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TUTORIAL VIDEOS:

A range of tutorial videos are available which demonstrate some of the key features in Nutritics. Look for the video reel icon in this guide to access the videos. Videos can also be accessed from within Nutritics by clicking **Menu>Tutorial Videos**, or by visiting our website.

ACCESS & INSTALLATION:

You must have an account registered in order to sign in to the software. Registration is free on <u>our website</u> and includes a fully functional 7 day trial which allows creation. You will be emailed a link with download instructions after registering. If you do not receive this email, please check your spam/junk mail folder or contact us.

Nutritics can be accessed in the web browser or downloaded and installed on any PC, Mac or table without limitation or restriction. All methods of access require an internet connection. Your user data will be accessible automatically on each computer, and is backed up to our secure servers. On most standard licences, you can only be logged in to your account from one location at a time.

Accessing Nutritics without Installation:

There are a number of options available if you cannot install, or would prefer not to install programs on the computer (many networked computers in workplaces or Universities have a firewall or security which means only administrators can install programs).

- 1. Most modern web browser can run Nutritics directly. We recommend Google Chrome for the best Nutritics experience, but IE9, 10, 11, Microsoft Edge, Safari and Firefox for Windows are also supported. Simply navigate to our website and click the login button at the top right of the page, or type nutritics.com/app into your URL bar (you can bookmark this page)
- 2. If you use Google / Chrome apps, the Nutritics web app can be installed from the Chrome web store. Simply search the store or copy and paste the link below into your **Chrome** web browser to access install the plugin: https://chrome.google.com/webstore/detail/nutritics-dietary-analysi/haiikldmnkhailcbppkpphadlnkpkobf?hl=en-GB

If you do not have Google Chrome installed, you can get it <u>here</u> at no cost.

3. You can download Nutritics portable and run it directly, either from your computers desktop/personal drive or from a USB memory key. To download Nutritics Portable (windows only) click here

Downloading and Installing Nutritics:



If you prefer a traditional installation process where the application icon appears on your desktop / toolbar, Nutritics can be downloaded for your laptop, mac or PC. Click here to access the downloads page. These links are also emailed to you after registration on our website. Please note that this version of Nutritics still requires internet access to function.

If you experience any difficulties with the installation, you may need to contact your network administrator to complete the installation. If you do not have an administrator or are still experiencing problems, consider one of the access methods above that do not require installation, or <u>contact us</u> for support.

Using Nutritics on Portable Devices:

Nutritics currently supports full functionality on Ipad and Android tablets. To access Nutritics on your tablet, navigate to our website and click the login button, or type nutritics.com/app into your URL bar. You can change the touch settings within the program from Menu>Settings>Preferences. By default, Nutritics will detect when you are using a touchscreen device and make the interface more 'finger friendly'. This can be adjusted from Menu>Settings>Preferences

Nutritics full professional interface is not available on smartphones. However, a report viewer is available to browse reports on the move from www.nutritics.com/explore/YourUsername. We do also have a smartphone companion app 'Libro', which is intended for use by your clients and restaurant guests to record their dietary intake and connect with professionals. See for more detail on Libro.

NUTRITICS MENU AND SETTINGS:

The Menu button is available in the top right corner of the screen after logging in to Nutritics. The menu provides various support tools and account specific features such as changing your password, updating your personal details, and changing the food databases and languages of the software. Each item in the Menu is described in more detail below:

Settings

Navigating to **Menu>Settings** will open the settings for Nutritics. The settings menu is made up of various tabs:

Your Profile: Shows your contact information and business details that Nutritics has on file. You can edit these details from this tab. If the option is enabled on your package, you can upload a business logo or banner here to brand the reports.

Your Account: Shows the Nutritics version number, license renewal date and details of last login. You can manage your subscription, customize your package, turn off autorenewal and view past invoices here. You can also change your password, delete all client data and download your client data in .CSV format from this tab. If you wish to change your login username, please contact us directly.

Preferences: Display preferences, beta program access, settings for various other features (search, allergen preferences, languages, imperial / metric units and activity log settings)

Databases: Show and customize active databases being used in your Nutritics account.

Feedback: Send us your comments, suggestions and food requests.

Tutorial Videos:

Click this option from the menu to access our tutorial videos, as well as step by step instructions on how to use each feature within Nutritics. You can also download our .pdf user manual from this link.

Support & Webinars

This menu item gives you access to support resources and the upcoming training webinar schedule. Support and webinars are included with all plans.

Add Features

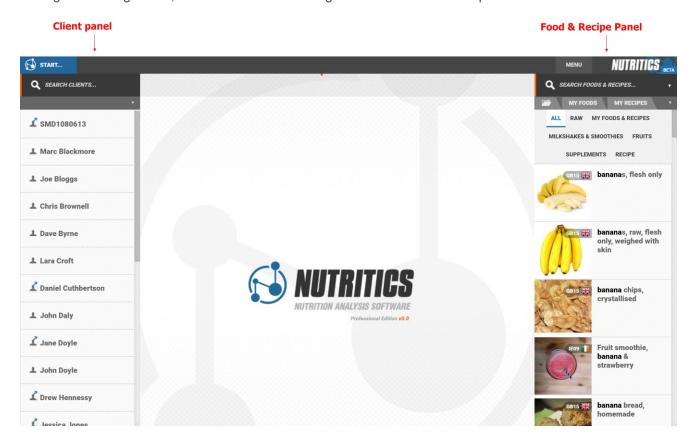
This menu item is available if you are paying by debit or credit card. Here you can customise your Nutritics package, add or remove features, add collaborators and adjust account storage to suit your budget

Manage Users

This menu item is available if you are an assigned administrator of user licenses for your organisation. Here you can view and manage users, set up accounts individually or in batch, adjust licence activation period and send reminders to Nutritics users in your organisation. See the Licence Management section for more information.

GETTING STARTED

Nutritics uses a modern panel design with high resolution graphics and scrolling animations throughout. Nutritics is made up of **panels** and **workspaces**. There are 2 primary panels, one for client storage & management, and the other for management of food and recipes:

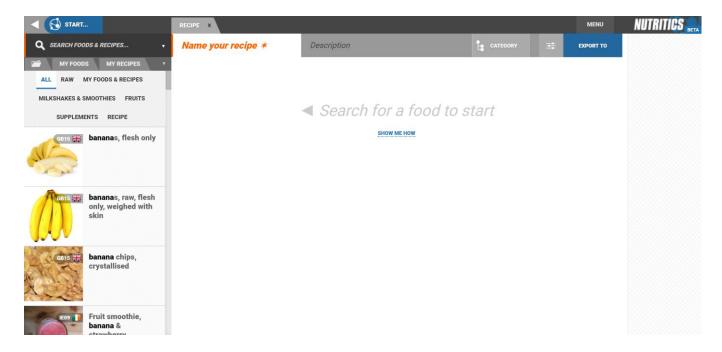


Clicking on an item from one of these panels will open a sub-panel with more detail on this item, or will scroll to a large open **workspace**, to allow you to view or develop that item further.

Depending on your product, your workspace panels may include:

- Food & Activity diary workspace
- Add new food or recipe workspace
- Meal plan creator workspace
- Food compare workspace
- Label Maker workspace
- Libro program design workspace

When using any of these workspaces, the food management panel will slide to the left side of the screen, giving you a larger work area, as shown below:

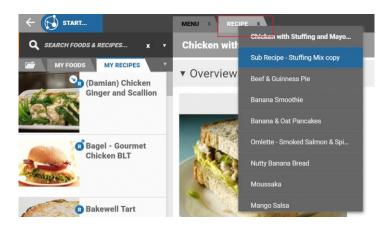


Click the back arrow at the top left of the screen to return to your client related panels.

As you open various workspaces in Nutritics, tabs will open at the top of the screen to assist easier switching between the workspaces.



