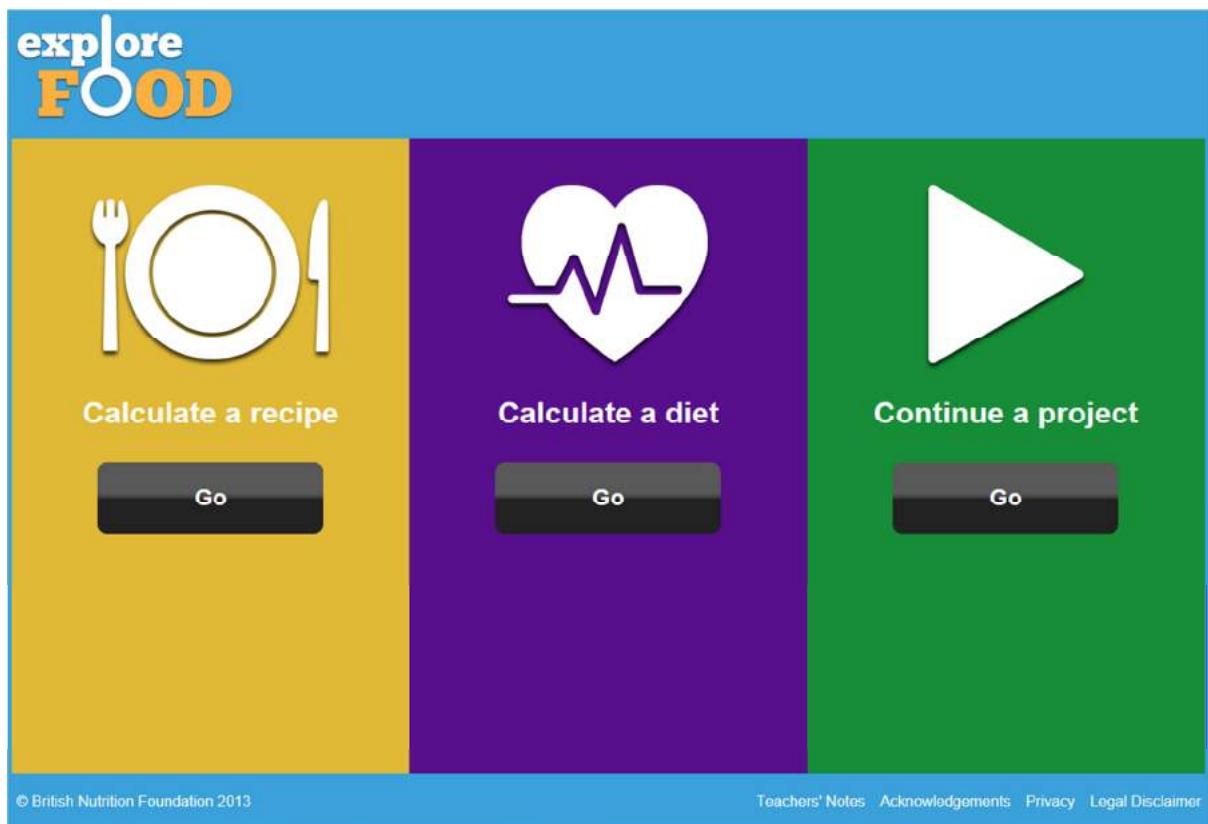


Explore food

Teachers' Notes



The image shows the homepage of the explore FOOD website. The header features the 'explore FOOD' logo. Below the header are three main sections: 'Calculate a recipe' (yellow background, plate icon), 'Calculate a diet' (purple background, heart icon), and 'Continue a project' (green background, play triangle icon). Each section has a 'Go' button. The footer contains the text '© British Nutrition Foundation 2013' and links to 'Teachers' Notes', 'Acknowledgements', 'Privacy', and 'Legal Disclaimer'.

explore
FOOD

Calculate a recipe

Go

Calculate a diet

Go

Continue a project

Go

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Teachers' Notes Acknowledgements Privacy Legal Disclaimer

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Background information

Welcome to *Explore food*, a simple online nutritional analysis tool for secondary school students, available free to use from the British Nutrition Foundation's *Food – a fact of life* education programme (www.foodafactoflife.org.uk).

Explore food aims to support 11- to 18-year-olds to learn about the energy and nutrients provided by food and drink, how to modify a recipe and compare a diet to the UK Dietary Reference Values (DRVs).

Explore food allows the user to input a recipe or a day's diet to generate a summary sheet and compare the day's diet to the DRVs. The tool does not save information online, but it enables the user to save and export the data on to their computer, on their browser or via email and reload for future use.

Explore food allows students to:

- calculate the energy and nutrients provided by a recipe or diet;
- model different portion sizes for a recipe;
- compare the diet for a day to DRVs;
- model different DRVs and the diet;
- save work to continue another time (saved as a file);
- export work into a spreadsheet file for further analysis;
- print work.

Explore food has been designed to be easy to use, guiding students through the analysis of nutrition information of a recipe or a day's diet. It also provides data for the student to analyse and draw conclusions away from the computer as part of their studies.

The selection of nutrients included in *Explore food* is taken from the GCSE / Standard Grade and A-Level / Advanced Higher exam specifications. The order of nutrients presented follows the format as listed in the Department of Health's Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991). Fibre is presented as AOAC values. Where no AOAC measure is available, the NSP value has been multiplied by 1.33 to give an AOAC equivalent.

Suggested activities

Explore food provides a user-friendly way for a quick analysis of a recipe or a day's diet. This will be a useful platform for teachers to demonstrate how changes to the selection and weights of different ingredients, foods and drinks may have an impact to the energy and nutrients provided by a recipe or a diet. Using the day's diet to compare with the UK's Dietary Reference Values can also help to facilitate menu planning to meet the needs of different groups of the population.

This tool also helps to save time from performing recipe analysis using food tables.

Users are recommended to have all the weights of the ingredients ready before they analyse a recipe, and to fill in the diet diary (Appendix two on Page 38) prior to calculating the diet, in order to support data input.

Explore food can be used for the following subjects:

- Food preparation and nutrition
- Food and nutrition
- Food technology
- Home Economics
- Catering and Hospitality
- Science
- PSHE
- PE
- Child Development

It can also be used in any other subject as teachers see fit.



Acknowledgement

The British Nutrition Foundation is grateful for financial support from the All Saints Educational Trust to enable us to develop this resource.

Nutrition information is based on the McCance and Widdowson's The Composition of Foods integrated dataset (CoF IDS) (2015). The data is available from: <https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid> The information used in this resource is provided under the Open Government Licence. Terms can be found at: www.nationalarchives.gov.uk/doc/open-government-licence

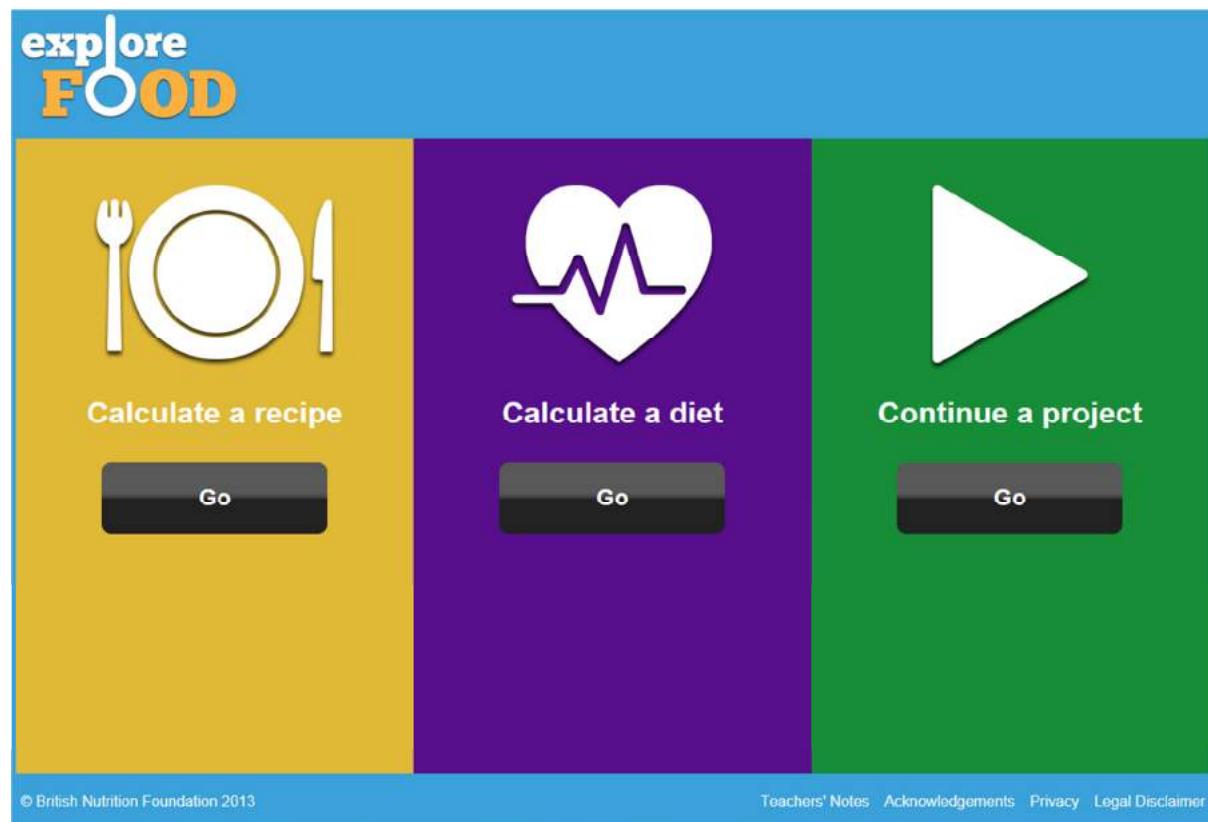
The Dietary Reference Values (DRVs) used for the dietary analysis are based on the Department of Health's Dietary Reference Values for Food Energy and Nutrients for the United Kingdom (1991), SACN's Dietary Reference Values for Energy (2011) and SACN's fibre recommendations (2015).

