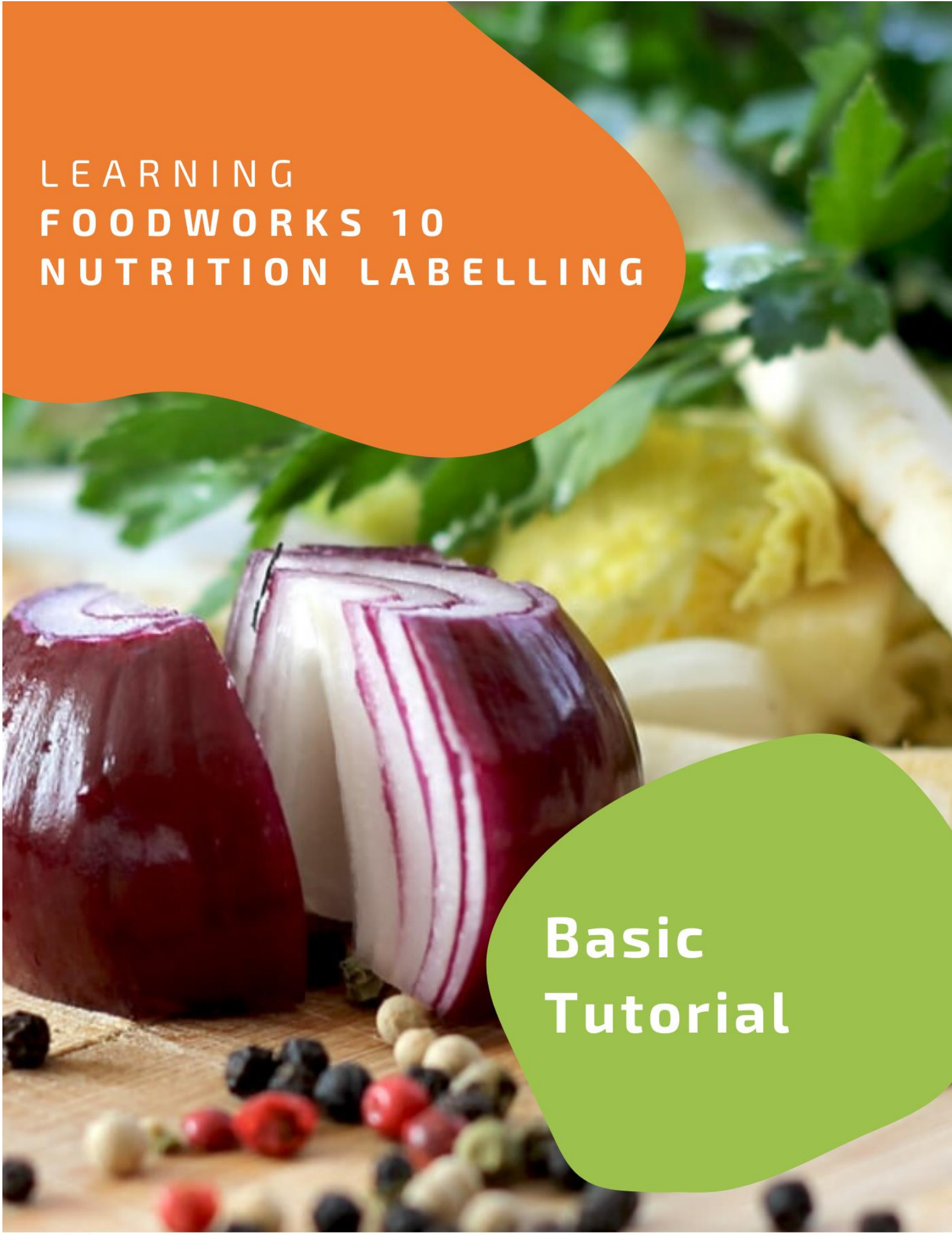

LEARNING
FOODWORKS 10
NUTRITION LABELLING

Basic Tutorial

FoodWorks

xyris

Release 1 – 6 MAY 2020

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Contents

About this tutorial

*This **Basic Tutorial** will step you through using **FoodWorks 10** to create recipes and to generate their nutrition labels.*

Who this tutorial is for

This tutorial is for you if you are new to **FoodWorks** and want to get started creating nutrition labelling information for your food products.

To create nutrition labels you need **FoodWorks 10 Nutrition Labelling** or **FoodWorks 10 Premium**.

What you need to know

*To produce nutrition labels you need a good working knowledge of the **Australia New Zealand Food Standards Code** and other relevant legislation for food labelling in Australia and New Zealand.*
You also need sound food technology knowledge.

This tutorial does *not* attempt to teach or reproduce the regulations surrounding food labelling in Australian and New Zealand. You can access the *Food Standards Code*, and assistance with implementing it, at www.foodstandards.gov.au. Note that using **FoodWorks** in no way ensures that you are complying with the relevant legislation and regulations. You need to seek independent expert legal advice to ensure this.

This tutorial also assumes that you have a broad knowledge of the advantages and limitations of computerised nutrition analysis as well as the necessary food technology knowledge. You should use your own technical expertise to verify any results generated by **FoodWorks** before relying on them for any significant purpose.

What you'll learn

1. **FoodWorks** basics – take a tour of the **FoodWorks** window
2. How to create a **FoodWorks** database for all your work
3. How to enter common types of ingredients
4. How to create a recipe
5. How to view and refine a label
6. How to print your labels
7. How to export your label data for others to use

This tutorial does **not** cover advanced features such as Country of Origin Labelling or Health Star Ratings.

You'll have the opportunity to:

- Create a **FoodWorks** database to play in
- Enter 4 different types of raw material. The examples used are walnuts, pumpkin, scone premix and water.
- Construct a simple scone recipe using the raw materials.
- View, refine, print or export the recipe's label.

Before you start

This tutorial assumes that you have already installed **FoodWorks 10 Nutrition Labelling** (or **FoodWorks 10 Premium**).

Time needed

Set aside about an hour to complete this tutorial.

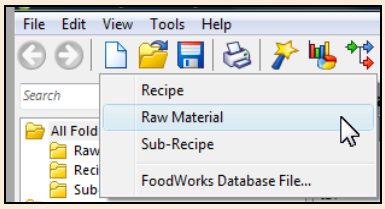
How to use this tutorial

This is a self-paced tutorial. You can simply read it through – but our recommendation is that you use the tutorial at your computer, working through all the examples.

A mouse icon and background shading indicate an instruction for you to follow on your computer. For example:

To create a new raw material:

- On the **FoodWorks** toolbar, click **New**, then click **Raw Material**.



After this tutorial

FoodWorks Nutrition Labelling is a powerful tool and has many more features and capabilities than are shown in this tutorial.

For how to use some of the more advanced features, you can see other guides, videos and articles on the **FoodWorks** support site (**support.xyris.com.au**), under the topic **Using FoodWorks Nutrition Labelling**.

1 - A tour of FoodWorks

FoodWorks® Nutrition Labelling (and **FoodWorks® Premium**) is designed to assist you to produce nutrition labelling information that complies with the *Australia New Zealand Food Standards Code* and other legislation.

From your recipes, **FoodWorks** automatically generates nutrition information panels (NIPs), ingredient statements, allergen declarations, Country of Origin standard marks and statements, and Health Star Ratings. And **FoodWorks** offers advanced options to give you flexibility in designing and publishing your nutrition labels.

You can also use **FoodWorks Nutrition Labelling** to assist with **new product development** (however, this is not the focus of this tutorial). With **FoodWorks**, you can perform "what if" style calculations to evaluate the nutritional composition of possible new products and easily compare variations of a product.

Not all **FoodWorks** functionality is showcased here. This tutorial is designed to get you going with the basics of creating ingredients, along with recipes and their labels – and to give you a good foundation for learning more.

Take the tour

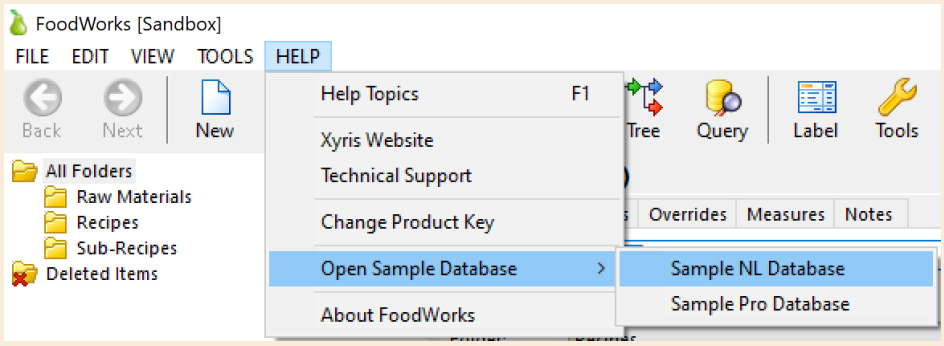
The **FoodWorks** window is your view onto your **FoodWorks** database.

To show you around **FoodWorks**, we'll use the **Sample NL database** supplied with **FoodWorks**. This sample database is already populated with a variety of documents - raw materials, sub-recipes and recipes – for you to explore.

Open the sample database

To open the sample database:

1. Start **FoodWorks 10**.
2. Follow the instructions to open an existing database, or if necessary, create one.
3. Then on the **FoodWorks** toolbar, click **Help**, then **Open Sample Database**, then select **Sample NL Database**.



Explore the FoodWorks window

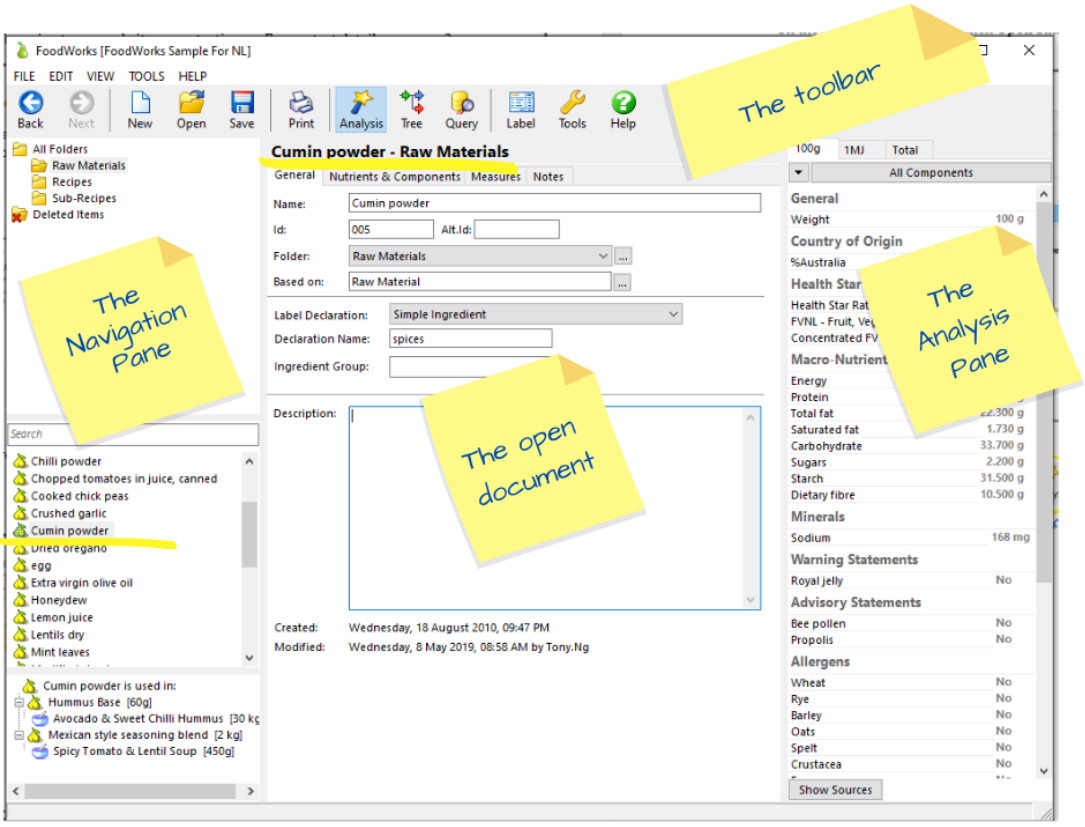
The **FoodWorks** window has four major sections:

A. The Navigation Pane (on the left) - showing the folders and documents in your database

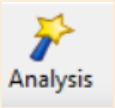
B. The open document (in the middle)

C. The Analysis Pane (on the right) – the nutritional analysis of the open document

D. The **FoodWorks** toolbar (below the main menu)

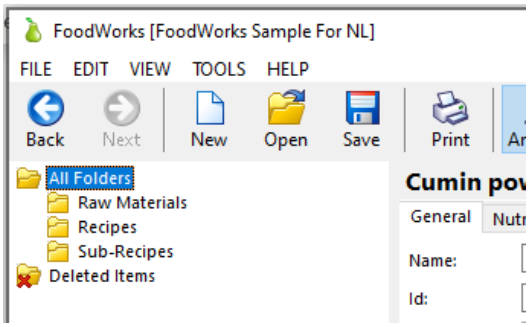


If the Analysis Pane is not displayed, on the toolbar click this button:

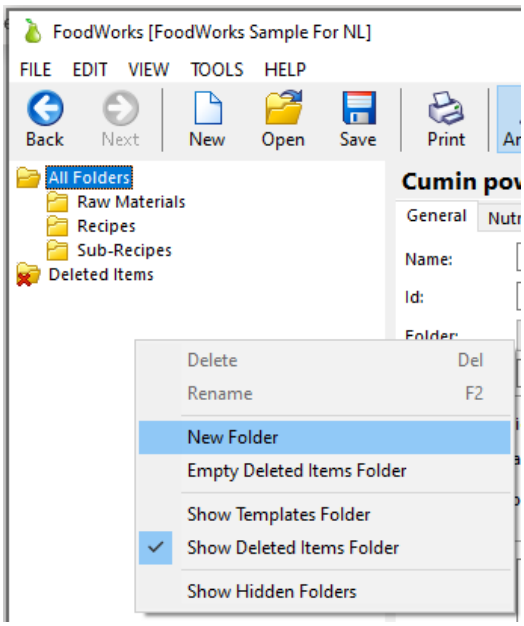


A. Navigation Pane

The Navigation Pane on the left, shows the folders in your database in the top section. The default folders provided are **Raw Materials**, **Recipes**, and **Sub-Recipes**.



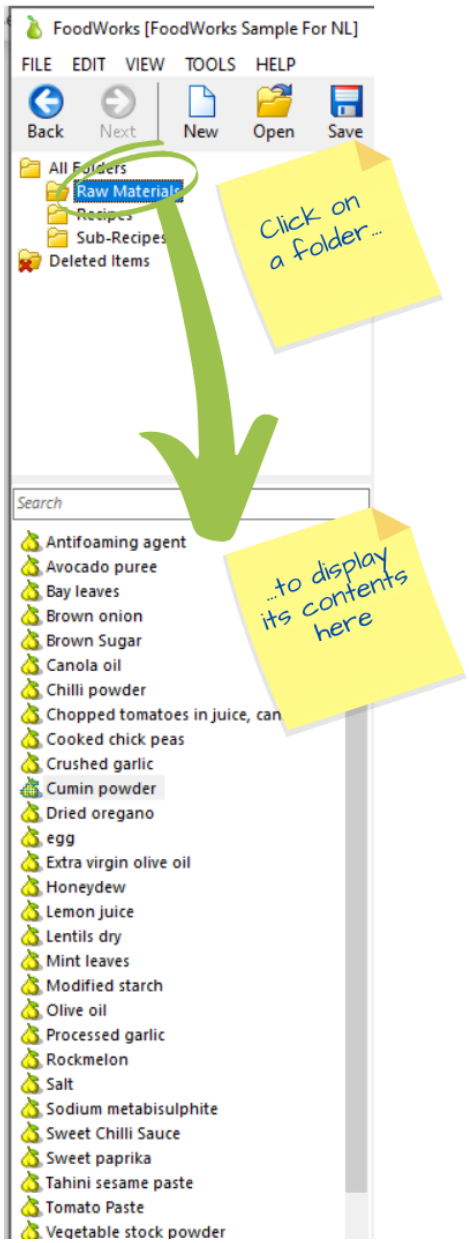
You can **add new folders** by right-clicking in the folder area, as shown below:



For example, if you have a large number of raw materials, you might want to create more folders, such as 'Wet Ingredients', 'Dry Ingredients', 'Fresh Veg'.