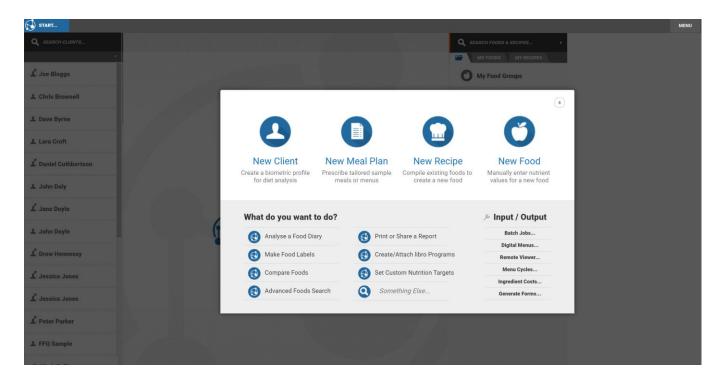
Right Clicking is supported throughout Nutritics, and performs a range of advanced functionality such as duplicating recipes, foods and clients, and various other shortcuts. Right clicking on a tab displays a history of items open in that tab, enabling quick switching between recently open items:

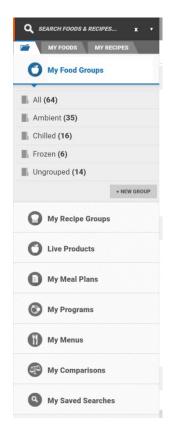


Mac users should hold ctrl and click to enable a right click action. On touch screen devices, you can hold your finger on the screen to enable a right click action.

The Start Button

The start button at the top left of the screen will open a quick access guide to all the core functionality available in Nutritics. Each option will be discussed in more detail in the relevant section of the user guide.





Content Explorer

Nutritics Content Explorer is a structured folder view similar to Windows Explorer, which gives you an overview of all records in your account. Click on the folder icon below the food search box to open the Explorer. This view allows you to browse, organise and update your records quickly in one workspace.

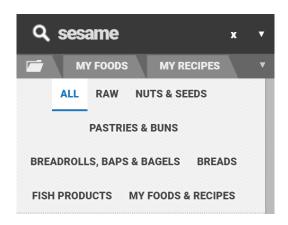
Click on a folder to display its contents on the workspace panel the right. Here you can set the display option 'monitors' and update things like food cost, food allergens, recipe names, recipe photos and more. The display can be set to tile mode of list mode by clicking the toggles at the bottom right of the workspace. Create your own custom views and export them for print or sharing from the 'Export to' button at the top right of the screen.

On Foodservice accounts or if you have the Foodservice add-on, the Explorer is also used to create menus and menu cycles, and also for the production of digital menus and paper calorie and allergen menus

Searching in Nutritics

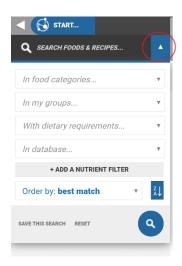
The search box is an integral part of Nutritics, and is always located in the top left of the screen when logging a diet or activity diary, creating a meal plan or creating a recipe. Press **F3** or click the search box to begin searching. Results are returned once at least 3 characters have been entered in the box, matching the exact character string to foods, activities, descriptions and keywords in the database. Direct matches to the search letters appear in bold while other matches appear in regular font. The search is ranked in order of popularity.

A category filter appears at the top of the search results following a search. Click on a category to refine the results to that category only:



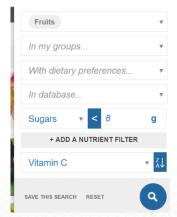
Advanced Search:

Nutritics advanced search is accessible from the small arrow within the search box:

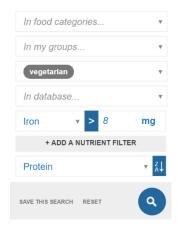


Here you can search for foods within specific food categories, groups, databases, or search for foods that meet specific nutrition targets and / or allergen requirements.

Example 1: List fruits with highest content of vitamin C and less than 8g of sugar per 100g:

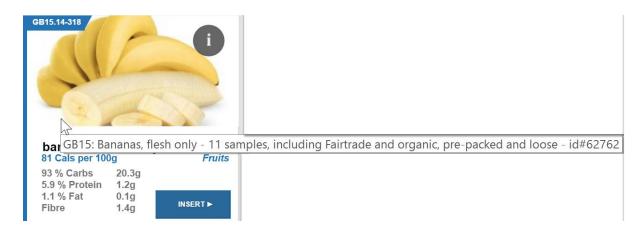


Example 2: List the best vegetarian sources of protein that are also high in iron:



Reviewing and Entering Items

In addition to the search functionality, a number of additional features have been implemented to assist accurate food/activity selection. Clicking on a food from the search results will open a summary box detailing the International Food Code, category, macronutrient content (per 100g) and estimated kcal distribution (in percentage). The nutrients displayed here can be customised from the preferences menu. Similarly, clicking an activity from the list of results will show category and kcal/kJ expenditure per hour. Hovering the mouse over a search item will show additional descriptive information such as the database source, ID number and number of data points sampled, where available.

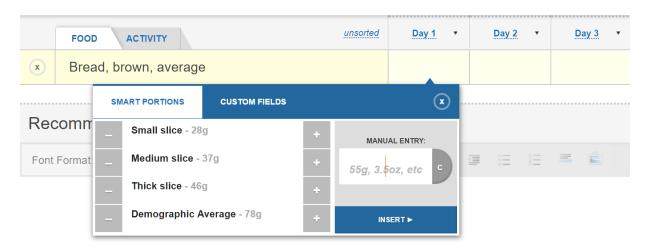


Click the button to open up the detailed profile of the food in anew tab within Nutritics

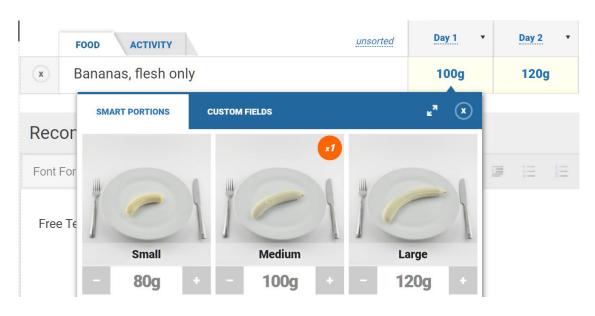
Once you have reviewed a food/ activity and are satisfied it is appropriate, click the button to add it to the open workspace.

Smart Portions:

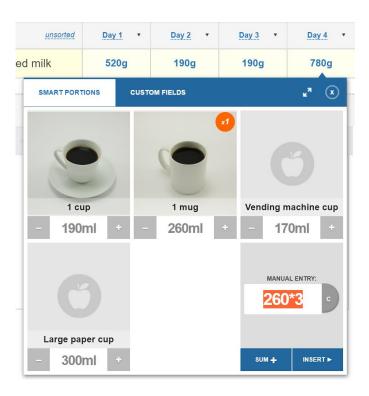
Nutritics provides a large number of portion sizes for foods in the database. These are assigned to foods from various portion size resources, manufacturer's data or from direct weighing by trained Nutritics staff. Click on the box under the corresponding entry point (day/meal/qty) to enter a portion size. A smart portions box will open if they are available for the food selected.



Use the buttons to modify a smart portion. A single press on + will add 1 to the portion multiplier, while a single press on — will subtract .5 from the smart portion. This enables flexible entry of smart portions. It is also possible to manually type a quantity in the box provided in any unit of measure.



Clicking the **sum** button will add the amount entered to the existing quantity, and clicking insert will replace the existing quantity. The grams display box also functions as a calculator if you want to add individual weights. You can add, subtract, multiply or divide by typing the symbols +, -, *, / respectively.



In addition to portion size suggestions, Nutritics also provides demographic portion size options for many foods, which have been adapted with permission from the research on the National Diet and Nutrition Survey by Wrieden & Barton, 2005. These portion sizes take account of your client's age and gender and indicate the average portion size consumed by this demographic group.

Food Comparison:

You can compare up to 6 foods or recipes at a time against EU and FDA Reference Intakes. Right click on a food from the search results and click the compare option from the context menu. Repeat for all foods you wish to compare.