Using *Explore food*

Getting started

The homepage is divided into three sections:

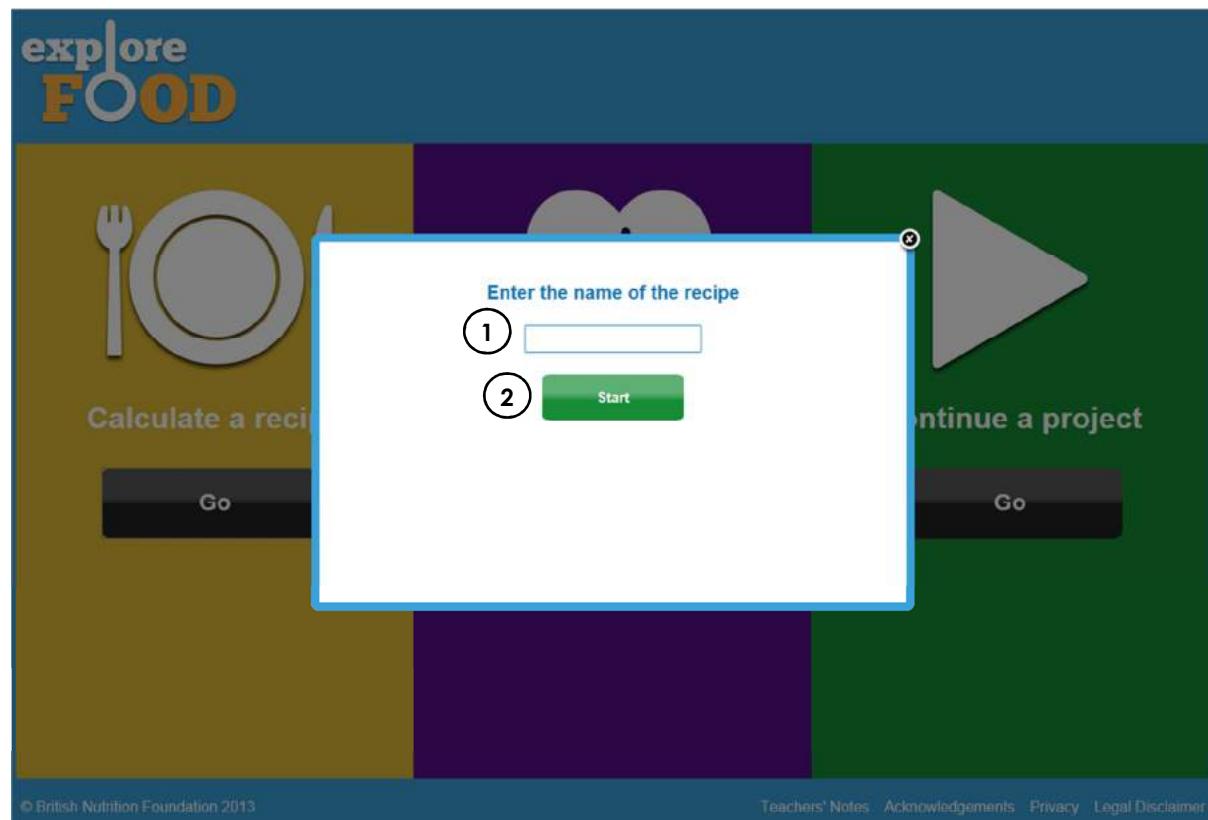
- Calculate a recipe – enables the user to analyse a recipe
- Calculate a diet – enables the user to analyse a day's diet
- Continue a project – enables the user to reload a saved project for further analysis



Calculate a recipe

This section allows the user to calculate the energy and nutrients provided by a recipe.

Students should have all the ingredients and weights ready for analysis.



1. Enter the name of the recipe here.
2. Click 'Start' to continue.

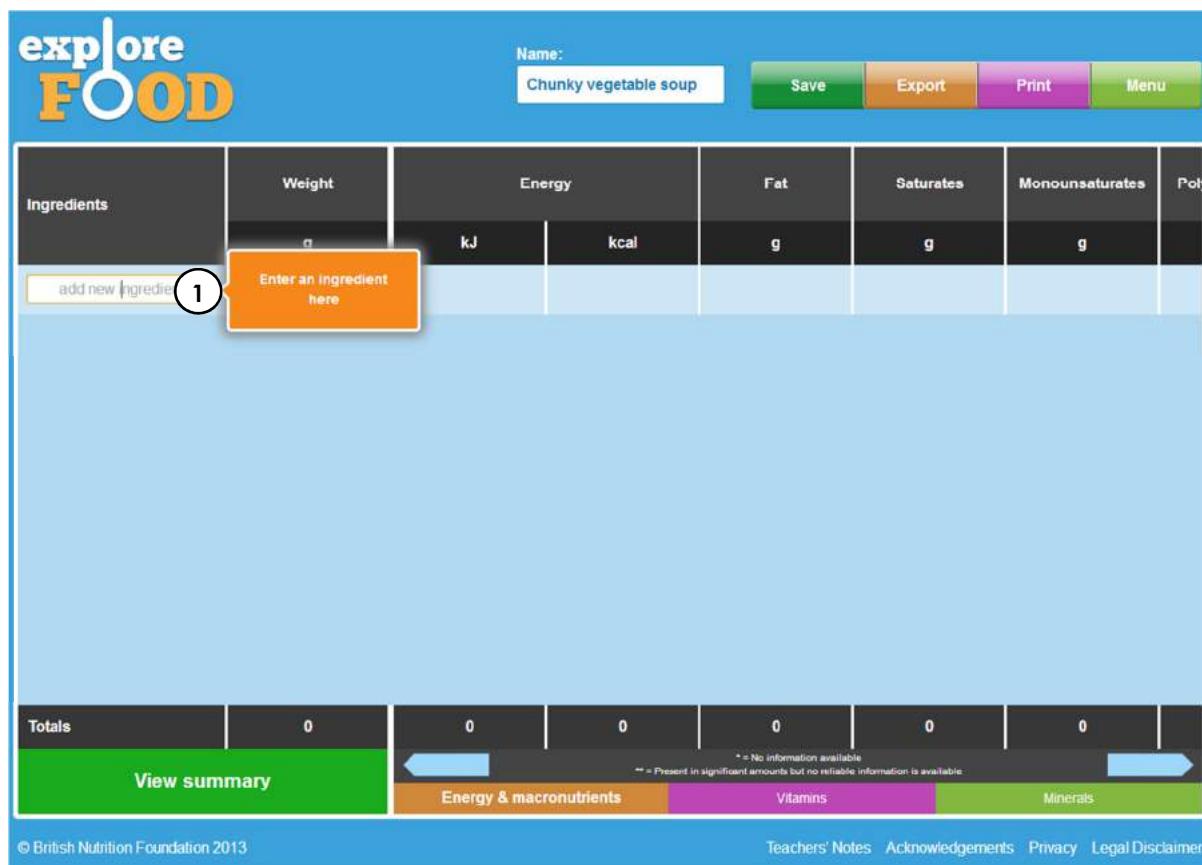
Entering ingredients

Start by typing in the name of the first ingredient.

The tool generates results to match the search terms. For example, searching for 'milk' will generate all results which contain milk. To select a specific type of milk, the user will need to scroll down to look for 'Semi-skimmed', 'Skimmed' or 'Whole' milk. Similarly, searching for 'flour' will generate all results which contain flour. To select the specific type of flour for cooking, the user will need to scroll down to look for 'Wheat flour'.

Users are recommended to enter the whole key word of the ingredient to generate the best matching results.

Only food and drinks from the government database are available so the user may need to find a suitable replacement if the ingredient is not shown on the tool. No ingredients can be added to the tool. Scroll up and down to find the most suitable ingredient.



The screenshot shows the 'explore FOOD' tool interface. At the top, there is a blue header with the 'explore FOOD' logo, a 'Name:' field containing 'Chunky vegetable soup', and buttons for 'Save', 'Export', 'Print', and 'Menu'. Below the header is a table with columns for 'Ingredients', 'Weight', 'Energy', 'Fat', 'Saturates', 'Monounsaturates', and 'Pol'. A large orange box highlights the 'Ingredients' column, with the text 'Enter an ingredient here' and a circled '1' indicating where to input the first ingredient. At the bottom, there is a 'View summary' button, a 'Totals' row with values 0, 0, 0, 0, 0, and 0, and a footer with links to 'Teachers' Notes', 'Acknowledgements', 'Privacy', and 'Legal Disclaimer'. A copyright notice '© British Nutrition Foundation 2013' is also present.

1. Enter an ingredient here.

explore
FOOD

Name:

Save **Export** **Print** **Menu**

Ingredients	
	Bhaji, potato and onion
	Bhaji, turnip and onion
	Cheese and onion rolls, pastry
	Flan, cheese, onion and potato, wholemeal
Onion	French onion soup
	Minced beef with gravy with/without onions, canned
	Okra with tomatoes and onion, West Indian
	Onion sauce, made with skimmed milk
	Onions, baked
	Onions, dried, raw
	Onions, fried in butter
	Onions, fried in lard
	Onions, pickled, drained
	Pakora/bhajia, onion, fried in vegetable oil
	Relish, corn/cucumber/onion
	Sauce, curry, onion, with butter
	Sauce, curry, tomato and onion
Totals	0
	0
	0
	0
	0
	0
	0

View summary

2 **1**

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1. Scroll down to find the most suitable ingredient, or modify the search term.
2. Click on the ingredient to select.

Once an ingredient is selected, the user can enter the weight. The amounts of food and drinks are required in grams (g).