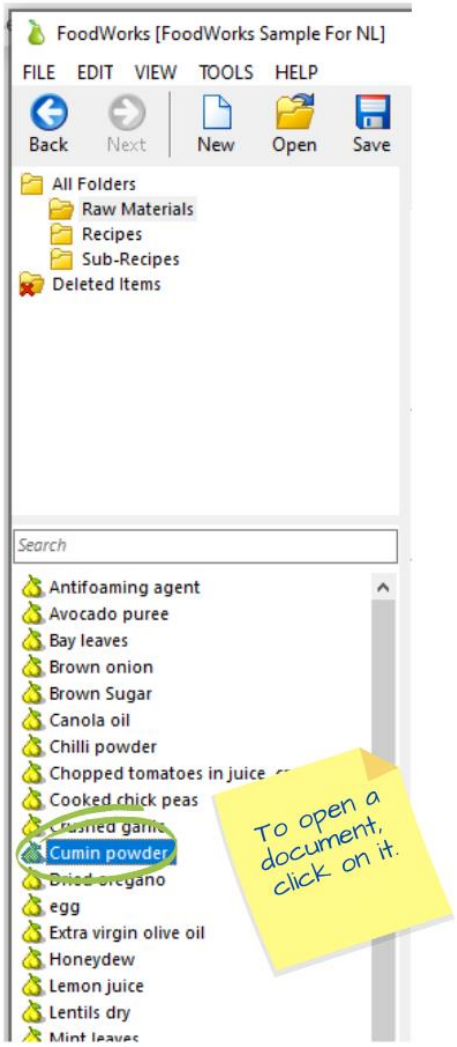
Try adding a new folder now – and then delete it again.

To open a folder and display the documents it contains, in the Navigation Pane, click on the folder. Its contents are then displayed below, as shown here.



Try clicking on each folder to display its contents.

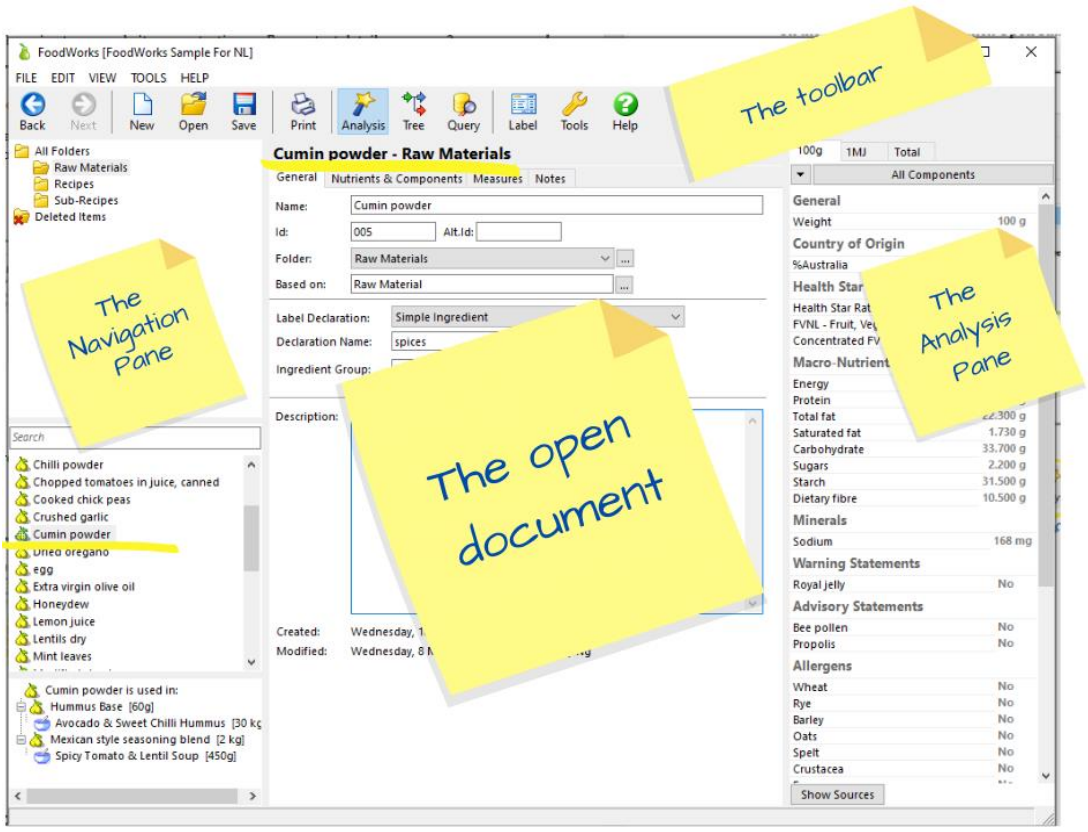
Then **to open a document** (a raw material, sub-recipe or recipe), in the Navigation Pane, click the document.



Click the **Raw Materials** folder, then click **Cumin powder** to open this raw material in the middle of the window.

B. Open document

The document selected in the Navigation Pane opens in the middle of the **FoodWorks** window.

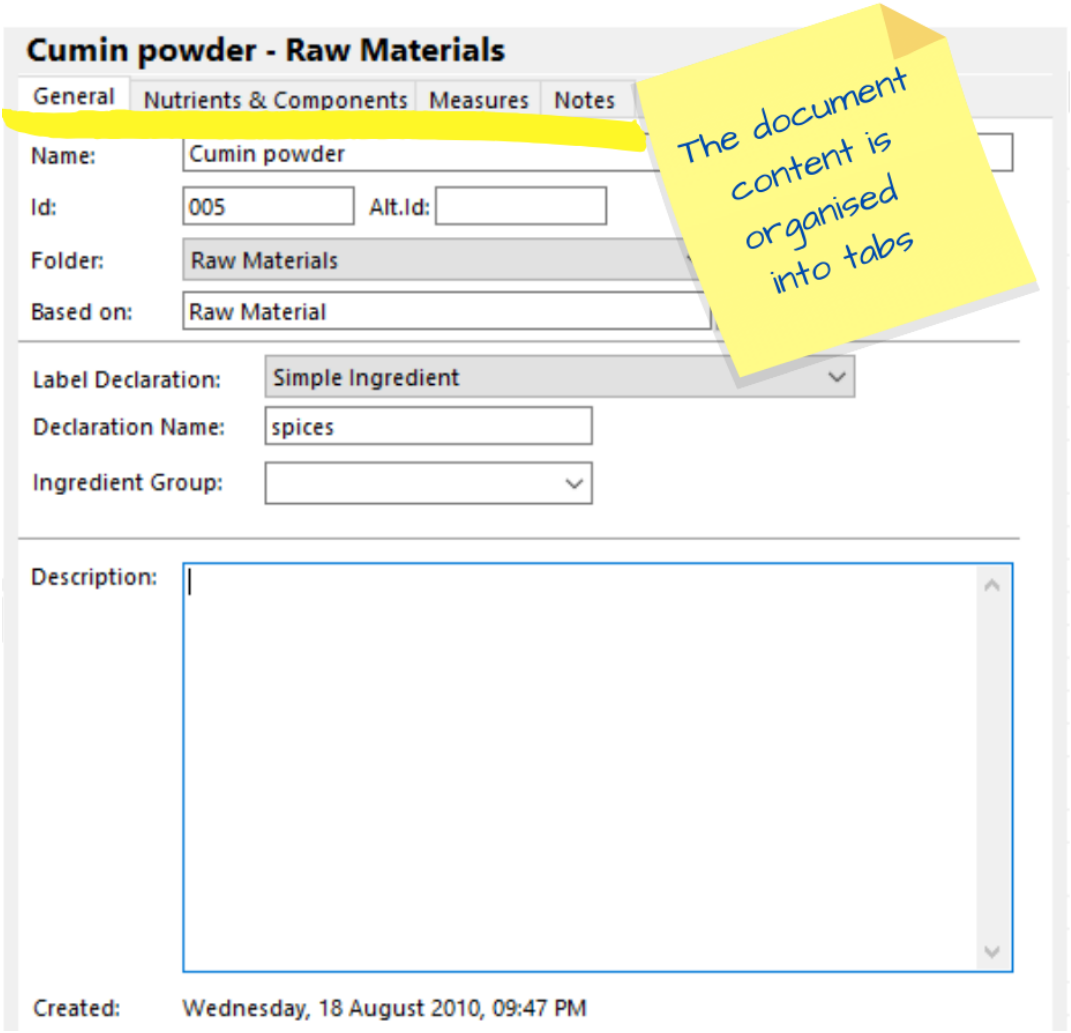


This middle pane is where you do your data entry as you create each of your ingredients and recipes.

The following types of document are available in **FoodWorks Nutrition Labelling**:

- Recipe – the final recipe for which you generate a label
- Sub-Recipe – a recipe used as an ingredient in final recipes
- Raw Material – an ingredient

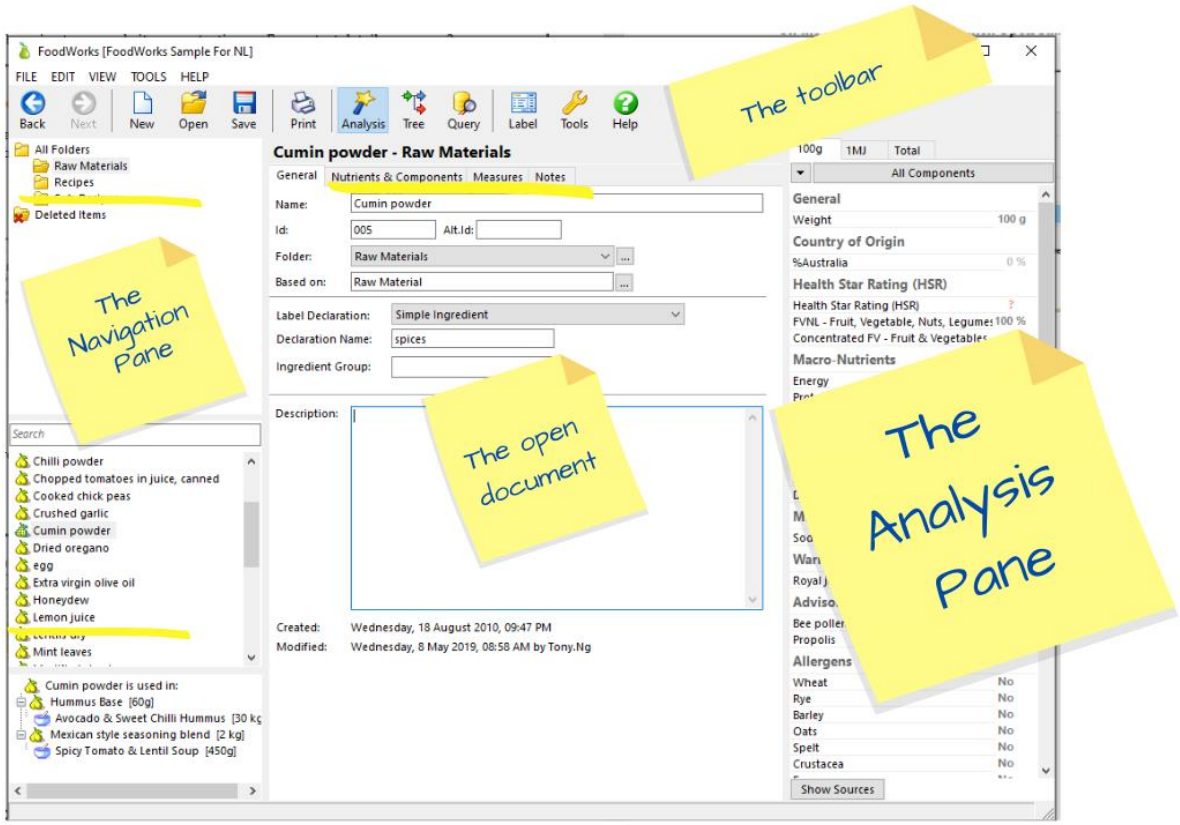
Each document has a series of tabs to organise its content. When you create a document, you enter its data onto each of these tabs.



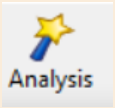
Click each tab in **Cumin powder**.

C. Analysis Pane

The Analysis Pane shows the nutritional analyses for the open document down the right of the **FoodWorks** window.

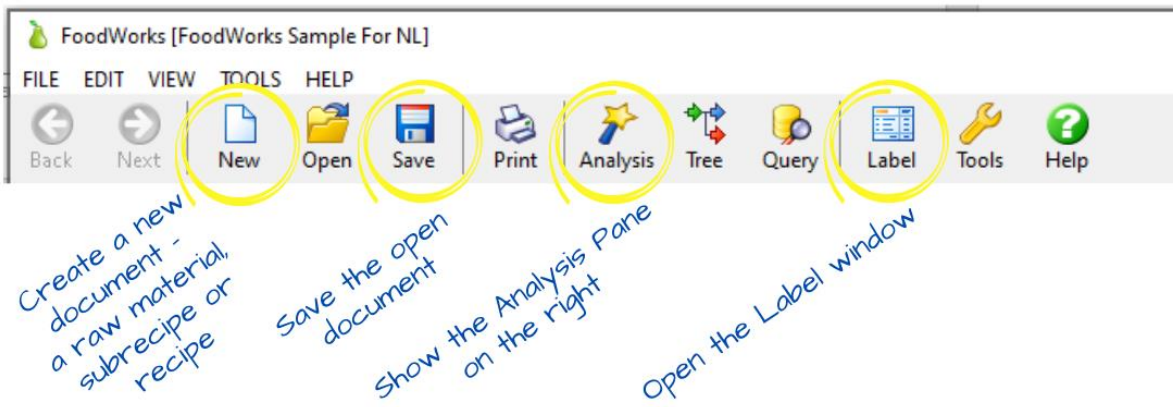


If the Analysis Pane is not displayed on the right, on the toolbar click this button:



D. Toolbar

To get started, here are the most important buttons for you to know on the **FoodWorks** toolbar:



2 - Create a FoodWorks database

*Your **FoodWorks** database is a repository for the work you do in **FoodWorks**. You store all the ingredients and recipes that you create here.*

A **FoodWorks** database is a Windows file (with the extension **.fwb**). So you can copy and move it like any other Microsoft Windows file.

For nutrition labelling tasks, you need a nutrition labelling database appropriate to your region (Australia or New Zealand). You choose the region when you create your database.

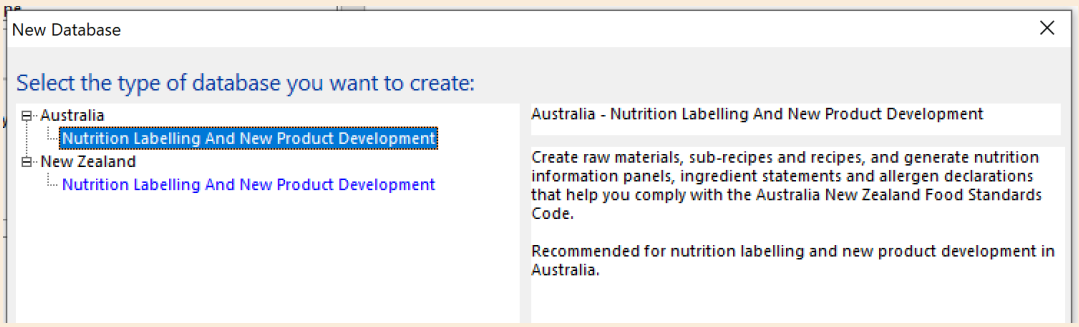
Note: Don't forget – Back up your database

*As for any important work you do, you should ensure that your **FoodWorks** database is backed up. So when you create your database, save it in a location that is regularly backed up.*

Create a new database to play in

To create a new database that you can use for the purposes of the exercises in this tutorial:

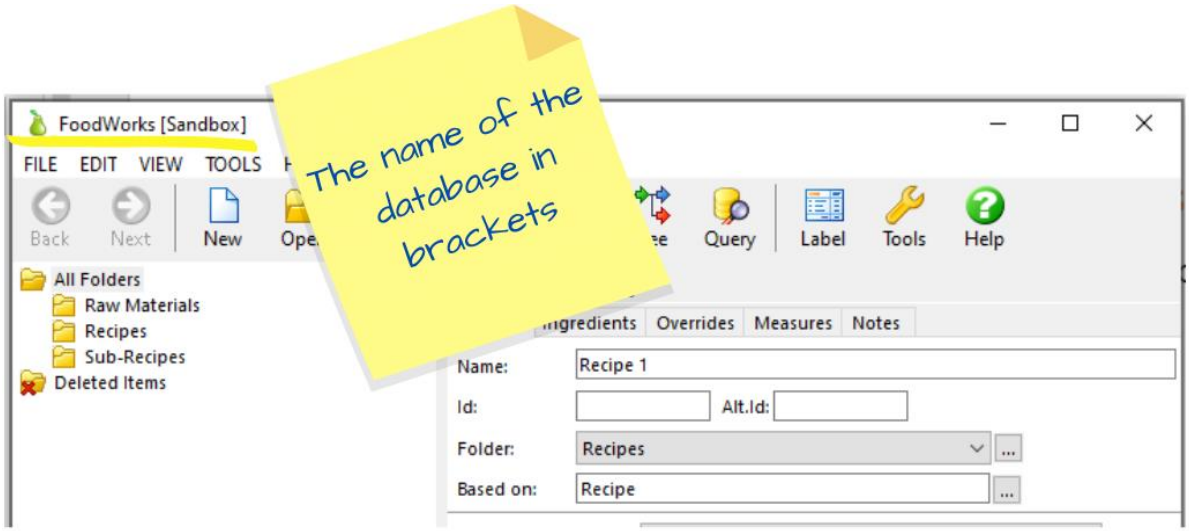
1. On the **FoodWorks File** menu, click **New**, then **FoodWorks Database File**.
2. Select your region:



3. Enter a name for your database e.g. *Sandbox*.
4. Browse to an appropriate location in your file system to save the database. (In general, make sure that your databases are saved to a location that is regularly backed up.)
5. Click **Save.**

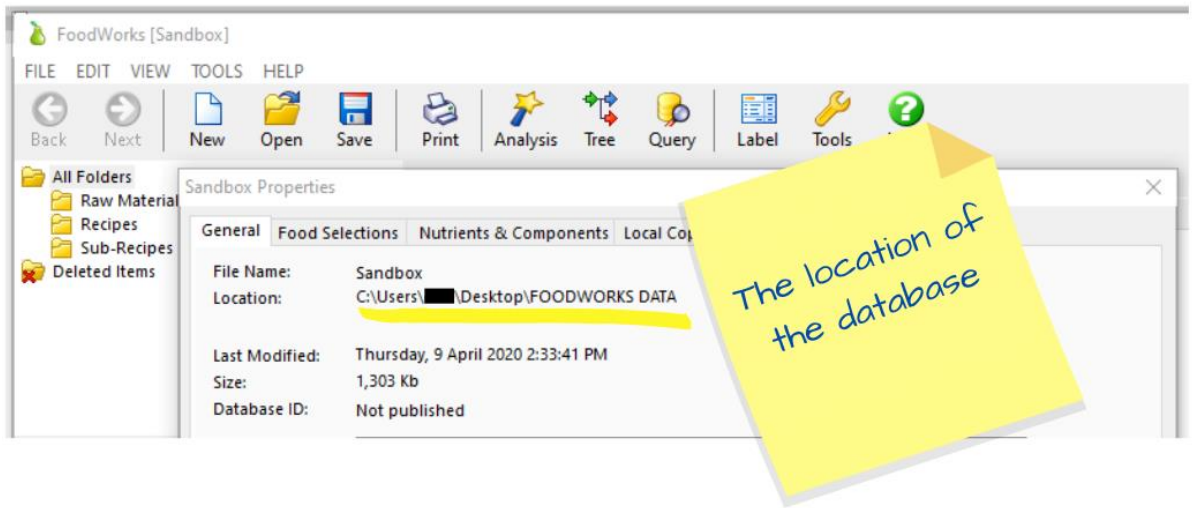
Filename and location of your database

The name of your **FoodWorks** database is shown in brackets at the top of the **FoodWorks** window, as shown here:



At any time, if you want to check where your database is located in your file system:

On the **FoodWorks File** menu, click **Database Properties**. The location of the database is displayed on the **General** tab.



3 - Create your ingredients

*In **FoodWorks Nutrition Labelling**, there isn't a ready-made list of ingredients for you to choose from (though there is lots of food data behind the scenes). Instead, we recommend that for each of your ingredients you create a **raw material** in **FoodWorks**.*

In the last chapter you created your own database. Now it's time to add some ingredients.

Best practice – Set up your raw materials first

To get going with **FoodWorks Nutrition Labelling** requires that you spend some time to create your raw materials. Then when you create your recipes (or sub-recipes) you use these raw materials as the ingredients.

This approach may seem labour-intensive but it gives you the essential control you need over your ingredient data to generate accurate labelling information for your recipes.

For example, for each raw material that you create in **FoodWorks** you get to set not only its nutrition information, but also its allergen data, declaration type and name, and more – and all this flows through to your recipe labels.

About raw materials

A **raw material** is an ingredient. In **FoodWorks** you can create raw materials that are simple ingredients, compound ingredients, additives, processing aids and reconstituted ingredients.

Raw materials are different to **recipes** and **sub-recipes** in that you need to supply the nutrition information – either from the supplier product specification or by basing it on a reference food provided in **FoodWorks**.

In contrast, for recipes and sub-recipes the nutrition information is calculated by **FoodWorks** using their ingredients.

To enter a raw material you need the following information:

- The nutrition information for the raw material.

  You can source the nutrition information from the supplier's product specification sheet, from commissioned analyses, or from a similar reference food supplied in **FoodWorks**.

  You can also use a mixed approach—basing the nutrition information on a reference food, and then overriding those nutrient values for which you have more specific data available.

- The type of raw material. In **FoodWorks**, you can choose from these types:
  - Compound ingredient
  - Additive
  - Processing aid
  - Simple ingredient
  - Reconstituted ingredient
- The specific data required for the selected type.

  For example, if this raw material is a compound ingredient you will need its statement of ingredients or ingredient listing. Its ingredient statement should be available on the product specification sheet.
- The label declaration name for the raw material – that is, the name you want to display for this ingredient in ingredient statements on recipe labels.
- The presence of any allergens.

  This information should be available on the product specification sheet.
- Data for calculating Health Star Ratings (not covered in this tutorial).
- Data for calculating Country of Origin (not covered in this tutorial).

Common types of raw materials

In this tutorial we'll focus on the most common types of raw materials. We'll create:

- A **simple** ingredient (*Walnuts*) – using nutrient data from a **supplier product specification**
- A **simple** ingredient (*Pumpkin, boiled*) – using nutrient data from a **FoodWorks reference food**
- A **compound** ingredient (*Scone Premix*) – using nutrient data from a **supplier product specification**
- A simple **liquid** ingredient (*Water*) – a special case where we set all nutrient values to zero

A **simple ingredient** is a basic ingredient which itself has only one ingredient, for example, potato. Ingredients like fresh fruits, vegetables, meats, fish and oils fall into this category.

A **compound ingredient** is defined in the *Food Standards Code* as an ingredient or a food which is itself made from two or more ingredients.

Workflow for entering raw materials

Raw materials, like all documents in **FoodWorks**, are organised as a series of tabs.

To enter the data for a raw material, work through the tabs methodically:

- Click the first tab, **General**, and work from the top to the bottom.
- Then click the next tab, and do the same. (Note that some tabs, i.e. **Measures** and **Notes**, may be optional.)
- Click the **Save** button on the toolbar regularly.

Create a simple ingredient from a product spec

This procedure is for creating an ingredient that has no ingredients of its own, and where its nutrition information is supplied.

In this example, you'll create the raw material *Walnuts* using the supplier product specification to provide the nutrition information.

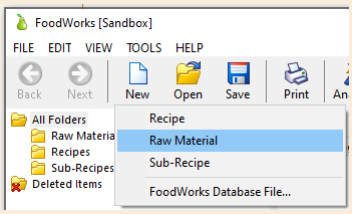
Note:

As a general rule of thumb, if you have a supplier product specification available for a raw material you should use it to provide the nutrition information.

A. Create a raw material (Walnuts)

To create a new raw material:

- On the **FoodWorks** toolbar, click **New**, then click **Raw Material**.



Then continue working on the **General** tab.

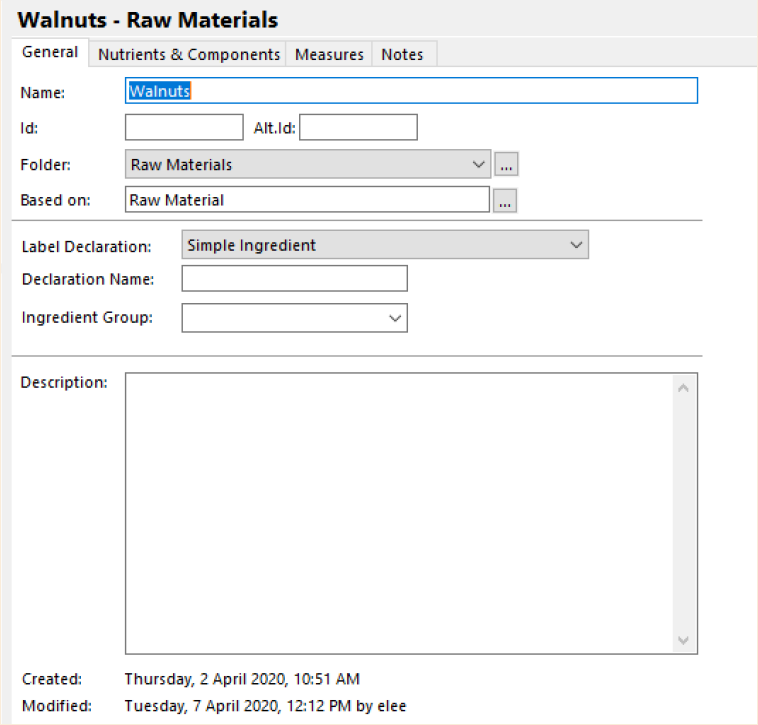
B. General tab

On the **General** tab:

1. In the **Name** box, type the name for the raw material.

   This is your internal name for the ingredient.

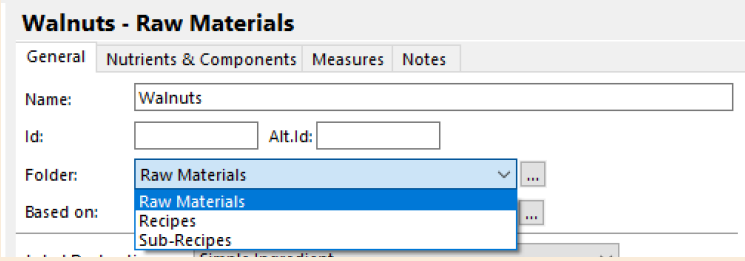
   For this example, enter *Walnuts.*



2. Optionally, enter your **ID** for the raw material. If you enter an ID, you can then search your documents by ID as well as by name.

   The **Alt. ID** field is optional and not a searchable field.

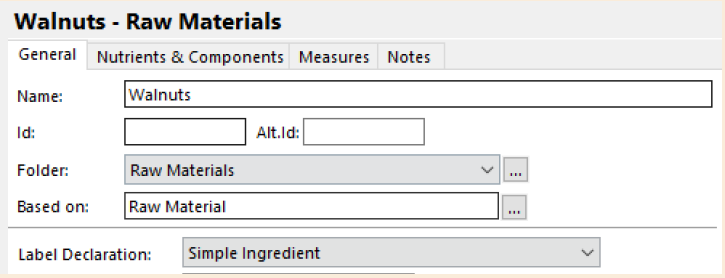
3. Now select a folder to save your raw material.



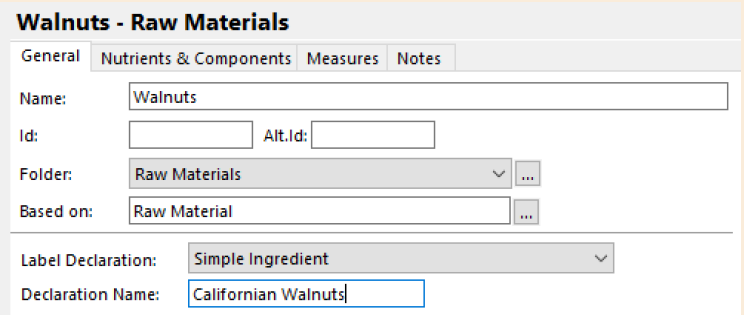
If you want to create a new folder, click the ellipsis **(...)** button.

4. The **Based on** field is an advanced option. It shows the document template that this document is based on. Do **not** change the document template without good reason.

5. To declare this raw material as a **simple ingredient** on recipe labels (that is, as an ingredient without an ingredient list of its own), ensure that beside **Label Declaration**, the **Simple Ingredient** option is selected. (As this is the default, you can just leave it.):



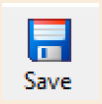
6. In **Declaration Name**, enter the name of the ingredient that you want to appear on recipe labels in ingredient statements. For this example, enter *Californian Walnuts*:



7. You can ignore the **Ingredient Group** field.

8. The **Description** is also optional. Here you can enter any useful information for this raw material. This information is text only and does not affect the label.

9. Click **Save**.



C. Nutrients & Components tab

For these steps you need the supplier product specification handy.

Here is the NIP from the product specification for the walnuts:

NUTRITIONAL INFORMATION

Avg Qty per 100g	
Energy	2910kJ
Protein	14.7g
Fat – total	68.2g
- saturated	5.9g
- trans	0.1g
- polyunsaturated	49.8g
- omega-3 ALA	8.5g
- monounsaturated	10.4g
Carbohydrate – total	5.0g
- sugars	2.5g
Dietary Fibre	6.4g
Sodium	3mg
Potassium	441mg

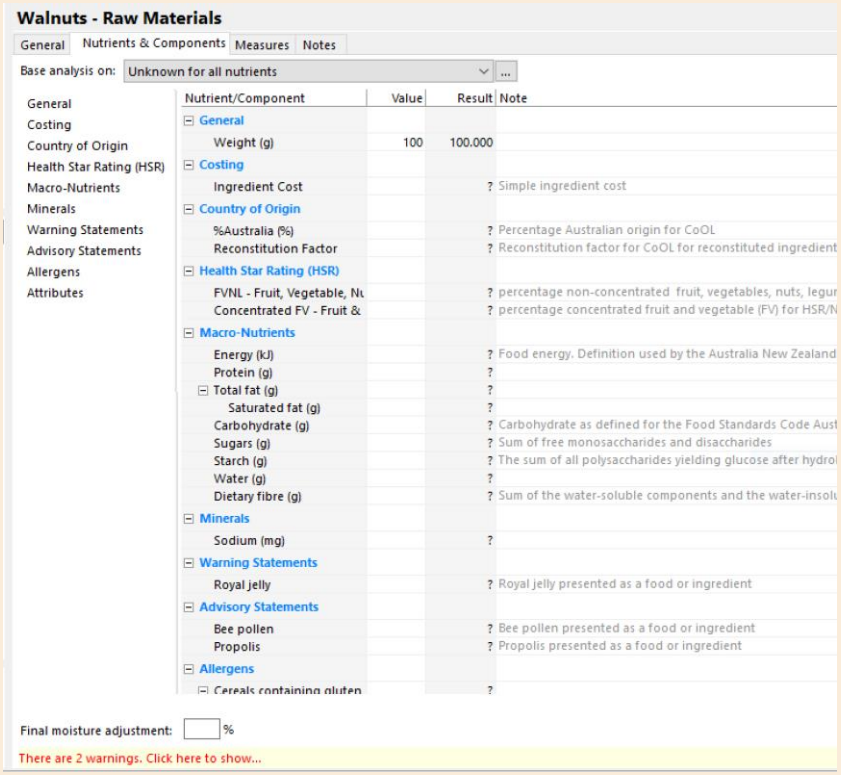
RDI is the Recommended Dietary Intake (Aus/NZ) of a nutrient. A 30g serving of Natural Californian Walnuts provides:

Protein 9% RDI

Dietary Fibre 6% RDI

Percentage daily intakes are based on an average adult diet of 8700kJ. Your daily intakes may be higher or lower depending on your energy needs.

1. Click the **Nutrients & Components** tab – this is where you enter the nutrition information for the raw material in the **Value** column.



Note:

For these examples, we'll skip ***Country of Origin*** *data (%Australian) and* ***Health Star Rating (HSR)*** *data (FVNL and Concentrated FV).*

Best practice tip: Do a basic check of the supplied nutrient values

When you enter the nutrient values from the supplier product specification, it is good practice to do a quick check to see that the numbers are reasonable.

To do this, **enter all the macronutrients but NOT the energy** (for now).

This way you can first see the **energy value that FoodWorks calculates** from the macronutrients and then compare it to the **energy value from the supplier**.

This provides a quick basic check of whether the values on the product specification are likely to be accurate.

Note: Which nutrients should you enter?

Sometimes the supplier provides more than the mandatory nutrients. In this case, the supplier has also provided Dietary Fibre and Potassium for the. Should you enter non-mandatory nutrients?

You should enter the additional nutrients provided if:

- ***You want to display that additional nutrient on your recipe labels.*** *You would need to make sure that this nutrient has values entered for other ingredients as well.*
- ***The nutrient contributes to the energy value****. Nutrients that contribute to energy but that are not mandatory include: dietary fibre, sugar alcohol, alcohol, and organic acids.*

For the walnuts, the supplier has provided a value for **dietary fibre**. As dietary fibre contributes to energy, we will enter this value, even though we don't intend to show it on recipe labels. We'll leave out the **potassium** as it's not mandatory.

