



INTRODUCTION TO
Dietary Analysis
WITH **FoodWorks 10**

AUGUST 2019



AUGUST 2019

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About this guide

Purpose and scope

This guide is designed to help you get started using **FoodWorks® 10 Professional** for analysing dietary intakes, recipes and meal plans. You can also use or **FoodWorks® Premium** for dietary analysis.



This guide assumes that you are a new user of FoodWorks, and that you are creating a new FoodWorks database for analysing diets, recipes, meal plans and foods.

This guide also assumes that you have a broad knowledge of the advantages and limitations of computerised nutrition analysis.

Getting more help

We recommend that you use this booklet as a guide for getting started with **FoodWorks Professional** (or **FoodWorks Premium** when using it for dietary analysis). There are also several other ways to get help using FoodWorks, including:

- **Video tutorials and blogs** [on our website](#)
- **On-line help**
 - 🔍 To get help while using FoodWorks: On the FoodWorks **Help** menu, click **Help Topics**.
- **FoodWorks support site**
 - 🔍 To search our knowledge base and to submit support requests, please go to the FoodWorks support site: <https://support.xyris.com.au>

Related documents

If you are using **FoodWorks Premium**, and you are also using it for nutrition labelling and product development, the following guide is helpful:

Introduction to Nutrition Labelling with FoodWorks® 10.

The guide is available from the FoodWorks support site.

Conventions

Each step-by-step computer procedure is introduced by a mouse icon in the left margin.

Example



To create a new database:

1. On the FoodWorks toolbar, click **New**, then click **FoodWorks Database File**.

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1. About FoodWorks® Professional

FoodWorks Professional is established and trusted Australian software for nutrition professionals. It is used in a wide range of contexts including health care, sports nutrition, food service, nutrition research, recipe publishing and tertiary education.

FoodWorks is used to analyse dietary intakes (such as 24-hour recalls and food diaries), to plan meals, to develop recipes, and to investigate the nutrient content of specific foods.

Features of FoodWorks for dietary analysis

Data entry and organisation

Using FoodWorks, you can enter dietary intakes, meal plans, recipes and foods.

Features for entering, editing and organising your data include:

- Quick and easy selection of foods and quantities from the most up-to-date Australian food composition data
- Full-featured editing capabilities for data entry
- Automatic updating of dietary intakes and recipes when you change a food/ingredient that they contain
- Recipes you create can be used in dietary intakes and in other recipes
- Automatically see where else in your data a food or recipe is used
- Easily navigate and search your data
- Organise your work with folders

Dynamic analyses

Nutrient analyses are updated instantaneously and graphically as you make changes to your dietary intakes, meal plans and recipes. Features for nutrient analyses include:

- Compare to Nutrient Reference Values (NRVs) including RDIs.
- See the food patterns in your diets, recipes and meal plans. With the Xyris food group system, view 5 major food groups and 28 subgroups, as well as oil equivalents, solid fat equivalents, added sugars and alcoholic drinks.
- Compare to custom nutrient goals.
- Show how much of a specific nutrient is in each food/ingredient.

Analyses include macro-nutrients, vitamins, minerals, and energy and fat ratios.

Food composition data

The major available food composition tables include:

- Australia—AusFoods 2019, AusBrands 2019, Australian Food Composition Database (AFCD)
- New Zealand—FOODfiles 2016
- United States—USDA National Nutrient Database for Standard Reference (Release 28)

Query the food composition data

- Search the food composition data
- Find foods high or low in a specific nutrient

Data publishing, import and export

- Publish your own food composition data for use by other FoodWorks users
- Export your FoodWorks database to Microsoft Access to enable statistical analyses or to generate reports
- Import dietary intakes, recipes and foods from other FoodWorks databases
- Import diet diaries from our free mobile app on iOS and Android, **Easy Diet Diary** (also from Xyris Software)¹

Printing options

- Choose the elements of a dietary intake, recipe or food to print
- Publish via Microsoft Word for complete customisation of format and layout

System requirements

Windows 7, 8, 8.1 or 10; Windows Server 2008 or later

¹ **Easy Diet Diary** is a free mobile app that your clients can use to track their diet and exercise. Download **Easy Diet Diary** from the Google Play Store or the Apple App Store.

2. Getting started

This chapter explains how to start and exit FoodWorks, and how to create your first FoodWorks database.

Downloading and installing FoodWorks

 To download and install FoodWorks, go to www.xyris.com.au and follow the instructions shown.

NOTE: The FoodWorks download and free trial

There is a single download for all the editions of FoodWorks (Professional, Nutrition Labelling and Premium). For the free trial period, you have access to FoodWorks Premium, which combines the functionality of both FoodWorks Professional and FoodWorks Nutrition Labelling.

When you purchase FoodWorks you are issued with a product key. This product key enables the features of the FoodWorks edition that you have purchased.

The free trial begins when you start FoodWorks for the first time. To continue using FoodWorks after the free trial expires, you need to purchase FoodWorks.

Starting FoodWorks and creating your first database

 To start FoodWorks and create a FoodWorks database for dietary analysis and meal planning:

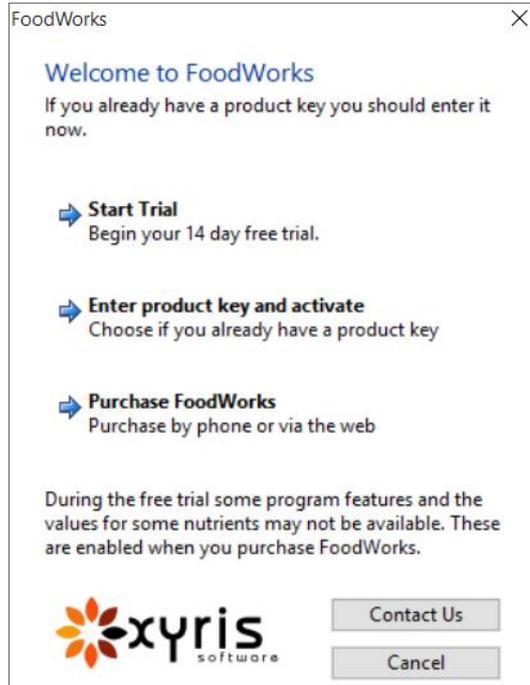
1. Click the Windows **Start** button.



2. Click the Windows **Start** button, then locate and click **FoodWorks 10**.



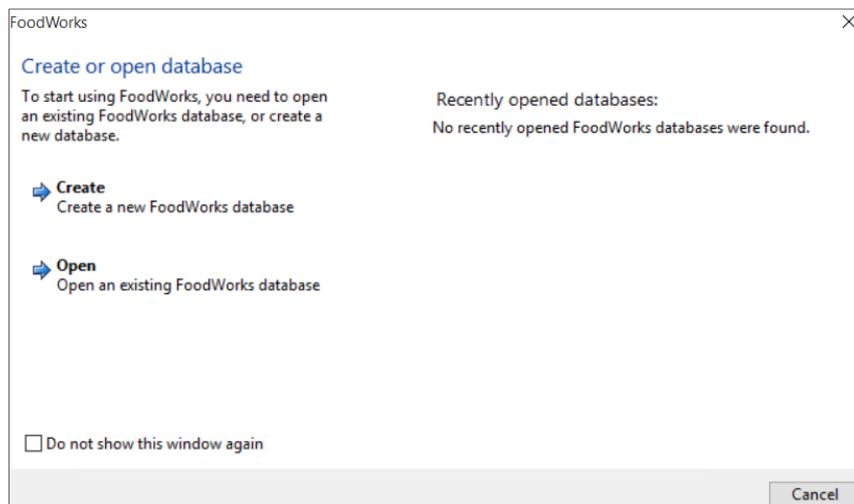
3. If this is the first time you have started FoodWorks, or you are trialling FoodWorks, the following dialog is displayed.



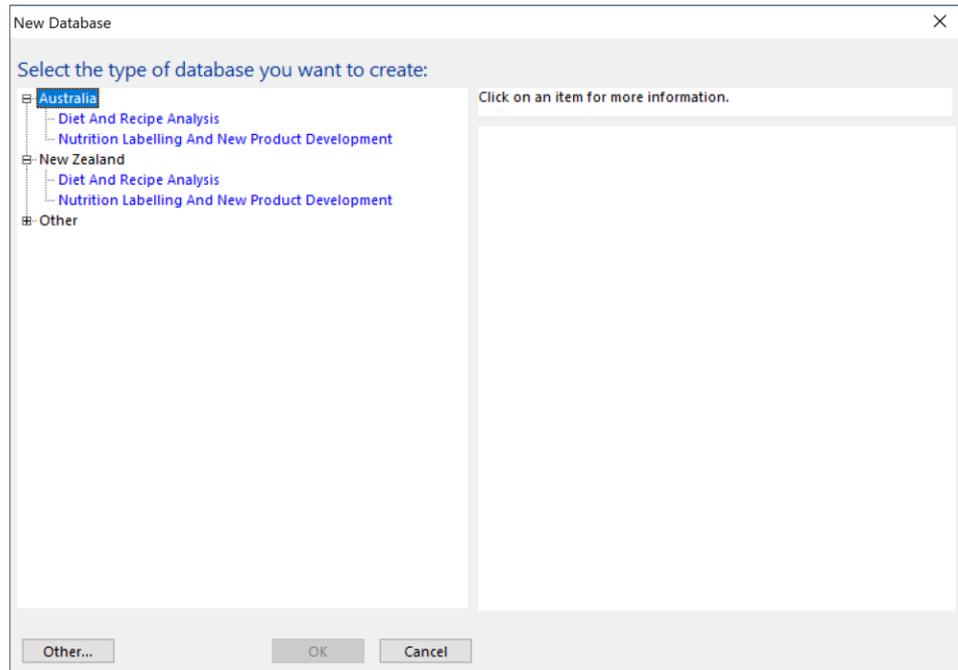
In the above dialog, you can start or continue the free trial. Or you can enter your product key.

4. If this is the first time you have started FoodWorks, read the **FoodWorks License Agreement**. To accept and continue, click **I accept**.
5. The following dialog is shown. To create a new database, click **Create**.

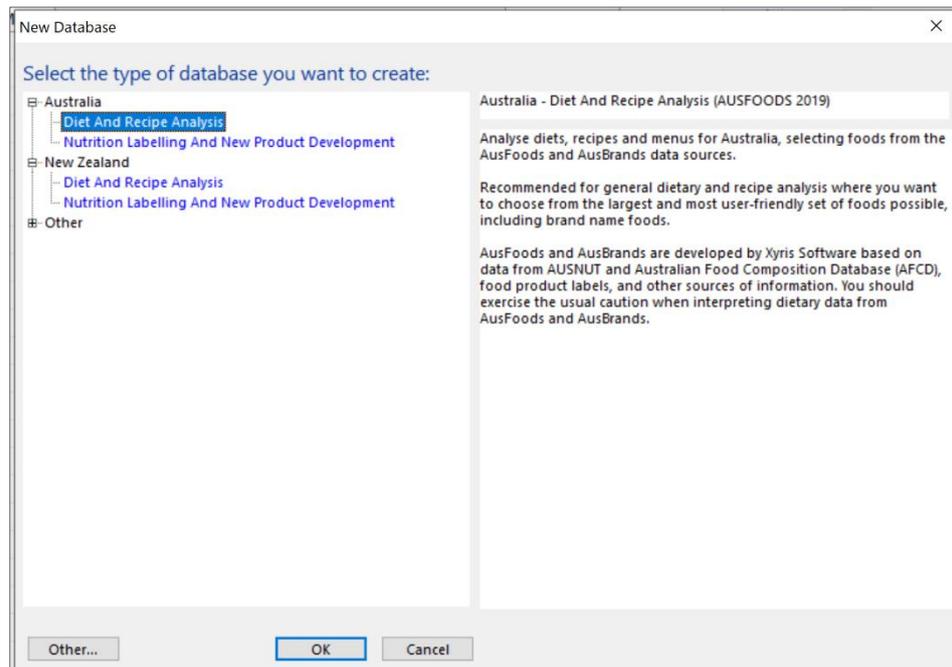
Example



6. A list of different types of database is displayed.



7. To see information about the choices, in the list, click a type of database—a description appears on the right.



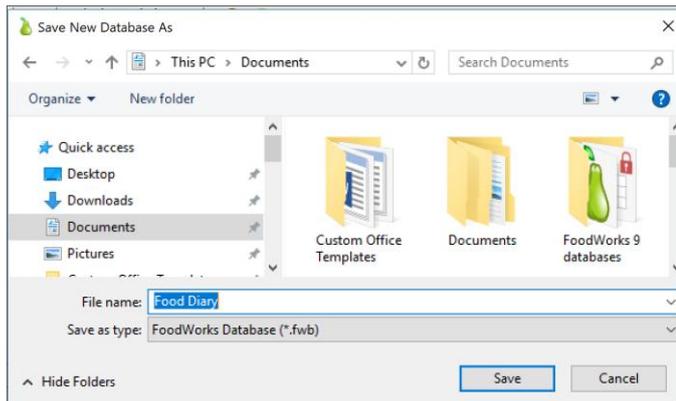
8. Select a type appropriate for:
- your region (in this guide we use *Australia*)
 - what you want to do (*Diet and Recipe Analysis*)
- Then click **OK**.

NOTE: Changing these settings

You can change or view the database settings at any time while working in FoodWorks: On the **File** menu, click **Database Properties**, make your changes, and click **OK**. For more information see the FoodWorks on-line help.

The free trial begins when you start FoodWorks for the first time. To continue using FoodWorks after the free trial expires, you need to purchase FoodWorks.

9. Type a name for the new database and browse to an appropriate location to save it.



NOTE: Backing up

It is important to choose a location where you know that your FoodWorks database file will be regularly backed up. See *Backing up your database* on page 13.

10. Click **Save**.

FoodWorks is started with your new database open.

Closing FoodWorks

 To close FoodWorks: On the FoodWorks **File** menu, click **Close**; or click the **X** in the top right corner of the FoodWorks window.

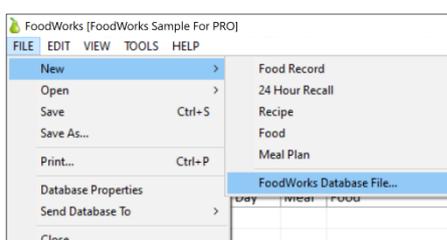
3. About your FoodWorks database

Your FoodWorks database is a repository for the work you do in FoodWorks. You store all the dietary intakes, recipes, foods and meal plans that you create in folders in this database.

Creating a new database

To create a new database:

1. On the FoodWorks toolbar, click **New**, then click **FoodWorks Database File**.



2. Follow the steps from **5** onwards in the procedure above *Starting FoodWorks and creating your first database* on page 9.

The database settings

By default, your new database is created with all the most commonly required settings for dietary analysis. The database settings affect, for example, the food composition data (food selections) available to you.

NOTE: Viewing or changing the default database settings

You can change or view the database settings at any time while working in FoodWorks: On the **File** menu, click **Database Properties**, make your changes, and click **OK**. For more information see the FoodWorks on-line help.

Backing up your database

It is very important to ensure that your FoodWorks database is backed up regularly. Make sure it is in a location that is routinely backed up as part of your organisation's standard back-up routine. If you are working in a networked environment, there are usually shared network drives available that are automatically backed up by your system administrator. In general, your FoodWorks database should be stored on one of these network drives.

FoodWorks also provides a simple option for ad hoc back-ups of the currently open database. (Note that this procedure should not replace a systematic back-up routine.)

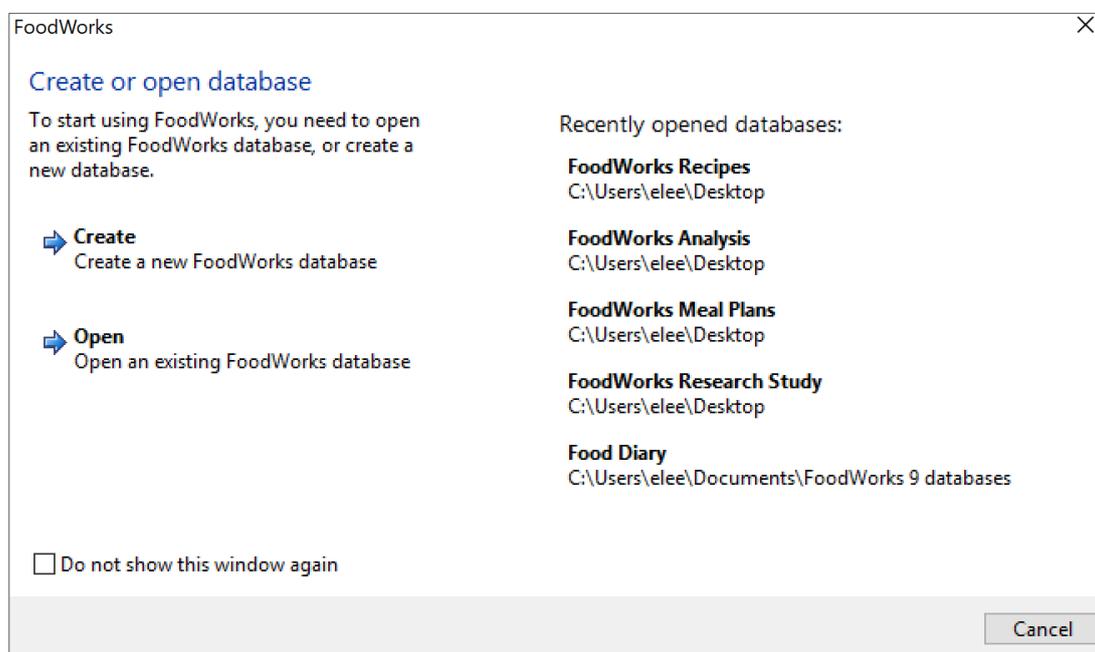
To back up your database using FoodWorks :

1. On the FoodWorks **Tools** menu, click **Back up Database**.
2. Select the location and name for the backup.
3. Click **Save**.

Finding your database

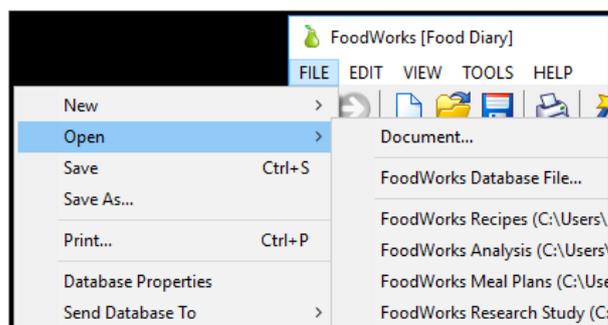
Finding a recently opened database

If FoodWorks is not yet started, to find a database that you have recently opened: When you start FoodWorks, look in the first dialog—the databases that you have opened recently are listed on the right, along with their file location.



(If you select the checkbox **Do not show this window again**, then in the future, the last database you worked on is opened.)

If FoodWorks is already running, on the **File** menu, click **Open**. A list of recently opened databases is shown for you to select from:



Viewing the location of the currently open database

- To view the location of the currently open database: On the FoodWorks **File** menu, click **Database Properties**. Its location is shown on the **General** tab.

Moving your database

A FoodWorks database is stored as a single file with the extension **.fwb**.

- To move your database: First, find its current location (see above). Then use Windows Explorer to move it to the correct location. Note that you need to close your FoodWorks database before moving it.

About the food composition data

FoodWorks provides several sets of food composition data, referred to as *data sources*. They provide a large number of 'ready-made' foods and recipes, called *reference foods*, with their nutrient composition. For example, the AFCD is supplied as a FoodWorks data source. You select foods from the data sources when entering foods into a dietary intake or ingredients into a recipe.

These data sources are not stored in your FoodWorks database but are associated with the database.

By default, when you create a database, certain data sources will be enabled.

- You can view the data sources selected for your database: On the **File** menu, click **Database Properties**, then click **Food Selections**.
- For detail on a particular data source, under **Data Sources**, select the data source and information is shown on the right. You can also find information about the major food composition data sources supplied with FoodWorks on the support site <https://support.xyris.com.au>.

