analysing Eating Occasions

### 3.1 Navigating Eating Occasion List View

Once all recipes have been coded, you can move on to eating occasions. Follow the steps below to learn how to navigate the eating occasion list view.

## Steps


### Eating Occasion

1. Click  to navigate to the eating occasion list view page.
2. Use the '**Record Type**' dropdown to select which record types should be displayed. Since all of the ingredients have been coded at the recipe step, we would suggest filtering here for '**Eat records or Leftovers.**'
3. Use the '**Study**' dropdown to select your study
4. Use the '**Household**' dropdown to select your household
5. Use the '**Participant**' dropdown to select a specific participant or, leave it set to '**Any**' if you wish to see data for all participants.
6. Click '**Show Advanced**' to see further filtering and search options.
7. Filter for identification status. '**In Progress**' will display records that have not been identified, and items that have been identified but not yet marked as Complete. '**Completed**' will show all records that have been identified and marked as complete. '**Any**' will show all records, regardless of identification status.
8. Filter for quantification status. '**In Progress**' will display all records that have not yet been completely quantified. '**Complete**' will display all records that have been quantified, saved and completed by the user.
9. There are also search bars that allow users to search for specific food items once they have been identified and for comments left on food records by key words.
10. Change the numbers of records shown per page in list view using the '**Results per page**' drop down.
11. Click '**Search**' to apply all search terms
12. Filter for specific days by selecting '**Choose Days,**' selecting dates of interest and clicking '**Ok.**'
13. To reset the search terms, click '**Clear.**'

## 3.2 Coding an Eating Occasion

### Steps

#### Identifying Eating Records

1. Click on an eating occasion to open it.
2. Use the  icon on the voice recording playback panel to listen to the associated voice recording.

3. If the transcript and/or English translation need to be corrected, the user can do this in the



boxes below. Click on the icon to edit the text and the



icon to save.

4. To identify the item in the image the user can click on any underlined part of the translated text to bring up the auto-suggestions and click on the item from the list. Or, they can click



and search for the item directly in the food composition database. If the user needs help identifying an item, they can use the zoom roll-over to assist.

5. If the user has first coded all recipes, food items can also now be identified as a household recipe. These will appear as suggestions and remain at the top of the food composition database drop down in the identification bar.

6. Once identified, drag the associated tag



to the food item and click the



icon.



7. Click to add multiple food items.



8. When all items have been identified, click to mark this record as completely identified.

9. We recommend when coding data that all items in recipes are identified first and are then quantified as a separate step. This reduces the burden on the analyst by allowing them to focus on one task type at a time. However, you can identify and quantify at the same time if that is your preference.


### Quantifying Eating Records


1. To quantify the item, enter the quantity estimation by first selecting the measure type. Grams will be an option for all items, mL, tablespoons (15ml) and teaspoons (4ml) will be an option for items with a density. For some items, there will other options to quantify with, such as the weight for a heaped spoon of that item. For example, for rice, you can quantify by heaped spoon type and the number of spoons. If the food composition database you are using also has a corresponding measures database, this information can be added to your study during the set-up stage.


2. Next, enter a quantity. If using grams enter the number of grams here. If you are using an alternative measure such as spoons enter the number of spoons here and it will be converted to grams for you in the 'Grams' box.


3. If you need help quantifying the item, try using one of the available quantification tools. These include:



- **Onscreen ruler:** Access this by clicking on the  icon to open the image in a new tab. The CMS will automatically align the fiducial marker overlay with the four corners of the black outline on the fiducial marker card. If it needs to be corrected, move each corner to be as close as possible and click 'Save.' Then, click+hold+drag your mouse over the image to measure anything within the image. The measurement will appear in the top right-hand corner of the page.

- **Reference images:** Access the reference images by clicking on the  icon. Images will populate based on the identification the user has selected. They can also use the dropdown and/or search bar to locate something manually. Each food type will have a list of images and their actual weights. Compare the reference images with the food image to make a more accurate estimate of the food weight. To use a reference weight click 'Use Weight.'

- **Tagged comments:** If the user cannot quantify the item, they can click on the  next to the item to open the help menu. Click 'I cannot quantify this item.' This will open a text box and prompt the user to enter a comment about the item. Once saved, this comment will appear on the record with a tag and will appear in a list of alerts for the study coordinator so that they can manage the item.

4. To save all items, click the  icon.

5. Once all items have been saved, click  to move on to the next record.

### 3.3 Coding a leftover record

Leftover records are coded in the same way as eating occasions with one small difference.

Leftover records will populate suggestions based on the identification of their linked eating record.

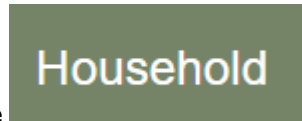
It is important to ensure that the identification of food items in eat records and their linked leftovers is the same. If they don't match the leftovers will not be deducted from the eat record and the analysis will be incorrect. If this occurs, the error will flag at the review screen stage of coding.