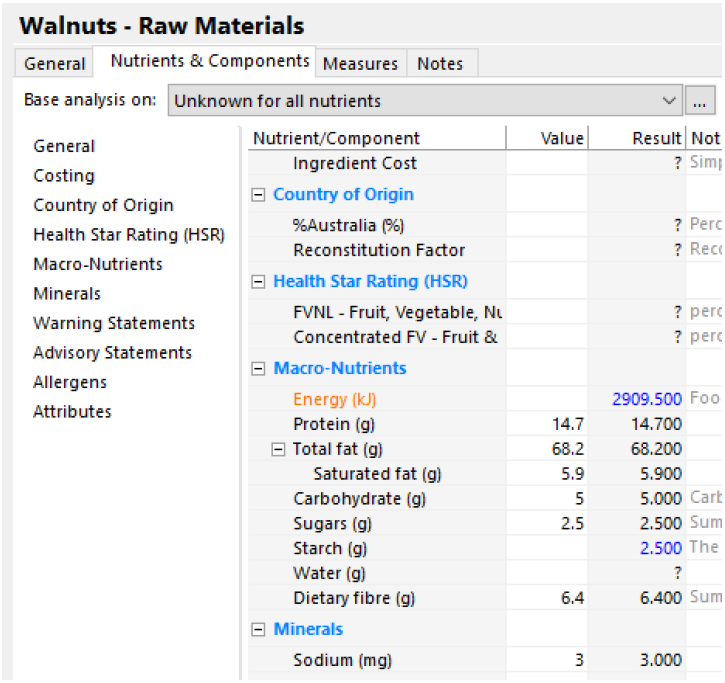
2. Under **Macronutrients**, in the **Value** column, enter the following values (shown in **bold**) from the walnut's product specification (omitting energy):
    - Protein – **14.7**
    - Total fat – **68.2**
    - Saturated fat – **5.9**
    - Carbohydrate – **5.0**
    - Sugars – **2.5**
    - Dietary fibre – **6.4**
3. Under **Minerals**, in the **Value** column, enter the following value from the product specification:
    - Sodium – **3**

Note:

Note that the default weight value for the ***Value*** *column is* ***100g****. So when you enter the nutrients, make sure you use the values* ***per 100g*** *from the product specification – sometimes there will also be values per serve or per 100 mL.*

As you can see in the screen below, **FoodWorks** calculates an energy value from the numbers you've entered for the macronutrients.

The calculated energy is shown in the **Result** column:



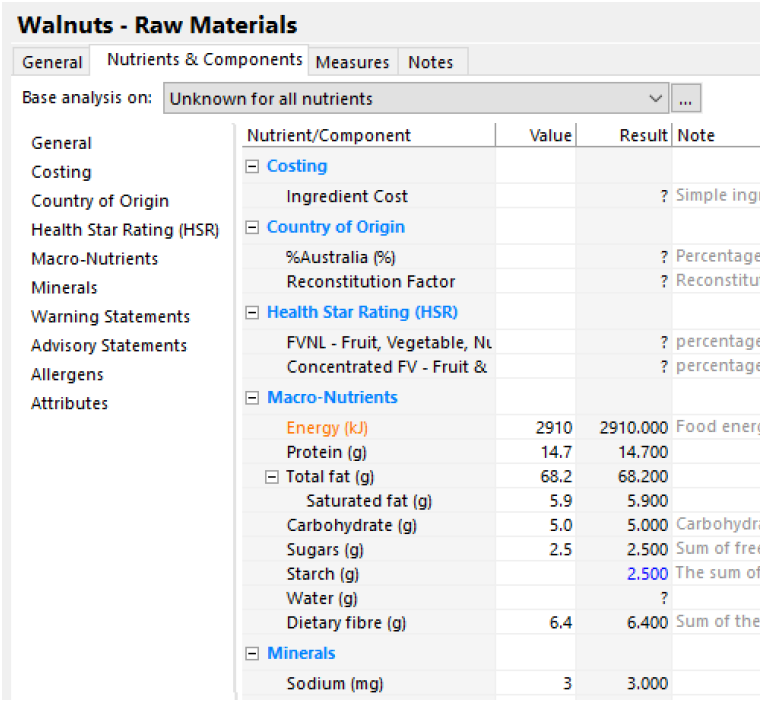
4. Compare the **Energy** value calculated in **FoodWorks** with the value from the specification.

FoodWorks has calculated **2909.5 kJ**. The value from the specification is **2910 kJ**.

In this case, the supplier's number is almost the same as the calculated number, so it is likely that the supplied numbers are accurate. We can go ahead and enter the supplied energy value into **FoodWorks**.

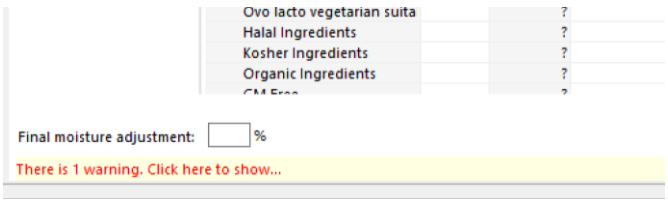
5. Enter the supplied value for Energy - **2910**

Here are the nutrient values for Walnuts filled in:



Note: Discrepant energy values

So what should we do if the calculated and supplied energy values are significantly different? For now, just be aware that ***FoodWorks*** *would alert you with a warning or error message at the bottom of the* ***Nutrients & Components*** *tab:*



We'll look more at what to do if the values vary significantly when we create the recipe, later in this tutorial.

Let's move onto the allergen information for the walnuts, which is included on this tab.

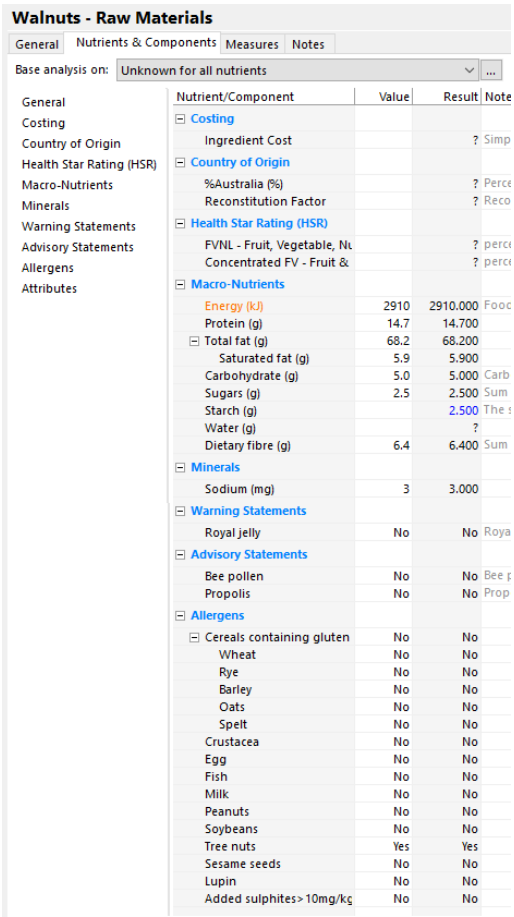
Important note: Cross contamination

In your facility you may need to account for the possibility or cross contamination of foods containing allergens. This tutorial does not cover this situation.

6. As per the Walnuts product specification, set all **Warning Statements**, **Advisory Statements** and **Allergens**, to **No**, except for **Tree nuts**, which you set to **Yes**.

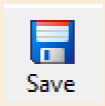
   - To quickly enter **No for** multiple allergens, you can press and hold **n** on the keyboard.
   - For **Tree nuts**, select **Yes**.

The example below shows values entered for the walnuts for the macronutrients and sodium, as well as for the warnings, advisory statements and allergens..

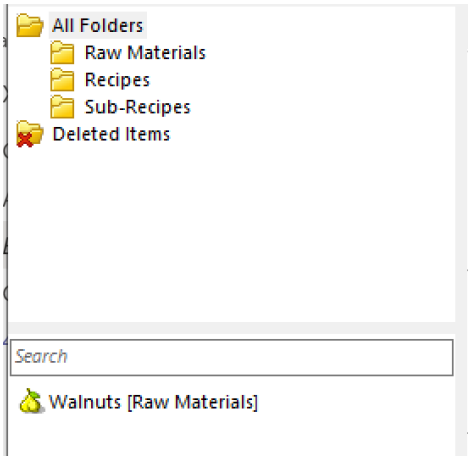


7. Ignore **Final moisture adjustment**. This field is only used in special cases.

8. Click **Save.**



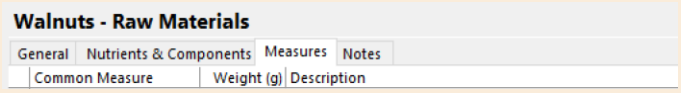
When you click **Save**, the raw material appears in the Navigation Pane.



D. Measures tab

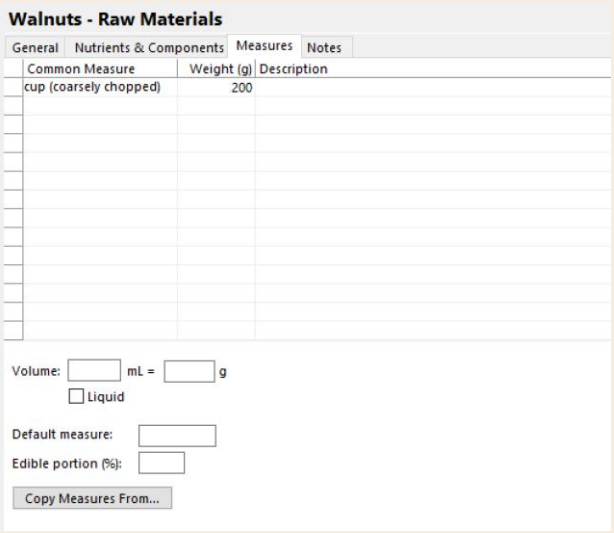
Here you can set common measures and/or volume measures for the raw material. Skip this tab entirely if you simply want to use **%**, **g** or **kg** as the measures for this raw material.

1. Click the **Measures** tab.



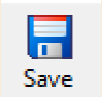
2. To set a **common measure**, enter the name for the measure and its edible weight. For our example:

   - Enter 'cup (coarsely chopped)' as the name into the **Common Measure** column.
   - Then enter '200' into the **Weight (g)** column



For *walnuts*, you can skip the rest of the information on the **Measures** tab.

3. Click **Save**.



E. Notes tab

This is an optional text field. Any text you enter here has no effect on recipe labels.

Create a simple ingredient using a reference food

This procedure is for a basic ingredient, such as a fruit or vegetable, with no ingredients of its own. If this raw material does ***not*** *have a product specification then you can get its nutrition information from a reference food provided in* ***FoodWorks****.*

Generally your suppliers should provide a product specification for all ingredients, even for fruits and vegetables. However, in practice, this is not always the case.

If the supplier cannot provide a product specification for a basic ingredient, you can instead base its nutrition information (excluding allergens information) on a similar reference food provided in one of the **FoodWorks** data sources.

Note:

It is worth noting that the ***FoodWorks*** *reference data sources only contain nutrient data – they do* ***not*** *contain data for allergens, Country of Origin* ***(% Australia****), or Health Star Ratings (****FVNL/Concentrated FV****). You need to source this data separately then enter it manually in the* ***Nutrients & Components*** *tab.*

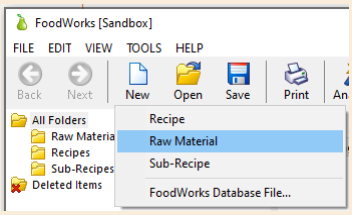
We encourage you to now work through the following example to create the raw material *Pumpkin, boiled.*

The steps are the same as those given above in the Walnuts example, ***Create a simple ingredient from a product spec*** on page 20 – except for when it comes to entering the nutrient values.

A. Create a raw material (Pumpkin, Boiled)

To create a new raw material:

- On the **FoodWorks** toolbar, click **New**, then click **Raw Material**.

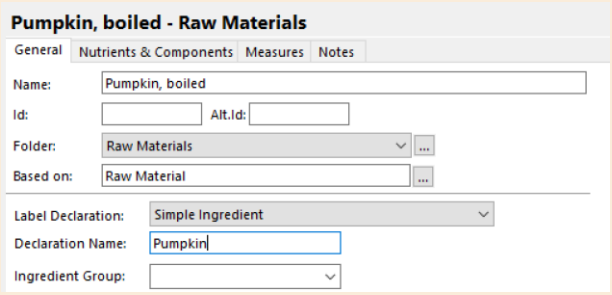


Then continue working on the **General** tab.

B. General tab

The first steps are the same as for creating *Walnuts* above, so we've just given you quick reminders in the procedure below:

1. Name your new raw material, *Pumpkin, boiled*.
2. Declare it as a **simple ingredient**.
3. Give it the **Declaration Name**, *Pumpkin*.



4. Click **Save**.

C. Nutrients & Components tab

1. Now click the **Nutrients & Components** tab.

Instead of entering values here from the product specification, we'll choose a reference food from **FoodWorks** to base this raw material on.

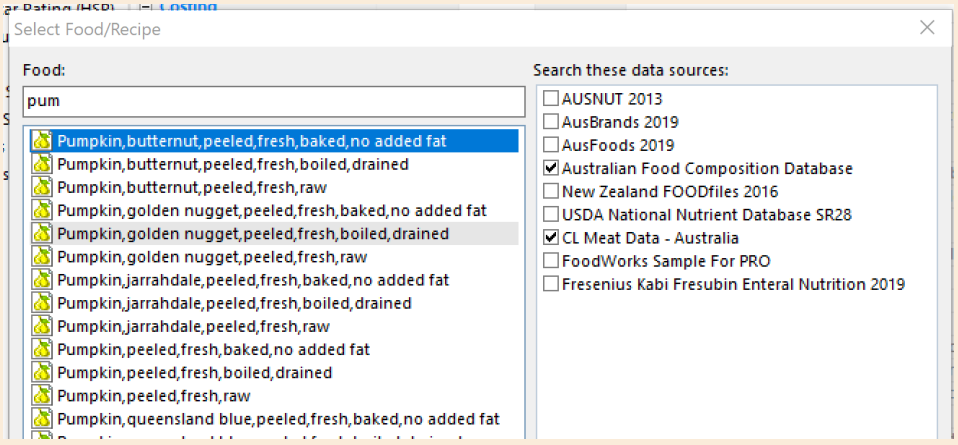
Note:

For these examples, we'll skip ***Country of Origin*** *data (%Australian) and* ***Health Star Rating (HSR)*** *data (FVNL and Concentrated FV).*

2. To select a reference food to base the pumpkin on:

   Beside **Base analysis on**, click the drop-down list and select **Other item.** Or click the ellipsis button:

3. Search for the most appropriate food in the reference data source, by typing a few letters of its name, for example, type *pum*.

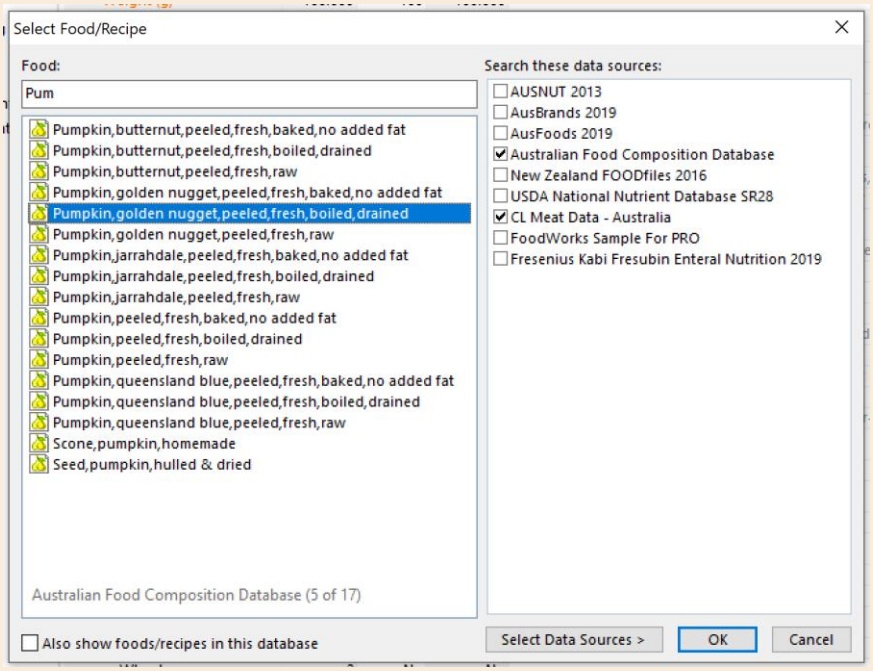


NOTE: The reference data source

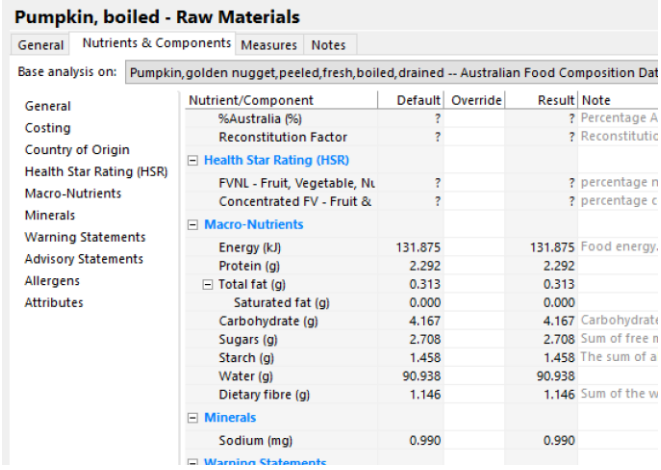
For Australia, the default data source for selecting foods in ***FoodWorks Nutrition Labelling*** *is the Australian Food Composition Database, released in 2019 by FSANZ.*

Changing the default data source is not generally recommended.