You can explore the reference foods in the **Query** view. See 10. *Exploring the reference foods* on page 62.

NOTE: Nutrient data for brand name foods (AusBrands)

You can control the nutrient data displayed for commercial products our data source **AusBrands 2019**. You can choose whether the data is sourced from the nutrition information panel on the package only, imputed from **AusFoods 2019**, or taken from a mixture of these. To see or change these options, on the **File** menu, click **Database Properties** then the **Advanced** tab.

4. Exploring the FoodWorks window

The FoodWorks application window is opened when you start FoodWorks. The FoodWorks window provides a view into your FoodWorks database.

Elements of the FoodWorks window

The FoodWorks window shows:

- the contents of your database—its folders and documents
- the open document, for example, a food record or a recipe
- the analyses of the open document

The name of the open database is displayed at the top of the FoodWorks window.

The major elements of the FoodWorks window are labelled in *Figure 1—The FoodWorks Window*.

Figure 1—The FoodWorks Window

A. The Navigation Pane displays all the folders and documents in your database.

Name of the open database.

B. Name - and folder - of the open document

D. FoodWorks toolbar.

C. The Analysis Pane shows analyses for the open document.

Your FoodWorks folders. Click a folder to open it and display its contents below.

The documents in the selected folder – in this case, some food records. Click a document here to open it in the middle of the window.

E. Status bar

The foods/ingredients grid (shown here) is displayed on the Foods or Ingredients tab. This is where you enter the foods (for a dietary intake or meal plan) or the ingredients (for a recipe).

The screenshot shows the FoodWorks interface for a user named Joanne Smith. The main window is titled "Joanne Smith - Food Records". The left pane shows a tree view of folders: "All Folders", "Food Records", "Foods", "Meal Plans", "Recipes", and "Deleted Items". The "Food Records" folder is expanded, showing a list of records for "01-Jan-18". The records are organized by meal: Breakfast, Morning tea, Lunch, Afternoon tea, and Dinner. Each record lists the food name, quantity, weight, and energy. The right pane shows a detailed analysis of the selected record, including "All Components", "Summary", "Profile", "Macro-Nutrients", "Vitamins", "Minerals", and "EER". The status bar at the bottom indicates "3 of 61 rows (2 Days). Source: AusFoods 2019".

Each part of the window is described below.

A. Navigation Pane

The Navigation Pane is displayed down the left side of the FoodWorks window. See *Figure 1* on page 16. It shows you all the folders and documents within your database.

- To open a folder or document: Click the name of a folder or document in the Navigation Pane.
- To show all the documents in the database: Click **All Folders**.
- To show or hide the Navigation Pane: On the **View** menu, click **Navigation Pane**, or press **F6**.
- To resize the Navigation Pane: Point to the right-hand border until the pointer turns into the resize pointer, then drag to the new position.



Resize pointer

- To search for one of your documents, click **All Folders**, then in the **Search** box type part of the name of the document.

What is a document?

The documents in your database are shown in the Navigation Pane. Every item that you create in FoodWorks is a **FoodWorks document**. Each document has its own icon, as shown below. You can organise your documents into folders.

The default documents that you can create in a dietary analysis database are:

Icon	Document	Usage
 (plate)	Food Record	A document for recording an individual's food intake. Use for recording dietary intakes that are <i>over several days</i> .
 (plate)	24 Hour Recall	A document for recording an individual's food intake. Use for recording dietary intakes that are for <i>just one continuous 24-hour period</i> . Can also be used to plan meals.
 (plate)	Meal Plan	A document for planning an individual's food intake.
 (bowl)	Recipe	Use for recipes with ingredients.
 (yellow pear)	Food	Use for foods that you need to add to the database.

Contrast documents with reference foods—see *About the food composition data* on page 15.

NOTE: Document templates

You can add or modify the types of documents available to you. Each document is based on an underlying *document template*. You can add new templates and modify the default templates for a database. When you modify a template, documents in the database that are based on that template may also be changed. For how to modify templates, or create new templates, see the FoodWorks on-line help.

B. Open document

The middle of the FoodWorks window displays the currently open document with its name at the top. See *Figure 1* on page 16. Only one document is open at any time. Each document is displayed as a set of tabbed pages. You click a tab to view a page.

Foods/ingredients grid

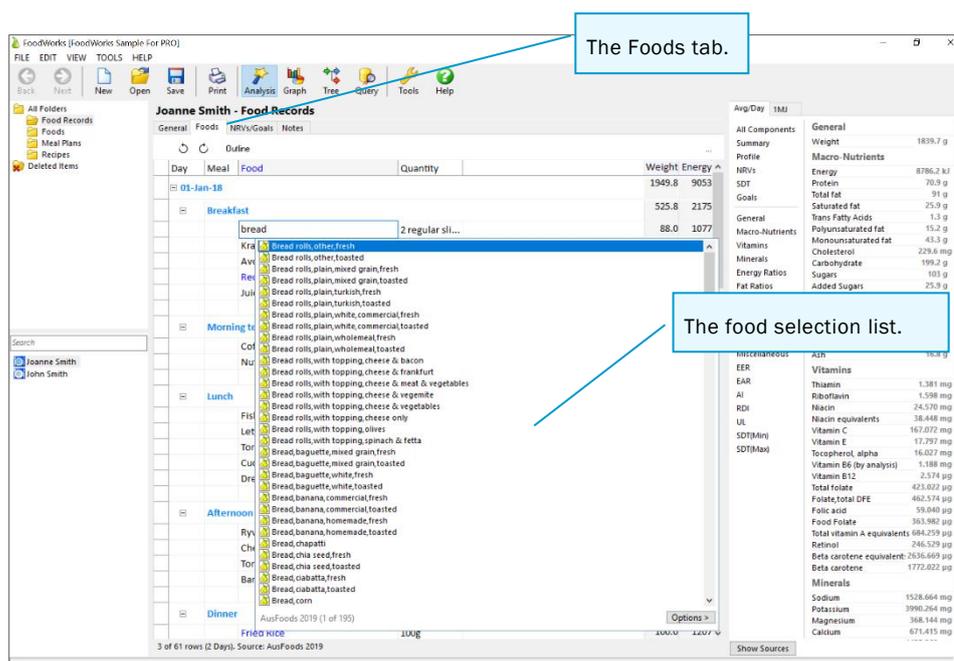
The **foods/ingredients grid** is shown on the **Foods** or **Ingredients** tab of the open document. Here is where you enter meals, foods and quantities for a dietary intake or ingredients and quantities for a recipe.

Food selection list

You select foods or ingredients from the drop-down **food selection list**. An example of the food selection list is shown in *Figure 2* below.

The food selection list appears when you begin typing a food or ingredient into the **Foods** or **Ingredients** column of the grid. Or you can display it at any time by clicking in the **Food/Ingredient** column and pressing **F2**.

Figure 2—The Foods/Ingredients grid showing food selection list



The foods shown in the food selection list can include:

- reference foods from the data sources selected for this database (as in the example above)
- documents (foods and recipes) from your own database.

What is a reference food?

Reference foods are from the data sources (food composition tables) supplied with FoodWorks. They are referred to as *reference foods* to distinguish them from the foods that you create and add to your database.

Icon	Item	Usage
 (pear on page)	Reference food from data source	Select reference foods to enter into your dietary intakes and recipes. Reference foods have nutrient values provided. They are not FoodWorks documents—you cannot open and modify them.

You can explore the reference foods in the Query view. See *10. Exploring the reference foods* on page 62.

C. Analysis Pane

The Analysis Pane is displayed down the right side of the FoodWorks window. It shows analyses of the currently open document.

- To show or hide the Analysis Pane: On the **View** menu, click **Analysis Pane**; or press **F8**; or on the FoodWorks toolbar, click the **Analyses** button:



Analyses button

- To resize the Analysis Pane: Point to the left border until the pointer turns into the resize pointer, then drag to the new position.



Resize pointer

🌀 If the Analysis Pane is **wide**, to select the type of analysis you want to view: Click an analysis in the list on the left.

Wide Analysis Pane...

... showing the list of analyses down the left. Click an analysis to select it.

Analysis	Value
Weight	1906.3 g
Energy	8678.8 kJ
Protein	90.1 g
Total fat	60.2 g
Saturated fat	17.6 g
Trans Fatty Acids	0.5 g
Polyunsaturated fat	12.2 g
Monounsaturated fat	24.5 g
Cholesterol	63.7 mg
Carbohydrate	255.8 g
Sugars	93.3 g
Starch	157.3 g
Water	1384.6 g
Alcohol	1.9 g
Dietary fibre	65.6 g
UoW Wholegrains	113.7 g
Ash	20.4 g
Thiamin	2.440 mg
Riboflavin	3.445 mg
Niacin	18.897 mg
Niacin equivalents	35.939 mg
Vitamin C	158.832 mg
Vitamin E	13.557 mg
Tocopherol, alpha	11.756 mg
Vitamin B6 (by analysis)	2.179 mg
Vitamin B12	3.988 µg
Total folate	1370.841 µg
Folic acid	196.672 µg
Folate food	1174.169 µg
Folate,total DFE	1502.719 µg
Total vitamin A equivalents	1187.840 µg
Retinol	317.884 µg
Beta carotene equivalents	5224.601 µg
Beta carotene	4303.521 µg

🌀 If the Analysis Pane is **narrow**, to select the type of analysis you want to view: Click the down arrow, then click an analysis in the drop-down list.

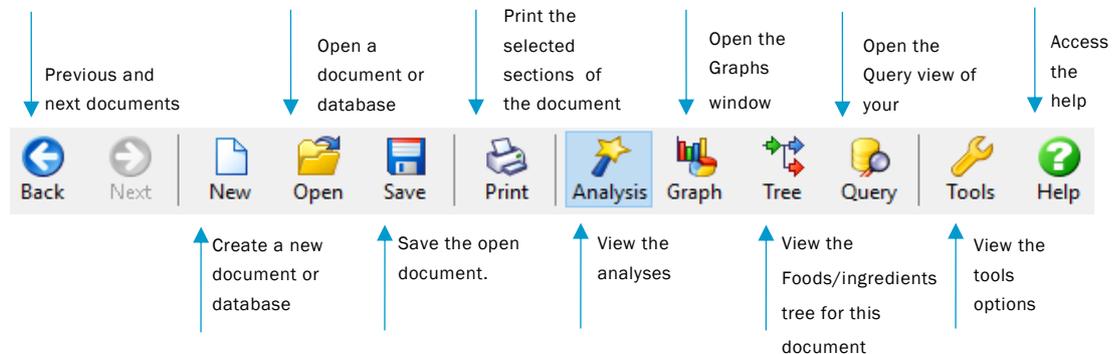
Narrow Analysis Pane
... showing the list of analyses as a drop-down. Click the down arrow to show the list...

...then click an analysis to select it.

Analysis	Value
Weight	1906.3 g
Energy	8678.8 kJ
Protein	90.1 g
Total fat	60.2 g
Saturated fat	17.6 g
Trans Fatty Acids	0.5 g
Polyunsaturated fat	12.2 g
Monounsaturated fat	24.5 g
Cholesterol	63.7 mg
Carbohydrate	255.8 g
Sugars	93.3 g
Starch	157.3 g
Water	1384.6 g
Alcohol	1.9 g
Dietary fibre	65.6 g
UoW Wholegrains	113.7 g
Ash	20.4 g
Thiamin	2.440 mg
Riboflavin	3.445 mg
Niacin	18.897 mg
Niacin equivalents	35.939 mg
Vitamin C	158.832 mg
Vitamin E	13.557 mg
Tocopherol, alpha	11.756 mg
Vitamin B6 (by analysis)	2.179 mg
Vitamin B12	3.988 µg
Total folate	1370.841 µg
Folic acid	196.672 µg
Folate food	1174.169 µg
Folate,total DFE	1502.719 µg
Total vitamin A equivalents	1187.840 µg
Retinol	317.884 µg
Beta carotene equivalents	5224.601 µg
Beta carotene	4303.521 µg

D. Toolbar

The FoodWorks toolbar is shown across the top of the FoodWorks window and provides short-cuts for commonly used commands.



 To see the name of a button in the toolbar, hover your cursor over the button.

E. Status bar

The status bar is shown along the bottom of the FoodWorks window.

 To show or hide the toolbar or status bar: On the **View** menu, click **Status Bar** or **Toolbar**.

Orientation exercise

 Try this quick orientation exercise to become more familiar with the elements of the FoodWorks window:

1. Start FoodWorks.
2. Click the Windows **Start** button, then locate and click FoodWorks 9.
3. Click a recently opened database.

When you first open FoodWorks, a blank document is opened.

NOTE: Sample FoodWorks database

To help you explore FoodWorks, we have provided a sample dietary analysis database, populated with some food records and recipes. To open this database, on the **Help** menu, click **Open Sample Database**, then **Sample Pro Database**.

Try hiding and then showing the Navigation Pane

1. On the **View** menu, click **Navigation Pane**. Repeat to show/hide it again. Try using the shortcut key (**F6**).
2. Explore the options in the open document. Click each of the tabs—for example, for a recipe, click the **Ingredients** tab, the **Overrides** tab, and so on.

Explore the options with the Analysis Pane

1. Try hiding and then showing the Analysis Pane. On the **View** menu, click **Analysis Pane**. Repeat to show/hide it again. Try using the shortcut key (**F8**).
2. Try resizing the Analysis Pane to show the wide view – in the list of analyses on the left, click an analysis to display it.
3. Then resize the Analysis pane to show the narrow view. Click the down arrow, then from the drop-down list, click an analysis to display it.

Explore the help

1. In FoodWorks, on the **Help** menu, click **Help Topics**.
2. If necessary, to show the help menu, click the Menu button. 
3. To browse the help using the table of contents, click the **Contents** tab. Then click a book, and then a topic, to open it.
4. To look up the index, click the **Index** tab, type a search term. Then click a topic in the search results.
5. To search the help text as a whole, in the **Search** box, type a search term and press **Enter**. Then click a topic in the search results.

Close FoodWorks

- On the FoodWorks **File** menu, click **Close**—or click the black **X** at the top right of the FoodWorks window.

5. Entering dietary intakes and meal plans

This chapter explains how to record a dietary intake (sometimes called a diet or food diary) or a meal plan for an individual. In FoodWorks, there are two types of document you can use for a dietary intake—one for multiple days, called a **food record**, and one for a single day, called a **24 hour recall**.

Icon in FoodWorks	Document	Usage
 (plate)	Food Record	A FoodWorks document for recording an individual's food intake over <i>several days</i> .
 (plate)	24 Hour Recall	A FoodWorks document for recording an individual's food intake for just one continuous 24-hour period.
 (plate)	Meal Plan	A FoodWorks document for planning an individual's food intake for one or more days.

NOTE: Food frequencies

You can also enter food frequencies into a dietary intake. See the FoodWorks on-line help.

Food records, 24 hour recalls, and meal plans are FoodWorks documents and are stored in your FoodWorks database. For more on FoodWorks documents see *What is a document?* on page 17.

When adding either any of these documents, you need the following information:

- The personal details of the individual—such as age, weight, gender and activity level
- All the foods and drinks, and their quantities, consumed by this person in a 24 hour period or over a number of days

Entering a food record, 24 hour recall or meal plan

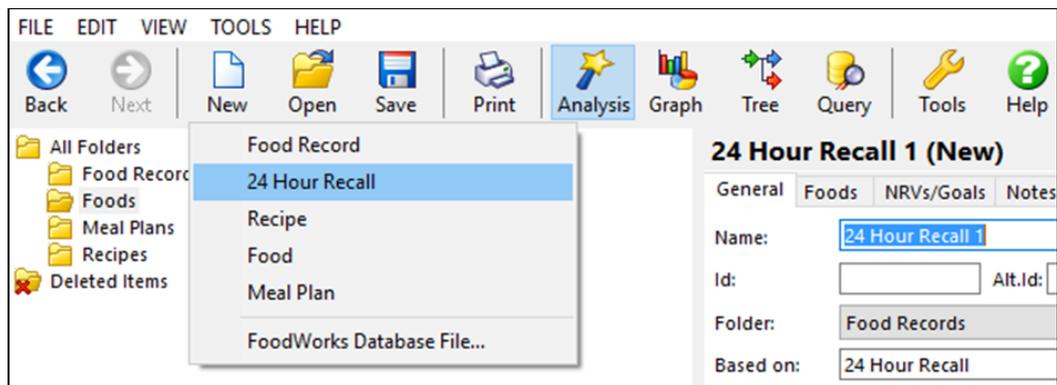
To enter a food record or 24 hour recall:

A. Create the new food record, 24 hour recall or meal plan

First, create the new food record, 24 hour recall or meal plan:

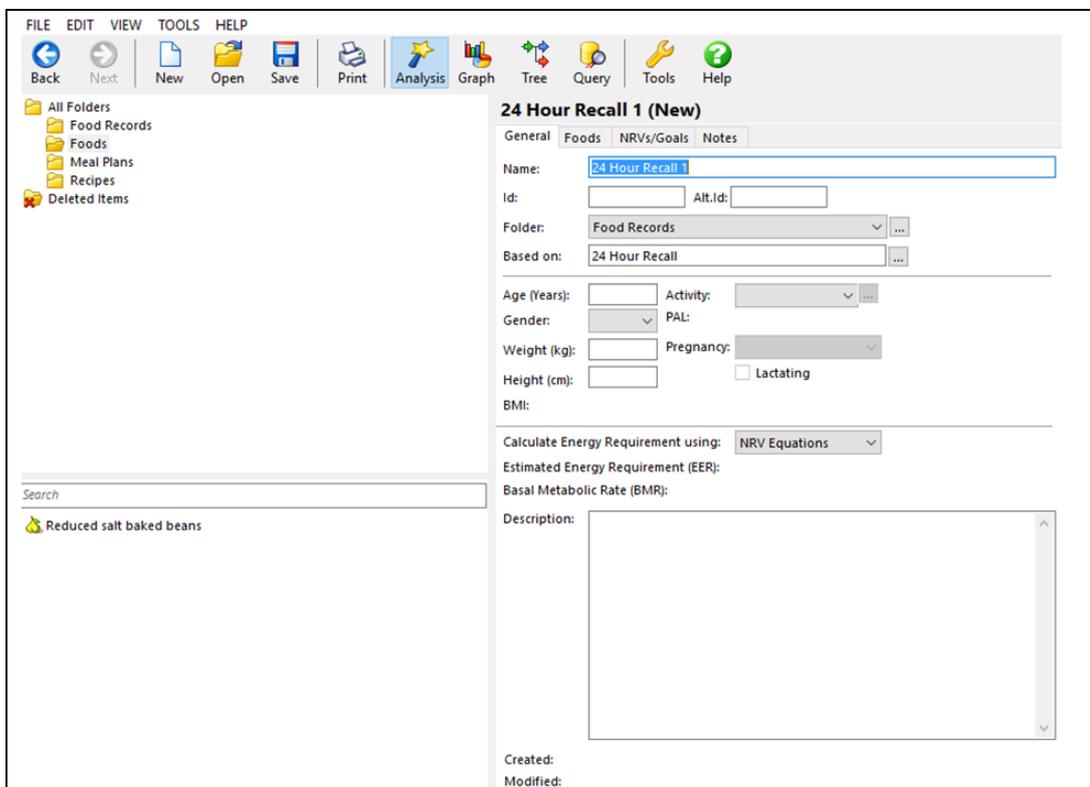
1. On the FoodWorks toolbar, click **New**, then click **Food Record, 24 Hour Recall or Meal Plan**.

Example (24 Hour Recall)



2. On the **General** tab, in the **Name** box, type the name for the food record or 24 hour recall.

Example (24 Hour Recall)



3. Optionally, enter the ID for the food record, 24 hour recall or meal plan.

- Click the **Folder** drop-down button and select the folder in which you want to store the food record, 24 hour recall or meal plan. By default, there is one folder called *Documents*.