	*** * * ***							0	
lutrients per 100g	EU Labelling	Yogurt, gree plain, wh	k style, nole	Coconut milk	, canned	Sour cr	eam	Creme fra	aiche
			- Energ	y -					
Energy(Kcal)	2000	133	7%	180	9%	250	13%	378	19%
Energy(Kj)	8400	551	7%	753	9%	920	11%	1556	19%
		- N	lacronut	rients -					
Carbohydrate	260 _g	4.8g	2%	2.8 _g	1%	4g	2%	2.4 _g	156
Protein	50 _g	5.7 _g	11%	1 _g	2%	2.4 _g	5%	2.2 _g	4%
Fat	70 _g	10.2 _g	15%	18 _g	26%	25 _g	36%	40 _g	57%
Water		78 _{ml}		72mi		59 _{ml}		56 _{ml}	
Alcohol									
		- Carboh	ydrate C	omponents -					
Starch		0.3 _g		1.6 _g		0.6 _g		0.3_g	

Saving Your Work:

Everything is saved automatically upon each mouse each mouse click in Nutritics. You can close Nutritics at any time and all data will be saved automatically and backed up to our secure servers.

Deleting a Record/Log

Delete a diet log, meal plan or recipe by clicking the small x on the log list, or by right clicking on a record and selecting delete. Delete a client and ALL associated data by right clicking on a client, or by clicking the x beside their **name** in panel 1. A warning box will confirm that you want to erase all information for this client, this **cannot** be undone.

Duplicating and Transferring records:

Duplicate and transfer records by right clicking the record and selecting the relevant option from the context menu. You can also transfer these logs to a different client by right clicking and selecting the 'move to client...' option from the list.

Sharing & Collaboration:

Clients, recipes, and foods can be shared with other Nutritics users. Look for the button, located both on the client set up panel, and on your foods and recipe workspaces, just below the pie chart at the top of the screen.

Type a Nutritics username or email address to enable sharing with the user. If your licences are part of an organisation or group, you will see all users of the organisation when you click 'add user'. You can also choose to share with all account holders within the organisation. You will have the option to share with read only or read & write privileges after adding a collaborator. Items that are shared with you have an inbound arrow indicated on the record icon , and a yellow bar within the record / workspace will be shown:



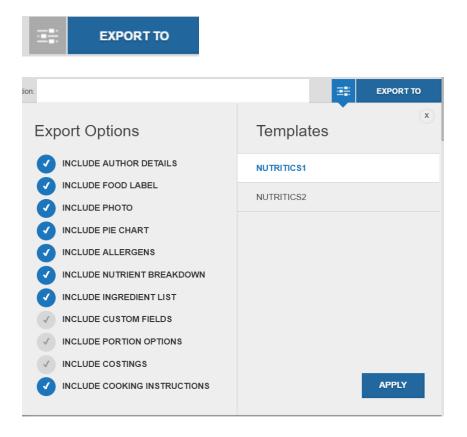
Items that you are sharing with other users are indicated with an out bound arrow on the record icon:



Exporting, Printing and Emailing a Report:

You can generate a live link of any report from the **EXPORT TO** button, for email or sharing. Any changes made are reflected in the live link in real time without the need for re-sharing. Reports can also be exported to Microsoft excel (or other CSV editor), converted to a.pdf file or printed directly.

The settings toggle beside the export button enables you to customise a report, and save the layout and customisations as a templates for future use.



You can also choose from a number of Nutritics built templates for a simplified or more detailed report layout.

Keyboard Shortcuts:

There are a number of keyboard shortcuts programmed within Nutritics which can greatly speed up your workflow. These keyboard shortcuts are detailed below for reference:

Keyboard Shortcut:	Function:
F3, CTRL+F	Move to food search
SHIFT+F3, CTRL+SHIFT+F	Move to client search
DOWN (directional arrow)	Move down search results or QTY boxes
UP (directional arrow)	Move down search results or QTY boxes
TAB	Cycle through food search category filters
	2) Move from left to right across a food diary
ENTER	1) Open the summary box for a food/activity search
	2) Open the smart entry dropdown box in a workspace
ENTED (L. L.L.)	3) Enter the selected item to a workspace
ENTER (double press)	Adds selected search item to the workspace, bypassing the food summary
	box
E, V	Edit and view the food/recipe.
DELETE	Delete the food or recipe.
+	Increase quantity from a smart entry dropdown box
-	Decrease quantity from a smart entry dropdown box
ESC	Close all the pop up boxes and smart entry boxes.

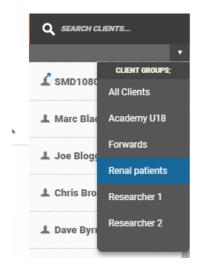
SETTING UP A NEW CLIENT:

After you log in, click the button in panel 1 to set up a new client, or alternatively, click and press 'New Client'. A sub panel will then expand so you can input the client's personal details, activity level, contact details and any other notes about your client. Fill in any details you wish to save. Weight and height related fields may be entered in any format by simply typing your preferred units in the box, if no unit of measure is typed then the default units are used for your region (meters and kg on metric setting, ft and lbs on imperial setting). The imperial / metric setting may be changed from Menu>Settings>Preferences.

Multiple clients can be set up at once using the batch import tool. Click START., then Import/Export and select the 'Client's' option to download the batch import spreadsheet for completion. Once completed, upload the spreadsheet and the client list will be updated.

Grouping Clients:

A client can be sorted into groups for easy retrieval, sorting and batch analysis later. Click the *ADD GROUP* button in client panel 2, below the client's biometric details, then type the desired group name in the pop up box. Client's can be added to multiple groups. Filter your client groups using the small icon at the top of the client list (panel 1). Selecting a group will filter clients by that group. Right click on a group to rename it or remove it from your account altogether.



Calculating Energy Requirements:

Nutritics is suitable for calculating Energy Requirements for all age ranges. An individual's Estimated Energy Requirements (EER) (also referred to as Total Daily Energy Requirements (TDEE)), can be calculated in Nutritics. An individual's energy requirements may be calculated independently of their

other nutrition requirements. There are a number of methods available to calculate energy requirements, which may be selected from the 'EER source' drop down menus within Nutritics:

- 1. Estimated Average Requirement (EAR) Uses a target based on population average energy requirements based on age and gender (e.g. from the SACN guidelines in the UK). The EER target will not be customised to your client's specific activity level, weight, or height. Use this option if you do not have weight and height information available for your client, or if you wish to compare intakes to demographic averages, which are typically used for population based research studies.
- 2. **Formula with Physical Activity Level (PAL)** This option uses a predictive equation to first calculate RMR/BMR, and then applies a multiplication factor (PAL) to the RMR/BMR figure based on the occupational and exercise activity level selectors in the Client Profile section (panel 2). This option is more specific to your client's individual energy requirements and more appropriate when working with individuals.
- 3. Formula with PAL and Exercise Associated Thermogenesis (EAT) Similar to option 2 but also adds any exercise activities included in the activity log. PAL should generally be set to 1.2-1.4 manually if using this method, to account for Non Exercise Activity Thermogenesis (NEAT) and Dietary Induced Thermogenesis (DIT).
- 4. **Formula with EAT, NEAT and DIT** Arguably the most accurate method, but requires a detailed and accurate food and 24hr activity log (to include sleeping, sitting, activities, exercise). Similar to options 2 and 3, this method uses a BMR/RMR formula, but also includes the sum of all energy expended through daily activities (NEAT) and exercise (EAT), plus the energy expenditure associated with the processes of digestion (calculated from food diary). These additional factors are normally estimated by means of the PAL multiplier, so with option 4, the PAL multiplier should not be used and PAL will be disabled automatically.

If your client is <12 months old, pregnant or lactating, the Energy Calculation formula will default to the Estimated Average Requirement from the Dietary Reference Values selected, rather than using a predicative equation.

RMR/BMR formula:

Energy requirements are estimated using an established metabolic rate formula and a Physical Activity Level (PAL) multiplier. Choose the RMR formula most appropriate to your client (or your preferred

formula), in the Energy Calculation Formula: drop down box. Note that each formula requires specific details about your client:

The following require gender, height, DOB and weight:

- Mifflin St. Jeor 1990
- Harris Benedict 1919
- Henry Oxford 2005 (weight or weight & height formulae)
- Institute of Medicine 2005
- Schofield 1985

Require body fat percentage and weight:

- Katch McArdle 1996
- Cunningham 1980

Body composition should be calculated elsewhere (from skin folds, bioimpedence, bodpod, DEXA or ultrasound methods) and the final body fat percent should be entered into this field.