4. Then select *Pumpkin, golden nugget, peeled, fresh, boiled, drained* – and click **OK.**



In the **Default** column, the **Macronutrients** and **Sodium** will be populated with information from the reference food, as shown below:



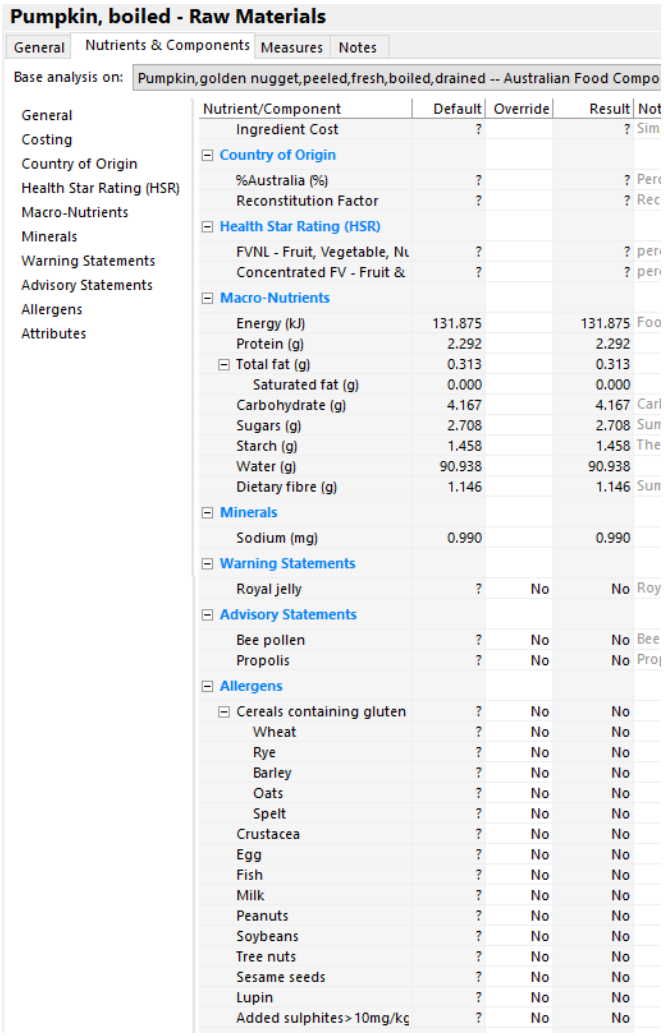
5. Though there is no product specification for this ingredient, we know that boiled pumpkin naturally does not include **allergens**.

   (You'll remember that we are **not** considering **cross contamination** in this tutorial.)

   So, in the **Override** column, set all **Warning Statements**, **Advisory Statements** and **Allergens**, to **No**. To quickly enter **No**, you can press and hold **n** on the keyboard.

   You need to make sure you fill out all these allergen values, otherwise you'll get the error "Allergens Unknown" on the recipe label.

The example below shows the completed tab:



Pumpkin, boiled - Raw Materials

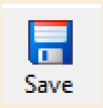
General | Nutrients & Components | Measures | Notes

Base analysis on: Pumpkin,golden nugget,peeled,fresh,boiled,drained -- Australian Food Compo

- General
- Costing
- Country of Origin
- Health Star Rating (HSR)
- Macro-Nutrients
- Minerals
- Warning Statements
- Advisory Statements
- Allergens
- Attributes

Nutrient/Component	Default	Override	Result	Not
Ingredient Cost	?		?	Sim
Country of Origin				
%Australia (%)	?		?	Per
Reconstitution Factor	?		?	Rec
Health Star Rating (HSR)				
FVNL - Fruit, Vegetable, Nu	?		?	per
Concentrated FV - Fruit &	?		?	per
Macro-Nutrients				
Energy (kJ)	131.875		131.875	Foo
Protein (g)	2.292		2.292	
Total fat (g)	0.313		0.313	
Saturated fat (g)	0.000		0.000	
Carbohydrate (g)	4.167		4.167	Carl
Sugars (g)	2.708		2.708	Sum
Starch (g)	1.458		1.458	The
Water (g)	90.938		90.938	
Dietary fibre (g)	1.146		1.146	Sum
Minerals				
Sodium (mg)	0.990		0.990	
Warning Statements				
Royal jelly	?	No	No	Roy
Advisory Statements				
Bee pollen	?	No	No	Bee
Propolis	?	No	No	Pro
Allergens				
Cereals containing gluten	?	No	No	
Wheat	?	No	No	
Rye	?	No	No	
Barley	?	No	No	
Oats	?	No	No	
Spelt	?	No	No	
Crustacea	?	No	No	
Egg	?	No	No	
Fish	?	No	No	
Milk	?	No	No	
Peanuts	?	No	No	
Soybeans	?	No	No	
Tree nuts	?	No	No	
Sesame seeds	?	No	No	
Lupin	?	No	No	
Added sulphites>10mg/kg	?	No	No	

6. Click **Save.**



D. Measures tab

We will stick with grams as the measure for this ingredient, so there is no need to add anything to the **Measures** tab.

Create a compound ingredient from a spec

Sometimes your raw material has its own ingredients.
In the Food Standards Code, this is a ***compound ingredient****. For these ingredients you use the product specification from the supplier to provide its nutrient values and its ingredient statement.*

To create compound ingredients, you follow similar steps to those given in the Walnut example, ***Create a simple ingredient from a product spec*** on page 20, as here we are also using information from the supplier's product specification.

The main difference is the **Label Declaration** on the **General** tab.

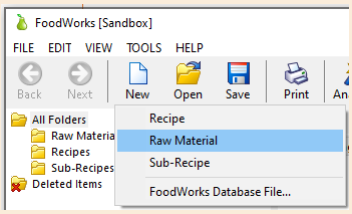
In this example, we create the compound raw material, *Scone premix*.

As you've now created two ingredients, we've provided simplified instructions below - so refer back to the Walnuts example, ***Create a simple ingredient from a product spec*** on page 20, if you need more detail.

A. Create a raw material (Scone Premix)

To create a new raw material:

- On the **FoodWorks** toolbar, click **New**, then click **Raw Material**.

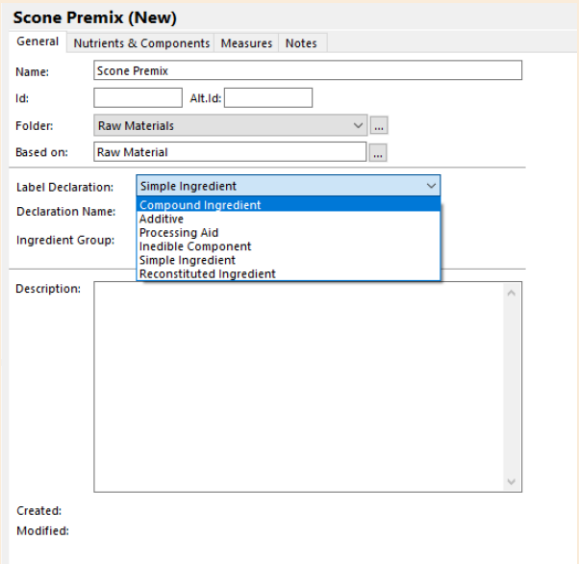


Then continue working on the **General** tab.

B. General tab

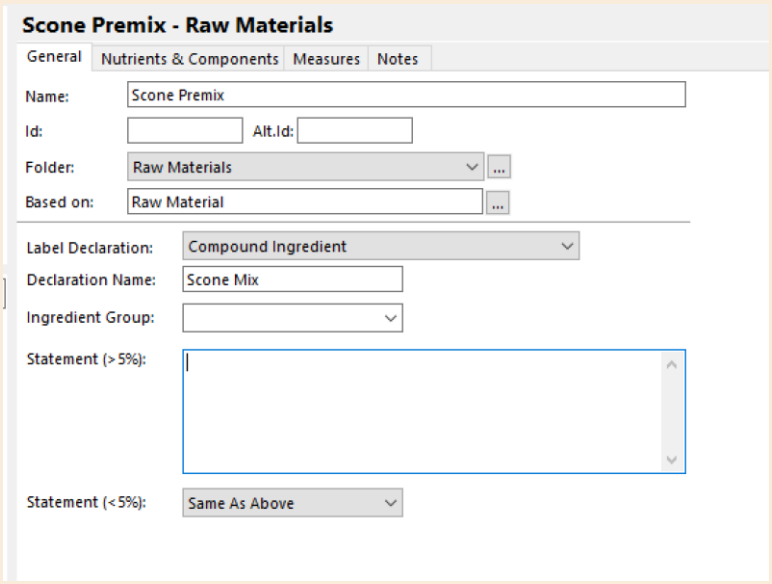
1. Name your new raw material *Scone Premix*.

2. For the **Label Declaration**, select **Compound Ingredient**.



When you choose **Compound Ingredient**, two fields appear for the ingredient statement.

3. Give your raw material the **Declaration Name**, *Scone Mix*.

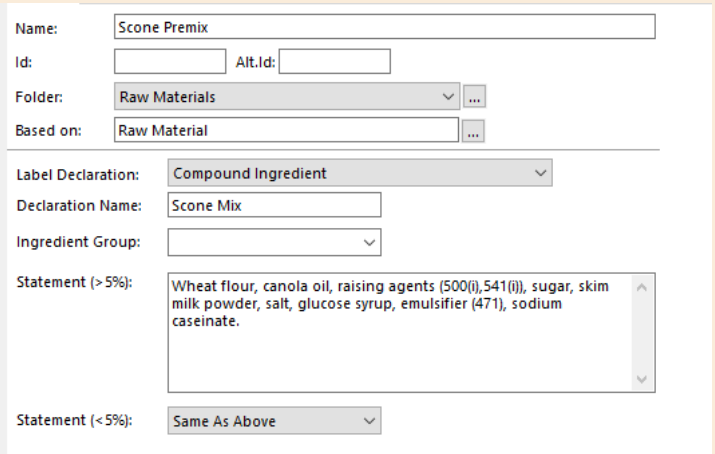


In the product specification, you'd find the ingredient statement for the premix.

Here it is for the Scone Premix:

Wheat flour, canola oil, raising agents (500(i), 541(i)), sugar, skim milk powder, salt, glucose syrup, emulsifier (471), sodium caseinate.

4. From the product specification, copy and paste the exact ingredient statement into **Statement (>5%)**:



You can have a different ingredient statement for when this ingredient is less than 5% of the final recipe.

For this example, however, you can leave the **Statement (<5%)** as **Same as Above**.

C. Nutrients & Components tab

For these steps you need the product specification for the Scone Premix handy.

Here is the **NIP** and **ingredient information** provided by the supplier:

Nutrition Facts

Serving size: 1 serving = 1g

	Qty per serving	Qty per 100g / 100ml	% daily intake*
Energy	832 kj	1280 kj	10 %
Energy Cal	199 Cal	306 Cal	10%
Protein	4.9 g	7.6 g	10 %
Total Fat	3.8 g	5.9 g	5 %
Saturated Fat	2.0 g	3.1 g	8 %
Carbohydrate	34.1 g	52.5 g	11 %
Sugars	5.1 g	7.8 g	6 %
Dietary Fibre Total	2.3 g	3.5 g	8 %
Sodium	487 mg	750 mg	21 %

Wheat flour, canola oil, raising agents (500(i),541(i)), sugar, skim **milk** powder, salt, glucose syrup, emulsifier(471), sodium **caseinate.**

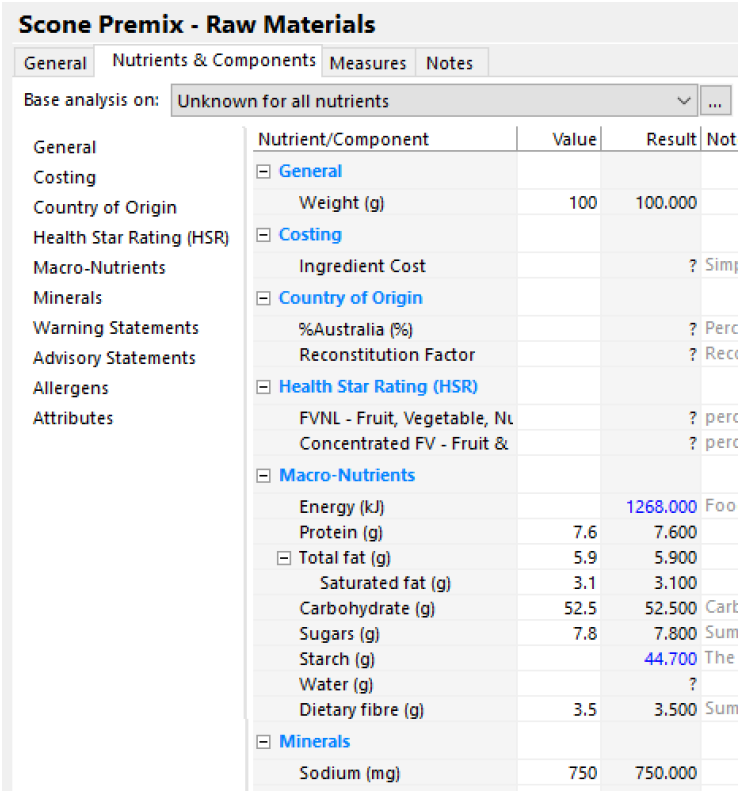
Contains Wheat (gluten) and milk. May contain soy.

As we did for the Walnuts ingredient, we'll perform the basic check of the supplied nutrient values by at first omitting the supplied energy value.

For the scone premix, the supplier has provided a value for **dietary fibre**. As dietary fibre contributes to energy, we will enter this value, even though we don't intend to show it on recipe labels.

1. Click the **Nutrients & Components** tab.
2. Under **Macronutrients** and **Minerals**, in the **Value** column, enter values from the product specification as shown in **bold** below. Skip the **Energy** value for now:
   - Protein – **7.6**
   - Total fat – **5.9**
   - Saturated fat – **3.1**
   - Carbohydrate – **52.5**
   - Sugars – **7.8**
   - Dietary Fibre – **3.5g**
   - Sodium – **750**

You can see the calculated energy value in the **Result** column:



3. Compare the **Energy** value calculated by **FoodWorks** with the value from the specification.

We can see that **FoodWorks** has calculated **1268 kJ** and the value from the specification is **1280kJ**. So the supplier's number is a little higher.

Is there a problem with the supplier's numbers?

When you enter an energy value that is discrepant with the **FoodWorks** energy value calculated from the nutrients, there are two basic scenarios:

- **The supplier's energy value is higher than FoodWorks**

  A higher supplied value does *not* necessarily mean the supplied energy value is wrong. There are other nutrients that potentially contribute to energy that have not been reported – such as dietary fibre, alcohol, sugar alcohol and organic acids.

  Here you use your professional judgement – if the energy values are significantly different, and there appear to be no other nutrients to account for the discrepancy, you may need to go back to the supplier for clarification.

- **The supplier's energy value is lower than FoodWorks**

  A lower supplied value usually means that there is an error in the supplier information.

  With any given amounts of macronutrients, there MUST be a certain minimum amount of energy. (For example, 100g of fat contains 3700kJ because 1g of fat has 37kJ as per the FSANZ Food Standards Code.)

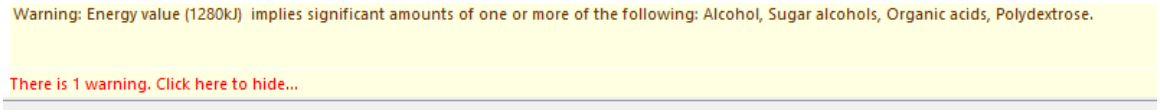
  Once again, you use your professional judgement. You may decide that the discrepancy is in an acceptable or expected range of error. If not, there may be an error either in the values for one or more of the macronutrients or for the energy. You may need to seek clarification from your supplier.

If you decide to accept the supplier's energy value, type it in the **Value** column (and the value will override **FoodWorks** calculated number).