Example (24 Hour Recall)

- If you want to create a new folder, click the ellipsis (...) button, type the folder name, and click **OK**.



- On the toolbar, click the **Save** button.



B. Enter the personal details

The individual's personal details are required for FoodWorks to calculate the Nutrient Reference Values (NRVs). They are also necessary for FoodWorks to calculate their Basal Metabolic Rate (BMR) and the Body Mass Index (BMI), which are displayed on the **General** tab.



To enter the personal details:

- Type in the age of the person.
- Click the drop-down button to select their gender.
- Type in their weight and height.
- Click the drop-down button to select their level of activity. For help in choosing the appropriate activity level, click the ellipsis (...) button.



- If the subject is female, enter her pregnancy and lactation status.

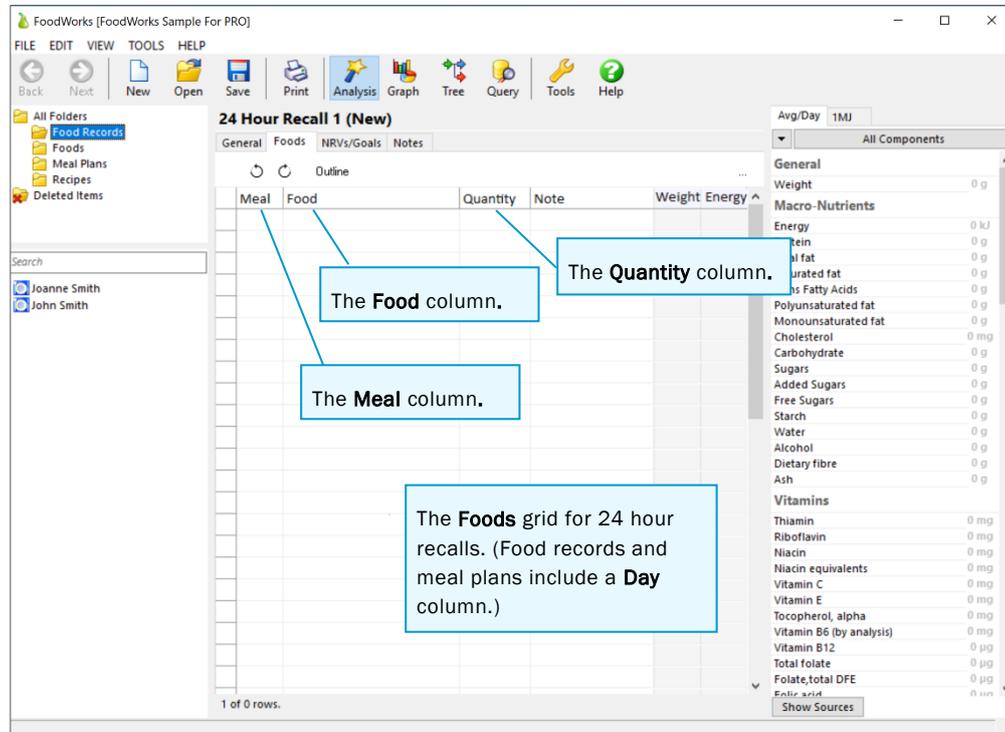
You can now see the values for the BMI, EER and BMR on this tab.

C. Enter the foods

To enter all the foods and drinks that the person has consumed:

1. Click the **Foods** tab.

Foods grid (24 Hour recall)



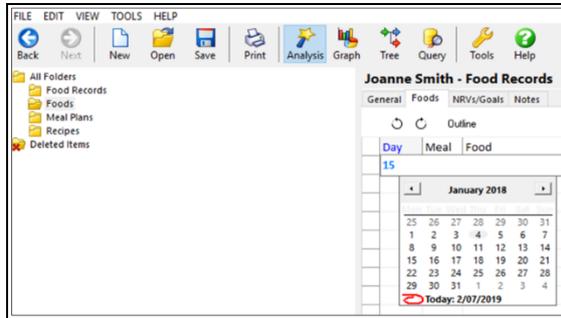
The only difference between a 24 hour recall document and a food record is here in the **Foods** tab—for a food record, there is an extra column, the **Day** column.

TIP: Showing the Day or Meal column

If the **Day** or **Meal** column is *not* showing, and you wish to show one or both: Point to the title of any column in the grid. Right-click, then select the name of the columns to show.

- If this is a food record or meal plan, in the **Day** column, type the name of the first day; or, to select the date, click in the **Day** cell, press **F2**, then click the date.

Example (food record)

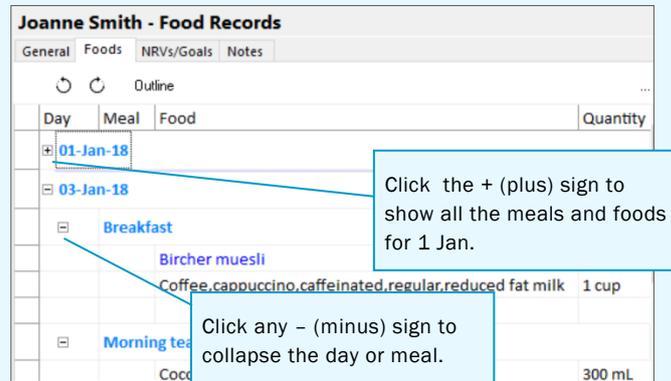


TIP: Collapsing and expanding days or meals

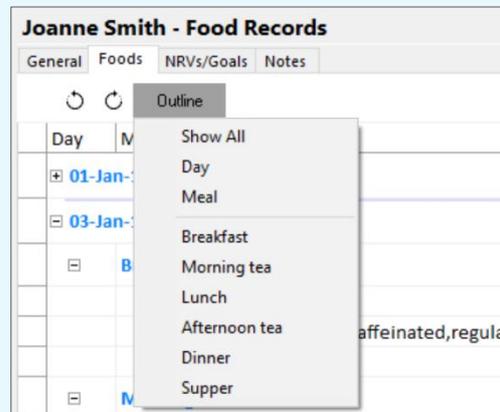
In food records, 24 hour recalls and meal plans, you can expand and collapse meals and days:

-  To expand a day or meal, click the + (plus) sign.
-  To collapse a day or meal, click the - (minus) sign.

Example



Click the **Outline** button, as shown below, for more options:

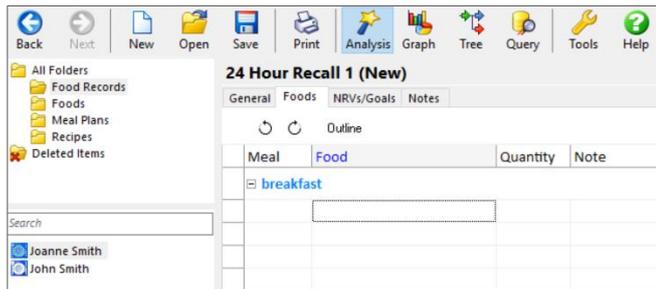


TIP: Entering data

When entering a food record, 24 hour recall or meal plan, you use a separate row for each day, meal and food.

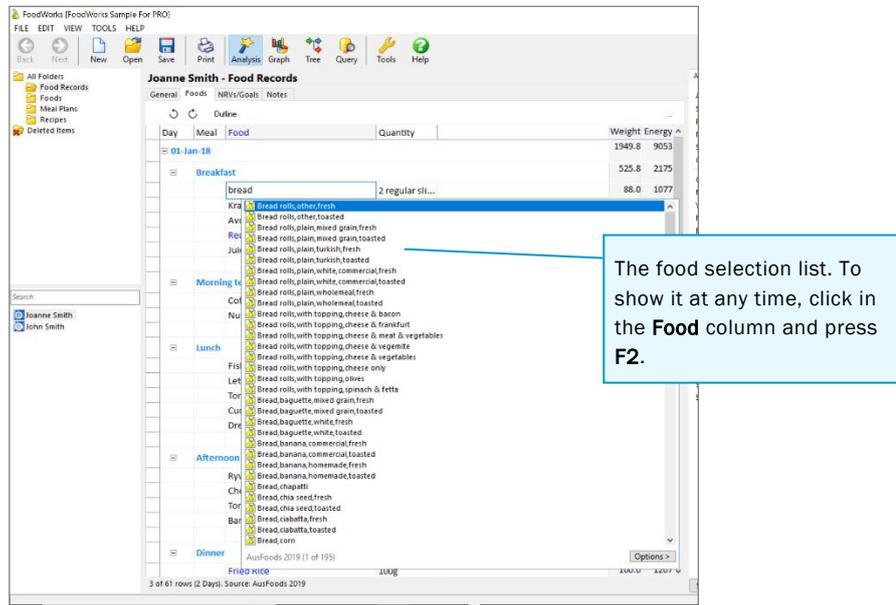
- 3. In the **Meal** column, type the name or time of the first meal, then press **Enter**.

Example (24 Hour Recall)



- 4. In the **Food** column, type the first few letters of each word of the food. Use the arrow keys to select the food from the drop-down list box, then press **Enter**. A list of matching foods (the food selection list) is shown.

Example (24 Hour Recall) showing the food selection list



TIP: Finding foods

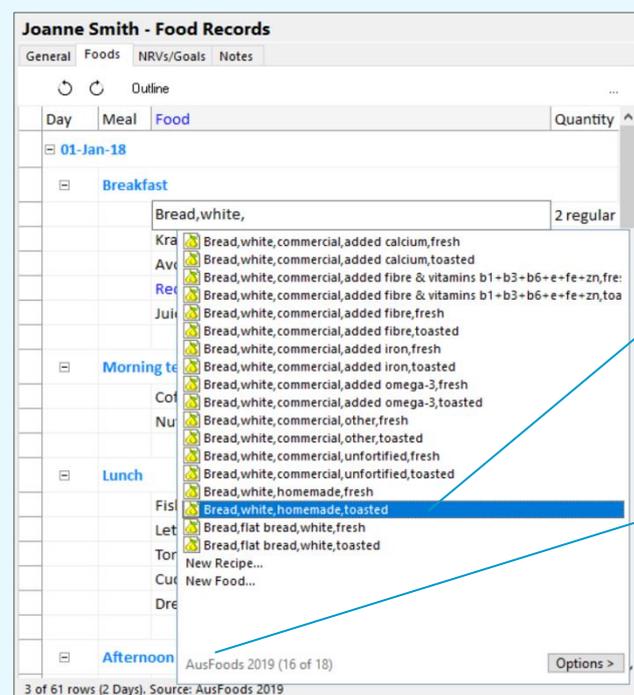
For more on what to type to find foods more efficiently, see *Tips for finding foods and ingredients faster* on page 31.

TIP: See where a food comes from

The food selection list can contain items from several different sources, including data sources and your database folders.

To see the source of a particular food or recipe in the food selection list:

In the list, highlight the item. The source (a data source or folder) is shown at the bottom of the list.



Click a food in the food selection list to show its source.

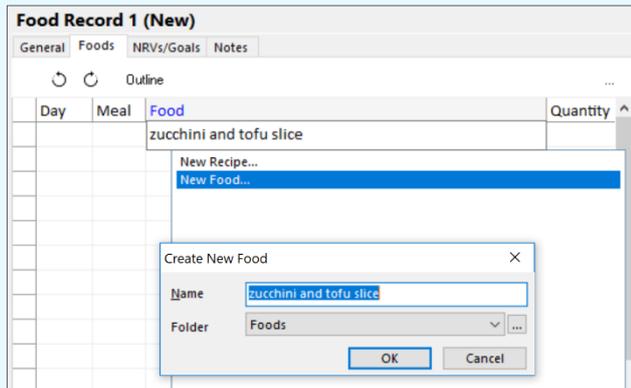
The source of the highlighted food is shown at the bottom of the food selection list. Here it is the AusFoods data source.

For more on FoodWorks data sources, see *About the food composition data* on page 15.

TIP: Can't find the recipe or food you want? Create one on the fly.

If you cannot find the recipe or food that you want, you can create it while entering foods into the **Foods** grid of the dietary intake, and enter its details later:

 To create a new recipe or food while in the **Foods** grid: In the **Food** column, type the name of the new recipe or food, or simply type *new recipe* or *new food*. Then type its name, select the required folder, and click **OK**.

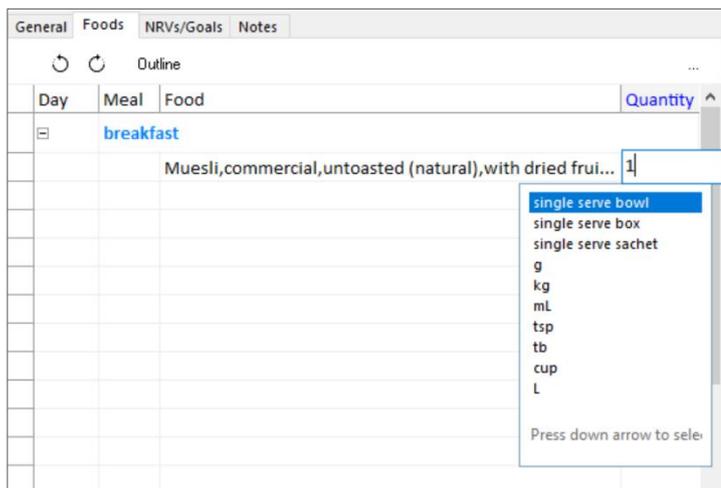


This creates an 'empty' recipe or food document (with no nutrient values) that you can fill in later. See 7. *Adding a recipe* on page 42 and 9. *Adding a new food* on page 57.

(Note that you cannot create new documents on the fly if you have keywords switched on—see B. *Using keywords for selecting foods* on page 78.)

5. In the **Quantity** column, type the number of units for the measure that you want to use. Then press **Enter**.

Example (24 Hour Recall)



NOTE: Fractions

To enter a fraction, use decimals—for example, for $\frac{1}{2}$ type **0.5**.

6. Use the arrow keys to select the measure that you want to use or type the first few letters of the measure name. Then press **Enter**.

7. Repeat steps 4 to 6 for each food in the meal.
8. Repeat from step 3 to start the next meal.
9. Repeat from step 2 to start the next day.

TIP: Decided you want to enter more days than one?

If you have entered a day's worth of food and drink into a 24 hour recall and realise that you want to continue on to more days, add a **Day** column: see *TIP: Showing the Day or Meal column* on page 26.

D. Save the food record, 24 hour recall or meal plan

 To save: On the FoodWorks toolbar, click **Save**.



Tips for finding foods and ingredients faster

When you are entering foods into the **Foods** tab of a food record, 24 hour recall or meal plan (or into the **Ingredients** tab of a recipe) try these tips for finding them faster:

- Type two to four letters only per key word of the ingredient name. This is faster and helps avoid spelling mistakes—for example, **avo** finds **avocado**. Typing avocado does not refine this search any further.
- Typing the first part of two or more key words helps refine your search—for example, for **black tea**, type **bl tea** rather than **tea**.
- The order for typing key words does not alter the number of foods found—for example, **tea black** is identical to **black tea**.
- Case is unimportant. FoodWorks accepts upper-case and lower-case entries.
- Type the singular for foods—for example, type **pea**, not **peas**, **bean** not **beans**.
- If you do not find the food, try alternative spellings or other word combinations.
- For some foods, there are many different varieties. Hence, when the varieties are displayed that may not all fit on to the screen. Use the arrow key to scroll down and see more varieties.

Next steps

This dietary intake is shown in the Navigation Pane of FoodWorks.

The next chapter explains how to view the nutrient analyses for your food record or 24 hour recall. *Chapter 7. Adding a recipe* and *Chapter 9. Adding a new food* explain how to add recipes and foods you need to your database.

6. Analysing dietary intakes and meal plans

While you are entering your food record, 24 hour recall or meal plan, you can view its analyses in the Analysis Pane on the right of the FoodWorks window. The analyses update as you make changes. Here are some suggestions for exploring the nutrient analyses for a dietary intake.

Basics—Using the Analysis Pane



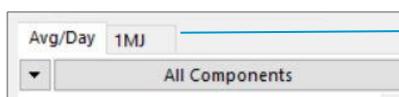
To view the analyses for the food record, 24 hour recall or meal plan:

1. First open that food record, 24 hour recall or meal plan: In the Navigation Pane, click the document.
2. To show the Analysis Pane (if it is not already displayed), on the FoodWorks toolbar, click the **View Analyses** button.



View Analyses button

3. To choose the unit of analysis for the food record, 24 hour recall or meal plan: Click the tabs at the top of the Analysis Pane. You can look at the analyses as an **average per day** or per **megajoule**.



Click the tab for the unit of analysis for the food record or 24 hour recall.

4. Then, in the list of analyses, click the analysis you require (e.g. **General**):

If the Analysis Pane is wide, the analyses are listed down the left of the pane.

Avg/Day 1MJ	
All Components	General
Summary	Weight 1906.3 g
Profile	Macro-Nutrients
NRVs	Energy
SDT	Protein
Goals	Total fat
	Saturated fat
	Trans Fatty Acids
General	Polyunsaturated fat 24.5 g
Macro-Nutrients	Monounsaturated fat
Vitamins	Cholesterol 63.7 mg
Minerals	Carbohydrate 255.8 g
Energy Ratios	Sugars 93.3 g
Fat Ratios	Starch 157.3 g
Fatty Acids	Water 1384.6 g
Amino Acids	Alcohol 1.9 g
Intolerances	Dietary fibre 65.6 g
Food Groups	UoW Wholegrains 113.7 g
Miscellaneous	Ash 20.4 g
EER	Vitamins
EAR	Thiamin 2.440 mg
AI	Riboflavin 3.445 mg
RDI	Niacin 18.897 mg
UL	Niacin equivalents 35.939 mg
SDT(Min)	Vitamin C 158.832 mg
SDT(Max)	Vitamin E 13.557 mg
	Tocopherol, alpha 11.756 mg
	Vitamin B6 (by analysis) 2.179 mg

When the Analysis Pane is wide, the list of analyses is shown on the left. Click the analysis you require.

If the Analysis Pane is narrow, the analyses are shown as a drop-down list. Click the down arrow to display the list.

Avg/Day 1MJ	
▼ All Components	
✓ All Components	
Summary	1906.3 g
Profile	
NRVs	78.8 kJ
SDT	90.1 g
Goals	90.2 g
	17.6 g
	0.5 g
General	12.2 g
Macro-Nutrients	24.5 g
Vitamins	3.7 mg
Minerals	55.8 g
Energy Ratios	93.3 g
Fat Ratios	57.3 g
Fatty Acids	84.6 g
Amino Acids	1.9 g
Intolerances	65.6 g
Food Groups	13.7 g
Miscellaneous	20.4 g
EER	140 mg
EAR	145 mg
AI	897 mg
RDI	939 mg
UL	832 mg
SDT(Min)	557 mg
SDT(Max)	756 mg
	179 mg
	988 µg
	841 µg
	672 µg
	169 µg

When the Analysis Pane is narrow, the list of analyses is shown as a drop-down. Click the analysis you require.