The screenshot shows the 'explore FOOD' interface. At the top, the title 'explore FOOD' is on the left, and a navigation bar on the right includes 'Name:' (set to 'Chunky vegetable soup'), 'Save', 'Export', 'Print', and 'Menu'. Below this, the 'Ingredients' section shows a table with columns for Energy (kJ and kcal), Fat (g), Saturates (g), Monounsaturates (g), and Polyunsaturates (g). A row for 'Onions, raw' is listed with a weight of '1'. An orange box with the text 'Enter the weight of the ingredient' is overlaid on the table. A circled '1' is next to the weight input field. Below the table is a button 'add new ingredient'. At the bottom, there are 'Totals' (all values are 0), a 'View summary' button, and sections for 'Energy & macronutrients', 'Vitamins', and 'Minerals'. A note at the bottom of the table states: '* = No information available ** = Present in significant amounts but no reliable information is available'.

1. Enter the weight of the ingredient in grams. For measurements in millilitres (ml), simply use the same value as grams (g).

The values for energy and macronutrients appear horizontally across the tool. Clicking on the tabs at the bottom of the screen will show the values for vitamins and minerals respectively. Use the horizontal scroll button to view all the values.

The user can continue to add other ingredients. Use the vertical scroll button on the right if necessary. The total amounts for different nutrients are shown at the bottom. Click 'View summary' to see the nutrition information of the complete recipe.

To delete an ingredient, click on the cross before the name of the ingredient.

The name of the recipe and weight of ingredients can be amended at any time.



explore
FOOD

Name: **Chunky vegetable soup**

Save Export Print Menu

Ingredients	Weight	Energy			Fat	Saturates	Monounsaturates	Pol...
		g	kJ	kcal				
4 Onions, raw	3 120	180	43.2	0.24	0	0	0	0
5 add new ingredient								

Totals

120	180	43.2	0.24	0	0
-----	-----	------	------	---	---

6 **View summary**

Click here to view a summary when all the ingredients have been added

1

2

3

4

5

6

7

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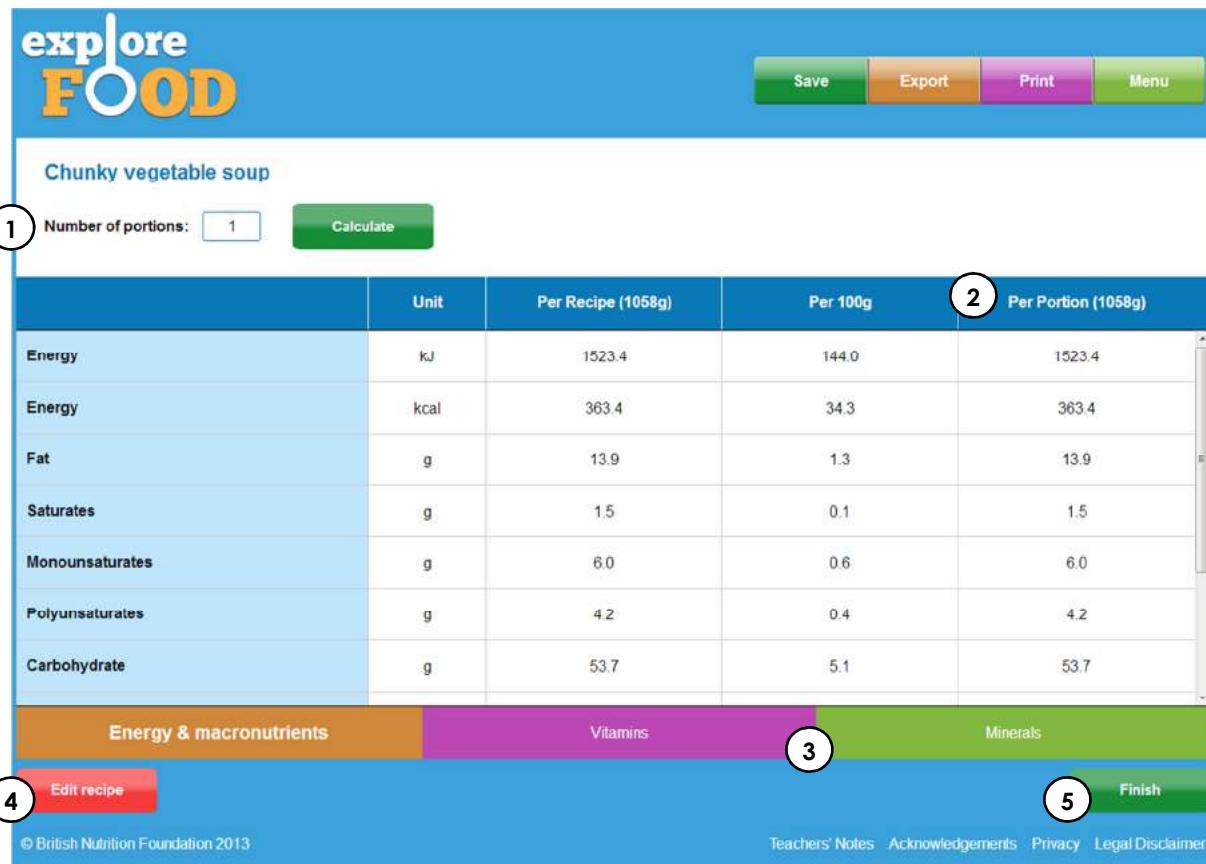
1. Click the tabs to view the values for different nutrient groups.
2. Scroll horizontally to view other values.
3. Change the weight of the ingredient here. Press enter. The data will automatically update.
4. Click here to delete the ingredient.
5. Add a new ingredient here.
6. Click here to view a summary when all the ingredients have been added.
7. Change the name of the recipe here.

View summary

On clicking 'View summary', the user will be provided with an overview of the recipe.

Similar to the previous screen, the user can click on the tabs at the bottom to view the values for 'Energy & macronutrients', 'Vitamins' and 'Minerals' respectively. All the values are expressed as per recipe, per 100g and per portion. The number of portions for the recipe can be changed. The value per portion is automatically calculated when the number of portions changes.

The user can click 'Edit recipe' to go back to the previous screen to make changes to the ingredient list and weight at any time. This supports recipe modification.



	Unit	Per Recipe (1058g)	Per 100g	Per Portion (1058g)
Energy	kJ	1523.4	144.0	1523.4
Energy	kcal	363.4	34.3	363.4
Fat	g	13.9	1.3	13.9
Saturates	g	1.5	0.1	1.5
Monounsaturates	g	6.0	0.6	6.0
Polyunsaturates	g	4.2	0.4	4.2
Carbohydrate	g	53.7	5.1	53.7

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1. Enter the number of portions of the recipe here. The default is set as 1. Click 'Calculate' to proceed.
2. The portion size changes with the number of portions per recipe.
3. Click on the tabs to view the values for different groups of nutrients.
4. Click here to edit the recipe, e.g. modify ingredients and weights.
5. Click 'Finish' to go back to the main menu. The user will be prompted to save the work (see Page 13).

Number of portions: 1 Calculate

Are you sure you want to finish?

1 Yes, please finish.

2 No, I want to continue or save my work.

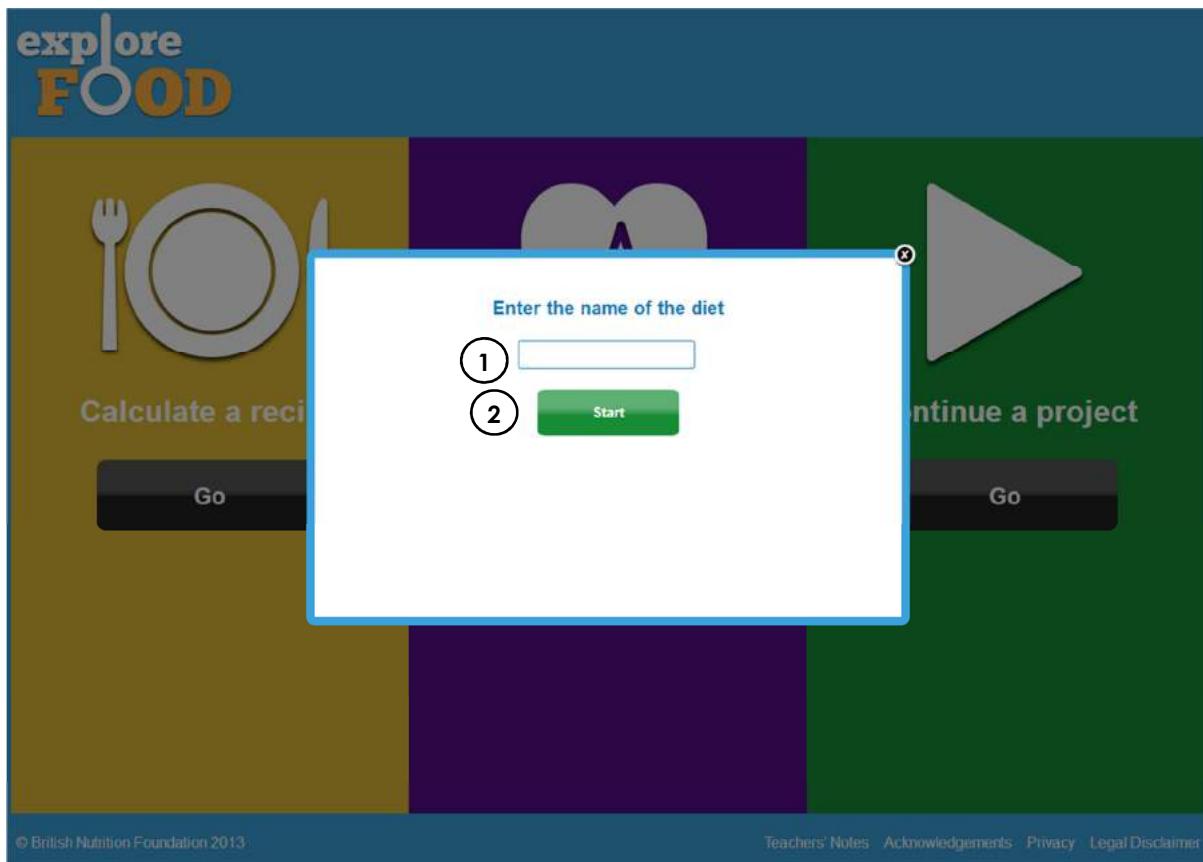
	Per Portion (1058g)			
Energy	1523.4			
Energy	363.4			
Fat	13.9			
Saturates	1.5			
Monounsaturates	6.0			
Polyunsaturates	4.2			
Carbohydrate	53.7	5.1	53.7	
Energy & macronutrients	Vitamins	Minerals		
Edit recipe	Finish			

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1. Click here to go back to the main menu. The work will not be saved.
2. Click here to continue or save work. To save work, click 'Save' (see Page 22).