It is possible to override the RMR/BMR formula and directly enter a value, if you have assessed this by other means. Simply enter the value (kcals) in the RMR box at the top of panel 3 rms: 2050 and press enter. Clicking the blue arrow will recalculate RMR based on the client details and formula selected.

PAL Multiplier

The 'occupational' and 'exercise activity level' drop down boxes will help you estimate your clients Physical Activity Level (PAL) multiplication factor. This is applied as a multiple to the RMR/BMR figure to calculate energy requirements. Simply choose the most appropriate activity factors from the drop down lists. You can override this multiplier if you wish by entering a PAL value in the PAL box at the top of panel 3 and pressing the enter key. Clicking the blue arrow will recalculate PAL based on the activity levels selected.

Athlete Type Adjustment:

Nutritics will adjust report nutrient targets based on the athletic factor selected. These guidelines are applied from current sports nutrition recommendations (see the section on Dietary Reference Values (DRVs). Your client must be aged 18-55 years and 'Nutritics' must be selected as the Dietary Reference Value source to enable this feature (Nutritics is the default DRV source).

Estimated Energy Requirement Adjustment:

This field enables an adjustment to the final EER target to allow for any weight modification goal. Simply use the plus or minus buttons to add/subtract 100 kcals per click, or type directly into the box. Nutritics provides a crude calculation of the estimated weight change this modification will induce. This adjustment applies regardless of which method of calculating EER is used. The calorie adjustment can also be split between energy intake and energy expenditure accordingly using the 'EER Adjustment balance' field:



Pregnancy/Lactating Adjustment

This modifier appears as an option if your client's gender is set to Female. The EER and target intakes for certain nutrients often vary throughout stages of pregnancy or lactation. This adjustment applies regardless of which method of calculating EER is used (see above), but will be dependent on the individual Dietary Reference Value you have selected on the report analysis screen (Selecting the SACN DRV will apply UK adjustments as per the guideline, and the IOM DRV will apply US adjustments)

Infant Feed Type Adjustment:

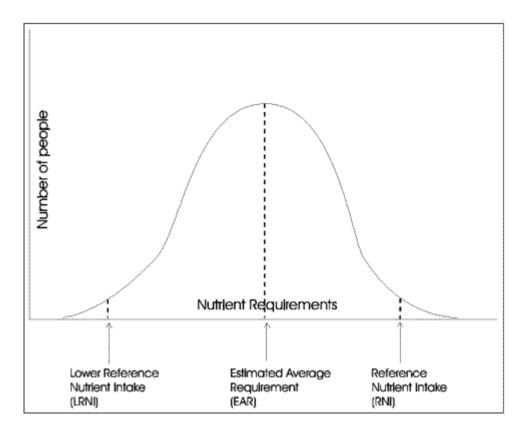
This modifier appears as an option if your clients D.O.B entered is within the last 12 months. If this option is active, the energy calculation formula will automatically be set to 'Use Dietary Reference Values

for Energy', rather than using a predictive formula based on weight and height. Note that modifiers for feed type are currently only applicable to the UK SACN 2015 / COMA and Nutritics Dietary Reference Values.

Dietary Reference Values (DRV's)

'Dietary reference values' (DRV) are the umbrella term for a range of nutrient values that apply to a population or group, and typically consist of numerous components:

- A Lower Reference Nutrient Intake (LRNI): Meets the nutritional requirements of only 2.5% of the population.
- An Estimated Average Requirement (EAR): The average amount of nutrient or energy required. Approximately 50% of the population will require more and 50% will require less.
- A Reference Nutrient Intake (RNI): The amount of a nutrient sufficient to meet the needs of 97.5% of a population (calculated from the EAR + 2 SD)
- Safe Intake (SI): Used in place of RNI when there is insufficient data available to set an RNI. A safe intake is likely to meet the needs of the majority of the population without causing any adverse effects of excess intake.
- Safe Upper Limit (SUL): The maximum amount of a nutrient known to be safe to intake.
 Habitually consuming nutrients above the SUL is not recommended and can cause toxic effects in some cases.



Source: Food and Agriculture Organisation of the United Nations

Note: DRV's are also known as NRV's (Nutrient Reference Values – Aus/NZ) and DRI's (Dietary Reference Intakes – USA). RNI's are also known as RDI's (Recommended Dietary Intakes) or RDA's (Recommended Dietary Allowance). SI is also known as AI (Adequate Intakes). SUL's are also known as UL (Tolerable Upper Intake Level)...just to keep it simple: D

It is important to recognize that all these values apply to populations, and not to individuals. However, a number of assumptions can be made when using DRV's with individuals:

- 1. If an individual is routinely consuming the RNI for a particular nutrient, it can be assumed that their diet provides adequate amounts (or more than adequate amounts) of that nutrient.
- 2. If an individual is consuming less than the RNI, it cannot necessarily be assumed that the diet is inadequate, as the person may have a lower requirement than average for that particular nutrient.
- 3. If an individual is consistently consuming less than the LRNI for a nutrient, it can be assumed that the person is deficient in that particular nutrient, although this does not imply the person is clinically ill.

4. The DRV's will apply to the needs of healthy people and it cannot be assumed that the needs of those who are ill or extremely active are identical.

DRV selection in Nutritics:

Choose which Dietary Reference Values you wish to use from the 'DRV source' drop down when setting up your client. The target intakes and ranges for nutrients on the report will be based on this selection. There are numerous options from International sources built in to Nutritics. You can also set your own targets using the DRV editor (see custom DRV section)

Built-in DRV's in Nutritics include:

- UK/SACN 2017: The Committee on Nutrition Aspects of Food and Nutrition Policy (COMA) with latest updates from the Scientific Advisory Committee on Energy, Carbohydrate, Folic Acid and Vitamin D
- EFSA 2017: European Food Safety Authority Guidelines
- EU/Nordic: The Nordic Nutrition Register (NNR)
- USA: The Food Nutrition Board from the Institute of Medicine (IOM)
- NZ/AUS: The National Health and Medical Research Council (NHMRC)
- EU: The EU Reference Intakes used in Food Labelling.
- FDA: The US Daily Values for labelling in the US and surrounding territories
- A Nutritics recommendation which combines macronutrient guidelines from American College of Sports Medicine (ACSM) with suggested dietary micronutrient targets for reducing the risk of developing chronic disease from the NHMRC. The Nutritics recommendations also show lower intake limits from the NNR and upper intake limits from the highest value deemed safe from the above authorities.

The Food Safety Authority of Ireland (FSAI) 1999 guidelines have been deprecated in Nutritics 5.0 as of November 2017.

Nutritics DRV's:

Nutrient intake in excess of the RNI's may reduce the risk of developing chronic diseases. Specifically, a higher intake of Vitamin C, E, A (particularly β -carotene), selenium, folate, omega 3 and dietary fibre may be beneficial. The Australian & New Zealand National Health and Medical Research Council have published a second set of guidelines known as "Suggested Dietary Targets (SDT's) to optimise dietary intake for reducing the risk of chronic disease". These SDT's have been incorporated into the Nutritics DRV source. Where no target intake has been set by in the SDT's, the highest RNI across all International sources has been used. Furthermore, the highest safe upper intake and the highest LRNI from all International sources has been set as upper and lower RNI's respectively, on the Nutritics source.