NOTE: Question marks (?) and 'greater than' (>) signs in the analyses

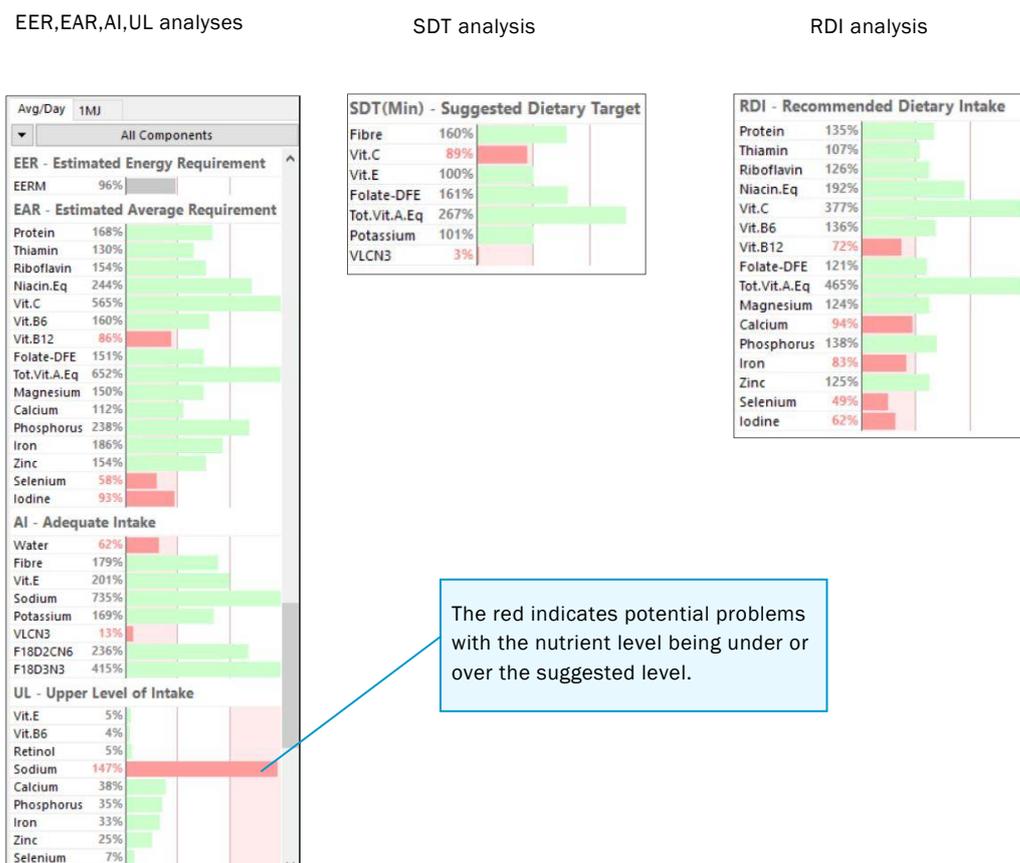
For help with resolving these problems see *A. Symbols in the analyses* on page 75.

About the nutrient reference values (NRVs)

The nutrient reference values (NRVs) for use in Australia and New Zealand² outline the levels of intake of essential nutrients to meet the known nutritional needs of practically all healthy people. They may not meet the specific requirements of people with various diseases or conditions, or pre-term infants.

In the Analysis Pane of FoodWorks, you can view NRV analyses as shown in *Figure 3—The NRV analyses in FoodWorks* below:

Figure 3—The NRV analyses in FoodWorks



Here are the definitions for each NRV that appears in FoodWorks:

Estimated Energy Requirements (EER)—The average dietary energy intake that is predicted to maintain energy balance in a healthy adult of defined age, gender, weight, height and level of physical activity, consistent with good health. In children and pregnant and lactating women, the EER is taken to include the needs associated with the deposition of tissues or the secretion of milk at rates consistent with good health.

Estimated Average Requirement (EAR)—A daily nutrient level estimated to meet the requirements of half the healthy individuals in a particular life stage and gender group.

Adequate Intake (AI)—The average daily nutrient intake level based on observed or experimentally determined approximations or estimates of nutrient intake by a group

² National Health and Medical Research Council (NHMRC) (2006). *Nutrient reference values in Australia and New Zealand. Executive summary.* Canberra: NHMRC

(or groups) of apparently healthy people that are assumed to be adequate. It is used when an RDI cannot be determined.

Upper Level of Intake (UL)—The highest average daily nutrient intake level likely to pose no adverse health effects to almost all individuals in the general population. As intake increases above the UL, the potential risk of adverse effects increases.

Suggested Dietary Target (SDT)—A daily average intake for certain nutrients that may help in the prevention of chronic disease. These values apply only to adults and adolescents aged 14 years and over.

Recommended Dietary Intake (RDI)—The average daily dietary intake level that is sufficient to meet the nutrient requirements of nearly all (97–98 per cent) healthy individuals in a particular life stage and gender group.

TIP: More on NRVs?

For more information go to www.nrv.gov.au.

About the food groups

The Xyris food group system allows you to analyse diets, recipes and meal plans by food group, and thus investigate food patterns.

The food groups use Australian food composition data, including extensive brand name data, and are informed by the *Australian Guide to Healthy Eating* (AGHE)³, and the *USDA Food Patterns Equivalents Database* (FPED)⁴.

The Xyris food groups are broadly compatible with the five food groups (and additional categories) of the *Australian Guide to Healthy Eating*. However, there are important differences.

Food groups and serve sizes

There are 5 major food groups and 28 subgroups, as well as oil equivalents, solid fat equivalents, added sugars and alcoholic drinks.

See the number of serves of the basic food groups (e.g. vegetables) and drill down into the subgroups (e.g. dark green vegetables). Where a recipe is available for them, composite foods and recipes (e.g. donuts, lasagne) are allocated to food groups according to their ingredients.

Serve sizes for the food groups are similar to those in the AGHE.

NOTE: Food groups are only for Australian data

The food group analyses are only available if you are selecting food from these Australian data sources: AUSNUT 2011-13, AusFoods 2019 and AusBrands 2019.

³ <https://www.eatforhealth.gov.au/guidelines/australian-guide-healthy-eating>

⁴ <http://www.ars.usda.gov>

Discretionary choices and food components

In the Xyris food groups, some food components are treated as 'groups' in their own right, namely:

- Oil equivalents (fats naturally occurring in nuts, seeds, avocado, seafoods, and unhydrogenated vegetable oils; excludes palm oil and coconut oil)
- Solid fat equivalents (fats naturally occurring in meat, poultry, eggs, dairy, fully or partially hydrogenated oils, shortening, palm oil and coconut oil)
- Added sugars
- Alcoholic drinks

As a result, the 'discretionary choices' category used in the AGHE is not used in the Xyris groups. Instead, all composite foods, including those that would be discretionary items (e.g. pizzas, pastries, commercial burgers), are broken into their ingredients/components and assigned to 'groups' accordingly. The resulting analysis exposes teaspoons of solid fat equivalents and added sugars, and serves of refined grains, etc. For example, a meat pie which would be considered a discretionary choice in the AGHE, in the Xyris system would instead contribute serves of meat, refined grains, solid fats, and so on.

More information on food groups in FoodWorks

For more information on the food groups and serve sizes, see the FoodWorks support site, <https://support.xyris.com.au>

Viewing the food groups analyses



To view the food groups analyses for your diet, recipe or meal plan:

- In the Analysis Pane, in the list of analyses, click **Food Groups**.

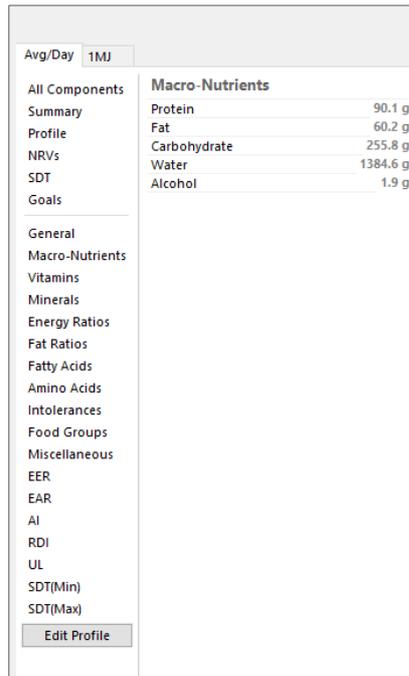
Avg/Day	1MJ
All Components	General
Summary	Weight 2220.6 g
Profile	Macro-Nutrients
NRVs	Energy 8645.3 kJ
SDT	Protein 62.7 g
Goals	Total fat 71.8 g
	Saturated fat 16.6 g
General	Trans Fatty Acids 0.8 g
Macro-Nutrients	Polyunsaturated fat 22.3 g
Vitamins	Monounsaturated fat 26.1 g
Minerals	Cholesterol 36.3 mg
Energy Ratios	Carbohydrate 268.6 g
Fat Ratios	Sugars 107.1 g
Fatty Acids	Starch 160.9 g
Amino Acids	Water 1741.2 g
Food Groups	Alcohol 0 g
	Dietary fibre 44.7 g
	Ash 22.1 g

Customising the nutrient profile

You can create your own customised list of the nutrients of interest to you by editing the **Profile** analysis.

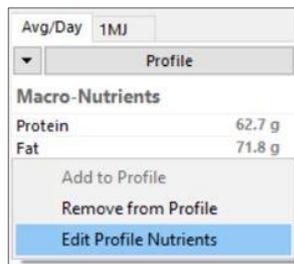
 To add or delete nutrients from the **Profile** analysis:

1. If the Analysis Pane is wide: In the list of analyses on the left, click **Profile**, then click the **Edit Profile** button.



- OR -

If the Analysis Pane is narrow: Point over the Analysis Pane, click right, then click **Edit Profile Nutrients**.



2. Select or de-select nutrients as required.

Edit Nutrient Profile

Nutrients/Components to include in the Nutrient Profile analysis:

<input type="checkbox"/> GENERAL	<input type="checkbox"/> Vitamin C (mg)	<input type="checkbox"/> kJ from fat (%)	<input type="checkbox"/> GRAINS (serve)	<input type="checkbox"/> - Organ meats (serve)
<input type="checkbox"/> Weight (g)	<input type="checkbox"/> Vitamin E (mg)	<input type="checkbox"/> kJ from saturated fat	<input type="checkbox"/> - Refined (serve)	<input type="checkbox"/> - Seafood high in LC
<input type="checkbox"/> _ MACRO-NUTRIENTS	<input type="checkbox"/> Tocopherol, alpha (m	<input type="checkbox"/> kJ from trans fat (%)	<input type="checkbox"/> - Wholegrains (serve)	<input type="checkbox"/> - Seafood low in LC
<input type="checkbox"/> Energy (kJ)	<input type="checkbox"/> Vitamin B6 (by analy	<input type="checkbox"/> kJ from carbohydrate	<input type="checkbox"/> - Wholegrains perce	<input type="checkbox"/> - Nuts & seeds (serve
<input checked="" type="checkbox"/> Protein (g)	<input type="checkbox"/> Vitamin B12 (µg)	<input type="checkbox"/> kJ from alcohol (%)	<input type="checkbox"/> FRUIT (serve)	<input type="checkbox"/> - Legumes (serve)
<input checked="" type="checkbox"/> Total fat (g)	<input type="checkbox"/> Total folate (µg)	<input type="checkbox"/> kJ from fibre (%)	<input type="checkbox"/> - Citrus, melons & be	<input type="checkbox"/> - Soy products (serve
<input type="checkbox"/> Saturated fat (g)	<input type="checkbox"/> Folate, total DFE (µg)	<input type="checkbox"/> kJ from others (%)	<input type="checkbox"/> - Other fruit (serve)	<input type="checkbox"/> DAIRY (serve)
<input type="checkbox"/> Trans Fatty Acids (g)	<input type="checkbox"/> Folic acid (µg)	<input type="checkbox"/> _ FAT RATIOS _____	<input type="checkbox"/> - Fruit juice (serve)	<input type="checkbox"/> - Milk (serve)
<input type="checkbox"/> Polyunsaturated fat	<input type="checkbox"/> Food Folate (µg)	<input type="checkbox"/> Fat as mono (%)	<input type="checkbox"/> - Fruit juice percent	<input type="checkbox"/> - Cheese (serve)
<input type="checkbox"/> Monounsaturated fa	<input type="checkbox"/> Total vitamin A equiv	<input type="checkbox"/> Fat as poly (%)	<input type="checkbox"/> VEGETABLES (serve)	<input type="checkbox"/> - Yoghurt (serve)
<input type="checkbox"/> Cholesterol (mg)	<input type="checkbox"/> Retinol (µg)	<input type="checkbox"/> Fat as saturated (%)	<input type="checkbox"/> - Dark green vegetab	<input type="checkbox"/> - Milk alternatives (se
<input checked="" type="checkbox"/> Carbohydrate (g)	<input type="checkbox"/> Beta carotene equiv	<input type="checkbox"/> _ FATTY ACIDS _____	<input type="checkbox"/> - Red & orange vege	<input type="checkbox"/> OIL EQUIVALENTS (tsp
<input type="checkbox"/> Sugars (g)	<input type="checkbox"/> Beta carotene (µg)	<input type="checkbox"/> Very long chain N3 fa	<input type="checkbox"/> - Tomatoes (serve)	<input type="checkbox"/> SOLID FAT EQUIVALEN
<input type="checkbox"/> Added Sugars (g)	<input type="checkbox"/> _ MINERALS _____	<input type="checkbox"/> F18D2C6 linoleic (g)	<input type="checkbox"/> - Other red & oran	<input type="checkbox"/> ADDED SUGARS (tsp)
<input type="checkbox"/> Free Sugars (g)	<input type="checkbox"/> Sodium (mg)	<input type="checkbox"/> F18D3N3 alpha-linol	<input type="checkbox"/> - Starchy vegetables	<input type="checkbox"/> - kJ from added suga
<input type="checkbox"/> Starch (g)	<input type="checkbox"/> Potassium (mg)	<input type="checkbox"/> F20D5N3 eicosapent	<input type="checkbox"/> - Potatoes (serve)	<input type="checkbox"/> - kJ from added suga
<input type="checkbox"/> Water (g)	<input type="checkbox"/> Magnesium (mg)	<input type="checkbox"/> F22D5N3 docosapent	<input type="checkbox"/> - Other starchy veg	<input type="checkbox"/> ALCOHOLIC DRINKS (
<input checked="" type="checkbox"/> Alcohol (g)	<input type="checkbox"/> Calcium (mg)	<input type="checkbox"/> F22D6N3 docosahex	<input type="checkbox"/> - Starchy vegetables	<input type="checkbox"/> UNCLASSIFIED WEIGH
<input type="checkbox"/> Dietary fibre (g)	<input type="checkbox"/> Phosphorus (mg)	<input type="checkbox"/> _ AMINO ACIDS _	<input type="checkbox"/> - Legumes (serve)	<input type="checkbox"/> - Unclassified weight
<input type="checkbox"/> Ash (g)	<input type="checkbox"/> Iron (mg)	<input type="checkbox"/> Tryptophan (g)	<input type="checkbox"/> - Other vegetables (s	<input type="checkbox"/> UNCLASSIFIED kJ (kJ)
<input type="checkbox"/> _ VITAMINS _____	<input type="checkbox"/> Zinc (mg)	<input type="checkbox"/> _ INTOLERANCES _	<input type="checkbox"/> PROTEIN FOODS (ser	<input type="checkbox"/> - Unclassified kJ perc
<input type="checkbox"/> Thiamin (mg)	<input type="checkbox"/> Selenium (µg)	<input type="checkbox"/> Salicylates	<input type="checkbox"/> - Red meats (serve)	<input type="checkbox"/> _ MISCELLANEOUS
<input type="checkbox"/> Riboflavin (mg)	<input type="checkbox"/> Iodine (µg)	<input type="checkbox"/> Amines	<input type="checkbox"/> - Poultry (serve)	<input type="checkbox"/> Caffeine (mg)
<input type="checkbox"/> Niacin (mg)	<input type="checkbox"/> _ ENERGY RATIOS	<input type="checkbox"/> Glutamates	<input type="checkbox"/> - Eggs (serve)	
<input type="checkbox"/> Niacin equivalents (m	<input type="checkbox"/> kJ from protein (%)	<input type="checkbox"/> _ FOOD GROUPS	<input type="checkbox"/> - Processed meats (serve)	

Include All Nutrients

OK Cancel

3. Click **OK**.

Investigating a particular nutrient

To see more information for a nutrient:

1. Make sure the Analysis Pane is wide, that is, showing the list of analyses on the left. For how to resize the Analysis Pane, see *C. Analysis Pane* on page 19.
2. Then, in the Analysis Pane, click the nutrient name. Some information appears on the left of the Analysis Pane, and a new column appears in the foods grid.

Example—Clicking protein – information in the Analysis Pane

The screenshot shows the Analysis Pane with a list of nutrients on the left and a detailed view of the selected nutrient, Protein, on the right. A callout box points to the 'Protein' entry in the list, stating 'Click a nutrient—here Protein...'. Another callout box points to the detailed information for Protein, stating '...and information about it is shown here.' The detailed information includes: Protein, AvgDay: 71g, 1MJ: 8g, EAR: 39g (182%), and RDI: 49g (145%).

A column for that nutrient is then also shown in the foods grid.

Example—Clicking protein – Nutrient column in the foods grid

The screenshot shows the Food Records grid for 'Joanne Smith'. The grid has columns for Day, Meal, Food, Quantity, Weight, Energy, and Protein. The Protein column is highlighted in yellow. A callout box points to the 'Protein' column header, stating 'Click the nutrient of interest—here Protein...'. Another callout box points to the Protein values in the grid, stating '...The nutrient column for the selected nutrient is displayed here, on the right side of the foods grid.' The grid shows data for various meals including Breakfast, Morning tea, Lunch, and Afternoon tea.

Viewing analyses for a selection

To see the nutrient values for part of the dietary intake only—say, for a single food or recipe, or for a meal:

- Use the selector buttons on the left of the **Foods** grid to select the row(s). The Analysis Pane then shows the analyses for the selected row(s) only.

The screenshot displays the 'Joanne Smith - Food Records' window. The 'Foods' tab is active, showing a table with columns for Day, Meal, Food, Quantity, Weight, Energy, and Protein. The data is organized by meal: Breakfast, Morning tea, and Lunch. A callout box with a blue border and arrow points to the selector buttons (checkboxes) on the left of the Foods grid, with the text: 'Click (and drag on) the selector buttons to select a row(s)...'. To the right, the 'Analysis Pane' is visible, showing a list of nutrients and their values for the selected row(s). A second callout box points to this pane, with the text: '...The Analysis Pane then shows the values for the selected row(s) only—in this case, for breakfast.' The analysis pane shows values for Weight (525.8 g), Energy (2174.6 kJ), Protein (16.1 g), Total fat (13.7 g), and various other nutrients.

Exploring the nested recipes in a dietary intake

A food record or 24 hour recall can include recipes from your own database. These recipes have ingredients of their own, which in turn might be recipes with their own ingredients, and so on.

To see *all* the nested recipes and their ingredients in a food record or 24 hour recall (in a tree-like view):

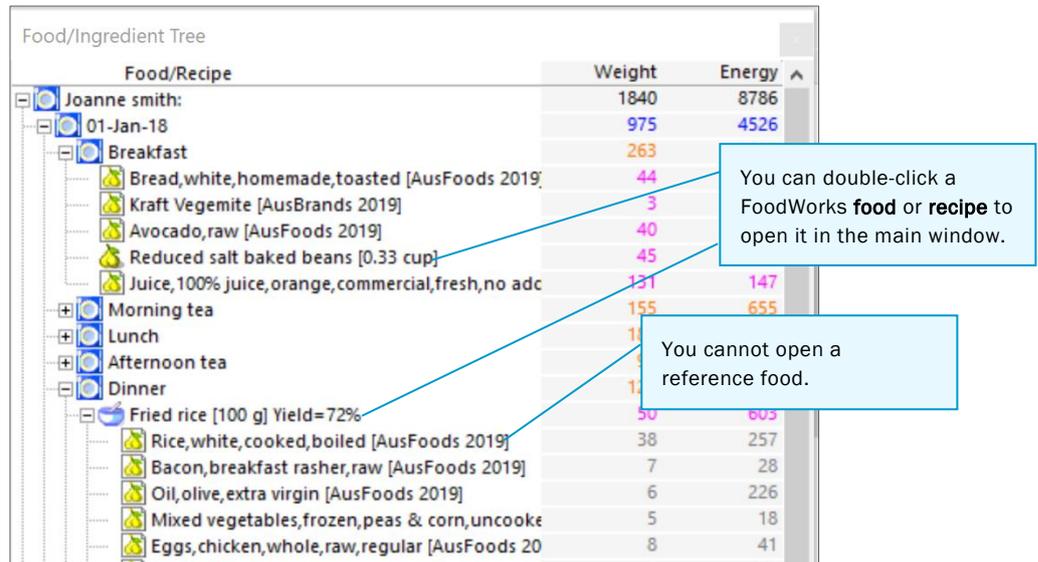
- In the Navigation Pane, select the food record or 24 hour recall.
- On the toolbar, click the **View Food/Ingredient Tree** button.