Note: Warning message for Scone Premix

When you enter the supplier's energy number, a warning message will appear at the bottom of the **Nutrient & Components** *tab. The warning alerts you that the supplied energy value is higher than is accounted for by the supplied nutrients.*

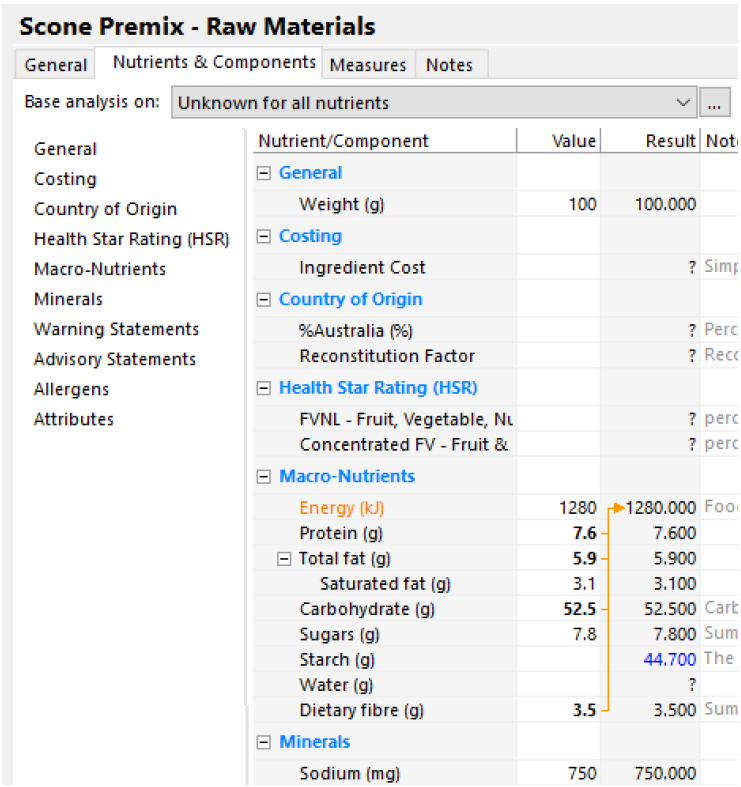
In such cases, you need to make a professional judgement whether it is warranted to contact the ingredient supplier for clarification or whether to accept their values.



In this case the discrepancy is deemed insignificant and it seems reasonable to accept the supplier's numbers.

4. So now enter the supplier value for Energy - **1280**

Here are the values for all the nutrients for the Scone Premix filled in:



Note:

*Note that the default weight value for the **Value** column is **100g**. So when you enter the nutrients, make sure you use the values **per 100g** from the product specification not the values **per serve** (or **per 100 mL**, if applicable).*

Then we move on to the allergen information.

We know from the supplier information that the Scone Premix contains **wheat**, **milk**, and possibly **soy**:

> **Contains Wheat (gluten) and milk. May contain soy.**

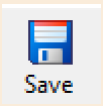
5. So, set all **Warning Statements**, **Advisory Statements** and **Allergens**, to **No**, except for **wheat** and **milk**, which you set to **Yes,** and **soy**, which you set to **Maybe.**

   To quickly enter **No**, you can press and hold **n** on the keyboard.

Here are the allergen values filled in for the Scone Premix:

⊟ Warning Statements			
Royal jelly	No	No	Royal jelly pre
⊟ Advisory Statements			
Bee pollen	No	No	Bee pollen pre
Propolis	No	No	Propolis prese
⊟ Allergens			
⊟ Cereals containing gluten		Yes	
Wheat	Yes	Yes	
Rye	No	No	
Barley	No	No	
Oats	No	No	
Spelt	No	No	
Crustacea	No	No	
Egg	No	No	
Fish	No	No	
Milk	Yes	Yes	
Peanuts	No	No	
Soybeans	Maybe	Maybe	
Tree nuts	No	No	
Sesame seeds	No	No	
Lupin	No	No	
Added sulphites>10mg/kg	No	No	

6. Click **Save.**



D. Measures tab

We will stick with grams for this ingredient, so there is no need to add anything to the **Measures** tab.

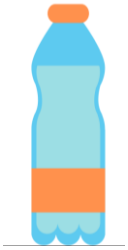
Create a liquid ingredient

We need one more ingredient for this recipe – *Water*.

Entering this raw material is very similar to the previous procedures for creating simple ingredients. Here are the differences:

- On the **Nutrients & Components** tab you set the nutrient values to zero.
- As water is a liquid, on the **Measures** tab you enter some extra information.

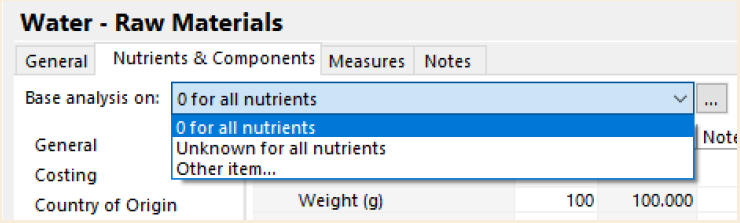
Now you have experience in creating a few raw materials, so the instructions below are not as detailed and you can test your skills...



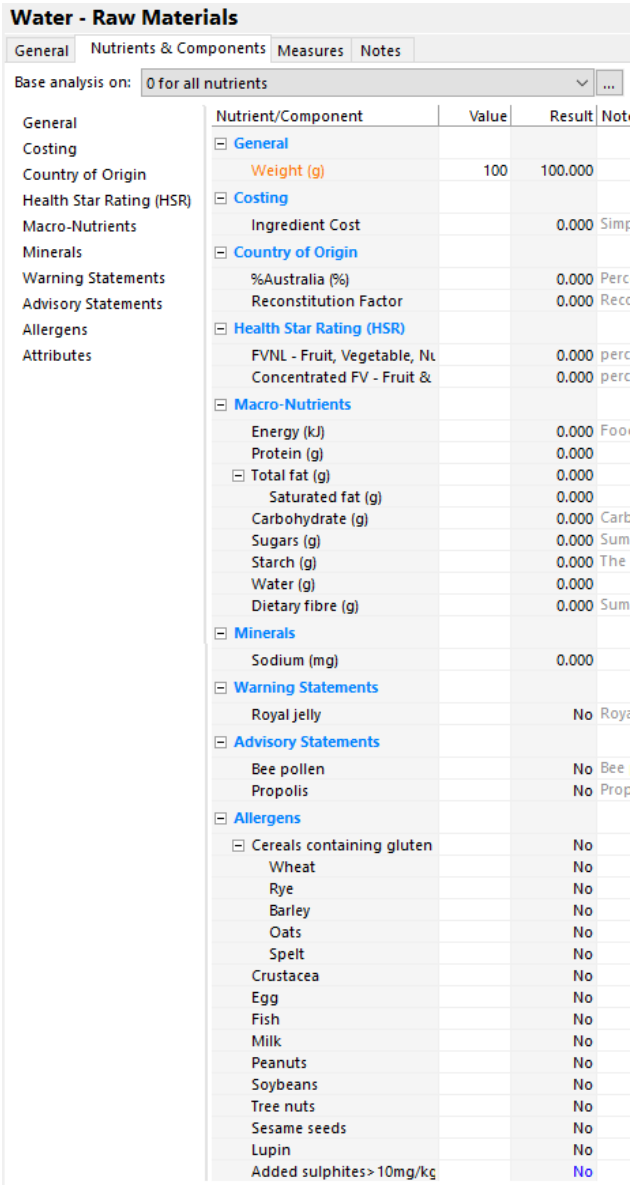
A. Create a raw material (Water)

Here are the first steps:

1. Click **New**, then click **Raw Material**.
2. On the **General** tab, name the ingredient *Water*.
3. Set the **Declaration Name** to *Water*.
4. On the **Nutrients & Components** tab, beside **Base analysis on** choose **0 for all nutrients:**



In the **Result** column for Water, this sets all nutrient values to **0** as well as all warning and allergen statements to **No:**



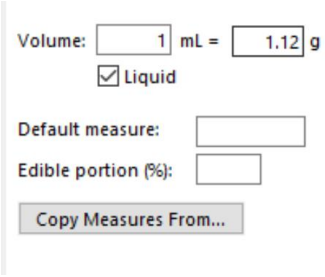
B. Measures tab - Volume Conversion Factor

For some ingredients you may want to use volume measures, such as millilitres (mL) or cups, when you enter them into a recipe.

To enable volume measures for a raw material, you must provide **specific gravity** data **(density)**, sometimes known as the **Volume Conversion Factor (VCF)** – that is, you need to provide **its weight(g) per mL**.

- If the product specification includes the specific gravity, use that value.

  For example, if the specific gravity provided is 1.12, then in **FoodWorks** you would enter **1mL = 1.12g**.



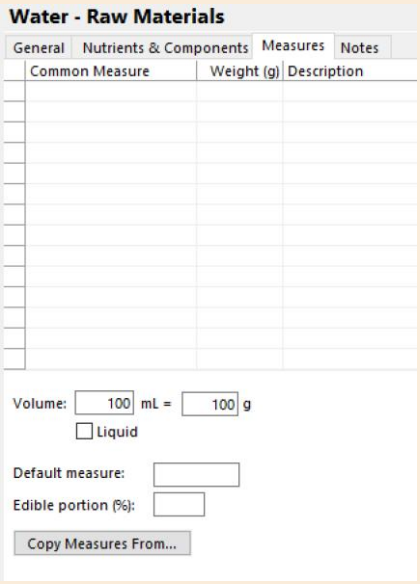
- If you do not have the specific gravity, you can weigh the raw material yourself.

  Use scales to weigh 100mL of the liquid. Say the weight is 120g.

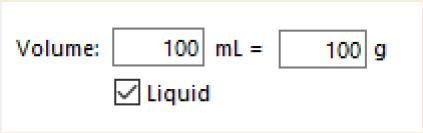
  Then in **FoodWorks**, you'd enter **100mL = 120g**

1. For the raw material, Water, enter the **Volume Conversion Factor** values:

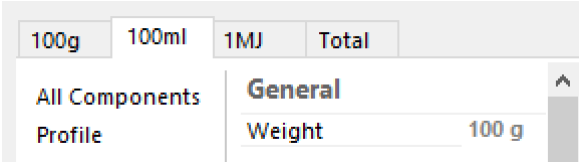
   100mL = 100 g.



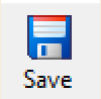
2. Select the **Liquid** check box.



Selecting the **Liquid** checkbox means that a new tab, per **100mL**, is shown in the Analysis Pane:



3. Click **Save.**



4 - Create your recipes

Once you've created your raw materials, you then use them as ingredients for your sub-recipes and recipes.

About sub-recipes and recipes in FoodWorks

In **FoodWorks Nutrition Labelling**, recipes and sub-recipes are the same except for how you use them.

- **Recipe**  – Use for your final products for which you are producing labels
- **Sub-Recipe**  – Use for your in-house sub-recipes that you use as ingredients in your final recipes

Tip

As a general rule-of-thumb, the way you construct a recipe in **FoodWorks** should reflect how the recipe is prepared in the kitchen.

For example, for a final recipe *Spaghetti in Tomato Sauce*, if the pasta and the tomato sauce are cooked separately and then combined to make the final recipe, in **FoodWorks** you would likewise create the pasta and the tomato sauce as separate **sub-recipes**, then combine those sub-recipes, using them as ingredients in the **final recipe**.

Create a recipe

In this tutorial we are creating a simple recipe for Pumpkin and Walnut Scones. You've already created these ingredients:

- Californian walnut (raw material – simple ingredient – from spec) **100g**
- Pumpkin (raw material – simple ingredient – based on a reference food) **200g**
- Scone premix (raw material – compound ingredient – from spec) **1kg**
- Water (raw material – simple ingredient (liquid) – based on a reference food) **510 mL**

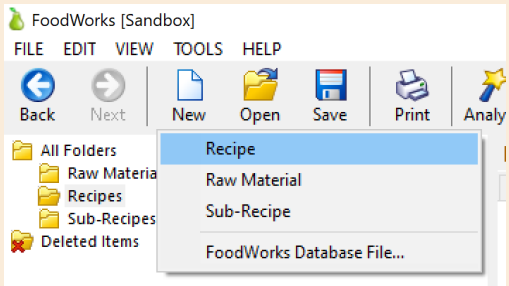
Each serve is **74g** and the yield is **92%.**

The serves per pack is **4**.

A. Create a recipe (Scones, Pumpkin and Walnut)

To create the new recipe:

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



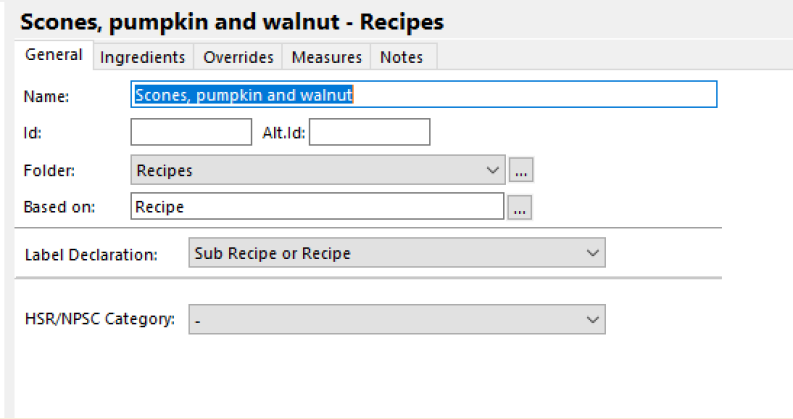
Then continue working on the **General** tab.

B. General tab

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

   For this example, enter *Scones, pumpkin and walnut*

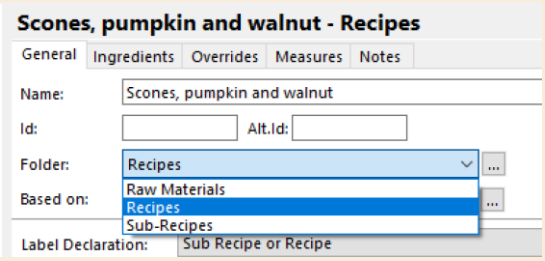
   This is your internal name, and also the name for your recipe label (unless you give it an alternative name in the **Label** window, which we'll do later).



2. Optionally, enter your **ID** for the recipe. If you enter an ID, you can then search your documents by ID as well as by name.

   The **Alt. ID** field is optional and not a searchable field.

3. Now select a folder to save your recipe.



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

4. Leave the **Label Declaration** as it is: **Sub Recipe or Recipe**.

5. The **Based on** field is an advanced option. It shows the document template that this document is based on. Do **not** change the document template without good reason.

6. The **Description** is optional. Here you can enter any useful information for this raw material. This information is text only and does not affect the label.

C. Ingredients tab

1. Enter each ingredient with its edible-portion quantity, as per the recipe:

   - walnuts (100g)
   - pumpkin, boiled (200g)
   - scone premix (1kg)
   - water (510mL):

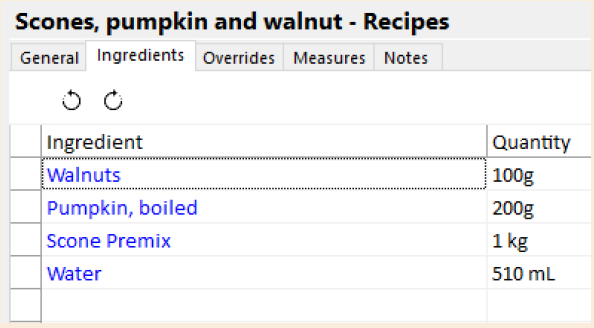
For each ingredient:

- In the **Ingredient** column, type a few letters of its name, then select it from the drop-down list.

  > ***TIP:*** *Press the up and down arrow keys to move in the list, and press* ***Enter*** *to select.*

- In the **Quantity** column, first type the number and then select the unit.

  > ***TIP:*** *To select the unit, press the up and down arrow keys to move in the list, and press* ***Enter*** *to select.*



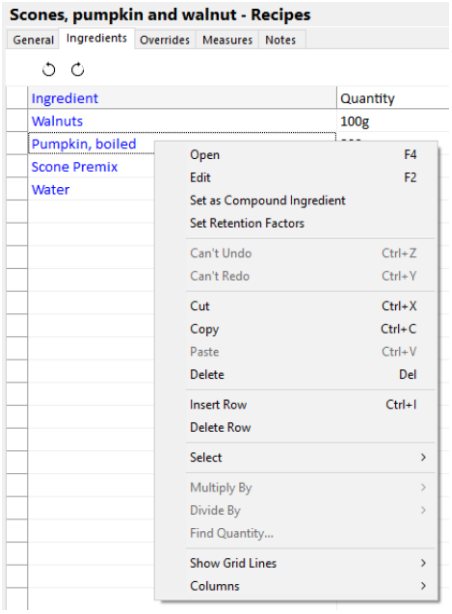
Note: Why are the ingredients shown in blue?