## 4. Household View

### 4.1 Navigating Household View

The Household view allows users to view data in a timeline style for each recording day. This lesson will introduce this page and demonstrate some of the key features.

#### 1. Locating and filtering data

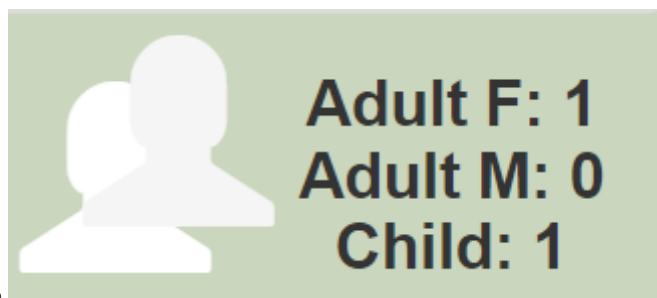


- Click on the **Household** tab to open the household view page.
- Use the '**Study**' drop down to select a study.
- Use the '**Household**' drop down to select a household.
- Click '**Search**' to apply all filters
- Use the '**Choose Days**' button to select only specific days.
- Roll the cursor over any food to see the item's record type, identification and quantification.

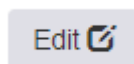
#### 2. Participants






- Each participant is denoted by a different coloured icon.
- Tick or untick participants and recipes to focus on particular people or recipes alone.



- Shared plates are denoted by a icon, and they have the total number of people eating listed by demographic.
- To add or remove a participant, click on the record and tick which participants should be assigned to the meal. To add non-participants, click through to the record and update the total number of people eating here.
- To edit the demographic data of a participant, including age, sex and life stage, click




#### 3. Comments

- To add a comment to a record, click on the record and click **'Add Comment.'** Type your comment and click **'Send.'**
- Records with comments on them will be denoted with a  icon.
- A complete list of comments for the recording day will be listed underneath each day.  
Click  to view.
- Click on check box for any of the comments to highlight the associated record with a red outline.
- Click on the  icon to hide a comment and remove it from this screen.


## 4.2 Adding, moving and removing

The Household view page also allows for food items to be added, converted to different record types and removed or hidden. This should be done carefully so not to accidentally incorrectly overwrite any original data.


### 1. Adding a new ingredient

- To add a new ingredient to an existing recipe, click on the  icon in the top right hand corner of the recipe record.
- Set the ingredient time, it should be set to match the recipe.
- Enter a text description for the ingredient and click **'Complete.'**
- Please note that this ingredient will now need to be identified and quantified in order to be included in the recipe calculation.

### 2. Adding a new recipe


- To add a new recipe, click the  icon.
- Select **'Recipe'**
- Set the recipe time
- Enter a text description for the recipe
- Please note that this recipe will now need to be coded and have ingredients added, in order to be included in the recipe calculations

### 3. Adding a new eat record

- To add a new eat record, click the  icon.
- Select the participants who should allocated to this food item
- Set the eat record time

- Enter a text description for the eat record.
- Please note that this eat record will now need to be coded in order to be included in the calculations

#### 4. Hiding and removing records

- To hide a food item, click on the food item and then click the  icon. This will hide the record from the list view and remove it from the nutrient calculations.
- To completely remove an image, click on the record and then click on the image. Select **'No Image'** and the original image will be removed. This can be helpful if needing to remove images containing personal or identifying information without removing the record of the food item.

#### 5. Converting records

- To convert an eat record, leftover or ingredient to a new recipe image, click on the record and use the **'Move To'** dropdown to select **'New Recipe'**. Edit the text description if necessary and then click **'Convert'**.
- To convert an eat record, existing leftover record or ingredient to leftovers, click on the record and use the **'Move To'** dropdown to select **'Leftovers'**. Click **'Choose record'** to select the eat record to which this new leftovers record will be linked. If you are need to swap 2 leftovers (e.g. soup leftovers recorded for rice eat record and rice leftovers for soup eat record) make sure that the check box is ticked next to **'Switch with existing leftovers'**.
- To convert a leftover or ingredient to an eat record, click on the record and use the **'Move To'** dropdown to select **'Eat Record'**. Select which participants should be allocated to this record and click **'Convert'**.
- To convert an eat record or leftovers to and ingredient, click on the record and use the **'Move To'** dropdown to select **'Ingredient'**. Use the **'Add to recipe'** dropdown to select the recipe to which the new ingredient will be moved.

## 5. Visualizing Intake Data

### 5.1 Navigating the Explore Intake page

The **Explore Intake** page allows users to compare the participant's recorded intake against the standard recommendations set for the study. This lesson will demonstrate how to access and navigate this page.

#### Steps

1. Use the **'Study'** drop down to select a study.
2. Use the **'Household'** drop down to select a household.
3. Click **'Search'** to apply all filters.