View Food/Ingredient Tree button

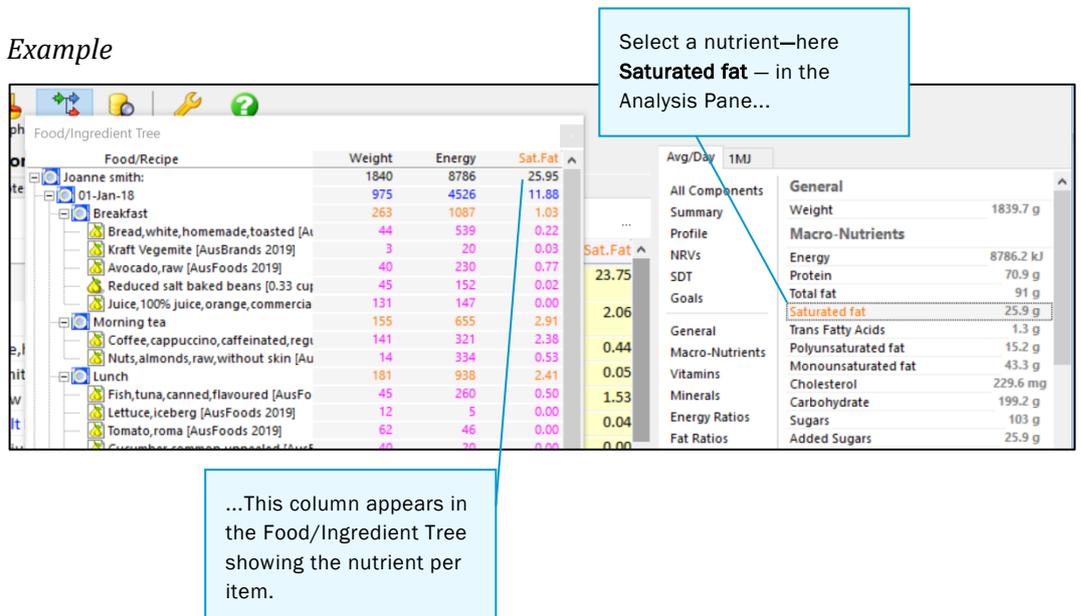
The **Food/Ingredient Tree** dialog is displayed.

Example



- To open a FoodWorks document from the **Food/Ingredient Tree** dialog, double-click its name. (Remember the icons show whether each ingredient is a reference food from the data sources, which cannot be opened, or a FoodWorks document—one of your own recipes or foods.)
- To view the values for a specific nutrient in the **Food/Ingredient Tree** dialog: In the Analysis Pane, click that nutrient.

Example



7. Adding a recipe

This chapter explains how to add a recipe to your FoodWorks database. You can use the recipes you create as ingredients in other recipes. You can also use them as foods in your food records and 24 hour recalls.

Icon	Document	Usage
 (bowl)	Recipe	Use to create recipes with ingredients.

The key difference between a recipe and a food document in FoodWorks is that a recipe has ingredients. (For how to add a food, see 9. *Adding a new food* on page 57.)

Recipes are FoodWorks documents and are stored in your FoodWorks database. You open them from the Navigation Pane. For more on FoodWorks documents, see *What is a document?* on page 17.

When adding a recipe, you need the following information:

- The ingredients and their quantities
- Optionally, the number of serves it makes or the serve weight
- Optionally, the yield

If you wish, you can record the method (preparation instructions) for the recipe, however, this does not affect the nutrient analyses.

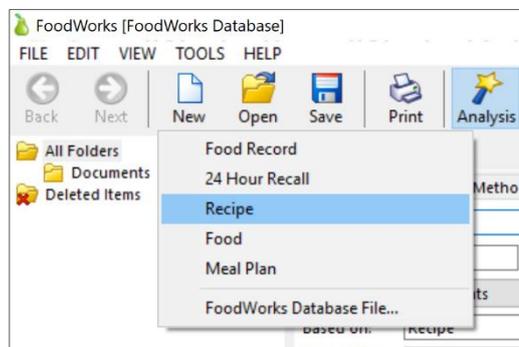
Adding a recipe

 To add a recipe to your FoodWorks database:

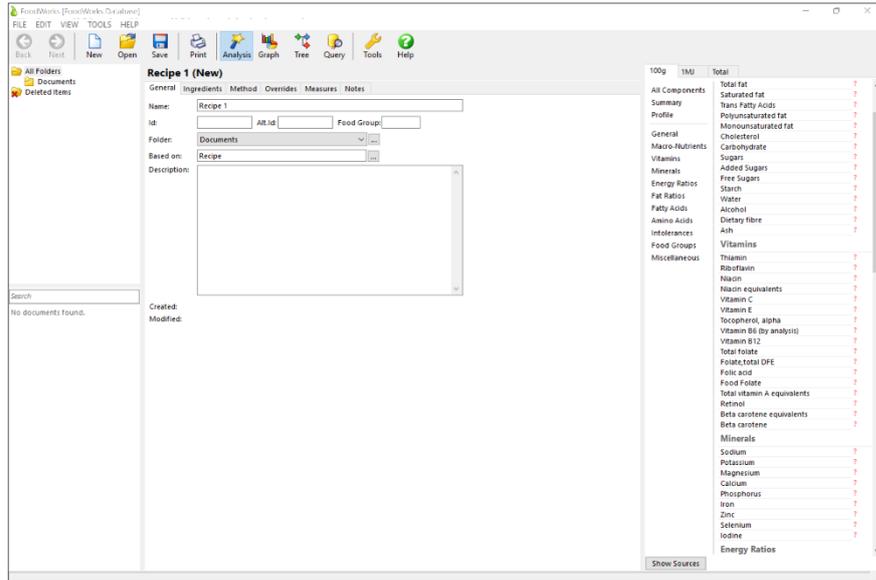
A. Create the new recipe

 To create a new recipe:

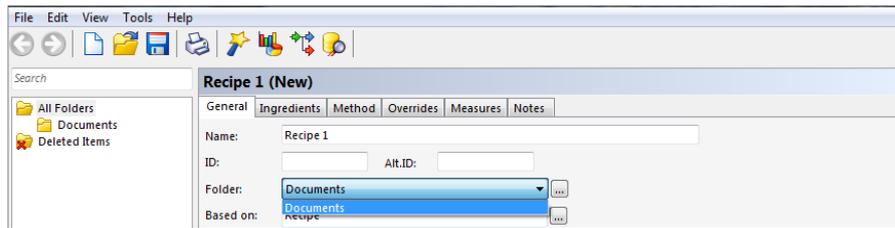
1. On the FoodWorks toolbar, click **New**, then click **Recipe**.



2. On the **General** tab, in the **Name** box, type the name for the recipe.



3. Optionally, enter your **ID** for the recipe.
4. Click the **Folder** drop-down button and select the folder in which you want to store the food. By default, there is one folder, *Documents*.



If you want to create a new folder, click the ellipsis (...) button, type the folder name, and click **OK**.



5. On the toolbar, click the **Save** button.

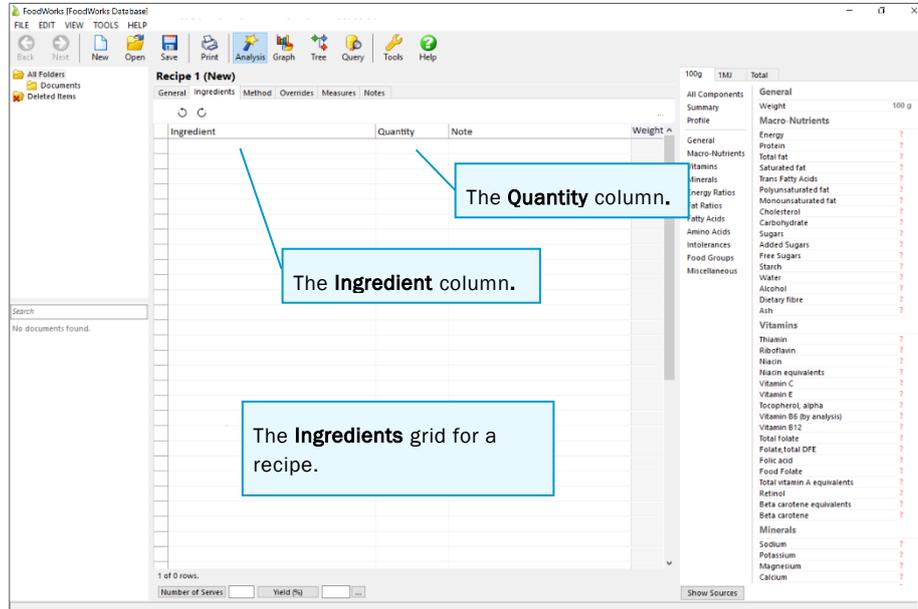


B. Enter the ingredients for the recipe

To enter the ingredients for the recipe:

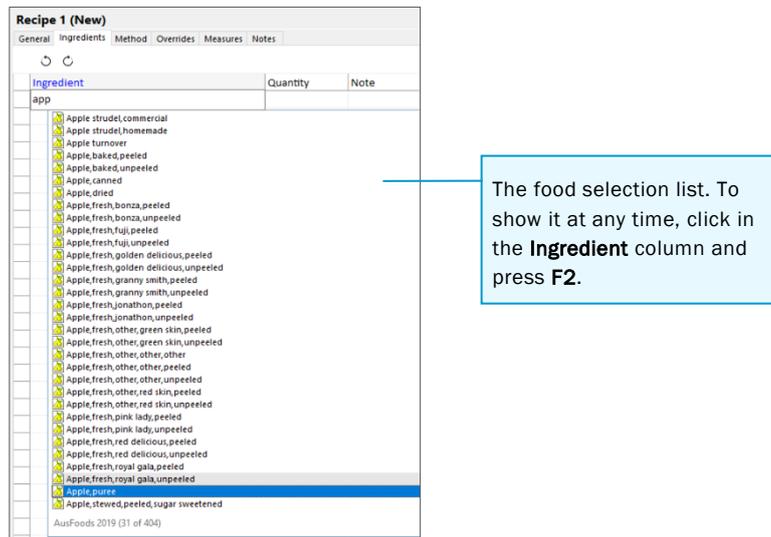
1. Click the **Ingredients** tab.

Example Ingredients grid



2. In the **Ingredient** column, type the first few letters of each word of the ingredient. Use the arrow keys to select the ingredient from the drop-down list box, then press **Enter**. A list of matching foods (the food selection list) is shown.

Example recipe showing the food selection list



TIP: Finding foods

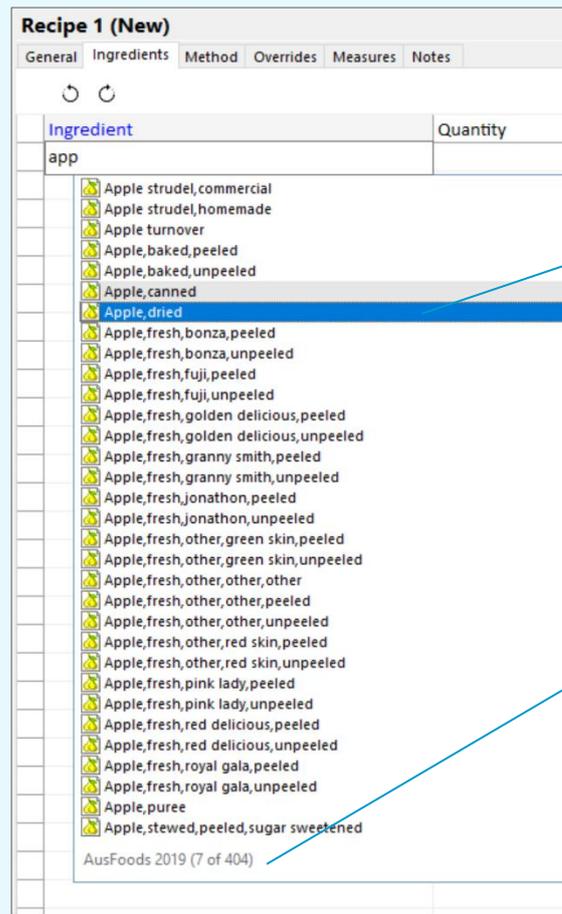
For more on what to type to find foods more efficiently, see *Tips for finding foods and ingredients faster* on page 31.

TIP: See where an ingredient comes from

The food selection list can contain items from several different sources, including data sources and your database folders.

To see the source of a particular food or recipe in the food selection list:

In the list, highlight the item. The source (a data source or folder) is shown at the bottom of the list.



Click a food in the food selection list to show its source.

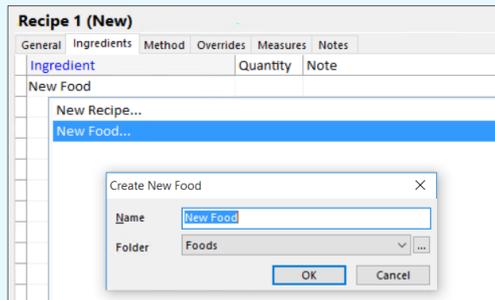
The source of the highlighted food is shown at the bottom of the food selection list. Here it is—in this case, the AusFoods data source.

For more on FoodWorks data sources, see *About the food composition data* on page 15.

TIP: Can't find the ingredient you want? Create one on the fly.

If you cannot find the food or recipe that you want as an ingredient, you can create while entering ingredients into the **Ingredients** grid, and enter its details later:

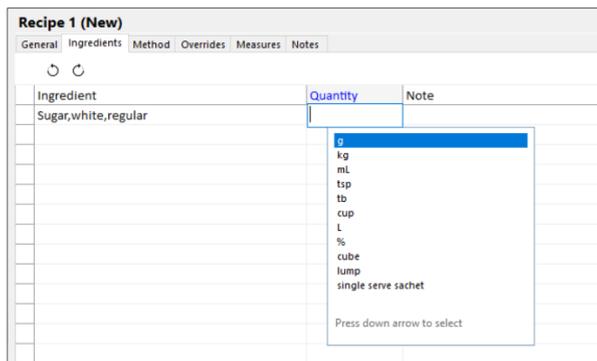
 To create a new food or recipe while in the **Ingredients** grid entering ingredients: In the **Ingredient** column, type the name of the new ingredient, or simply type *new recipe* or *new food*. Then type the name for the recipe or food, select the required folder, and click **OK**. (Note that you cannot create new documents on the fly if you have keywords switched on – see *Using keywords* on page 78.)



This creates an 'empty' recipe or food document that you can fill in later. Use this chapter to fill in the detail later for a recipe and for a food, see 9. *Adding a new food* on page 57.

3. In the **Quantity** column, type the value (a number) for the measure that you want to use. A drop-down list displays the available measures for this item.

Example



NOTE: Fractions

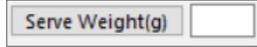
To enter a fraction, use decimals—for example, for $\frac{1}{2}$ type **0.5**.

4. Use the arrow keys to select the measure that you want to use or type the first few letters of the measure name. Then press **Enter**.
5. Repeat these steps for each ingredient in the recipe.

C. Enter the serve weight for the recipe

 To enter the serve weight (in grams):

- On the **Ingredients** tab, in the **Serve Weight(g)** box (at the bottom of the Ingredients grid), enter the serve weight.



NOTE: Number of Serves versus Serve Weight

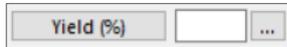
Click the button to toggle between **Serve Weight(g)** and **Number of Serves** and enter whichever value is more convenient.

D. Enter the yield for the recipe

If the processing step for this recipe will result in a change in weight due to the loss or gain of water, then you need to set the yield.

 To set the yield:

- If you already know the final *percentage* weight of the recipe, on the **Ingredients** tab, in the **Yield** box, type the percentage.
- If you know the final weight of the recipe, FoodWorks can calculate the yield for you. To enter the final weight, click the ellipsis (...) button, type in the final weight, then click **OK**.

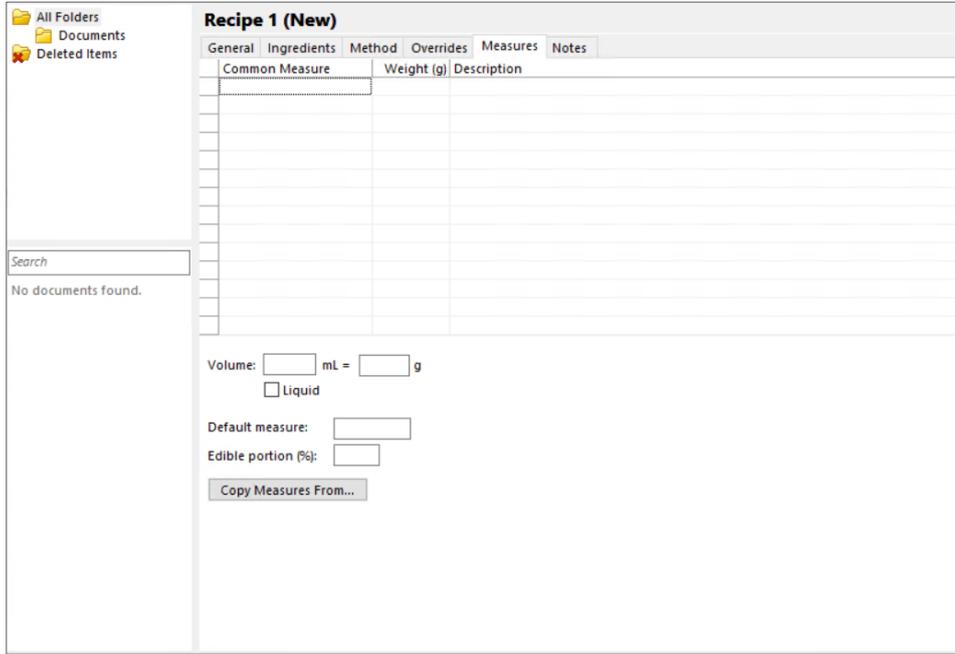


Click the ellipsis button to enter the final weight.

E. If the recipe is a beverage or liquid

 If the recipe is a beverage or a liquid:

1. Click the **Measures** tab.



The screenshot shows the 'Recipe 1 (New)' dialog box with the 'Measures' tab selected. The dialog has a navigation pane on the left with 'All Folders', 'Documents', and 'Deleted Items'. Below it is a search box with the text 'No documents found.' The main area contains a table with columns 'Common Measure', 'Weight (g)', and 'Description'. Below the table are input fields for 'Volume: [] mL = [] g', a 'Liquid' checkbox, 'Default measure: []', and 'Edible portion (%): []'. A 'Copy Measures From...' button is at the bottom.

2. Set the density by entering a volume (in mL) and its corresponding weight (in g).
3. Select the **Liquid** check box.

F. Save the recipe

 To save the recipe: On the FoodWorks toolbar, click **Save**.

Next steps

Your recipe is shown in the Navigation Pane of FoodWorks. And it is also automatically listed in the food selection list for you to select as an ingredient in other recipes or as a food in a dietary intakes.

The next chapter explains how to view the nutrient analyses for the recipe.

8. Analysing a recipe

While you are creating a recipe, you can view its nutrient analyses in the Analysis Pane on the right of the FoodWorks window. The analyses update automatically as you make changes to the recipe. Here are some suggestions for exploring the nutrient analyses for a recipe.

Basics—Using the Analysis Pane



To view the analyses for a recipe:

1. First open the recipe: In the Navigation Pane, click the recipe.
2. To show the Analysis Pane (if it is not already displayed), on the FoodWorks toolbar: Click the **View Analyses** button.



View Analyses button

3. To choose the unit of analysis for the recipe: Click the tabs at the top of the Analysis Pane. For a recipe, you can look at the analyses per **100g**, per **megajoule**, and for the **total** recipe.