Calculate a diet

This section allows the user to calculate the energy and nutrients provided by a diet for one day. Completing this will lead to a summary sheet and a comparison of the diet to Dietary Reference Values (DRVs). Students should have completed a diet diary in advance of completing the analysis (see Appendix two on Page 38) – this supports more accurate analysis. The amounts of food and drinks are required in grams (g). Support for average portion sizes is provided in Appendix one (Page 27).



1. Enter the name of the diet here.
2. Click 'Start' to continue.

Entering a diet

Start by typing the first food or drink for breakfast (or another meal occasion)

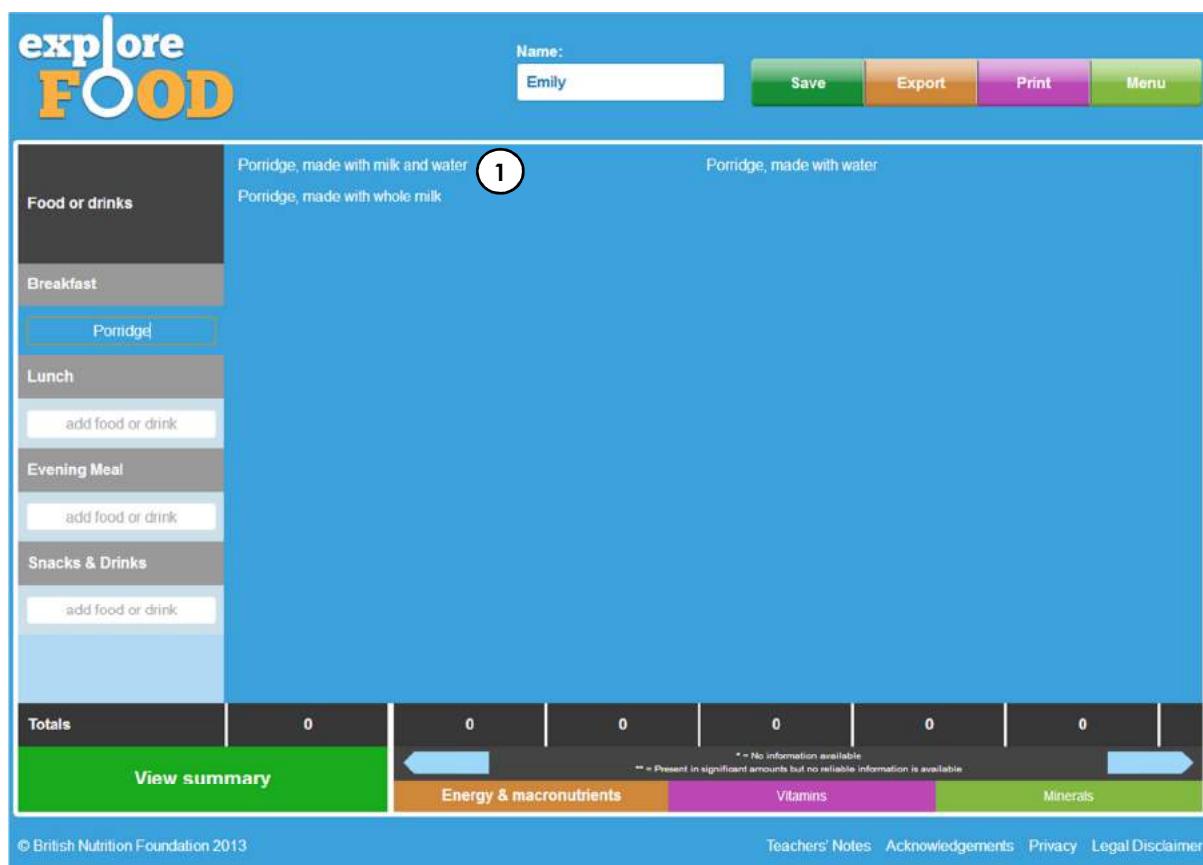
The tool generates results to match the search terms. For example, searching for 'apple' will generate all results which contain apple. To select a raw apple for eating, the user will need to scroll down to look for the appropriate item. Similarly, searching for 'water' will generate all results which contain water, such as foods made up with water. To select water for drinking, the user will need to scroll down to look for 'Distilled water'.

Users are recommended to enter the whole key word of the food or drink to generate the best matching results.

Only food and drinks from the government database are available so the user may need to find a suitable replacement if the search item is not shown on the tool. No food or drink can be added to the tool. Scroll up and down to find the most suitable food or drink. The screen has been designed to encourage the user to enter the food and drinks into different meal occasions throughout the day, as well as for snacks and drinks.



1. Enter a food or drink here.



Name:

Save Export Print Menu

	0	0	0	0	0	0
Totals	0	0	0	0	0	0
View summary						
	Energy & macronutrients		Vitamins	Minerals		

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1. Click to select the most appropriate food.

Once a food or drink is selected, the user can enter the weight.

There is a lack of national guidance on the portion size of different foods in the UK. Refer to Appendix one (Page 27) for further information.

Name:

Emily

Save

Export

Print

Menu

Food or drinks	Weight	Porridge, made with milk and water		Fat	Saturates	Monounsaturates	Poly
		kJ	kcal	g	g	g	g
Breakfast	Enter the weight of the food or drink						
Porridge, made with milk and water	1						
add food or drink							
Lunch							
add food or drink							
Evening Meal							
add food or drink							
Snacks & Drinks							
add food or drink							
Totals	0	0	0	0	0	0	0

* = No information available

** = Present in significant amounts but no reliable information is available

[View summary](#)

Energy & macronutrients

Vitamins

Minerals

1. Enter the weight of the food in grams. For measurements in millilitres (ml), simply use the same value as grams (g).

The values for energy and macronutrients will appear horizontally across the tool. Clicking on the other tabs at the bottom will show the values for vitamins and minerals respectively. Use the horizontal scroll button to view all the values.

The user can continue to add other food and drinks for the different meal occasions. Use the vertical scroll button if necessary. The total amounts for different nutrients are shown at the bottom. Click 'View summary' to see the nutrition information for the day's diet.

To delete a food or drink, click on the cross before the name of the food or drink.

The name of the diet and weight of food and drinks entered can be amended at any time.



Food or drinks	Weight	Energy			Fat	Saturates	Monounsaturates	Poly
		g	kJ	kcal				
Breakfast								
✖ Porridge, made with milk and water	3 200	672	160	6.2	2.96	1.86		
✖ Orange juice, freshly squeezed	200	280	66	0	0	0		
✖ Raspberries, raw	60	65.4	15	0.18	0.06	0.06		
Lunch								
✖ Chilli con carne, homemade	300	1512	363	22.5	8.64	9.69		
✖ White rice, polished, boiled	200	1044	246	0.6	0	0		
Totals	3520	6760	1608.9	65.75	22.33	23.9		
View summary 2								
<small>* = No information available</small> <small>** = Present in significant amounts but no reliable information is available</small>								
Energy & macronutrients			Vitamins			Minerals		

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1. Click the tabs to view the values for different groups of nutrients.
2. Scroll horizontally to view other values.
3. Change the weight of the food or drink. Press enter. The data will automatically update.
4. Click here to delete a food or drink.
5. Add a new food or drink here.
6. Scroll down to view the values for other food and drinks.
7. Click here to view a summary when all the food and drink items have been added.
8. Change the name of the diet here.

View summary

On clicking 'View summary', the user will be provided with an overview of the day's diet per meal occasion and total amounts. Similar to the previous screen, the user can click on the tabs at the bottom to view the values for 'Energy & macronutrients', 'Vitamins' and 'Minerals' respectively. All the values are expressed per meal occasion and the total amount for the day. The user can scroll vertically to see other values.

This screen is a useful teaching tool to see the contribution of energy and nutrients to each meal occasion throughout the day.

To see how the diet compares with the Dietary Reference Values (DRVs), click 'Compare with DRVs'.



The screenshot shows a table of dietary intake for user 'Emily' across four meal occasions: Breakfast, Lunch, Evening Meal, and Snacks & Drinks. The table includes columns for Nutrient, Unit, and values for each occasion, with a final column for the Total. The table is scrollable vertically.

	Unit	Breakfast	Lunch	Evening Meal	Snacks & Drinks	Total
Energy	kJ	1017.40	2556	1841	1345.60	6760
Energy	kcal	241	609	439.50	319.40	1608.90
Fat	g	6.38	23.10	25.15	11.12	65.75
Saturates	g	3.02	8.04	4.30	6.37	22.33
Monounsaturates	g	1.92	9.69	9.55	2.74	23.90
Polyunsaturates	g	1.12	1.53	7.35	0.38	10.38
Carbohydrate	g	39.76	72.40	3.10	52.74	168
Sugars	g	23.96	8.10	2.25	21.06	55.37
Protein	g	6.24	32	50.40	5.68	90.52

Below the table are three tabs: 'Energy & macronutrients' (highlighted in orange), 'Vitamins' (highlighted in pink), and 'Minerals' (highlighted in green). At the bottom of the screen, there are four numbered buttons: 1 (scroll), 2 (edit diet), 3 (compare with DRVs), and 4 (compare with DRVs).