The macronutrient recommendations provided in the Nutritics option are adopted from International Sports Nutrition guidelines, includ9ing the American College of Sports Medicine and American Dietetics Associations position stand on Nutrition and Athletic Performance, ISSN and Australian Institute of Sport:

Athletic Variable	Protein	Fat	Carbohydrate
Skill Based	1-1.4g per kg.bw	25-35% Kcal	Remainder EER- Protein-Fat (~40-55% kcal)
Mixed Active	1.2-1.6g per kg.bw	25-35% Kcal	Remainder EER- Protein-Fat (~40-55% kcal)
Strength / Power	1.4-1.8g per kg.bw	20-35% Kcal	5-7g per kg.bw
Intermittent / Field			
Based	1.2-1.7g per kg.bw	20-35% Kcal	5-7g per kg.bw
Endurance	1.2-1.4g per kg.bw	20-35% Kcal	6-10g per kg.bw
Ultra Endurance	1.4-1.6g per kg.bw	20-35% Kcal	8-10g per kg.bw

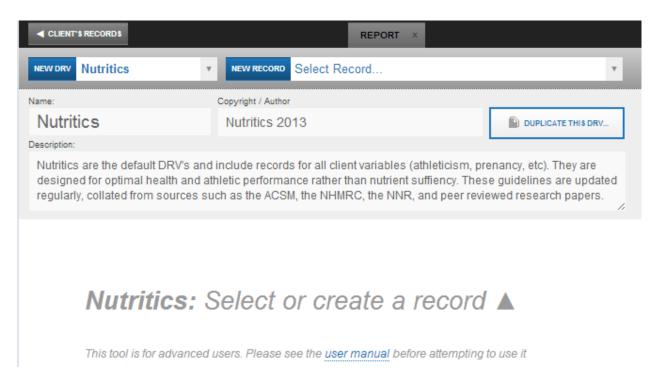
These are provided as guidelines only; exact requirements will vary from person to person and depends on factors such as training intensity, training duration, available recovery time, and fitness status.

SETTING CUSTOM DRV'S:

Nutritics allows you to set custom Dietary Reference Values which will be displayed visually on the report. This 'power feature' allows you to set nutrient targets as precise intakes, as calculations based on body weight (or other formula based targets) or as an acceptable distribution range. You can also define lower and upper limits for any nutrient.

The DRV editor can be accessed from Menu>Settings>Preferences or by selecting 'Custom DRV...' from the DRV source drop down options (on the client set up, reports and meal plans)

This will open the following screen:



Creating a New Entry:

- 1. Click the NEW DRV button
- 2. Name the DRV and provide a reference or author and description if desired.
- 3. Click the NEW RECORD button
- 4. Define the inclusion criteria that the DRV's will apply to (gender, age range etc)
- 5. Define the DRV's using the guide below
- 6. Changes are saved automatically

Editing an Existing Entry:

- 1. Select the DRV source you wish to edit from the drop down at the top left (The field "Nutritics" in the example above)
- 2. Click the button
- 3. Rename the DRV, author, and description as desired
- 4. Select the record you wish to edit from the drop down at the top right (The field "Select Record" in the example above"). This will import the existing values into the tables which can now be edited.
- 5. Changes are saved automatically

Basic Programming:

Type any figure in the box to set that figure as the **Recommended Intake**:



Add a ^ symbol (shift + 6) **after** the recommendation to include a **lower limit**.



Add a second ^ to include an upper limit:



Use a | symbol (shift + \) to set a recommended intake range:



Advanced Programming:

Use basic calculator notation (addition +, multiplication *, subtraction -, division /) and nutrient keywords to program advanced formulae. Acceptable keywords include weight, age, bodyfat, lbm (lean body mass), bmi, eer (recommended kcal intake) and pal. These are based on data from the client information panel (panels 2 and 3). Take note they are all lower case.

You can also use **any nutrient** in a formula by typing it in the box **exactly** as it appears in the DRV editor (all lower case).

Working Examples:

1. Carbohydrate intake is 55% of kcal intake



eer is estimated energy requirements, multiplication by .55 gives 55%. 3.75 is the number of calories in one gram of carbohydrate, this converts the 55% of calories into a weight in grams

2. Carbohydrate intake is 55% of kcal intake with a lower limit of 100g

```
carbohydrate (g) eer*.55/3.75^100
```

3. Carbohydrate intake is 55% of kcal intake with a lower limit of 100g and an upper limit of 75% of calorie intake

```
carbohydrate (g) eer*.55/3.75^100^eer*.75/3.75
```

4. Protein intake is 20% of kcal intake

protein (g)	eer*.2/4
-------------	----------

4 is the number of calories per gram of protein, this converts 20% of calories to grams.

5. Protein intake is 1.2 times (g.kg.bw) the client's body weight

```
protein (g) weight*1.2
```

6. Protein intake is a range from .8 -1.6 times the client's body weight

```
protein (g) weight*.8|weight*1.6
```

7. Fat intake is a range from 20-35% of kcal intake

9 is the number of calories per gram of fat

8. Fat intake is a range from 20-35% of kcal intake and an upper limit of 40% of kcals.

```
fat (g) eer*.20/9|eer*.35/9^eer*.4/9
```

9. Folate intake is a range 300-600 μ g with a lower limit of 100 μ g and an upper limit of 1000 μ g

folate (µg)	300 600^100^1000
-------------	------------------

10. Vitamin D intake is $15\mu g$ with a lower limit of $5\mu g$

vitd (µg)	15^5

Please contact <u>support@nutritics.com</u> if you require assistance setting up custom Dietary Reference Values.

ADDING NEW FOODS TO THE DATABASE:

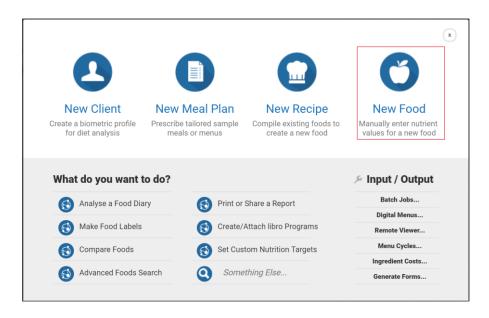


An unlimited number of new foods, products, and supplements can be user added to Nutritics from label data, International food tables, or from laboratory analysed values.

Pro Tip: Most of the foods in Nutritics are 'average samples' from multiple samples or brands. Thus when searching for products, it is often suitable to simply use an existing 'best match' food from the Nutritics database. Just be aware that the allergen information may not be specific to your branded product.

Adding an individual food:

1. To add a food, click the Start button at the top left of the screen and select the 'New Food' option.



2. Specify if your food data is from a product label or other data source, such as lab analysed values or an International Food Composition Database

Pro Tip: In order to include vitamin and mineral values, which are not usually available on manufacturer's food labels, you can import the nutrition from a 'best match' food in the database. To do this, search for a similar food in the database and click 'insert' after step 1 above. You can then update and edit as per the steps below (alternatively, search for a food and right click it to duplicate and start editing the values)

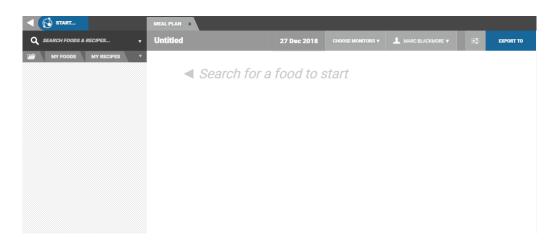
- 3. Choose the best fit category for your food from the options presented
- 4. Title the food and provide a description with any additional information (for example, manufacturer, data source, flavour, searchable keywords or any other background information)
- 5. Check if the label/data is presented per 100g of product adjust the box Label values per as necessary
- 6. Fill in the label data exactly as presented on the label, additional nutrients may be added by clicking **show extended nutrients
- 7. Click the submit button to add the food the system will automatically check for any input errors before showing the complete food workspace
- 8. Add optional information such as a food photograph, food specific custom fields (eg. shelf life, origin, storage instructions), allergens, notes and portion size information
- 9. All data is saved automatically with each action

Uploading multiple foods in batch:

If you have many custom foods to add, (for example, if you are moving to Nutritics from another system) or if you wish to use an International or custom data table not available in Nutritics, these can be uploaded in bulk from an excel sheet using the 'Batch Jobs' option in the start menu. The template spreadsheet from the import section must first be downloaded and filled in with the data.