100g	1MJ	Total
All Components	General	
Summary	Weight	100 g

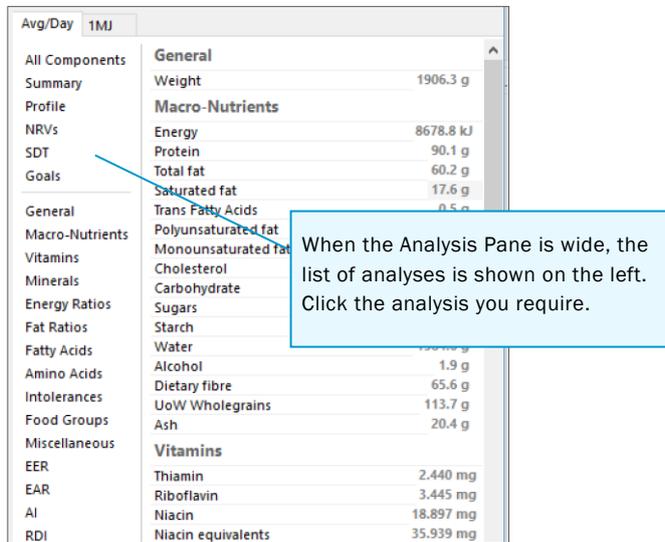
Click the tab for the unit of analysis for the recipe.

If you have entered the number of serves the recipe makes at the bottom of the **Ingredients** tab, then a per **Serve** tab is also shown.

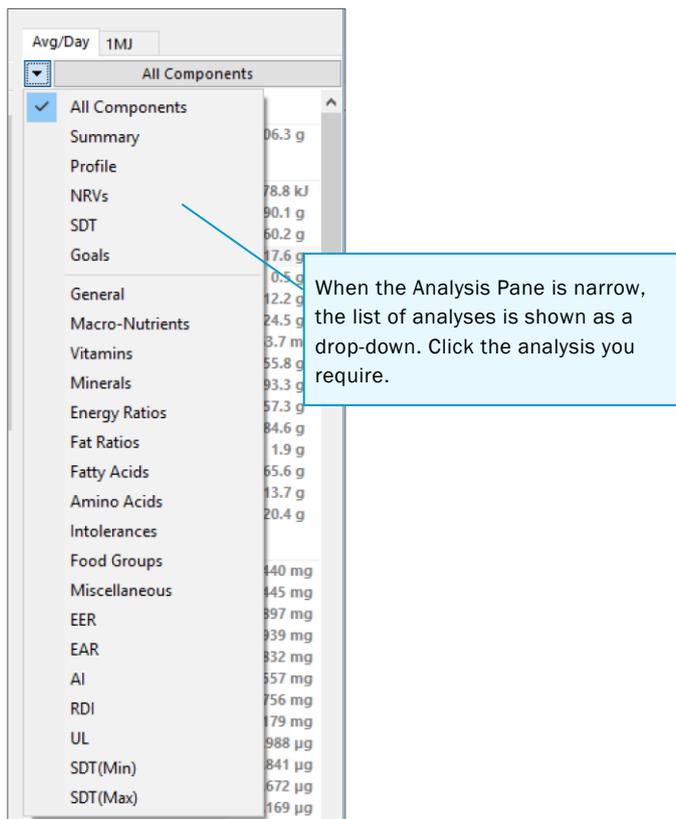
Serve	100g	1MJ	Total
All Components	General		
Summary	Weight		100 g

4. Then, in the list of analyses, click the analysis you require (e.g. **General**):

If the Analysis Pane is wide, the analyses are listed down the left of the pane.



If the Analysis Pane is narrow, the analyses are shown as a drop-down list. Click the down arrow to display the list.



NOTE: Question marks (?) and 'greater than' (>) signs in the analyses

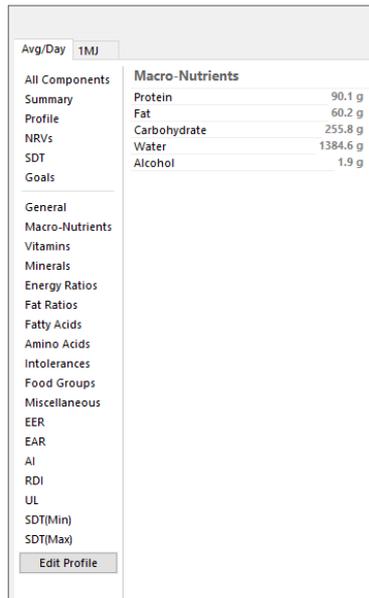
For help with resolving these problems see *A. Symbols in the analyses* on page 75.

Customising the nutrient profile

You can create your own customised list of the nutrients of interest to you by editing the **Profile** analysis.

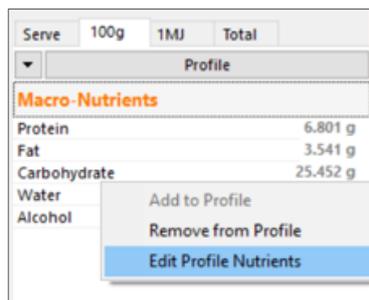
To add or delete nutrients from the **Profile** analysis:

1. If the Analysis Pane is wide: In the list of analyses on the left, click **Profile**, then click the **Edit Profile** button.



- OR -

If the Analysis Pane is narrow: Point over the Analysis Pane, click right, then click **Edit Profile Nutrients**.



Investigating a particular nutrient

To see more information for a nutrient:

1. Make sure the Analysis Pane is wide, that is, showing the list of analyses on the left. For how to resize the Analysis Pane, see *C. Analysis Pane* on page 19.
2. Then, in the Analysis Pane, click the nutrient name. Some information appears on the left of the Analysis Pane, and a new column appears in the ingredients grid.

Example—Clicking Protein - information in the Analysis Pane

Point to a nutrient—here **Protein...**

...and information about it is shown here.

Vitamins	%Mono	51%
Minerals	%Sat	31%
Energy Ratios	Nutrient/Component	
Fat Ratios	Weight	1839.7 g
Fatty Acids	Energy	8786.2 kJ
Amino Acids	Protein	70.9 g
Intolerances	Fat	91 g
Food Groups	Sat.Fat	25.9 g
Miscellaneous	Carbohydrate	199.2 g
EER	Alcohol	21.8 g
EAR	Fibre	25.8 g
AI	Sodium	1528.664 mg
RDI		
UL		
SDT(Min)		
SDT(Max)		

Protein
AvgDay: 71g
1MJ: 8g
EAR: 39g (182%)
RDI: 49g (145%)

A column for that nutrient is then also shown in the ingredients grid.

Example—Clicking Protein - Nutrient column in the ingredients grid

Click the nutrient of interest—here **Protein...**

...The nutrient column for the selected nutrient is displayed here, on the right side of the ingredients grid.

Day	Meal	Food	Quantity	Weight	Energy	Protein
01-Jan-18						
Breakfast						
		Bread,white,homemade,toasted	2 regular sli...	88.0	1077	6.98
		Kraft Vegemite	2 thin spread	5.0	40	1.27
		Avocado,raw	0.5 mediu...	79.5	460	1.27
		Reduced salt baked beans	0.33 cup	90.8	303	4.45
		Juice,100% juice,orange,commercial,fresh,no added vi...	250 mL	262.5	294	2.10
Morning tea						
		Coffee,cappuccino,caffeinated,regular,full cream milk	1 regular ta...	281.0	642	8.42
		Nuts,almonds,raw,without skin	1 handful	28.0	668	5.52
Lunch						
		Fish,tuna,canned,flavoured	90g	90.0	519	16.20
		Lettuce,iceberg	3 medium l...	24.0	9	0.22
		Tomato,roma	1 medium	92	1.24	1.24
		Cucumber,common,unp...		40	0.64	0.64
		Dressing,vinaigrette		1215	0.05	0.05
Afternoon tea						
				891	5.64	5.64
				293	2.00	2.00

Protein
AvgDay: 71g
1MJ: 8g
EAR: 39g (182%)
RDI: 49g (145%)

Viewing analyses for a selection

To see the values for an ingredient (or several ingredients) only:

- Use the white selector buttons on the left side of the **Ingredients** grid to select the row(s). The Analysis Pane then shows the analyses for the row(s) only.

Click the grey selector buttons to select a row(s), here coconut...

...The Analysis Pane then shows the values for the selected row(s) only, here coconut.

Exploring the nested recipes in a recipe

A recipe can include other recipes with their own ingredients.

To see *all* the nested ingredients of a recipe in a tree-like view:

- In the Navigation Pane, select the recipe.
- On the toolbar, click the **View food/Ingredient tree** button.



View food/ingredient tree button

The **Food/Ingredient Tree** dialog is displayed.

Example

You cannot open reference foods.

You can double-click on any FoodWorks document (recipe or food) to open it.

- To open a FoodWorks document from this **Food/Ingredient Tree** dialog, double-click its name. (Remember, the icons show whether each ingredient is a reference food, or a FoodWorks document—one of your own recipes or foods.)

- To view the values for a specific nutrient in the **Food/Ingredient Tree** dialog: In the Analysis Pane, click that nutrient.

Example

Select a nutrient—
here **Saturated fat**—
in the Analysis

The screenshot displays the FoodWorks software interface for a 'Tuna sandwich' recipe. The main analysis pane shows a table of ingredients with columns for Weight, Energy, and Saturated Fat. The 'Saturated fat' nutrient is highlighted in the Analysis Pane on the right. A 'Food/Ingredient Tree' dialog is open, showing a detailed view of the ingredients and their nutrient values. A callout box points to the 'Saturated fat' column in the tree dialog, indicating that this column shows the nutrient per item.

Ingredient	Quantity	Note	Weight	Energy	Sat.Fat
Tuna filling	2 Serve		242.7	2544	7.60
Bread,mixed grain,commercial,fresh	4 regular slice		144.0	1508	0.95
Tomato,common,raw	4 medium slice		60.0	44	0.00
Lettuce,iceberg	3 medium leaf		24.0	9	0.00

...This column
appears showing the
nutrient per item.

Exploring where a recipe is used

A recipe might be used in other documents in your database—either as an ingredient in another recipe or as an item in a dietary intake.



To see what documents in your database use this recipe:

1. In the Navigation Pane, navigate to the recipe and select it.
2. At the bottom of the Navigation Pane, a box appears at the bottom showing you where this recipe is used.

Example showing the 'used in' box

The screenshot shows the FoodWorks interface with the 'Tuna filling' recipe selected. The recipe ingredients are listed in a table:

Ingredient	Quantity	Note	Weight	Energy	Sat.Fat
Fish,tuna,canned,unflavoured,in brine	2 drained indi...		140.0	756	1.44
Mayonnaise,commercial,regular fat	60 mL		59.4	1729	6.06
Celery,fresh,raw	1 medium stalk		40.0	25	0.00
Herbs,Thyme	1 tsp		2.7	31	0.10
Salt,cooking	1 pinch		0.4	0	0.00
Pepper,black	1 pinch		0.2	2	0.00

A callout box points to the 'Tuna filling is used in:' section at the bottom of the Navigation Pane, which shows 'Tuna sandwich (2 Serve)'. The callout text reads: 'Look here in this box to see in what documents (and in what quantity) the open recipe or food is used. In this example, 2 serves of Tuna Filling is used in Tuna sandwich'.

3. As elsewhere in the Navigation Pane, simply click the document containing the recipe to open it to see how it is used.

9. Adding a new food

This chapter explains how to add foods to your database. For example, you might choose to add a food that you cannot find in the reference foods.

Icon	Document	Usage
 (yellow pear)	Food	Use for foods that you need to add to the database.

Contrast the foods that are FoodWorks documents with *reference* foods from the data sources, which you can not open or edit:

Item	Usage
 (pear on page)	Reference food from data source Select reference foods to enter into your dietary intakes and recipes. Reference foods have nutrient values provided. They are not FoodWorks documents—you cannot open and modify them.

Foods are FoodWorks documents and are stored in your FoodWorks database. You open them from the Navigation Pane. For more on FoodWorks documents, see *What is a document?* on page 17.

When adding a new food, you need the nutrition information for the food. You can get this information by basing the food on a similar reference food. Or, you might have the nutrient values from the product label. You can also use a mixed approach basing the nutrition information on a reference food in FoodWorks, and then overriding those nutrient values for which you have more specific data available.

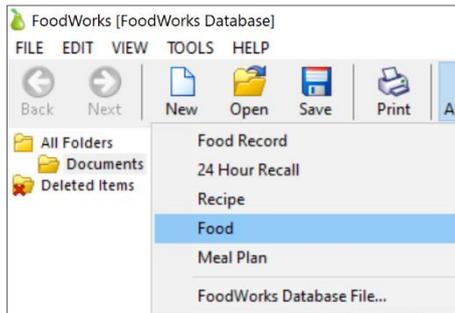
Adding a food

To add a food to your FoodWorks database:

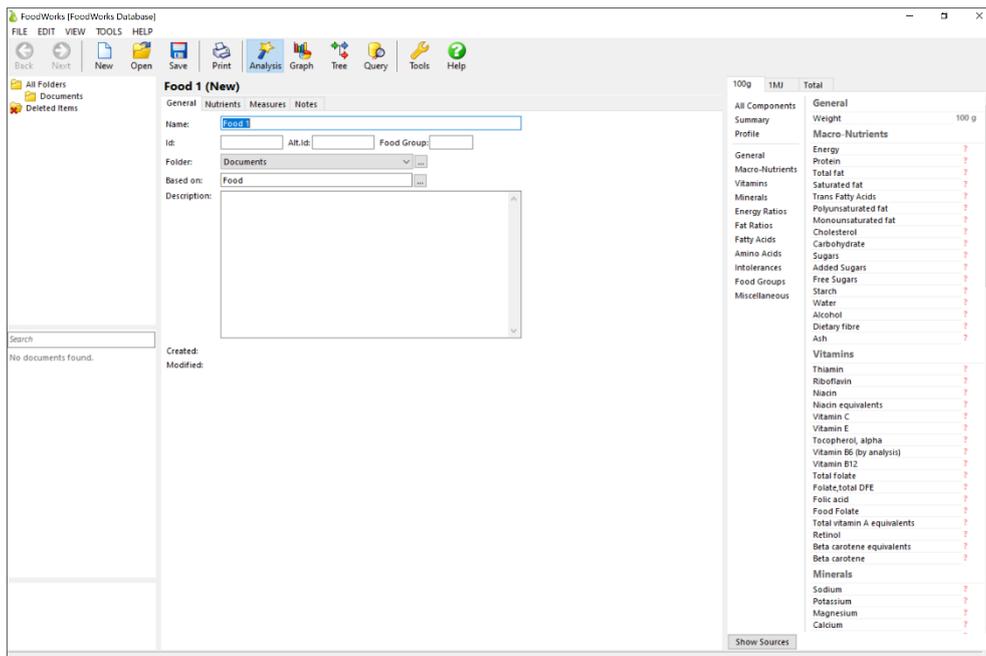
A. Create the new food

First, create the new food:

1. On the FoodWorks toolbar, click **New**, then click **Food**.

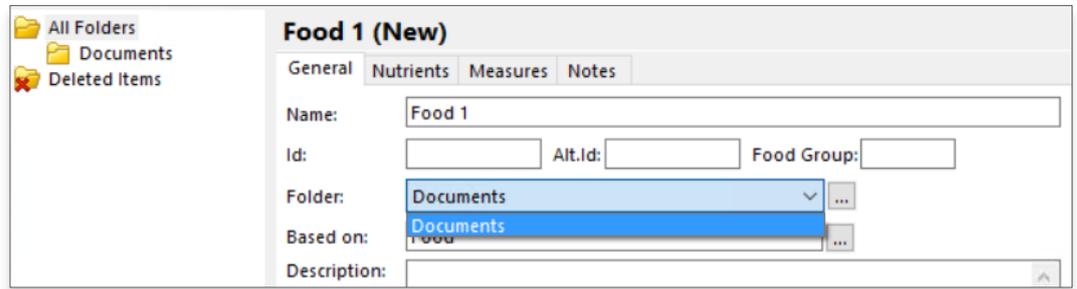


2. On the **General** tab, in the **Name** box, type the name for the food.



3. Optionally, enter your ID for the food.

- Click the **Folder** drop-down button and select the folder in which you want to store the food. By default, there is one folder, *Documents*.



- If you want to create a new folder, click the ellipsis (...) button.



- On the toolbar, click the **Save** button.



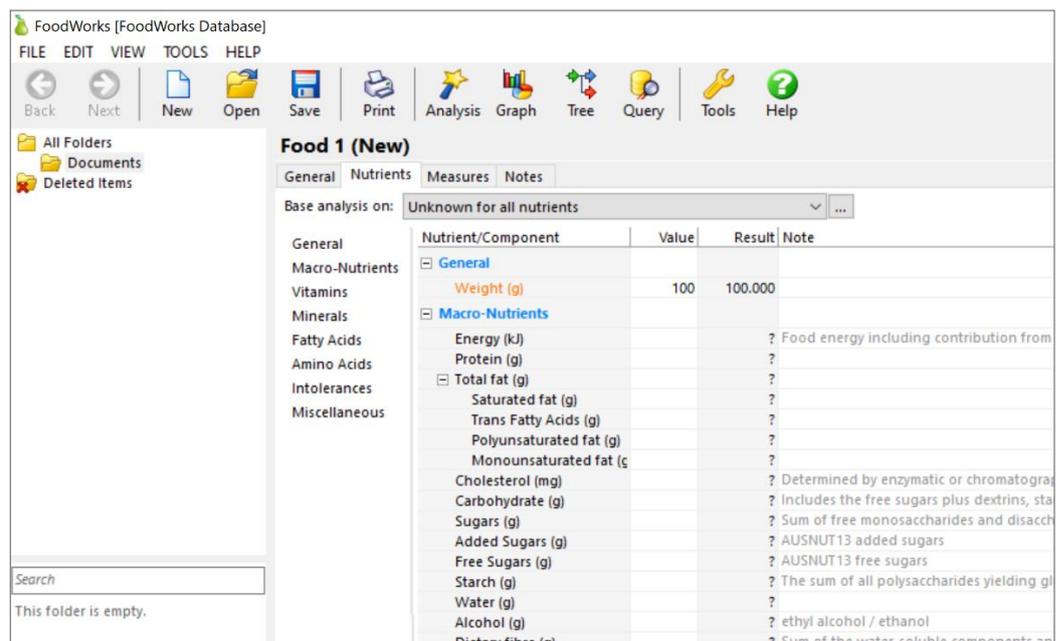
B. Base the nutrient values on an existing food

Using the following steps, you can base the nutrient values on a reference food (from a data source in FoodWorks), or on another FoodWorks document in your database.

If you want to type in values from an external source, skip to *C. Enter or edit nutrient values* page 60.

 To derive the nutrient values for this food from a reference food or another FoodWorks document:

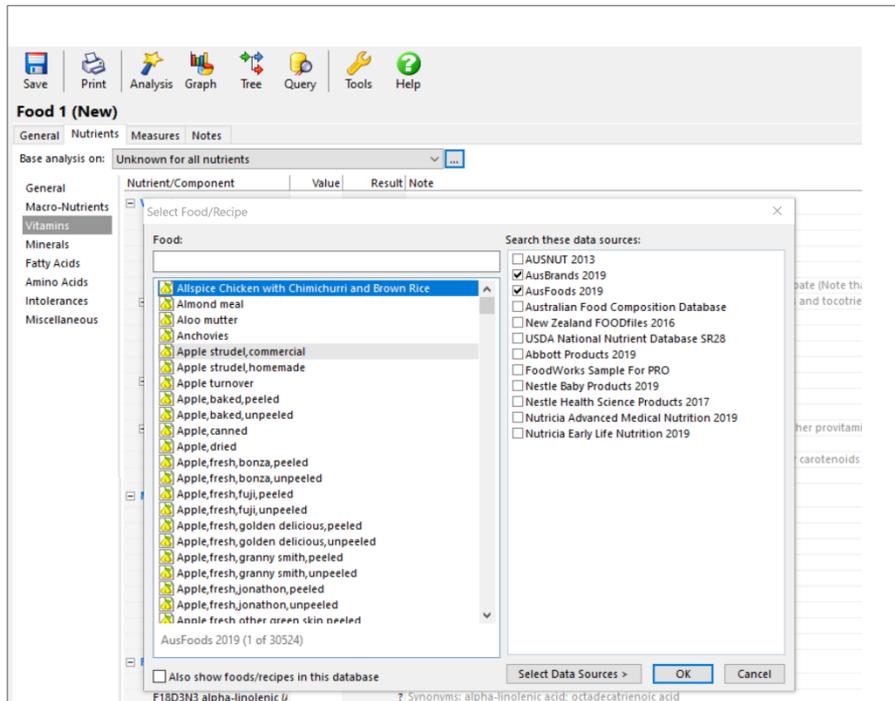
- Click the **Nutrients** tab.