The ingredients in the recipe are shown in ***blue*** *to indicate that they are* ***FoodWorks*** *documents that you have created (and not reference foods from the data sources supplied with* ***FoodWorks****).*

You can open a document from here:

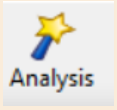
Right-click the ingredient, and choose ***Open****.*

Below, we've right-clicked Pumpkin, boiled*:*

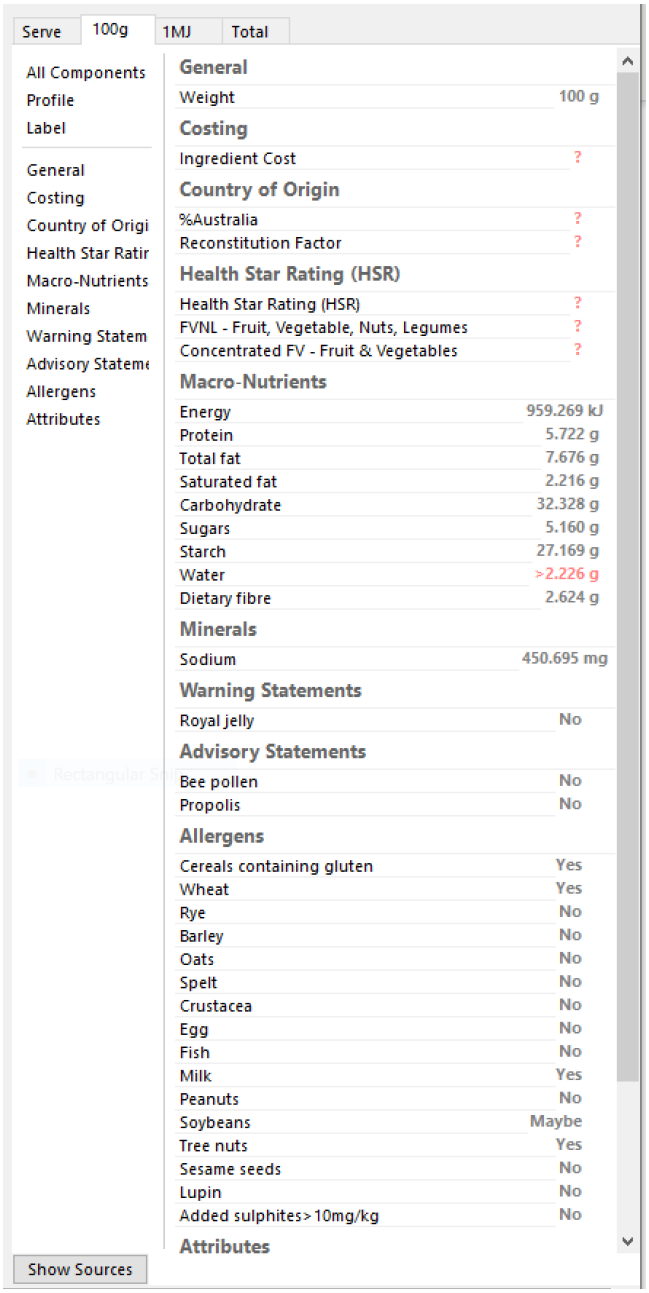


As you enter the ingredients, you can see **nutrient analyses** begin to appear in the Analysis Pane on the right. The analyses update dynamically as you make changes to the recipe.

2. If the Analysis Pane is not showing, on the toolbar, click the **Analysis** button.



Here is the Analysis Pane for the scones:



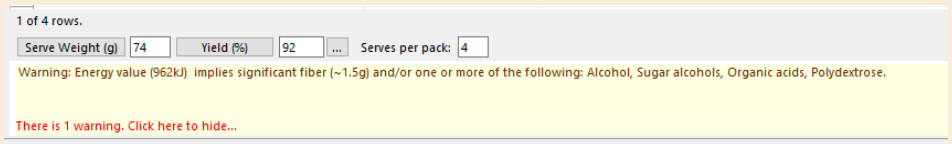
Note: About the question marks and red values

You can ignore the red question marks and values in the Analysis Pane if they are not nutrients that you are using on your label and you are not otherwise interested in them..

3. Check any warning or error messages shown at the bottom of the **Ingredients** tab.

   For the scone recipe as entered so far, there is a 1 warning.

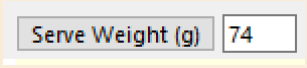
   Click to show it:



This warning message has come through from the *Scone Premix* ingredient – see the discussion ***Is there a problem with the supplier's numbers?*** on page 42 – so, we can ignore it.

4. Enter the serve weight (in grams):

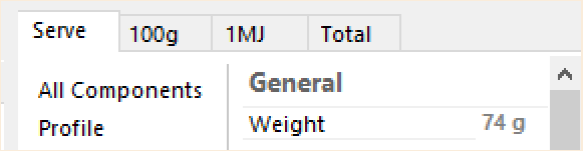
   In the **Serve Weight(g)** box (at the bottom of the Ingredients grid), enter **74**.



If you wanted to enter the **number of serves** rather than serve weight, click the **Serve Weight** button to toggle.

5. Once you've entered serve information, a **Serve** tab appears in the Analysis Pane.

   Click on the **Serve** tab to show the analyses per serve:

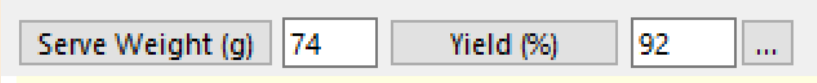


If the processing step for this recipe or sub-recipe will result in a change in weight due to the loss or gain of water, then you need to set its **yield**.

The scones lose moisture in the cooking process.

6. Enter the yield for the recipe.

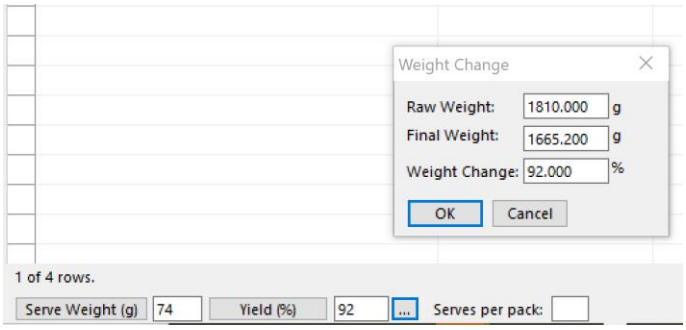
   For the scones, we already know the yield percentage, so type in **92%.**



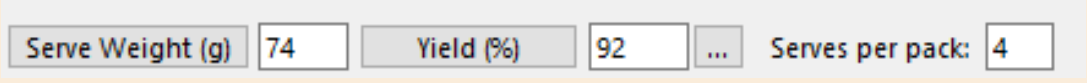
NOTE: If you have the final weight, but not the yield percentage...

*If you do not have the yield percentage, but you know the **final weight** of the recipe, **FoodWorks** can calculate the yield for you.*

*To enter the final weight, click the ellipsis (**...**) button beside **Yield**, type in the final weight, then click **OK**.*



7. Enter the serves per pack for the recipe: In the **Serves per pack** box, enter the number – here **4**:



D. Overrides tab

Usually you don't need to override the nutrient values that **FoodWorks** calculates for recipes, so you can ignore this tab for now.

E. Measures tab

Here you would set common measures and/or volume measures for the recipe, if required.

Usually you can skip the **Measures** tab for a final recipe as the recipe will not be used as an ingredient.

However, you need to enter information here in these cases:

- **This recipe is a sub-recipe and will be used as an ingredient in other recipes**, and where its quantity will not be stated as **g** or **kg**, but as common measures or volume measures.

  In this case, on the **Measures** tab, you need to set the appropriate common measures (see Walnut example on page 30), or for volume measures, you need to set the Volume Conversion Factor (see Water example on page 48).

- **This recipe is a liquid**, and you want its NIP to show a 100mL column.

  In this case, on the **Measures** tab, you need to provide the Volume Conversion Factor (see Water example on page 48).

F. Notes tab

This is an optional text field. Any text you enter here has no effect on recipe labels.

5 - View and refine your labels

You can open the **Label** window to show a preview of the label for the open recipe.

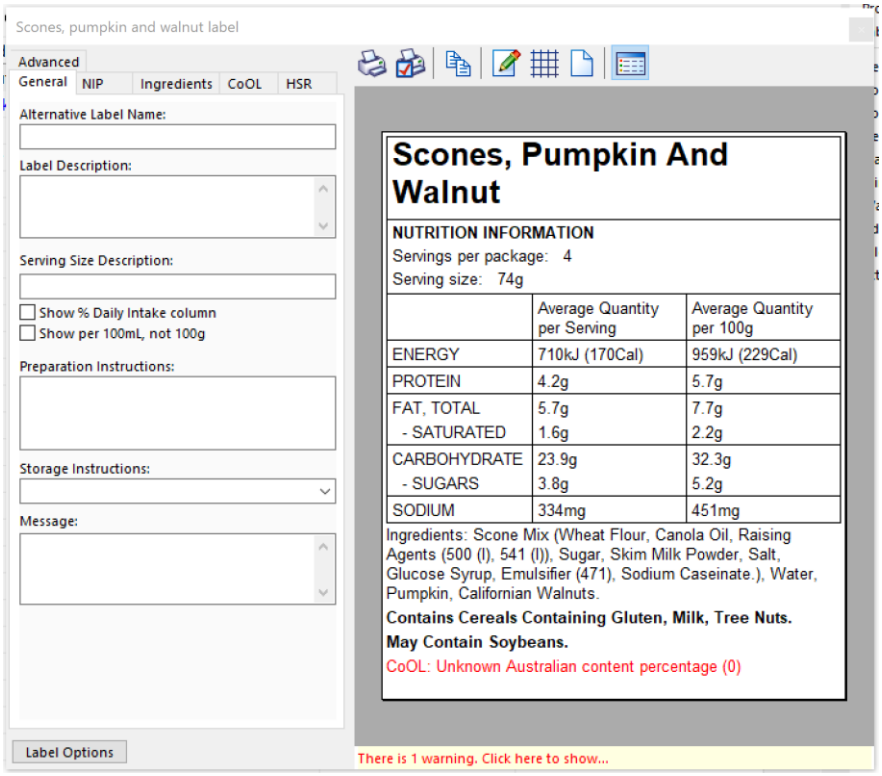
You can keep the Label window open while you make changes to your recipe. The draft label will update dynamically.

View the label

To view the label:

1. Open the recipe *Scones, pumpkin and walnut*.
2. On the **FoodWorks** toolbar, click the **Label** button.

The Label window is displayed for your recipe:

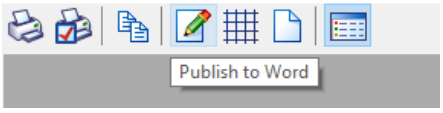


In the Label window you see:

- **Tabs** on the left that organise the settings for the label. (We'll set some on the **General**, **NIP** and **Ingredients** tabs.)
- The **draft label** for the open recipe. In the draft label you can already see:
  - Recipe name
  - Nutrition information panel
  - Ingredients statement
  - Allergen statement
  - And other information
- **Buttons** above the draft label for publishing and printing.

Note: Buttons in the Label window

To see what a button does, hover the cursor over it to display the tooltip:

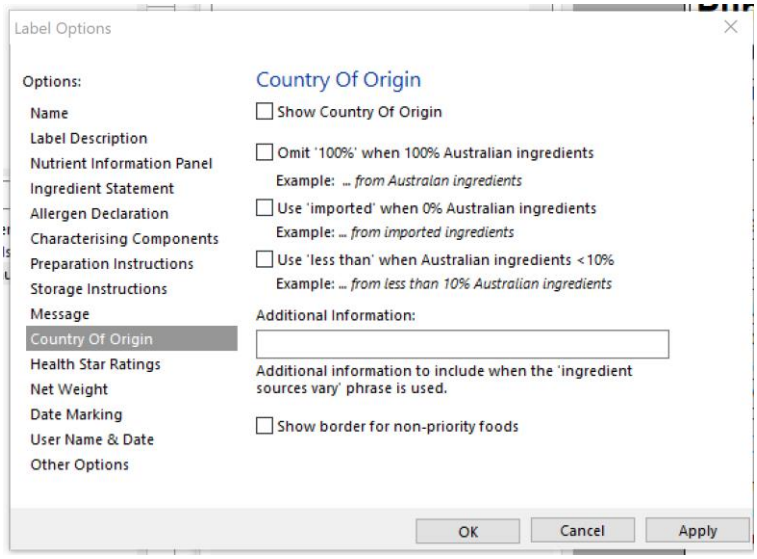


Note: Country of Origin error message

If you are not interested in ***Country of Origin Labelling*** *then you can simply ignore this error message:*

However, if you don't want to see the error message, on the Label window, click ***Label Options****, and on the left click* ***Country of Origin****.*

Then de-select ***Show Country of Origin*** *and click* ***OK****.*



This will turn off ***Country of Origin*** *for all labels in this database.*

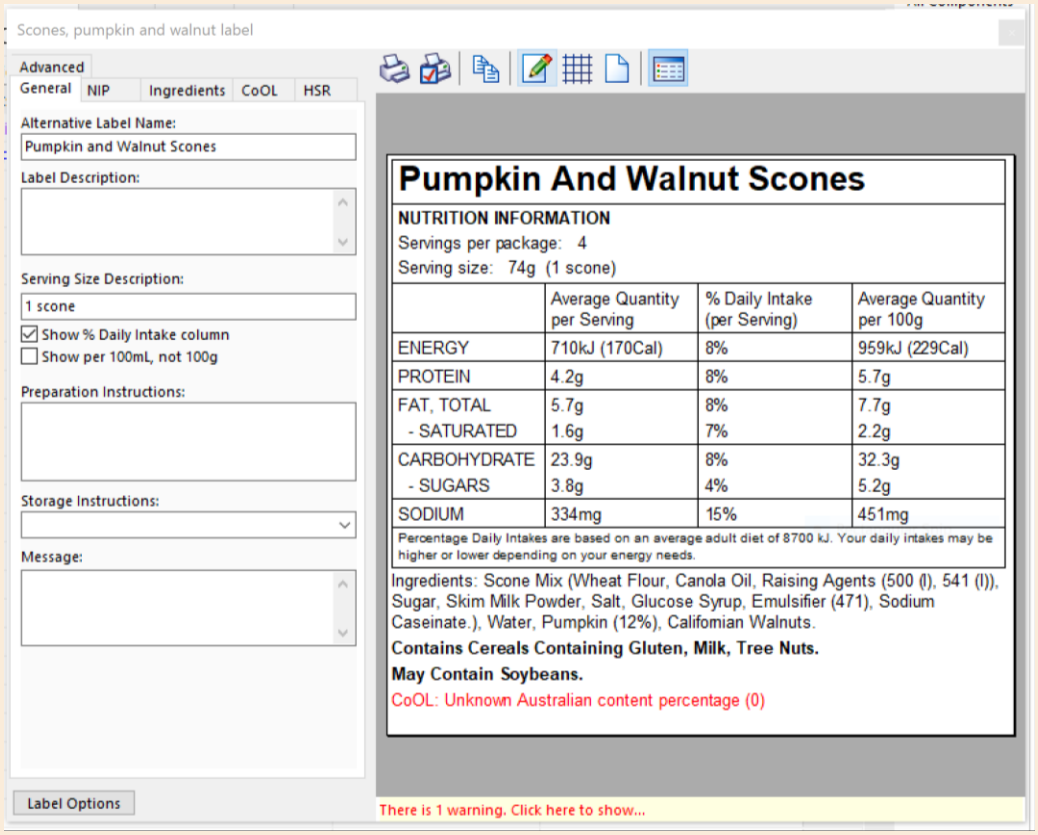
Refine the label

Now we'll go ahead and refine the label for *Scones, pumpkin and walnut* by adjusting some settings.