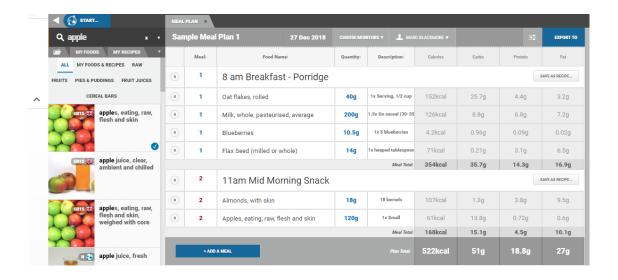
CREATING A MEAL PLAN:

Nutritics Professional includes a meal plan creator which enables creation of custom eating plans to suit your client's health or performance based goals. To create a meal plan, select a client (or set up a new client) and click the button on the meal plan panel. Meal Plans can be created from scratch, or you can reuse a previously created meal plan and attach it to a new client. Select the preferred option, and the meal plan creator screen will open:



Adding Foods and Recipes:

To begin creating the meal plan, search for a food in the food search box at the top left of the screen and insert it into your meal plan. Enter a name for the meal and a quantity and measure (optional) for each food. You can also rename the food to a more 'client friendly' name by clicking on it and typing a new



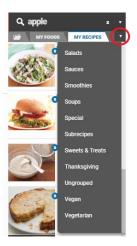
name. As you work, you will see nutrient totals for both the meal and the overall meal plan:

To add a new meal to the meal plan, click the button. Once clicked, any new foods added will be entered to the newest meal created. Continue adding meals and foods until you are satisfied with the meal plan.

Previously created recipes can also be used in a meal plan. Simply search as normal and look for the cicon indicating a recipe – use the 'My foods & recipes' tab to filters the search results to only display items you have created:



You can also browse recipes in the 'My Recipes' tab or filter your recipe list in groups from the small arrow beside the 'My Recipes' tab:



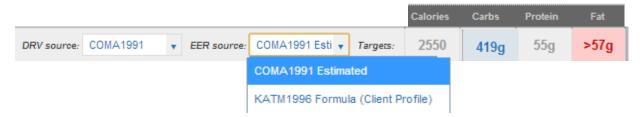
After clicking the 'insert' button on a recipe, you will be asked if you want to import all ingredients from the recipe. Selecting no will import the recipe name only (as a single row on the meal plan) with the nutrient totals. Selecting yes will import all the ingredients with their individual nutrient breakdown.

Nutrient Monitors:

You can choose up to 10 nutrient monitors to include with the meal plan by clicking the 'Choose Monitors' button on the top toolbar:



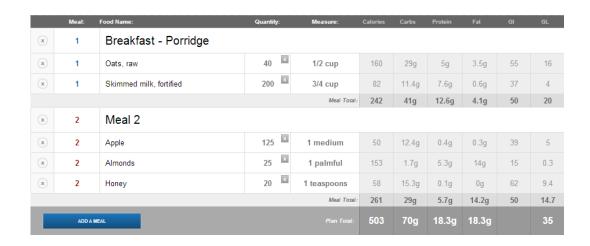
As you work, these monitors will update in real time and will be compared against recommended target intakes (specific to the current client) at the bottom of the report.



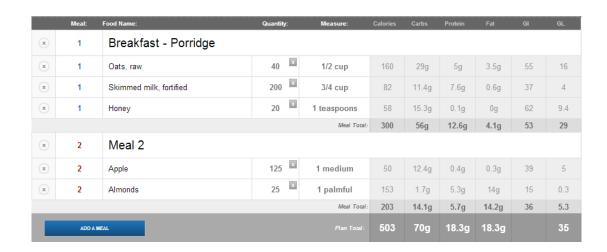
A red highlight means the current plan is above or below the lower limit or safe upper limit for that nutrient. A blue highlight indicates the nutrient is within the recommended range. You can choose a DRV source and the method of energy calculation (whether you want to use the formula calculated energy requirements or the generic values built in to the DRV source, where available).

Rearranging Foods and Meals:

The numbered boxes to the left of each food provide a means to rearrange foods and meals in a meal plan. You can move a food from one meal to another by typing a number in the box. The number should correspond to the meal number you want to add that food to. In the example below, to move honey from meal 2 to meal 1, simply type a 1 in the box beside honey:



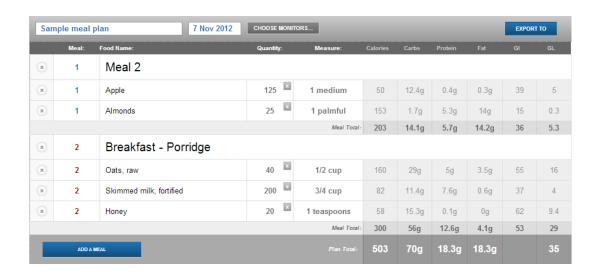
This will rearrange the meal plan as follows:



Similarly, to rearrange meals, type a number in the box beside the meal title. The number should correspond to the meal position you want. This command also provides the option to merge foods from two meals into one meal, or keep them as separate meals.

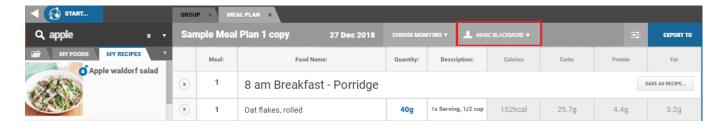


Clicking 'keep separate' will rearrange the position of the meals as below:

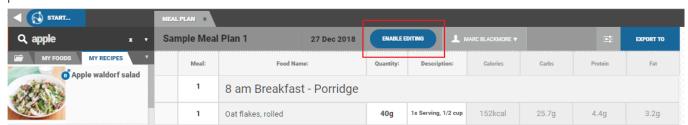


Using Meal Plans with Multiple Clients:

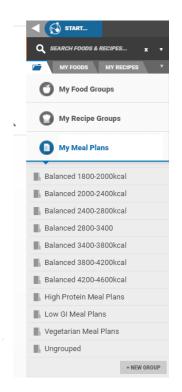
The client(s) assigned to a meal plan are shown in the toolbar at the top of the Meal Plan workspace. You can add / view clients by clicking on the button:



If multiple clients are assigned to a meal plan, the meal plan will be locked for editing. Clicking the 'Enable Editing' button will give the options to edit the meal plan for the current user, or edit the meal plan for all users:



Meal plans can be organised from the Content Explorer — to access, just click the folder icon in the top toolbar (beside 'My Foods'), then click 'My Meal Plans. Your meal plans built as templates (or attached to multiple clients) are accessible from this panel. Click on a meal plan to edit the template or assign it to a new client.



Exporting Meal Plans:

Meal plans can be exported to a diet log or a report to assess the complete nutritional information. Simply click the button and select 'Report' from the drop down menu.

You can also export a meal plan directly to a diet log if you need to make additions or edits before generating a report. This is useful for improving accuracy if you provided a meal plan that was only loosely adhered to by your client. Meal plans exported to a diet log are automatically saved as new logs.

Please not that a maximum of 14 meals can be exported from a meal plan to a report or diet log. If your meal plan exceeds this, only the first 14 meals will be exported.

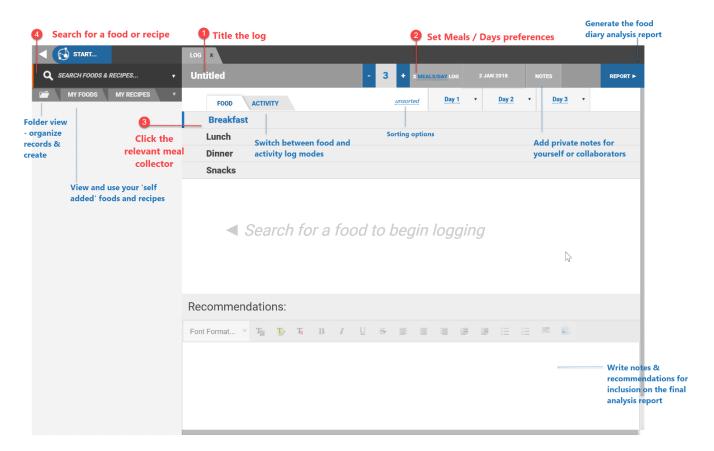
The meal plans can also be converted to .pdf, excel, emailed or a link can be generated for online publishing in the same way reports and recipes can.

CREATING A DIET & ACTIVITY LOG:



Quick Tip: You can generate a professional food & exercise diary from within the software to print or email to your client. Navigate to **Menu** > **Output tools** and click the 'Generate' tab to access the forms. Enter the number of days you require in the box in panel 3 then click the **go** button.