- To the right of the **Base Analysis On** drop-down button, click the ellipsis (...) button.



- The **Select Food/Recipe** dialog is displayed.



- Type a few letters of your search term, and select the food you want to use from the list box on the left, and press **Enter**.

If you wish to edit the nutrient values, use the next procedure.

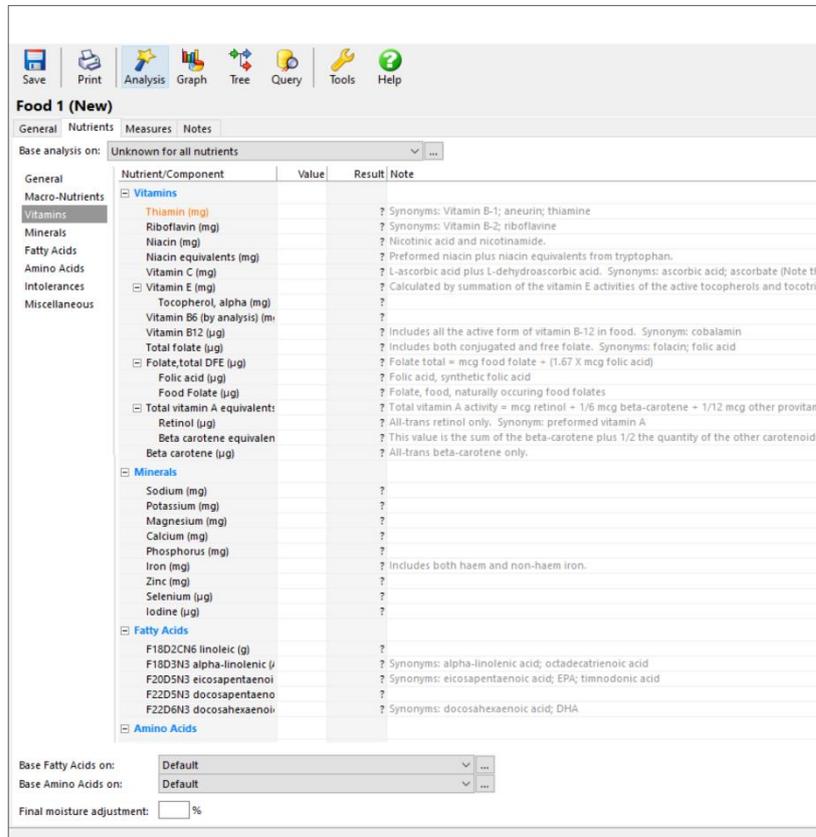
C. Enter or edit nutrient values

Use this procedure to enter nutrient values for your food from an external source, such as the label for the product.

You can also use this procedure, if necessary, to override some of the nutrient values derived from a reference food or FoodWorks document (see the last procedure).

 To enter nutrient values for a food:

1. On the **Nutrients** tab, on the left, click the category of nutrient that you wish to work with.



2. In the **Override** column, type the value for the nutrient, then press **Enter**.

NOTE: Units

Be sure to use the appropriate unit for each nutrient in FoodWorks. You can see the unit beside the nutrient name in the **Nutrient/Component** column on the **Nutrients** page. For example *sodium* uses the unit *mg*, not *grams*.

D. Save the food



To save the food: On the FoodWorks toolbar, click **Save**.



You have now added your first food to the FoodWorks database. You can see your new food document in the Navigation Pane of FoodWorks, and it is available for you to use as an ingredient when you are entering a recipe or as a food in your food records.

Next steps

Your food is now shown in the Navigation Pane of your database. And it is automatically listed for you to select as an ingredient in recipes or as a food in dietary intakes.

10. Exploring the reference foods

The **Query** view lets you explore all the reference foods in your licensed data sources (as well as all the documents in the FoodWorks database). You click an item to display its nutrient composition. You can rank the search results based on a specific nutrient or component.

For more on reference foods and the data sources which contain them, see *About the food composition data* on page 15

The usual view of the FoodWorks window is onto your database and all its folders and documents. In contrast, the **Query** view gives you a view into your reference data sources.

Basics—Using the Query view

Here are the basic ways to work in the Query view. In *Figure 4*, the boxes with letters A, B, C and so on, show the procedures detailed in *Basic procedures* on page 63.

To display the **Query** view: Click the **Query** button on the FoodWorks toolbar. To return to the usual database view, click the **Query** button again.



Query button on toolbar

Figure 4—The Query View: Basics

A. Select the data sources to search in.

B. To include your own documents in the search: select this checkbox.

C. Type your search item here.

The search results are shown in this middle pane.

D. The search results. Select an item (here **apple, dried**) to see its analyses on the right.

E. In the Analysis Pane, select a nutrient to focus on (here **Vitamin C**). It is then shown for each food in the search results.

F. To rank the foods by the selected nutrient, click one of the units, for example, **100g**. Click again to reverse the ranking.

Click here to toggle between the Query view and the standard view of FoodWorks.

The Analysis Pane showing the analyses for the food selected in the search results.

Food	Source	100g	1MJ	100gDW
Apple strudel, commercial		1.98	4.19	
Apple strudel, homemade		2.54	4.69	
Apple turnover		1.31	2.77	
Apple, baked, peeled		17.78	26.85	
Apple, baked, unpeeled		13.36	20.52	
Apple, canned				
Apple, dried	AusFoods 2019	9.00	7.31	11.05
Apple, fresh, bonza, peeled	AusFoods 2019	4.00	15.44	25.48
Apple, fresh, bonza, unpeeled	AusFoods 2019	2.00	8.20	13.61
Apple, fresh, fuji, peeled				
Apple, fresh, fuji, unpeeled				
Apple, fresh, golden delicious, peeled				
Apple, fresh, golden delicious, unpeeled				
Apple, fresh, granny smith, peeled				
Apple, fresh, granny smith, unpeeled				
Apple, fresh, jonathon, peeled				
Apple, fresh, jonathon, unpeeled	AusFoods 2019	5.00	22.12	31.22
Apple, fresh, other, green skin, peeled	AusFoods 2019	5.00	22.22	33.56
Apple, fresh, other, green skin, unpeeled				
Apple, fresh, other, other, peeled				
Apple, fresh, other, other, unpeeled				
Apple, fresh, other, red skin, peeled				
Apple, fresh, other, red skin, unpeeled				
Apple, fresh, pink lady, peeled				
Apple, fresh, pink lady, unpeeled				
Apple, fresh, red delicious, peeled	AusFoods 2019	4.00	15.44	25.48
Apple, fresh, red delicious, unpeeled	AusFoods 2019	6.00	24.19	38.71
Apple, fresh, red delicious, unpeeled, sliced	AusFoods 2019	4.00	15.44	25.48
Apple, fresh, red delicious, unpeeled, sliced, dried	AusFoods 2019	2.00	9.01	15.04
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW	AusFoods 2019	3.17	13.36	20.52
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ	AusFoods 2019	1.97	6.40	10.35
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW	AusFoods 2019	2.20	11.44	18.65
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW, 1MJ	AusFoods 2019	3.16	10.76	16.75
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW	AusFoods 2019	3.54	19.94	30.33
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ	AusFoods 2019	0.00	0.00	0.00
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW	AusFoods 2019	0.00	0.00	0.00
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ	AusFoods 2019	22.00	14.05	23.91
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW	AusFoods 2019	6.00	4.04	6.52
Apple, fresh, red delicious, unpeeled, sliced, dried, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ, 100g DW, 1MJ	AusFoods 2019	6.00	3.77	6.45

Basic procedures

 To search for foods in the Query view:

A. Set up your search

 To find foods in selected data sources and/or in your open FoodWorks database:

1. To show the Query view, on the toolbar, click **Query**.
2. Under **Search In**, select or de-select data sources as required.
3. If you want to include FoodWorks documents from your open database in the search, below the **Search In** list, select the **Show documents from this database** check box.

B. Type in your search term

 To search for an item:

- In the **Search** box, type part of the name of the food(s) or recipe(s) that you want to find.

The search results are shown in the middle pane of the **Query** view.

C. View analyses for a selected food

 To show the nutrient analyses for a food listed in the search results:

- In the middle pane of the **Query** view, click the food.

The nutrient values for that item are displayed in the Analysis Pane on the right of the **Query** view. If you see question (?) marks, it indicates that FoodWorks cannot calculate this value or that the value is missing in the data source. See A. *Symbols in the analyses* on page 75 for information on how to resolve question marks.

D. Show a nutrient for all foods listed

 To show the value for a particular nutrient for all the foods listed in the search results:

- In the Analysis Pane of the **Query** view, click the nutrient of interest.

The nutrient column (with the nutrient name as its title) appears to the right of the results list.

E. Rank foods by a nutrient

 To rank the foods in the search results by nutrient:

1. To select the nutrient, in the Analysis Pane, click the nutrient of interest.
2. In the middle pane, click the title of the column (the unit of analysis) by which you want to rank the results. You can order the foods by the nutrient value per:
 - 100g
 - 1MJ (the value for the quantity of the food or recipe that contributes 1MJ of energy)
 - 100gDW (the value for 100g of the food or recipe where all water has been removed, that is, on a 'dry weight basis')
3. To change the order of the ranking (from ascending or descending, or vice versa), click the title of the column again.

Searching for foods high or low in a nutrient

To search the data sources and/or your documents for a food high or low in a nutrient:

1. Set up your search: Under **Search In**, select or de-select data sources as required. To include FoodWorks documents from your open database in the search, below the **Search In** list, select the **Show documents from this database** check box.
2. If necessary, clear the **Search** box.
3. In the Analysis Pane, click the nutrient of interest.

Example—Clicking Calcium

...the name of the selected nutrient is displayed in the tab and the values are shown for Calcium for each item.

Here, the user has clicked on Calcium in the Analysis Pane...

The tab in the Search results now displays the nutrient you have chosen, and the value for each item is shown.

4. To order the results from least to most: In the search results, click the unit of analysis (e.g. per **100g**). Then, click the unit of analysis again to order the results from most to least.

If you want to show the ranked list for all the foods in the selected data sources, as in the following example, make sure you clear the **Search** box first.

Example—Ranking per 100g for Calcium, most to least

The screenshot shows the FoodWorks interface with a search for 'Calcium (mg)'. The results are sorted by the 100g column in descending order. The highlighted item is 'Fish, sardine, cooked' with 930.14 mg per 100g.

Food	Source	100g	1Ml	100gDW
Herbs, basil, dried	AusFoods 2019	2090.9	1932.77	2323.23
Fruit blend	AusFoods 2019	2090.91	832.77	2323.23
Beverage base, malt milk flavour	AusFoods 2019	1910.00	1200.33	1946.99
Herbs, Thyme	AusFoods 2019	1890.00	1598.34	2049.89
Herbs, sage	AusFoods 2019	1652.00	1251.52	1795.65
Herbs, mixed, dried	AusFoods 2019	1627.13	1399.29	1782.96
Spice, oregano	AusFoods 2019	1597.00	1457.12	1772.48
Spice, marjoram	AusFoods 2019	1597.00	1457.12	1772.48
Seeds, poppy	AusFoods 2019	1438.00	685.74	1529.79
Shrimp paste	AusFoods 2019	1380.00	3502.54	2464.29
Milk, cow, dry powder, skim	AusFoods 2019	1100.00	724.16	1149.43
Protein powder, whey based, prot	AusFoods 2019	1100.00	634.74	1115.62
Spice, cinnamon	AusFoods 2019	1002.00	998.01	1120.81
Cheese, cheddar, natural, plain, ext	AusFoods 2019	995.00	897.20	1880.91
Milk, goat, dry powder	AusFoods 2019	976.00	476.56	1003.08
Cheese, parmesan, dried	AusFoods 2019	970.00	497.69	1251.61
Cheese, parmesan, fresh	AusFoods 2019	970.00	573.96	1349.10
Cheese, romano	AusFoods 2019	963.00	604.14	1439.46
Cheese, mozzarella, reduced fat	AusFoods 2019	950.00	772.99	1708.63
Breakfast cereal, mixed grain, rice	AusFoods 2019	936.00	560.81	973.99
Spice, cumin seeds	AusFoods 2019	931.00	522.45	1013.06
Fish, sardine, cooked	AusFoods 2019	930.14	1354.77	2447.34
Herbs, rosemary, dried	AusFoods 2019	905.71	796.49	984.47
Cheese, processed, with added ph	AusFoods 2019	886.00	1242.64	2226.13
Cheese, cheddar, processed, extra l	AusFoods 2019	886.00	1099.26	1951.54
Cheese, cheddar, processed, reduc	AusFoods 2019	886.00	840.61	1865.26
Cheese, jarlsberg, light	AusFoods 2019	885.00	816.72	1762.95
Cheese, swiss	AusFoods 2019	885.00	546.30	1413.74
Cheese, jarlsberg, regular	AusFoods 2019	885.00	546.30	1413.74
Milk, cow, dry powder, regular fat	AusFoods 2019	850.00	399.62	879.01
Cheese, cheddar, other, reduced fa	AusFoods 2019	835.12	775.67	1641.52
Cheese, pizza blend	AusFoods 2019	811.00	610.69	1420.32
Cheese, gouda	AusFoods 2019	810.00	504.67	1314.94
Cheese, edam	AusFoods 2019	810.00	536.42	1347.75
Beverage base, chocolate flavour, i	AusFoods 2019	800.00	532.27	809.72
Cheese, cheddar, natural, plain, red	AusFoods 2019	800.00	584.80	1372.21
Spread, cheese, cream cheese, reds	AusFoods 2019	800.00	868.62	2105.26
Spread, cheese, cheddar	AusFoods 2019	800.00	673.97	1629.33
Spread, cheese, cream cheese, regu	AusFoods 2019	800.00	658.44	1839.08
Cheese, cheddar, natural, oth	AusFoods 2019	776.95	483.49	1202.80

11. Printing and publishing

This chapter explains your options for printing, publishing and sharing your FoodWorks data.

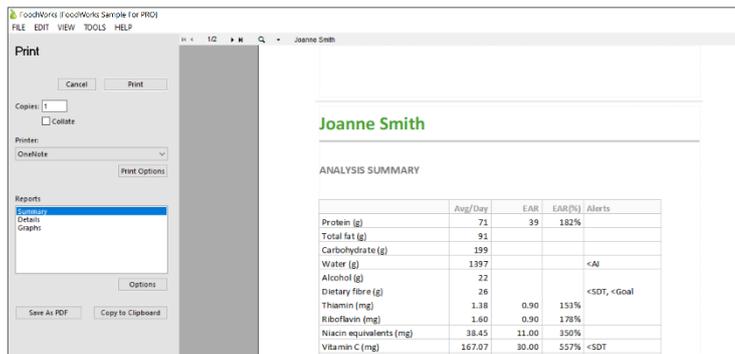
Printing a document

To print a FoodWorks document (such as a dietary intake, recipe or meal plan):

1. Open the document.
2. On the toolbar, click **Print**.



The Print window is shown, with a preview of your document on the right:



3. To set printing options such as the paper size, orientation and margins, click **Print Options**. Edit as required, then click **OK**.
4. Click the report you wish to print.
5. Click **Print**.

TIP: Saving a document as a PDF

To save a document as a PDF, on the toolbar, click **Print**, then click **Save As PDF**.

Modifying a report

To see what is included in a report, or to modify what is included:

1. Click **Options**, and select or de-select sections as required.
2. Then click **OK**.

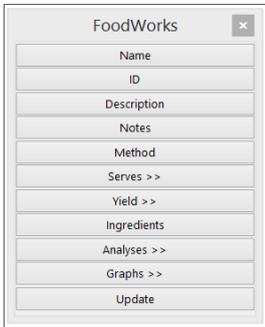
Publishing a FoodWorks document to Word

FoodWorks has a publishing tool that enables you to streamline publishing your documents to Word. You can create Word templates appropriate for publishing your FoodWorks documents and use these templates whenever you publish to Word.

 To publish a FoodWorks document using Microsoft® Word:

1. In FoodWorks, open the document.
2. On the **Tools** menu, click **Publish with Microsoft Word**. FoodWorks now opens Microsoft Word and Word displays the templates for you to choose from.
3. Click the template in Word that you want to use.
4. The Word document opens, and the FoodWorks **Publish with Microsoft Word** tool appears:

FoodWorks Word Publisher tool (for recipes)



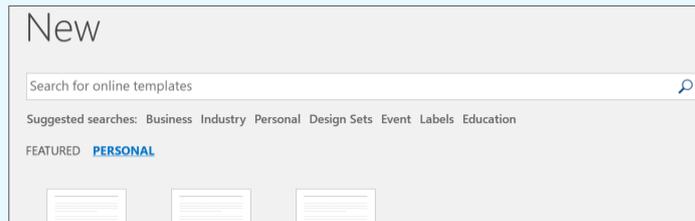
Name
ID
Description
Notes
Method
Serves >>
Yield >>
Ingredients
Analyses >>
Graphs >>
Update

5. In the Word document, place the cursor where you want the data to appear, then on the **Publish with Microsoft Word** tool, click the button for the type of data you want to insert.
6. Repeat step 5 until you have entered all the data you require.
7. Format the Word document as you require.

TIP: Save your Word document as a Word template

Open the Word document to which you have published FoodWorks data that you would like to use as a template. On the **File** menu, click **Save As**. Click **Browse**, then from the **Save as type** menu, select **Word Template (*.docx)**, enter a file name and click **Save**.

To use your template, when you next go to publish from FoodWorks to **Microsoft Word**, in Word, click the **Personal** tab, and you should see your saved template.



Emailing a FoodWorks database

To email your database to another FoodWorks user, on the **File** menu, click **Send Database To** and choose **Mail Recipient**.

Or simply attach your FoodWorks database to an email.

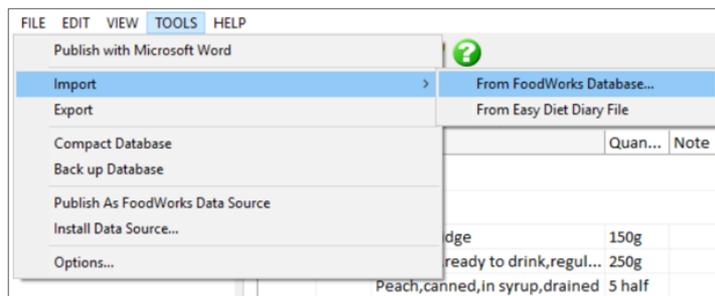
To open a database that you receive by email:

1. Save the attachment.
2. In FoodWorks, on the **File** menu, click **Open FoodWorks Database File**, then navigate to the database file, and click **Open**.

Importing folders from another FoodWorks database

To import FoodWorks documents from another FoodWorks database:

1. On the **Tools** menu, click **Import**, then click **From FoodWorks Database**.



2. Open the Windows folder containing the FoodWorks database from which you wish to import.
3. Select the database file to open, then click **Open**.
4. Select the FoodWorks folders that contain the documents you wish to import.
5. Click **Import**.

Publishing your foods and recipes as a data source

If you want your recipes and foods to be available as reference foods (with nutrient composition) to other FoodWorks users, you can publish your FoodWorks database (just the recipes and foods) as a FoodWorks *data source*.