A. General tab

In the Label window on the **General** tab:

1. In the **Alternative Label Name** box, enter *Pumpkin and Walnut Scones*.
2. In the **Serving Size Description**, enter *1 scone*.
3. Select **Show %Daily intake column**.
4. Notice the changes to your label:

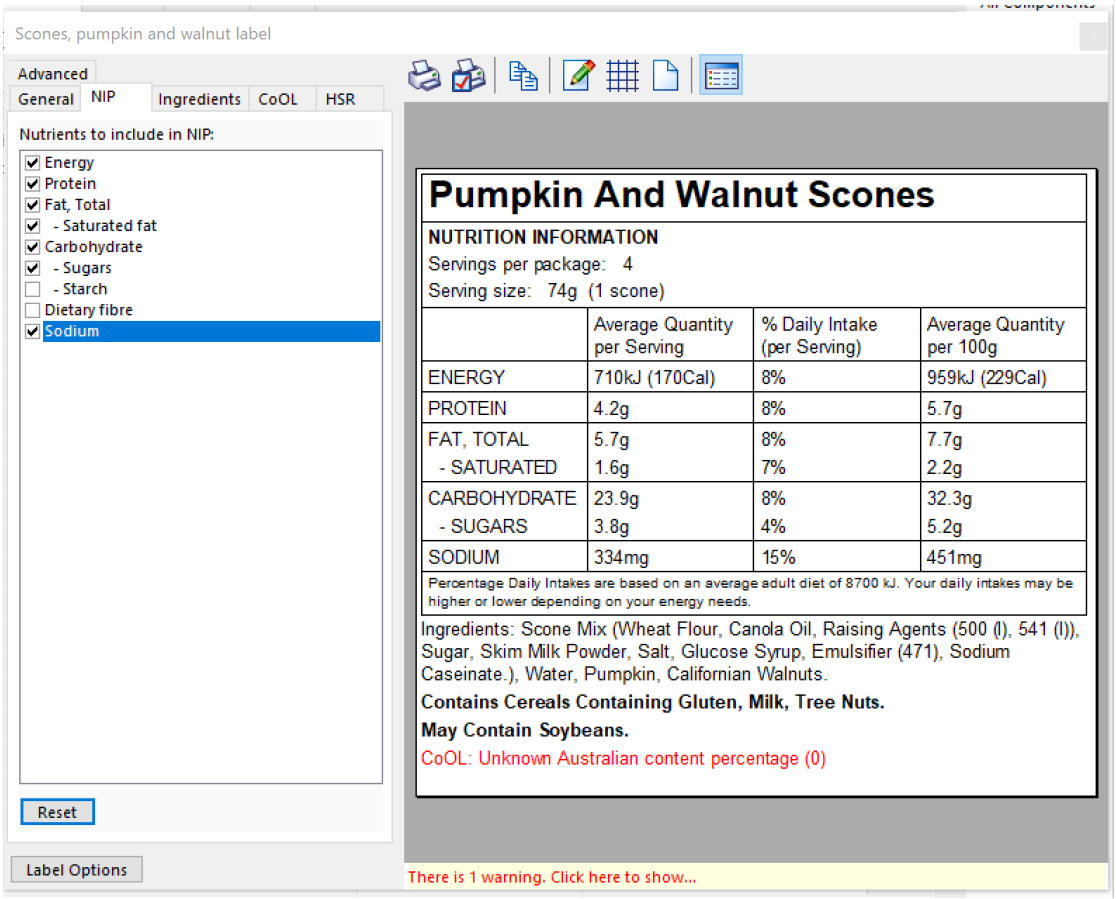


On the **General** tab of the Label window you can also set some text fields to display: the **Label description**, which shows a description of the product below the label name, **Preparation** and **Storage** instructions and a **Message**.

B. NIP tab

On this tab you can control which nutrients apart from the mandatory nutrients, if any, are shown in the NIP.

The tab below shows the default nutrients available for your label:



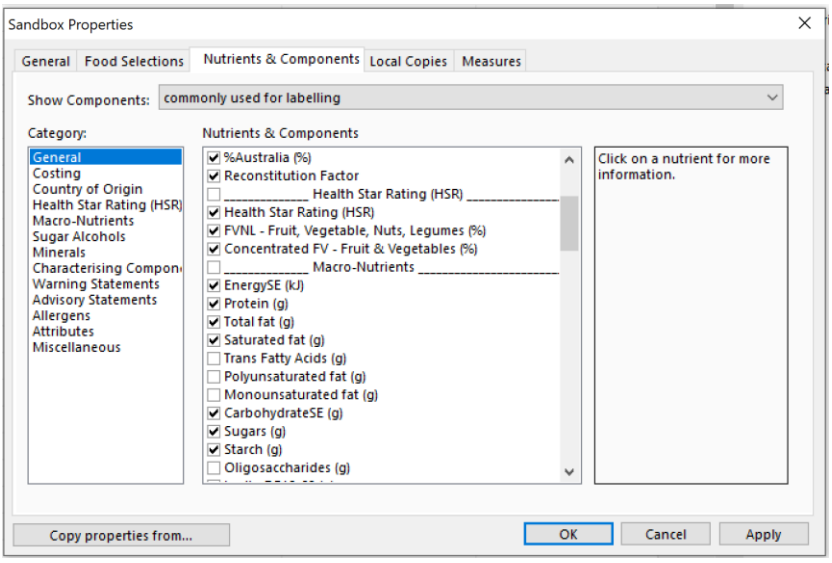
In some cases, you might wish to work with additional nutrients to the default nutrients shown here.

Note:

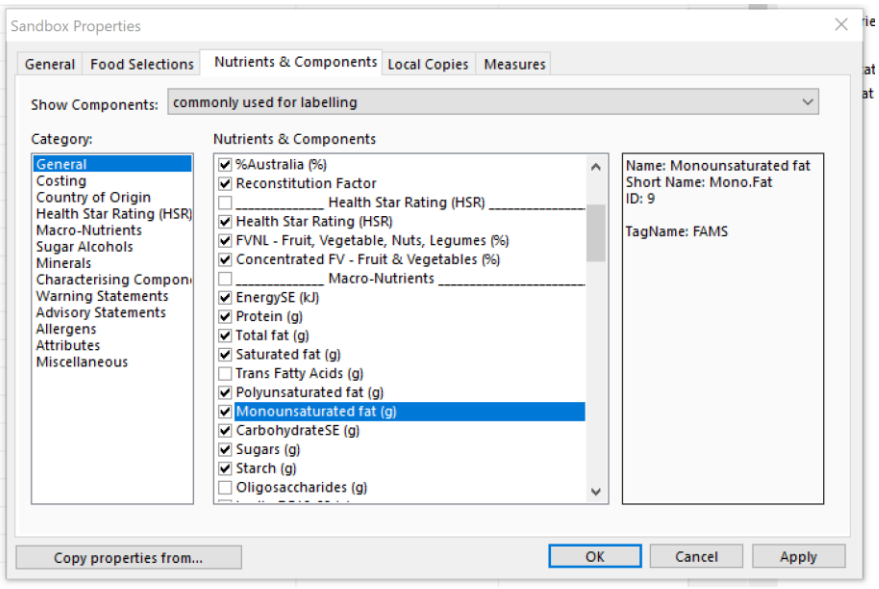
When working with additional nutrients, you will need to ensure that each of the raw materials used in the recipe has data for that nutrient. Otherwise your label will show question marks for that nutrient as its value is unknown.

Here is how to show additional nutrients:

1. On the **File** menu, click **Database Properties**, then the **Nutrients & Components** tab.

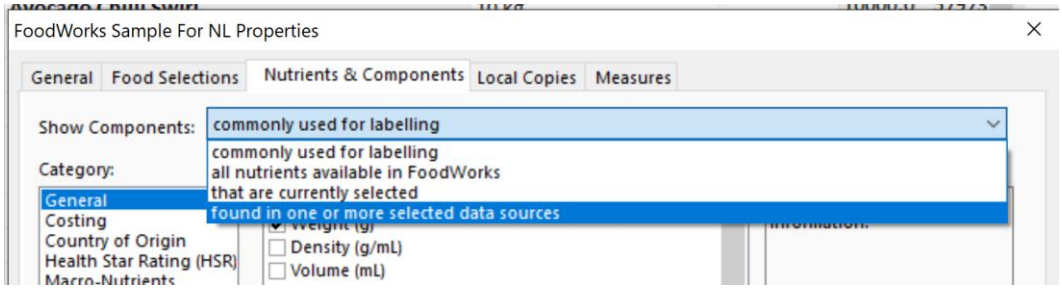


2. Select the nutrient(s) that you want to show – for example, *Polyunsaturated fat* and *Monounsaturated fat*.



Note:

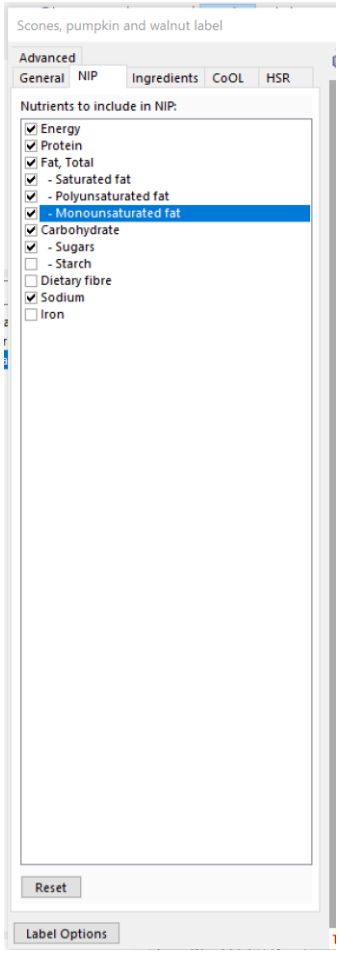
If you don't see the nutrient you are after, beside ***Show Components****, select* ***found in one or mare selected data sources****.*



3. Then click **OK**.

4. Now open the **Label** window – you will see the additional nutrient(s) listed on the left.

5. You can select them to show them in your label:

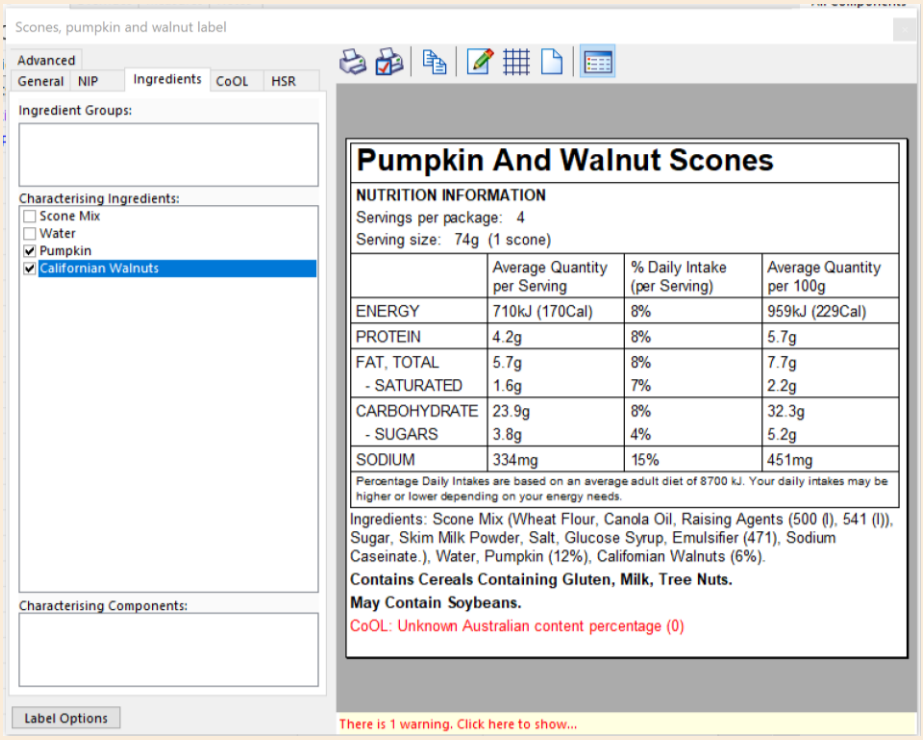


6. To return to just using the mandatory nutrients in your NIP, click **Reset** at the bottom left of the window. The additional nutrients will be de-selected.

C. Ingredients tab

You can show the percentage for your recipe's characterising ingredients in the ingredients statement on the label by selecting them on this tab.

1. In the Label window, click the **Ingredients** tab.
2. Select these ingredients:
   - Pumpkin
   - Californian Walnuts



3. Notice that the ingredient statement on the label now shows the percentages of these ingredients.

D. Advanced, CoOL, and HSR tabs

On the **Advanced** tab you can set shelf life and date marking for the label. This tutorial does not cover Country of Origin Labelling or Health Star Ratings.

6 - Print your labels

You can print your labels in a few different ways. This chapter explain how.

Print a single label directly from FoodWorks

This option works well when:

- You are happy to print one label at a time.
- You are happy with the information, format and design provided in the Label window and you do not need to make any changes.
- The label as printed is the right size.

To print a single label:

1. Open the recipe, and open the **Label** window.
2. Click the **Print** button and select the appropriate printer.

Print a single label via Word or Excel

This option works well when:

- You are happy to print one label at a time.
- You need to make small changes to the information, format and design, for example, changes to the font, font size, colours. (The overall layout of the label stays the same.)
- The label as printed is the right size.

To print a single label:

1. Open the recipe, and open the **Label** window.

2. From the **Label** window, export the label to Microsoft Word or Excel:

   - Publish to Word 
   - Publish to Excel 

3. In Word and Excel you can edit the label format and information as required, and then print from there.

Print multiple labels using label design software

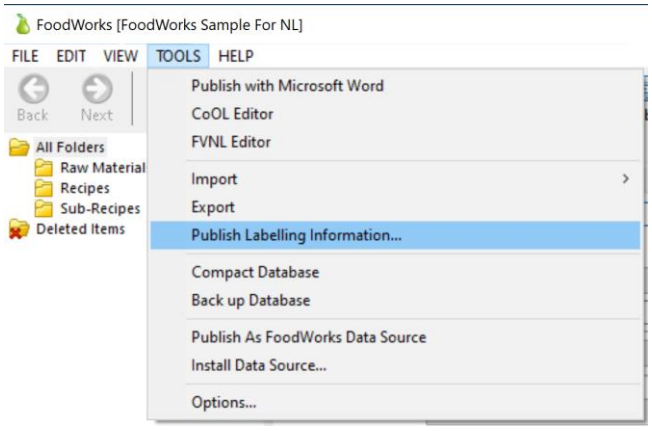
You can use label design software such as *BarTender®* or *LABELVIEW* if you need to print multiple labels frequently.

This approach gives you the most efficiency and control. This option works well when:

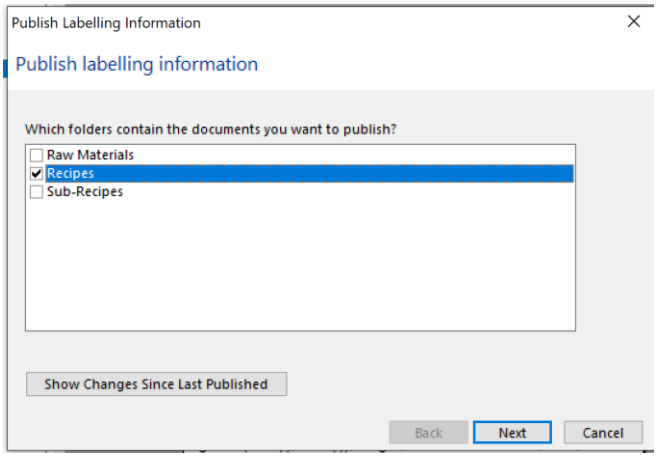
- You want to print many labels at once.
- You need to completely redesign the label.

Here's how:

1. First, export your label data from your **FoodWorks** database – On the **Tools** menu, click **Publish Labelling Information** and follow the instructions.



Choose the folders you wish to publish:



The label data will be exported to a Microsoft Access database.

2. Configure BarTender/LABELVIEW to read the label data from the Access database. You will need to:

   - Design your label in BarTender/LABELVIEW.
   - Configure BarTender/LABELVIEW to read the label data from the Microsoft Access database generated from **FoodWorks**.
   - Select which label(s) to print.

   For more information, see our support article FoodWorks and BarTender and talk to your label designers or your IT support.

7 - Export your label data

If you need to export your labelling data, for example, to pass the information onto your marketing team or to send to your clients, you can use the following methods.

Export a single label

This option works when you are happy to export one label at a time.

You can export a label to the format for PDF or Word or Excel directly from the **Label** window.

To export a single label, on the **Label** window, click the appropriate button:

- Publish to Word 
- Publish to Excel 
- Publish to PDF 

The information, format and layout of the NIP will be exported to that application.

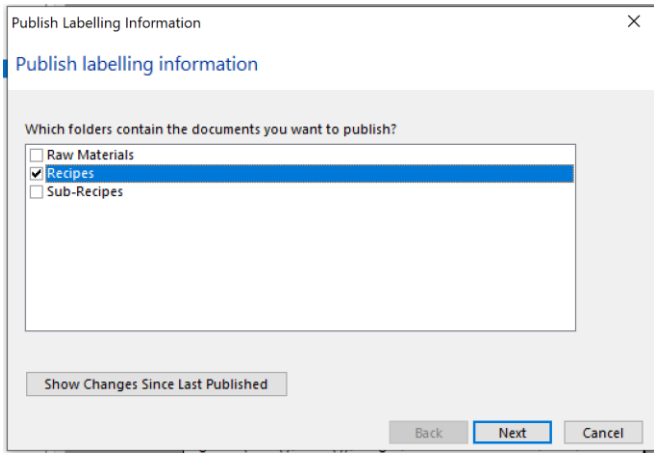
Export multiple labels

You can export all the labelling data from your **FoodWorks** database to a Microsoft Access database.

This option is suitable for bulk export of all or some of your label information but does *not* include the format and layout of the labels.

To export your labelling information in bulk, on the **Label** window, click the appropriate button:

1. On the **Tools**, click **Publish Labelling Information** and follow the instructions. You can choose which folders to export:



All the labelling information in the selected folders will be exported to a Microsoft Access database.

Congratulations!

Well done. You've now completed the ***Basic Tutorial*** for **Learning *FoodWorks 10 Nutrition Labelling***.

You have learned the skills to create common types of raw materials and then how to use them to create a final recipe and its nutrition label.

To learn more, see the FoodWorks support site.