To create a diet or exercise log, select or set up a new client, then in the panel that opens, click the button under the 'Logs' heading. This will take you to the log entry screen below:



- 1. Title your log
- 2. Choose the log type, either meal by meal, or day by day logging
- 3. Click a meal collector*— Breakfast, Lunch, Dinner or Snack, that you wish to log first
- 4. Search for foods and recipes in the food search box at the top left of the screen (hotkey F3)

- 5. Click a food from the results to review it before entering it to your log
- 6. If satisfied with the selection, add it to your log by clicking the blue 'Insert' button

*Collectors are meal name slots — Enable more meal slots from Menu>Settings>preferences

- 7. Clicking the white cell will open a popup box with built in portion size suggestions to choose from, you can also type any quantity in this box in grams
- 8. The diary is set up like an excel spreadsheet, so you can add a food to multiple days or meals by clicking the corresponding cell row, without having to search for the item each time
- 9. Repeat steps 3-6 until all foods have been added
- 10. Toggle between a food log and an exercise log using the top of the log. Please note that the Activity Log tab is not enabled on all account types, but you may add it on from Menu>Upgrade/Downgrade.

Pro Tip: Flexible data points known as 'Custom Fields' can tagged to diet log data. Examples of custom field data includes meal time, location, mood, food cost, brand information or custom nutrient parameters. Please see the section on the Research Edition for more information on how to set up and use custom fields

Entering Recipes into the Diet Log:

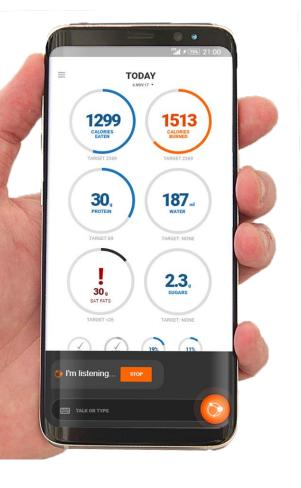


Recipes are searchable foods like any other food in the database. Simply search for the recipe as you would normally when searching for a food and they will appear within the result listing. Your personally created recipes are marked with an local icon in the search results. It may be useful to use the 'My Foods & Recipes' search filter after running a search, to filter the result list to a specific category.



You can also browse and add recipes from the MY RECIPES tab below the food search box.

Once you have found the recipe, click on it and press the insert button, the same way you enter foods to a log. You will be given the option to customize a recipe after it has been entered to a log, which applies to this instance of the recipe only. If you wish to edit the base recipe, you can right click on it from the log, or open the original recipe and make edits.



LIBRO – SMARTPHONE APPLICATION

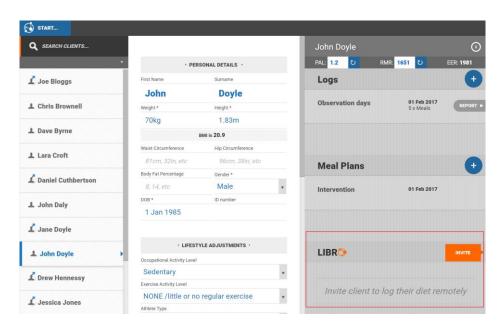


Libro is a voice assisted smartphone application for Android and Iphone that allows your clients or research participants to input their own food diaries directly, to save you input time and improve accuracy. Libro includes visual aids, prompts and reminders, and the user can log by voice, ask nutrition related questions to our Al, and create recipes for inclusion in their log or fine tuning by you as their nutrition professional. The client's diet log is then available for you to import into Nutritics in one click for analysis and feedback, and the analysis report and feedback can be sent

directly from your Nutritics Professional account to the client's smartphone.

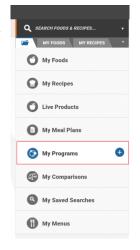
Inviting Clients to Libro

After setting up a client, click the orange 'Invite' button that appears below the diet log and meal plan section. Note that an email address and forename are required fields to send an invitation. The client will receive a welcome email with a link to the Apple and Android App.



Libro Programs

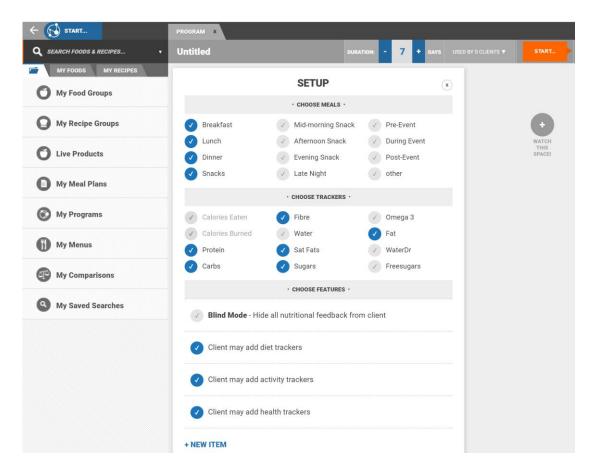
Libro programs allow you to set the parameters and settings of the Libro app, and can be 'attached' to a client after inviting them to Libro to subscribe them to the program or apply the settings to their Libro account. Programs allow you to customise the experience of the client using Libro, for example, what they see on screen and what is tracked. In Q3 2018, Libro programs will allow more complex program development, tasks, reminders and check ins which are all scheduled by



the Nutrition Professional. Consider your clients goals and technical ability when assigning them to programs, to ensure they can use the app effectively and save you time in logging.

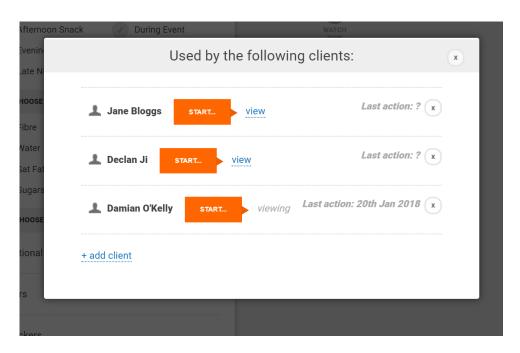
The orange 'Invite' button above changes to a + button after sending the invitation, and here you can subscribe the client to one of your custom programs. To create a program, follow the steps below:

1. Click Start>New Libro Program, or click the + button on 'My Programs' from the Tree Viewer. Then click 'New Program' to open the Program Development Workspace:



- 2. Give the program a title and specify the duration it should be applied to the clients Libro app
- 3. Choose the applicable meals that you want to your client to track. These are known as 'Meal Collectors' and will appear within the clients Libro app
- 4. Specify which trackers are shown on the homescreen by default or your program. For example, if you want to create an insulin management program, you might set total carbohydrate, GI and GL as the default trackers
- 5. If you would like to prevent the client from adding their own personal nutrition, activity or heath trackers to the app (this doesn't modify your program template), tick the box to disable the functionality.

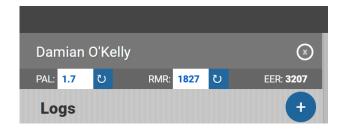
- 6. If you would rather the client did not see any nutritional feedback as they log, tick the box for 'Blind Mode' which will disable the trackers homescreen and just shows the client their diet log screen with no nutritional feedback
- 7. When you are satisfied with the settings, click the button 'Used by 0 clients' in the top toolbar to assign the program to specific clients
- 8. Click Start beside the clients name to start the program. This will replace their existing trackers and view of Libro with your program for the scheduled period



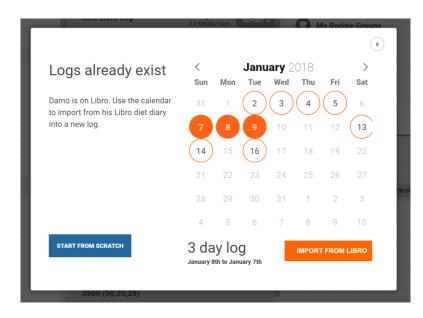
9. This panel also shows the clients last activity in the app, and allows you to view or customise the program for the individual specifically

Importing a Food Diary from Libro

Nutritics allows direct import of food and activity information from your clients Libro app. To import a food diary, select a client from your client list, then click the +button in the logs section (the same way you would create a log manually from scratch)



If Libro logs are detected, you will be presented with the screen below. The orange circles indicates days that have been logged by your client in Libro. Simply click on them to select them for import, then click the orange button 'Import from Libro'



This will bring you to the diet log workspace with all the diet log information filled in, as entered by your client. Once imported, you can make edits and tweaks to the diet log data, note that this **does not change** the clients smartphone log.