NOTE: About publishing a data source

When you publish your data as a FoodWorks data source, it is *automatically* available to you and other users on this computer.

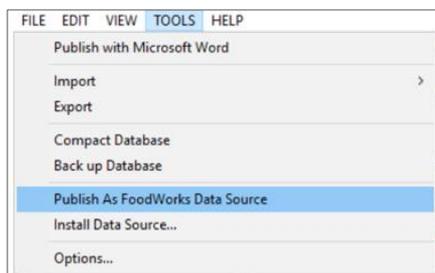
If you are working on a local area network where multiple users are accessing the same FoodWorks databases, it is recommended that, *prior to publishing*, you place the database in the same folder as the databases that will use the new data source. Then, when you publish your database as a data source, the new data source is automatically available for other users on the local area network.

If you want to send this data source to other users, first, you need to compress the data source into a *FoodWorks cabinet file*. Then you can email it, post it to a web site, or copy it to a shared folder.

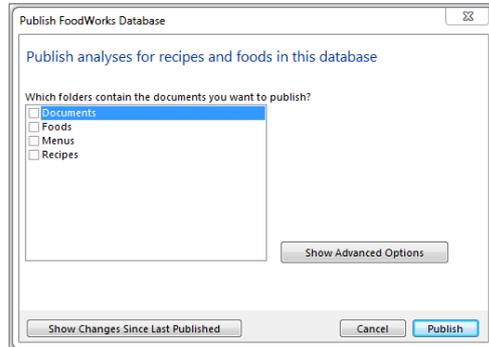


To publish the data from your FoodWorks database as a data source for other FoodWorks users:

1. Open the FoodWorks database.
2. On the **Tools** menu, click **Publish as FoodWorks Data Source**.



3. Follow the instructions shown. You can choose which folders (of recipes and foods) to publish.



4. Then Under **Show Advanced Options**, you can choose:

- which nutrients to publish
- whether to compress the exported file into a FoodWorks cabinet file (.FWC)

NOTE: Sending a FoodWorks data source

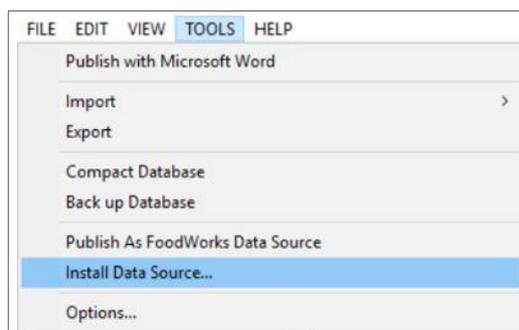
If you want to send this data source to other users, make sure that you select **Create a FoodWorks Cabinet file**.

Installing a FoodWorks data source



To install a FoodWorks cabinet file (extension .FWC) containing a FoodWorks data source:

1. On the FoodWorks **Tools** menu, click **Install Data Source**. Alternatively, double-click the cabinet file containing data source.



2. Follow the instructions shown.

TIP: Checking that the data source is installed



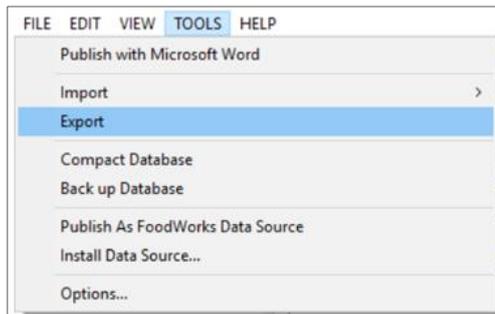
To check that the new data source is installed: Open the FoodWorks database that is to use the data. Click **File**, then click **Database Properties**. Click **Food Selections** and the new data source will be listed.

Exporting your data for further analysis

You can export your data to Microsoft Access for further analysis in other software such as a statistical package.

 To export data from a FoodWorks database to Microsoft Access:

1. Open the FoodWorks database.
2. On the **Tools** menu, click **Export**.



3. Follow the instructions shown.

FoodWorks creates a new Microsoft Access database containing the data from your FoodWorks database, in the location that you specify. You can then use Microsoft Access or any other compatible tool to query, analyse or produce reports on the documents in your database.

12. Importing diaries from Easy Diet Diary

Users of Easy Diet Diary (our mobile app for iPhone and Android phones) can send their diary to you to open and analyse in FoodWorks. When a client chooses to share their diary with you, you receive a link to download their diary in an email we send to you on behalf of your client. You can open their diary in FoodWorks straight away, or you can save the file for use later.

More information

For more about Easy Diet Diary, visit easydietdiary.com. To download Easy Diet Diary, visit the Apple App store or the Google Play Store and search for 'Easy Diet Diary'. For help for your clients in using Easy Diet Diary, including how to email their diary to you, visit the Easy Diet Diary support site: support.easydietdiary.com.

Opening a diary in FoodWorks from the email

 To open a diary in FoodWorks:

1. Locate the email sent by us on behalf of your client and click the “Open in FoodWorks” button.
2. Depending on the settings of your web browser. The Easy Diet Diary file will either be automatically downloaded (usually in the Downloads folder), or you will be prompted to save the file to suitable location.
3. To open the diary in FoodWorks, double-click the downloaded file.

By default, the diary is automatically imported into a database, **EasyDietDiary.fwb** in the Documents folder. See below if you want to open the diary in a different FoodWorks database.

Set the default destination database

If you wish, you can set another database and location as the default database for Easy Diet Diary diaries.

 To set the FoodWorks database to which you want to import diaries from Easy Diet Diary:

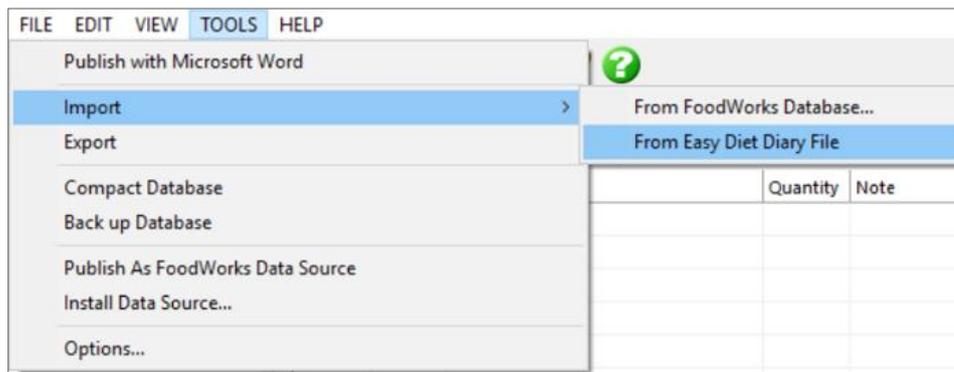
1. Open the database to which you want to import the diaries.
2. On the **Tools** menu, click **Options**.
3. On the **General** tab, tick the checkbox: 'Make this database the destination for EDD diaries.'
4. Click the **OK** button.

Opening a diary from within FoodWorks

If you are working in FoodWorks, you can also import the diary into your currently open database.

 To open the diary in **the currently open database**:

1. First, from the email, save the diary in a suitable location.
2. On the **Tools** menu, click **Import**, then **From Easy Diet Diary File**.



3. Navigate to the Easy Diet Diary file.
4. Click **Open**.

Tips

- **Recipes:** Recipes imported from the diary are shown in blue. To see the ingredients, click right on the recipe name, then click **Open**. The quantities of the ingredients are shown for the whole recipe; the portion eaten is shown as a percentage of the whole recipe. (To see the recipes as documents in their own right, in the Folder box, click right and select **Show Hidden Folders**.)
- **Exercise:** Exercise activity from the diary is shown at the bottom of the list of foods for each day.
- **Personal details:** Your client's details from Easy Diet Diary such as age, weight and height are shown in the **General** tab.

A. Symbols in the analyses

Sometimes in the Analysis Pane, instead of numbers you will see question marks (?) for one or more or all the nutrients. Or you might see a > ('greater than') sign in front of one or more value. A question mark indicates that for some reason FoodWorks cannot calculate a nutrient value. When only a partial result is possible, FoodWorks displays the 'greater than' sign before the partial result.

Example recipe with question marks in Analysis Pane

Ingredient	Quantity	Note	Weight	Energy	Protein
Sun Rice Arborio Risotto Rice	150g		150.0	2229	9.45
Mixed vegetables, canned, carr...	missing		?	?	?
Stock, powder, reduced salt	1 tsp		4.0	36	0.45
Scrambled eggs, chicken, plain, ...	200g		200.0	1090	21.30
Ginger, fresh, raw	1g		1.0	1	0.01

Question marks (?) in the Analysis Pane.

Causes of question marks and 'greater than' signs

Question marks (?) and 'greater than' (>) can be caused by missing data.

The data might be missing from a FoodWorks document. It might be that you omitted some data on the **Foods** tab (for a food record) or **Ingredients** tab (for a recipe) or the **Nutrients** tab (for a food). In the recipe above, for example, a quantity has been omitted for an ingredient.

Or the data might be missing in a reference food.

Sometimes a calculation is impossible. For example, if you are investigating protein, for water, the percentage of energy from protein appears as a question mark because the calculation $0/0$ is undefined.

Investigating question marks and 'greater than' signs

Here are some suggestions for investigating question marks or 'greater than' signs appearing in the Analysis Pane of a dietary intake or recipe.

Find the problem items

1. Depending on whether you have open a dietary intake or recipe, click the **Foods** or **Ingredients** tab.

- In the Analysis Pane, click a nutrient showing a question mark or 'greater than' sign. A column appears on the right side of the foods/ingredients grid showing values for this nutrient. There will be question marks beside the problem items.

Example recipe

The user has clicked on **Protein** in the Analysis Pane to bring up this column. The problem food is Mixed Vegetables.

Ingredient	Quantity	Note	Weight	Energy	Protein
Sun Rice Arborio Risotto Rice	150g		150.0	2229	9.45
Mixed vegetables, canned, carr...	missing		?	?	?
Stock, powder, reduced salt	1 tsp		4.0	36	0.45
Scrambled eggs, chicken, plain, ...	200g		200.0	1090	21.30
Ginger, fresh, raw	1g		1.0	1	0.01

If all foods have question marks or 'greater than' signs

If **all** foods in the dietary intake or recipe have a question mark or 'greater than' sign for a nutrient, there might be a global problem with the dietary intake or recipe. For example, for a recipe, check that a valid value been entered for the yield.

Check a valid quantity had been entered

In the foods/ingredients grid, check that a quantity for the problem item has been entered. If it is missing, enter the quantity and click **Save**.

Open a problem FoodWorks document



If the problem item is a FoodWorks document (food or recipe):

- In the foods/ingredients grid, right-click it, then click **Open**. (Remember you cannot open a reference food.)

The dietary intake or recipe might have nested recipes within it.

- To make sure you can see all the FoodWorks documents and reference foods that the dietary intake or recipe contains: On the FoodWorks toolbar, click the **View Foods/Ingredients tree** button.
- To open the problem FoodWorks document (food or recipe) from the **Food/Ingredient** tree dialog, double-click it.

Investigate a problem FoodWorks document



To investigate the problem FoodWorks document (food or recipe): Open the document, then click the **Nutrients** tab (for foods) or **Ingredients** tab (for recipes) tab and check for missing data. Enter any required data and click **Save**.

Investigate a problem reference food

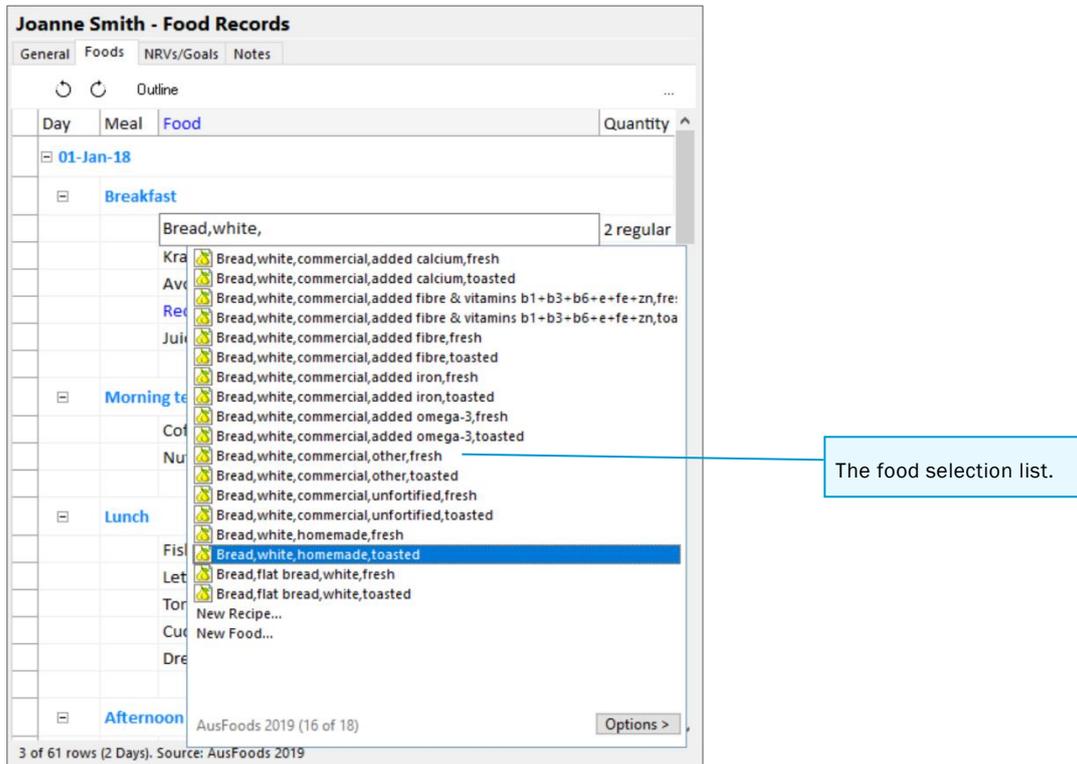


To investigate a problem reference food:

1. Find out the data source it comes from—this data source might not contain values for this nutrient: In the foods/ingredients grid, click the name of the food, then press **F2**. The data source for the reference food is shown at the bottom of the food selection list.
2. If the reference food does not have the nutrient data you need, your options include to:
 - Create your own food.
 - Disable the nutrient for this database—On the **File** menu, click **Database Properties**, then click **Nutrients & Components**, then de-select the nutrient and click **OK**.

B. Using keywords for selecting foods

This appendix explains options that you can set for the food selection list used when selecting foods or ingredients for a food record or recipe.

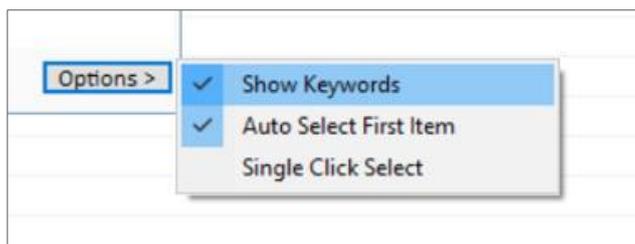


- To show the food selection list at any time: Click the **Foods** or **Ingredients** tab of the food record or recipe document. Click in the **Food** or **Ingredient** column and start typing, or simply press **F2**.

Using keywords in the food selection list

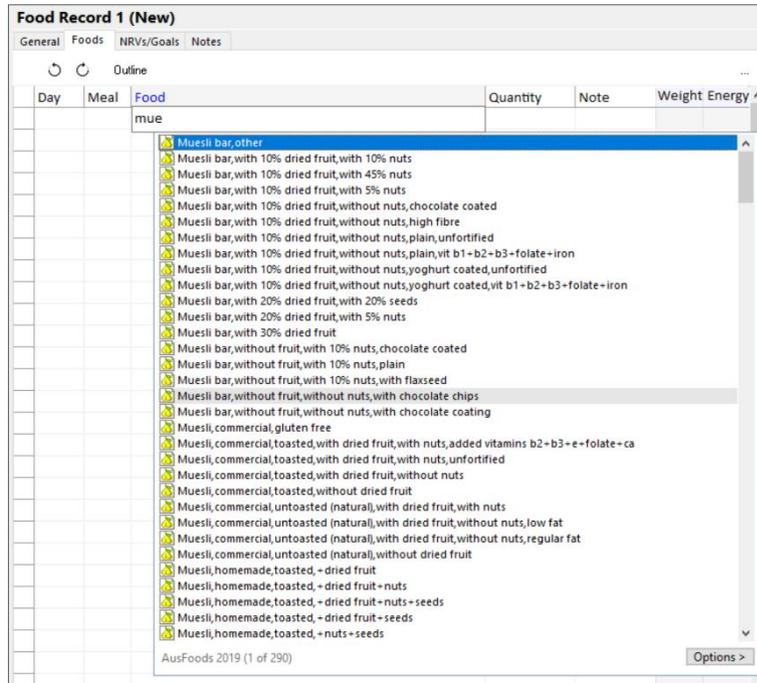
In the food selection list, you can turn on **keywords** to help guide you through the list of foods.

- To turn on keywords:
 - At the bottom of the food selection list, click **Options**.
 - Then click **Show Keywords**.

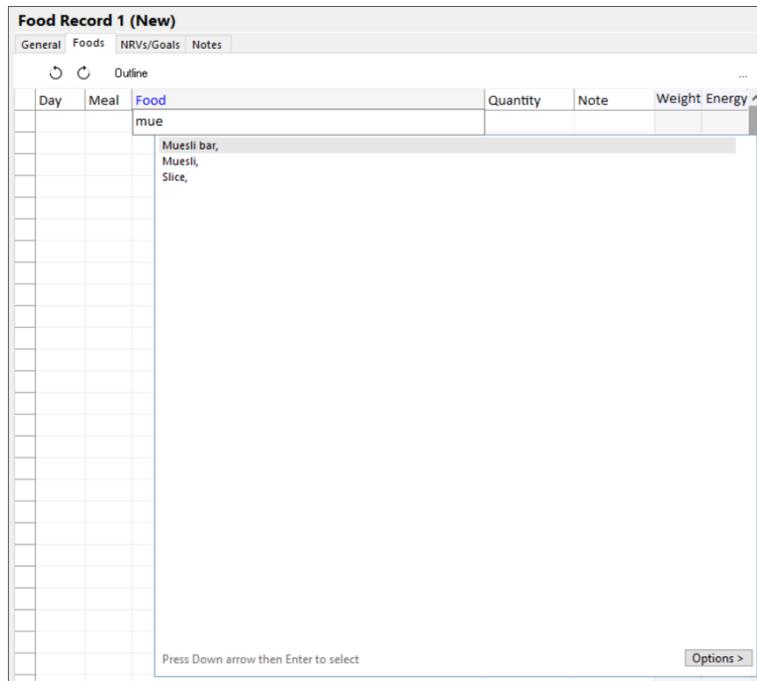


Now instead of a flat list of foods matching the letters you have typed, the list shows categories of foods.

Example of food selection list without keywords



Example of food selection list with keywords turned on



 To find the food you want using the keywords:

1. Use the arrow keys or the mouse to select the keyword, then press **Enter**.
2. Continue until you find the actual food item to select — it will have an icon beside it and will be a recipe, food or reference food.

Example of food selection list with reference food

Food Record 1 (New)

General Foods **NRVs/Goals** Notes

Outline ...

Day	Meal	Food	Quantity	Note	Weight	Energy
		mue				
		Muesli bar, other				
		Muesli bar, with 10% dried fruit, with 10% nuts				
		Muesli bar, with 10% dried fruit, with 45% nuts				
		Muesli bar, with 10% dried fruit, with 5% nuts				
		Muesli bar, with 10% dried fruit, without nuts, chocolate coated				
		Muesli bar, with 10% dried fruit, without nuts, high fibre				
		Muesli bar, with 10% dried fruit, without nuts, plain, unfortified				
		Muesli bar, with 10% dried fruit, without nuts, plain, vit. b1+b2+b3+folate+iron				