4. To select only specific nutrients click '**Choose Columns.**'



5. If there are any error messages, click on the icon and a list of errors will appear. These can include food items that have incomplete quantification and leftovers that don't match their linked eat records. Click on the individual errors to open the related record page and make and corrections.

6. When ready to proceed, click the checkboxes of the days of data you're interested in. The graphs will calculate data as an average of the days that you select. Click the '**Average**' row to bring up the graphs.

7. The top left-hand graph will compare the nutrient intake for the days selected for the participant selected with the set recommendations for the study. Roll-over each nutrient to see intake of that nutrient, RDI of that nutrient and the % of the RDI that is met by the recorded intake.

8. The top right hand graph will provide a total gram weight and percentage of total intake breakdown of each food group. Clicking on any of these food groups will show a further breakdown of the food group in to individual food items. To return to the previous graph, click '**Up one level.**'

## 5.2 Exploring food sources

The Graphs and RDI's page also allows users to look at specific nutrients consumed and the percentage of each food group and type responsible for the intake of each nutrient. This lesson will demonstrate how to view these graphs and navigate back and forth between graph levels.

### Steps

1. Following on from the previous lesson, scroll to the base of the page and select which nutrients you wish to view in detail. You can select 4 nutrients at any one time.
2. A graph for each nutrient will appear that displays the food groups responsible for the participant's intake of the selected nutrient by percentage. Click on any food group to see a breakdown of each food item within the food group.
3. Click '**Up one level**' to return to the previous graph

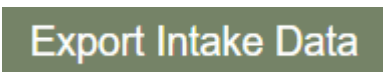
## 6. Reviewing and Exporting Data

### 6.1 Reviewing Intake Data

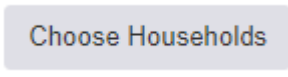
Once all data has been coded, users can review and export the data for external collation and analysis. This lesson will demonstrate how to locate the intake review screen, find and repair errors and export data.

## Steps

1. Click 

2. Click 

3. Use the Study drop down to select a study

4. Click 


5. Use the search bar to find the households you want to review and tick the check boxes. If you want to export all households, click '**All**'

6. Click '**Ok**'


7. Use the '**View by**' drop down to select how you want to view the data

- By day - displays the total nutrient breakdown per participant, per day
- By eating occasion - displays the total nutrient breakdown per participant, per eating occasion
- By food item - displays the total nutrient breakdown per participant, per food item


8. Click '**Search**'

9. Use the arrows  next to Household, Participant, Date, Time and Weight to organize the food items for easier viewing.

10. Nutrients that are red with an asterisks have incomplete nutrient data in the selected food composition table. These nutrients don't need to be excluded but can be if preferred. If wanting to look only at specific nutrients, click '**Choose Columns**.' Nutrients that are incomplete will also be shown in red text here.

11. Items that may require review will be denoted with an  icon. Clicking on this icon will list the reason for the error alert. Potential errors include; items that are identified but have not been quantified, items that have been identified and quantified but not yet completed, and items with leftovers that do not match the linked eat record. To repair these, click on the blue text to be taken directly to the record. If you do make repairs to any of the records, you will need to refresh the export page to allow it to update before exporting.

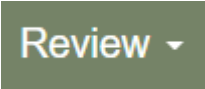

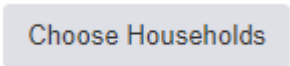



12. If any other records are in need of review, they can be accessed directly by clicking on the blue time stamp link.

13. When ready to export, click  and a CSV file will be downloaded to your computer.

## 6.2 Reviewing Recipe Data

Once all data has been coded, users can review and export the data for external collation and analysis. This lesson will demonstrate how to locate the recipe review screen, find and repair errors and export data.

### Steps

1. Click 
2. Click 
3. Use the Study drop down to select a study
4. Click 
5. Use the search bar to find the households you want to review and tick the check boxes to select them. If you want to export all households, click '**All**'
6. Click '**Ok**'
7. Click '**Search**'
8. Use the arrows  next to Name, Household, Time and Linked EO's to organize the food items for easier viewing.
9. Nutrients that are red with an asterisks have incomplete nutrient data in the selected food composition table. These nutrients don't need to be excluded but can be if preferred. If wanting to look only at specific nutrients, click '**Choose Columns**.' Nutrients that are incomplete will also be shown in red text here.
10. Recipes that require review will be denoted with an  icon in the Yield Factor column if a recipe has no yield factor applied, and the Linked EO's column if no eat records in the household have been identified with that recipe. Clicking on this icon will open the recipe page directly to allow for repair. If you do make repairs to any of the records, you will need to refresh the export page to allow it to update before exporting.
11. If any other records are in need of review, they can be accessed directly by clicking on the blue recipe name link.
12. When ready to export, click  and a CSV file will be downloaded to your computer.