1. Scroll vertically to see other values.
2. Click on the tabs to view the values for different groups of nutrients.
3. Click here to edit the diet, e.g. modify food and drinks, weights and meal occasions.
4. Click here to compare the day's diet to UK Dietary Reference Values (DRVs).

Compare with DRVs

This screen allows the user to compare the diet of a person with the UK Dietary Reference Values (DRVs) (Department of Health 1991 and SACN 2011). The user needs to enter the age and gender of the person for whom the diet is for, and if applicable, select either pregnancy or breastfeeding for females 16 years or over.

Pregnancy options are by the trimesters (1-3 months, 4-6 months, 7-9 months) and the breastfeeding options are monthly up to 6 months. The World Health Organization recommends exclusive breastfeeding for the first 6 months of life and the introduction of complementary foods and continued breastfeeding thereafter (WHO 2002).

The values are presented as a percentage of the recommended DRVs. The user can click on the different tabs at the bottom of the screen to see the values for vitamins and minerals respectively.

The user can click 'View summary' to go back to the previous screen and further edit the diet. The user can also change the age and gender of the person at any time.



1. Enter the age of the person here.
2. Select the gender of the person here.
3. Select pregnant or breastfeeding as appropriate. Applies to females 16 years of age or over.
4. Click here to see the results.
5. Click on the tabs to view the percentage values for different groups of nutrients.
6. Click here to go back to view the summary of the diet.

Function buttons

At the top right hand corner, there are four buttons which provide different functions.

These are:

- Save – allows users to save existing work.
- Export – exports work to a spreadsheet file.
- Print – prints work on the current screen.
- Menu – goes back to the main menu.



Save: to allow saving of existing work.

Desktop:

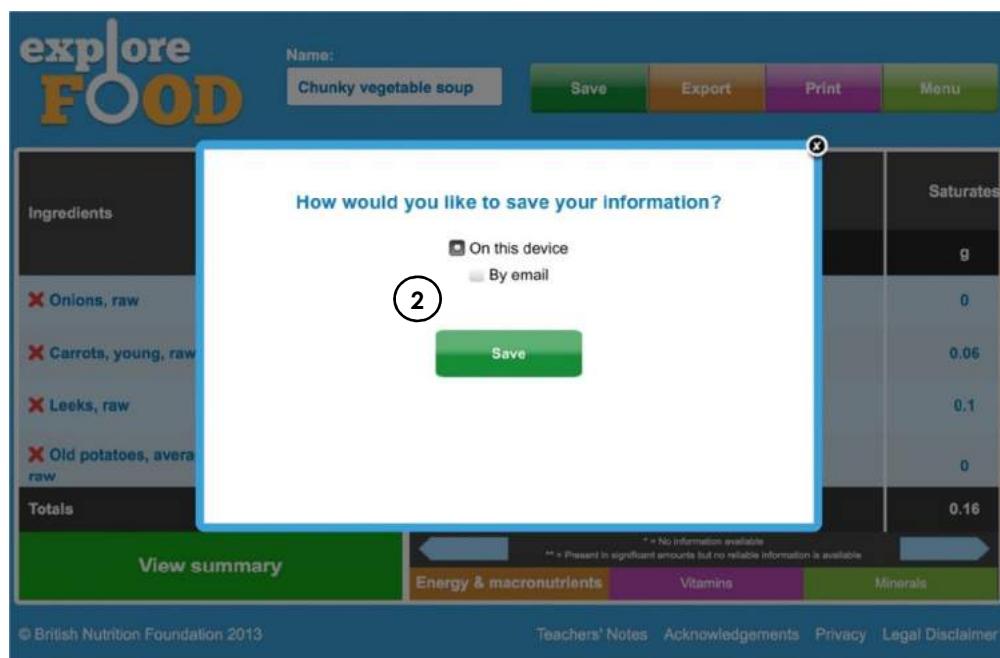


The screenshot shows a nutrition facts table for 'Chunky vegetable soup'. The table includes columns for Ingredients, Weight (g), Energy (kJ and kcal), Fat (g), Saturates (g), Monounsaturates (g), and Polyunsaturates (g). The table lists various vegetables and their weights, along with their nutritional values. A 'View summary' button is at the bottom left, and a navigation bar at the bottom right includes Energy & macronutrients, Vitamins, and Minerals.

Ingredients	Weight	Energy		Fat	Saturates	Monounsaturates	Polyunsaturates
		g	kJ				
Onions, raw	120	180	43.2	0.24	0	0	0
Carrots, young, raw	60	75	18	0.3	0.06	0	0
Leeks, raw	80	74.4	17.6	0.4	0.08	0	0
Old potatoes, average, raw	120	381.6	90	0.24	0	0	0
Celery, raw	140	42	9.0	0.20	0	0	0
Vegetable oil, blended, average	11	406.56	98.89	10.99	1.28	5.85	3.86
Wheat flour, white, plain	20	200	69.2	0.26	0.04	0.1	0.1
Totals	1058	1523.41	363.4	13.92	1.46	6.96	3.86

1. For desktop users, this will automatically save the project in the name of the recipe/diet as a '.dat' file to a pre-set folder, e.g. 'Downloads'. The file can be moved to another location. The contents of this file should not be edited, as this will corrupt any future work. To continue work, see Page 26.

Tablet:



The screenshot shows a save dialog box on a tablet device. The dialog box asks 'How would you like to save your information?' with two options: 'On this device' (checked) and 'By email'. A 'Save' button is at the bottom. The background shows the nutrition facts table for 'Chunky vegetable soup'.

2. For tablet users, the data can be saved on the browser or via email as an attachment, which asks for an email address for the data to be sent to. The file attachment can be reloaded on a desktop computer. To continue work, see Page 26.

Export: to allow the nutrition data to be exported for further analysis. The file will be saved in the name of the recipe/diet as a '.csv' file which can be viewed using a spreadsheet, e.g. Microsoft Excel.

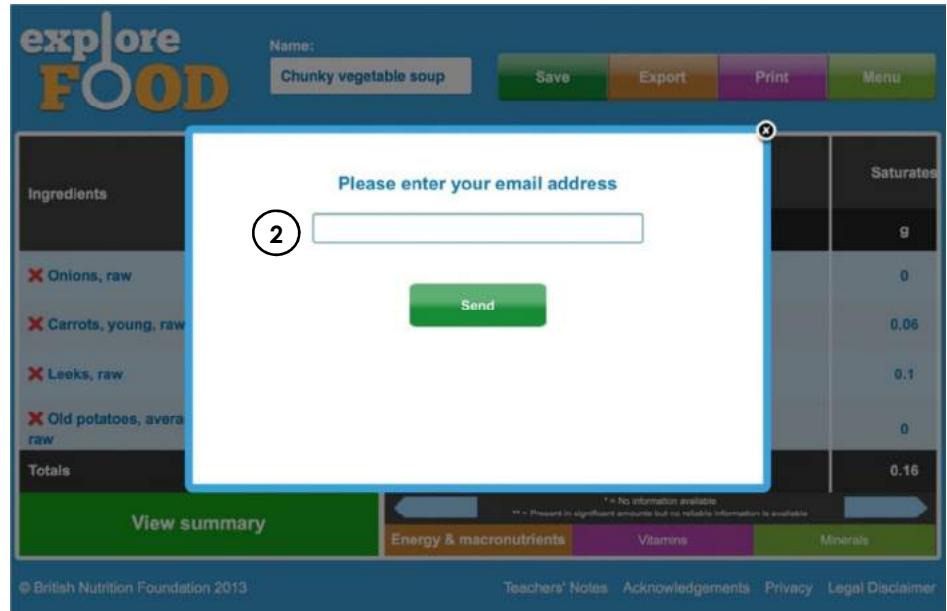
Desktop:



The screenshot shows a nutrition facts table for 'Chunky vegetable soup'. The table includes columns for Ingredients, Weight (g), Energy (kJ and kcal), Fat (g), Saturates (g), Monounsaturates (g), and Polyunsaturates (g). The table lists various ingredients with their weights and nutritional values. A 'View summary' button is at the bottom left, and a 'Save' button is at the top right. A status bar at the bottom shows '© British Nutrition Foundation 2013' and '© Show all downloads... x'.

1. For desktop users, this will automatically export the data to a pre-set folder, e.g. 'Downloads'. The file can be moved to another location.

Tablet:



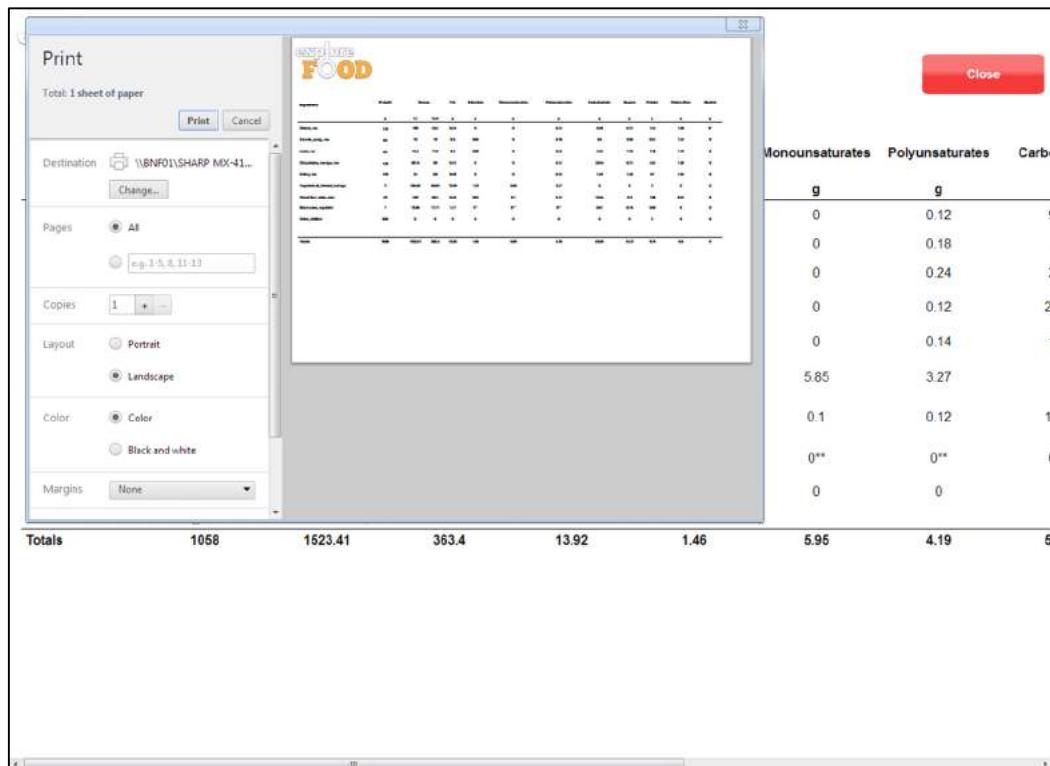
The screenshot shows a nutrition facts table for 'Chunky vegetable soup' on a tablet. A modal dialog box is open in the center, prompting the user to 'Please enter your email address' with a text input field and a 'Send' button. The background table includes columns for Ingredients, Weight (g), Energy (kJ and kcal), Fat (g), Saturates (g), Monounsaturates (g), and Polyunsaturates (g). The table lists various ingredients with their weights and nutritional values. A status bar at the bottom shows '© British Nutrition Foundation 2013' and '© Show all downloads... x'.

2. For tablet users, the data will be exported via email as an attachment. Enter an email address for the data to be sent to. The file attachment can be reloaded on a desktop computer.

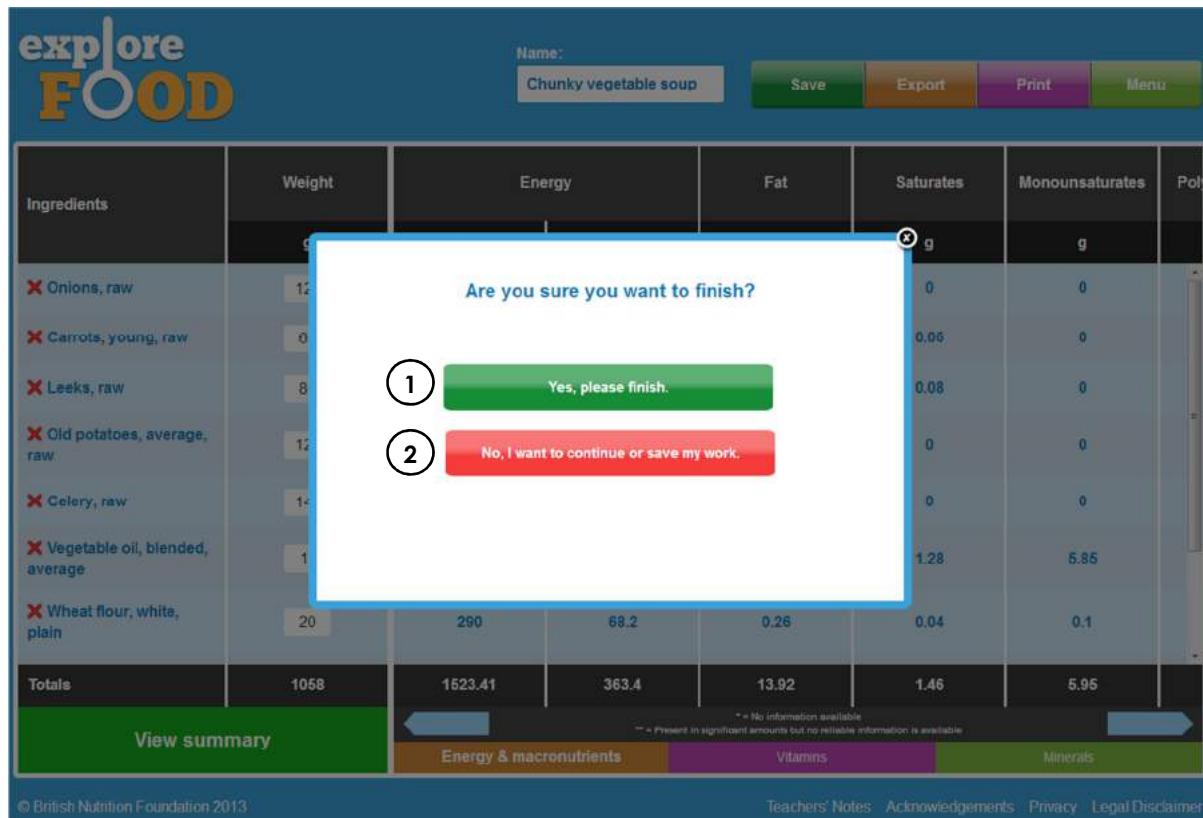
Print: to allow printing of the screen the user is viewing. To print a different set of nutrients, i.e. 'Energy & macronutrients', 'Vitamins' and 'Minerals', the user needs to click on a different group tab at the bottom of the chart and then click 'Print'.

For optimal viewing, select the landscape layout.

Tablet users can print their work on a pre-set printer connected via the wireless network.



Menu: directs the user back to the main menu page. The user will be reminded to save existing work.



The screenshot shows a nutrition facts table for 'Chunky vegetable soup'. The table includes columns for Ingredients, Weight, Energy, Fat, Saturates, Monounsaturates, and Poly. A confirmation dialog box is overlaid on the table, asking 'Are you sure you want to finish?'. Two options are provided: '1 Yes, please finish.' (green button) and '2 No, I want to continue or save my work.' (red button). The table data is as follows:

Ingredients	Weight	Energy	Fat	Saturates	Monounsaturates	Poly
Onions, raw	12	290	68.2	0.26	0.04	5.95
Carrots, young, raw	0					
Leeks, raw	8					
Old potatoes, average, raw	12					
Celery, raw	12					
Vegetable oil, blended, average	1					
Wheat flour, white, plain	20					
Totals	1058	1523.41	363.4	13.92	1.46	5.95

View summary

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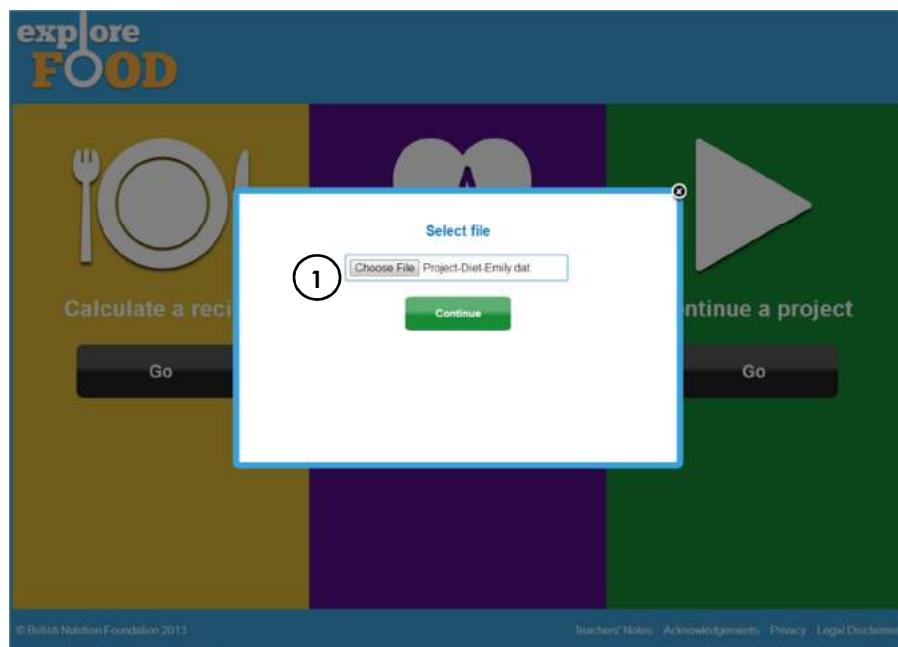
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1. Click here to go back to the main menu. Work will not be saved.
2. Click here to continue or save work. To save work, click 'Save' (see Page 22).

Continue a project

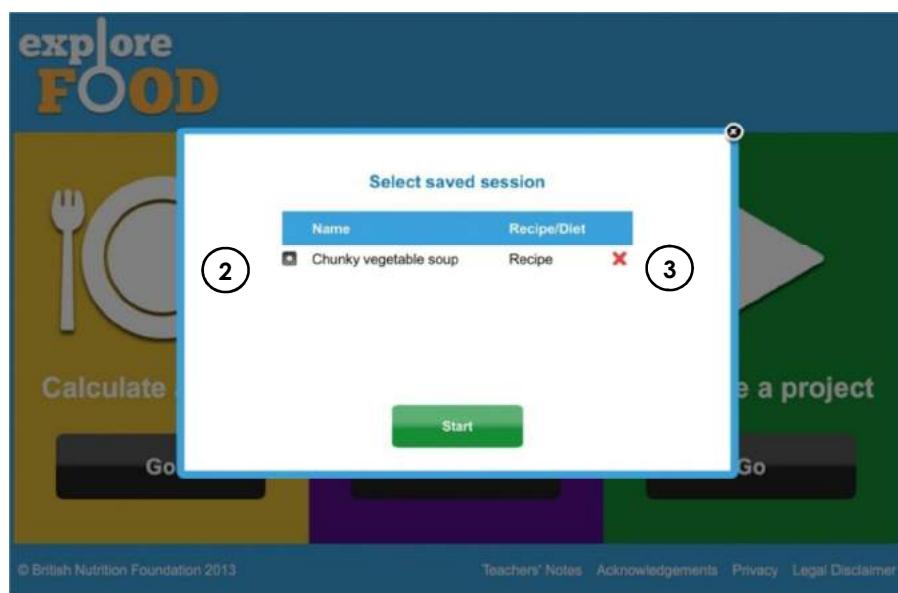
This section allows the user to reload previous work and continue an existing project. This can be a recipe or a diet. To do this, locate where the .dat file of the project is saved on the desktop computer or tablet platform, and click 'Continue'.

Desktop:



1. For desktop users, existing files will be saved on the computer. Select the file for the project and click 'Continue'.

Tablet:



2. For tablet users, existing files will be saved in the browser. Select the file for the project and click 'Start'.
3. Click here to delete any saved files on the browser.

Appendix one

Portion sizes

Currently, there is no standardised portion size published for food or drinks in the UK. Only portion size guidelines are available, for example the *Food Portion Sizes* guide by the Food Standards Agency (2002). Users are recommended to weigh all ingredients so they know how much they are adding to the recipe, which can also improve the accuracy of the nutrition analysis.

Below are some examples which may be useful in calculating the recipe (Food Standards Agency 2002):

Category	Food or drink	Quantity	Weight (g)
Beverages	Fruit juice	1 average glass	160
		1 individual carton	200
	Coffee	1 average mug	260
	Tea	1 average mug	260
Biscuits	Crispbread	1 crackerbread	10
	Digestives	1 full coated	20
	Oat cakes	1 round piece	13
	Shortbread finger	1 piece	13
Breads	Bagel	1 plain	70
	Breadstick	1 stick	7
	Brioche	1 piece	45
	Chapati	1 piece	55
	Croissant	1 piece	35 (mini) 60 (regular)
	Naan bread	1 plain	160
	Papadum	1 fried	13
	Pitta bread	1 piece	75 (small) 95 (large)
	Roll	1 white, soft	45
		1 wholemeal, soft	48
	White sliced bread	1 slice of small loaf	27 (fresh) 24 (toasted)
		1 thin slice of large loaf	31 (fresh) 22 (toasted)
		1 medium slice of large loaf	36 (fresh) 27 (toasted)
		1 thick slice of large loaf	44 (fresh) 34 (toasted)
		1 slice of small loaf	25 (fresh) 23 (toasted)
	Wholemeal sliced bread	1 medium slice of large loaf	36 (fresh) 31 (toasted)
		1 thick slice of large loaf	44 (fresh) 40 (toasted)
		1 tablespoon	8
Breakfast cereals	Bran flakes		

Category	Food or drink	Quantity	Weight (g)
Breakfast cereals	Corn flakes	1 average portion	20 (small) 30 (medium) 50 (large)
		1 tablespoon	6
	Muesli	1 average portion	30 (small) 50 (medium) 100 (large) 40 (sachet) 15 (tablespoon)
	Porridge	1 portion, made-up	110 (small) 160 (medium) 210 (large)
	Rice cereal	1 average portion	20 (small) 30 (medium) 45 (large) 4 (tablespoon)
	Shredded cereal	1 average portion	35 (small) 45 (medium) 70 (large)
Cakes	Wheat biscuits	1 bisc	20
	Bakewell tart	1 piece	43
	Chelsea bun	1 piece	78
	Chocolate éclair	1 piece	90
	Doughnut	1 piece	75 (jam-filled) 60 (ring)
	Gateau	1 average slice	85
	Scones	1 piece	48
	Swiss roll	1 average slice	30
Cheese	Hard cheese, e.g. Cheddar	1 average chunk	20 (small) 40 (medium) 60 (large) 30 (matchbox size)
		1 tablespoon grated	10
	Cottage cheese	1 tablespoon	40
Confetionery	Chocolate bar	1 piece	50 (small) 17 (treat size)
Eggs	Hen's eggs	1 average boiled, no shell	50
Fats	Butter	1 average portion on sliced bread	7 (thin) 10 (medium) 12 (thick)
		1 tablespoon	11
	Oil	1 teaspoon	3
		1 average portion on sliced bread	5 (thin) 7 (medium) 10 (thick)
Fish	Cod	1 average fillet	50 (small) 120 (medium) 175 (large)

Category	Food or drink	Quantity	Weight (g)
Fish	Crab meat	1 tablespoon	40
		1 can	85 (small) 170 (large)
	Crabstick	1 stick	17
	Fish fingers	1 finger	28
	Haddock	1 average fillet, grilled	50 (small) 120 (medium) 170 (large)
	Lemon sole	1 average, grilled or steamed	100 (small) 170 (medium) 220 (large)
	Mackerel	1 average portion, grilled	160
		1 small can	200
	Mussels	1 piece, no shell	7
		1 average portion, no shell	40
	Plaice	1 average fillet, steamed or grilled	75 (small) 130 (medium) 180 (large)
	Prawn	1 piece, no shell	3 (regular) 8 (king size)
	Salmon	1 steak, grilled	100 (average) 170 (large)
		1 average canned portion	100
		1 average portion, smoked	56
	Trout	1 average fillet, grilled, flesh only, without head	155
	Tuna	1 small can	100
	Turbot	1 average whole, grilled	160
	White bait	1 average portion, fried	80
Fruit	Apple	1 small eating, raw	75 (with core) 67 (without core)
		1 medium eating, raw	112 (with core) 100 (without core)
		1 large eating, raw	170 (with core) 153 (without core)
	Apricot	1 raw without stone	40
		1 dried	8
	Avocado pear	1 raw, without skin or stone	100 (small) 145 (medium) 195 (large)
	Banana	1 raw, without skin	80 (small) 100 (medium) 120 (large)
	Blackberries	1 raw	5
	Cherries	1 raw, without stone	4
	Clementines	1 raw, without skin	40 (small) 60 (medium) 80 (large)
	Currants	1 heaped tablespoon, dried	25
	Dates	1 without stone	25 (raw) 15 (dried)
	Fig	1 piece	55 (raw) 20 (dried)

Category	Food or drink	Quantity	Weight (g)
Fruit	Fruit salad	1 portion	140
	Grapes	1 seedless, raw	2
		1 small bunch	100
	Grapefruit	1 portion	120
	Kiwi fruit	1 raw medium without skin	60
	Lemon	Juice from ½ lemon	10
	Lychee	1 without stone or skin	15 (raw) 13 (canned)
	Mandarin orange	1 without skin, raw	60 (small) 100 (medium) 140 (large)
	Mango	1 without stone or peel	150
		1 slice	40
	Melon	1 slice without skin	150 (cantaloupe) 200 (honeydew) 200 (watermelon)
	Orange	1 raw, without skin	120 (small) 160 (medium) 210 (large)
		Juice from 1 orange	55
	Passion fruit	1 average, flesh and seeds	15
	Peach	1 raw, without stone	70 (small) 110 (medium) 150 (large)
		1 average portion, canned	120
	Pear	1 raw	150 (comice) 170 (conference)
		1 average portion, canned	135
	Pineapple	1 large slice	80
		1 ring or 6 chunks, canned	40
	Plum	1 raw, without stone	30 (small) 55 (medium) 85 (large)
	Prunes	1 dried, with stone	8
		6 stewed, without stone	60
	Raisins / Sultanas	1 tablespoon, dried	30
	Raspberries	1 raw	4
	Strawberry	1 raw	12
	Tangerine	1 raw, without skin	50 (small) 70 (medium) 90 (large)
Ice-creams	Ice-cream	1 scoop / tub	60
	Ice-cream bar	1 bar	94
	Ice-cream slice	1 slice	56
Meat	Bacon	1 rasher, grilled, average	25 (back) 40 (middle) 20 (streaky)
	Beef burger	1 average	34
	Beef, minced	1 average portion, stewed	100 (small) 140 (medium) 220 (large)

Category	Food or drink	Quantity	Weight (g)
Meat	Beef, roast	1 average portion	50 (small) 90 (medium) 150 (large)
		1 slice	28 (thin) 45 (thick)
	Beef steak	1 average portion	110 (small) 144 (medium) 210 (large)
		1 fillet steak, grilled	105 (5oz) 168 (8oz)
		1 rump steak, grilled	102 (5oz) 163 (8oz)
	Beef, stewed	1 average portion	90 (small) 140 (medium) 210 (large)
	Black pudding	1 slice	30
		1 portion	75
	Chicken fingers	1 finger	15
	Chicken Kiev	1 fried or grilled	170
	Chicken nuggets	1 piece	16
		6 nuggets	100
	Chicken pie	1 average slice, large pie	90 (small) 120 (medium) 150 (large)
	Chicken portions	1 breast, no bone	100 (small) 130 (medium) 150 (large)
		1 drumstick, no bone	47
		1 half	350
		1 wing, no bone	25
	Chicken, roast	1 average portion	70 (small) 100 (medium) 170 (large)
		1 slice	40
	Chilli con carne	1 average portion, no rice	220
	Corned beef	1 slice	38 (thin) 50 (thick)
		1 small can	198
	Cornish pastie	1 average portion	155 (medium) 260 (large)
	Cottage pie / Shepherd's pie	1 average portion	310
	Duck	1 average portion,	185 (breast and wing, meat and skin) 125 (crispy duck)
	Ham	1 slice	23 (average) 11 (thin)
	Parma ham	1 average slice	17
		1 average portion	47
	Chicken tikka	1 average main course portion	200

Category	Food or drink	Quantity	Weight (g)
Meat	Samosa	1 average portion	40 (small) 70 (medium) 120 (large)
	Doner kebab	1 average meat portion	85 (small) 130 (large)
	Lamb chop	1 average cutlet, no bone	50
	Lamb, roast	1 average portion	50 (small) 90 (medium) 150 (large)
		1 average slice	30
	Lasagne	1 average portion	420
	Luncheon meat	1 average slice	14 (thin) 20 (thick)
	Mousakka	1 average portion	330
	Pork chops	1 average lean escalope	75
		1 rib end chop, no bone	85
		1 spare rib, no bone	140
	Pork pie	1 average portion	140
	Pork, roast	1 average portion	50 (small) 90 (medium) 150 (large)
		1 average slice	40 (regular) 28 (thin)
	Sausage roll	1 average portion	32 (small) 60 (medium) 145 (large) 14 (mini cocktail)
	Sausages	1 chipolata, fried or grilled	20
		1 cocktail sausage, fried or grilled	10
		1 German sausage, bratwurst	75
		1 hot dog sausage	23 (small) 47 (large)
		1 pork / beef, fried or grilled	12 (buffet) 40 (large) 20 (thin)
		Spare ribs	60
Milk and cream	Milk	1 tablespoon	15
		1 teaspoon	5
		In mug of tea / coffee	30 (Whole) 40 (Semi-skimmed) 50 (Skimmed)
		1 average glass	200
		1 average portion, with cereals	100
		Cream	1 tablespoon 15 (single) 30 (double)

Category	Food or drink	Quantity	Weight (g)
Miscellaneous	Baking powder	1 teaspoon	4
	Curry powder	1 level teaspoon	3
	Herbs	1 teaspoon, dried	1
	Mustard	1 level teaspoon	8 3 (powder)
	Stock cube	1	7
	Parsley	1 level teaspoon, dried	1
		1 large sprig, fresh	1
	Salt	1 level teaspoon	5
		1 heaped teaspoon	8
	Spices	1 teaspoon, dried	3
	Stuffing	1 average portion	50
	Vinegar	1 teaspoon	5
		1 tablespoon	15
Nuts and seeds	Almonds	6 whole	13
	Brazil nuts	3 whole	10
	Cashew nuts	10 whole	10
		1 bag, roasted	25 (small) 50 (medium) 100 (large)
	Chestnuts	5 whole, peeled	50
	Peanuts	10 whole	13
		1 bag, roasted	25 (small) 50 (medium) 100 (large)
	Sesame seeds	1 tablespoon	12g
	Sunflower seeds	1 tablespoon	16
	Walnuts	6 halves	20
Pasta and grains	Bran	1 tablespoon	7
	Cornflour	1 heaped tablespoon	30
	Couscous	1 average portion	150
		1 tablespoon	33
	Flour	1 tablespoon	20 (level) 30 (heaped)
	Macaroni	1 average portion, boiled	150 (small) 230 (medium) 350 (large)
		1 tablespoon	30
	Macaroni cheese	1 average portion	220
	Noodles	1 packet, made up	280
	Oats	1 tablespoon	15
	Pasta, cooked	1 average portion	150 (small) 230 (medium) 350 (large)
		1 tablespoon	30
	Ravioli	1 average portion	250
	Pot noodles	1 average portion	300
	Rice	1 average portion, boiled	100 (small) 180 (medium) 290 (large)

Category	Food or drink	Quantity	Weight (g)
Pasta and grains	Spaghetti	1 average portion	150 (small) 220 (medium) 270 (large)
	Spaghetti Bolognese	1 average portion	470
	Tortellini	1 average portion	320
		1 tablespoon, canned	50
Puddings	Yorkshire pudding	1 average portion	80
	Bread and butter pudding	1 average portion	170
	Cheesecake	1 average slice	120
	Christmas pudding	1 average portion	100
	Custard	1 average portion	120
	Fruit crumble	1 average portion	170
	Fruit pie	1 average portion	110
	Fruit tart	1 average portion	95
	Jelly	1 average portion	115
	Lemon meringue pie	1 average portion	95
	Milk / Rice pudding	1 average portion	200
	Mousse	1 average portion	60
	Pancakes	1 average portion	60 (small) 110 (medium) 150 (large)
	Tiramisu	1 average portion	90
	Trifle	1 average portion	170
	Waffle	1 average portion	65
Sandwiches (made with two slices of medium sliced bread and filling)	Beef roast and salad	1 average sandwich	165
	Cheese and pickle	1 average sandwich	185
	Chicken roast and salad	1 average sandwich	205
	Egg mayonnaise and cress	1 average sandwich	145
	Ham, cheese and pickle	1 average sandwich	180
	Tuna mayonnaise	1 average sandwich	165
Sauces and pickles	Apple sauce	1 average portion	20
	Cheese sauce	1 average portion	30 (small) 62 (medium) 90 (large)
	Chutney, mango	1 teaspoon	10
		1 tablespoon	33
	Cranberry sauce	1 average portion	30
	French dressing	1 tablespoon	15
	Gravy	1 average portion	25 (small) 50 (medium) 120 (large)
	Mayonnaise	1 heaped tablespoon	33
		1 level tablespoon	15
	Mint jelly	1 average portion	20
	Mint sauce	1 average portion	10
	Pickle	1 tablespoon	40

Category	Food or drink	Quantity	Weight (g)
Sauces and pickles	Picked gherkin	1	8 (small) 25 (medium) 60 (large)
	Picked onion	1	15 (average) 25 (large)
	Soup	1 average portion	150 (small) 220 (medium) 300 (large)
	Soy sauce	1 teaspoon	5
	Tomato / White sauce	1 average portion	30 (small) 62 (medium) 90 (large)
Savoury snacks	Crisps	1 average pack	25 or 30 (small) 40 (medium) 75 (large) 100 (family)
	Taco	1 shell	10
Sugars and preserves	Honey	1 teaspoon	17 (heaped) 8 (level)
	Sugar	1 cube	5
		1 teaspoon	6 (heaped) 4 (level)
		1 tablespoon	20
Vegetables	Artichoke	1 globe heart	50
	Asparagus	5 spears	125
	Aubergine	1 half, including skin	130
	Baked beans	1 average portion	80 (small) 135 (medium) 190 (large)
		1 tablespoon	40
	Broad beans	2 tablespoons	120
	French beans	1 average portion	60 (small) 90 (medium) 120 (large)
	Red kidney beans	1 heaped tablespoon, cooked	35
	Runner beans	1 average portion	60 (small) 90 (medium) 120 (large)
	Beansprouts	1 tablespoon	20
	Beetroot	1 whole, small	35
		1 slice	10
	Broccoli	1 spear	45
		1 average portion	60 (small) 85 (medium) 110 (large)
	Brussels sprouts	1 average serving, 9 sprouts	90
		1 average portion	60 (small) 90 (medium) 120 (large)

Category	Food or drink	Quantity	Weight (g)
Vegetables	Cabbage	1 average portion	60 (small) 95 (medium) 120 (large)
	Carrots	1 average portion, boiled	40 (small) 60 (medium) 85 (large)
		1 boiled	30 (small) 80 (medium) 140 (large)
		1 tablespoon	40
	Cauliflower	1 floret	10
		1 average portion, boiled	60 (small) 90 (medium) 120 (large)
	Celery	1 stick	30
		1 average portion, boiled	30 (small) 50 (medium) 80 (large)
	Chick peas	1 heaped tablespoon	35
	Hummus	1 tablespoon	30
	Coleslaw	1 tablespoon	45
		1 tub	120 (small) 250 (large)
	Courgettes	1 cooked	100 (medium) 150 (large)
		1 average portion	60 (small) 90 (medium) 120 (large)
	Cucumber	1 slice	6
		1" piece	60
	Leeks	1 medium, boiled	160
	Lentils	1 tablespoon, boiled	40
	Lettuce	4 small leaves	20
	Marrow	1 average serving	65
	Mixed vegetables	1 average serving	90
	Mushrooms	1 button, raw	5 (small) 10 (medium) 20 (large)
	Okra	1 medium	5
	Onion	1	60 (small) 150 (medium) 240 (large)
		1 slice	20
	Onion rings, battered	1 average portion	100
	Parsnips	1 average portion	40 (small) 65 (medium) 85 (large)
		1 tablespoon	50
	Peas	1 average portion	40 (small) 70 (medium) 100 (large)
		1 tablespoon	30

Category	Food or drink	Quantity	Weight (g)
Vegetables	Pepper	1 medium	160
		1 sliced ring	10
	Plantain	1 whole, boiled	200
	Potatoes	1 baked jacket, with skin	100 (small) 180 (medium) 220 (large)
		1 baked jacket, without skin	88 (small) 160 (medium) 195 (large)
		1 average potato, boiled	60 (old) 40 (new)
		1 roasted	50 (small) 85 (medium) 130 (large)
	Potato cakes	1 fried	80
	Potato chips	1 chip	10
		1 average portion	100 (small) 165 (medium) 240 (large)
	Potato mash	1 tablespoon	45
		1 scoop	60
	Radish	1 average	8
	Spinach	1 average serving	90
		1 tablespoon	40
	Spring onion	1 average	10
	Swede	1 average portion	40 (small) 60 (medium) 85 (large)
	Sweet potatoes	2 medium, boiled	130
	Sweetcorn kernels	1 tablespoon	30
		1 average portion	85
		1 corn-on-the-cob	125
	Tomato	1 piece	65 (small) 85 (medium) 150 (large)
		1 slice	17
		1 can	400
	Turnip	1 whole, boiled	110
	Yam	1 whole, boiled	130
Yogurts	Yogurt	1 average pot	125
		1 tablespoon	40 (low-fat) 45 (thick)
	Frozen yogurt	1 average portion	56
	Fromage frais	1 tablespoon	45

Appendix two

Diet diary

Name of person:

Male / Female

Pregnant (1-3 months / 4-6 months / 7-9 months)

Breastfeeding (up to 1 / 2 / 3 / 4 / 5 / 6 months)

Breakfast

Name of food/drink	Amount of food/drink (g)

Lunch

Name of food/drink	Amount of food/drink (g)

Evening meal

Snacks & drinks

References

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