If the client has created any recipes and used them in their log, these will also be imported. This can also be useful to provide your client with feedback by making simple tweaks to their existing recipes as part of the feedback process.

DIET LOG REPORTS:

Nutritics generates client facing reports from a diet log. To generate a report, click the button at the top of the diet log screen.

By default, the report generated will be an average across the analysis period that was entered into the food log. You can customise the analysis period from the button at the top toolbar of the report.

The top toolbar also allows modification of the report calculations which were originally set during client set-up. The two drop down menus, 'EER source' and 'DRV source' allow you to switch between different calculation formulae and nutrition reference values quickly.

Interpreting the Report:

The report is grouped into subsections under Energy, Macronutrients, Carbohydrate Components, Lipid Components, Minerals & Trace Elements, and Vitamins. Nutrient intake is represented by the black horizontal bars, while the target intake (Reference Nutrient Intake — RNI) is indicated by a blue line or a blue bar (if the recommendation is a range). If a Lower Reference Nutrient Intake (LRNI) Safe Upper Limit (SUL) are available, they are represented by the red bars at the lower and upper end of the bar (respectively). If the black bar is within this range, the nutrient name will appear in red font and flagged with a \blacktriangleright symbol



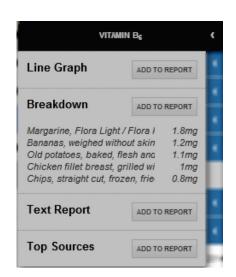
Nutrient intake is also given in numeric form in the 'Intake' vertical column, while the recommended intake and limits are given in numeric form in the 'RNI' and 'Limits' columns. Hovering the mouse over the black bar will display the nutrient intake as a percentage of total of the recommended intake. You can print the percentages on the report in place of the limits by checking the option from Menu>Settings>Preferences.

Hiding/Removing Nutrients from the Report:

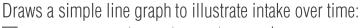
You can toggle on and off a nutrient by simply clicking it. This will hide the nutrient so it will not be printed or generated in the final report. This also works for groups of nutrients (e.g. you can toggle on/off all carbohydrate components by clicking the carbohydrate components heading.

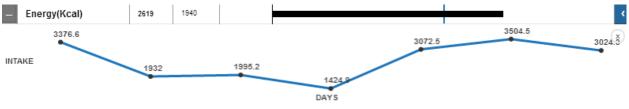
Fly-out Enhancements:

You can add quick enhancements and provide additional information on the report using the fly-out button at the end of the nutrient row.

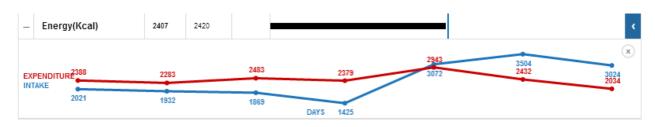


Line Graph:



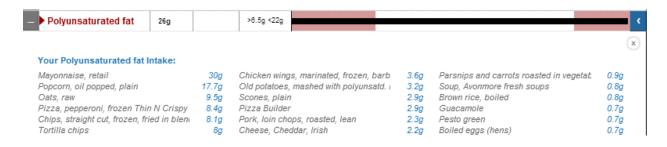


If activities are logged then these are also plotted on the graph:



Breakdown:

Adds a ranked breakdown of the contributing foods to a particular nutrient:



Text Report:

Adds background information about the nutrient. Text reports are sensitive to nutrient intake in relation to recommended intake. The text report also gives details of the implications of inadequate/excess intake and provides a list of foods which are rich sources of that particular nutrient. Text reports may be switched off upon request (eg. University student licences)



Polyunsaturated fat

Your polyunsaturated fat intake is above the recommended intake. The primary risk is that intake of free radicals from degraded fat will also be higher than normal, since even gently processed raw oils are oxidised to some degree before consumption. A high polyunsaturated fat intake has been linked to increased risk of certain cancers and other degenerative diseases.

Polyunsaturated fats are composed of carbon, hydrogen and oxygen and have two or more double bonds between their carbon chains. Polyunsaturates are liquid both at room temperature and when refrigerated. The most well-known polyunsaturated fats are the Essential Fatty Acids omega 3 and omega 6. These fats cannot be synthesised in the body and must be obtained from dietary sources. Polyunsaturated fats are very delicate and susceptible to lipid peroxidation from free radicals. This process can occur from processing or from exposure to light, heat or oxygen. When consumed, oxidised fat can have a mutagenic effect on other cells. Antioxidants such as vitamin E, selenium and vitamin A, as well as the structures provided by whole food (protein, fibre) seem to protect polyunsaturated fats from oxidation. For these reasons, it is best to consume polyunsaturated fats from whole food sources. Good dietary sources of polyunsaturated fat include sardines, salmon, tuna, walnuts, sunflower seeds, sesame seeds, flax seed, soybeans, and cold pressed vegetable oils and fish oils.

Top Sources:

Adds a list of the top 10-12 food sources for a particular nutrient, with serving size gram weight and 'friendly' measure.

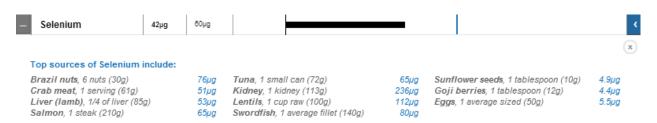
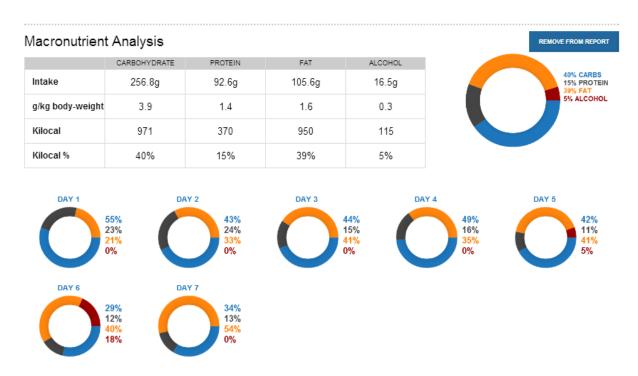


Table Enhancements:

Macronutrient Breakdown:

Inserts a summary table detailing average macronutrient intake for the analysis period selected. This is presented as total grams, as grams per kg of body weight and as a percentage of total energy intake. The pie chart also illustrates the percentage contribution from each macronutrient as well as contributions on each day individually.



Diet Log Table:

Adds all source foods from the report to a list organised by day/meal



Energy Expenditure Table:

Adds a table showing all factors contributing to Energy Expenditure (and their contributions).

Only available where activities have been logged



Activities Log Table:

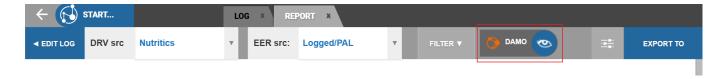
Adds all activities to the report to a list organized by day/session.



Sharing a Report

The final report can be printed or shared form the button at the top right of the screen. Note that the share link is **live**, and any changes you make on the report will be reflected in real time, without the need to reshare or send an email again.

If your client is set up on Libro, reports can be shared directly to their Libro app by clicking their name at the top right of the report screen.



The eye icon here means that the report is now shared in read only format. The client will be notified when the report is shared.



RECIPE ANALYSIS & PRODUCT DEVELOPMENT:

Nutritics recipe creator can be used to combine foods from the database into a new recipe entry. Recipes can be used in diet logs, meal plans or combined with other recipes to make full meals quickly and easily. Nutritics Foodservice edition includes a cost analysis system for recipes, as well as a menu cycle builder and product reformulation engine, which makes ingredient suggestions on how to improve the nutritional profile of a dish. Recipes can also be used for the production of Nutrition Labels, digital menu board displays and allergen reports.

There are a few top tips you should know before getting started:

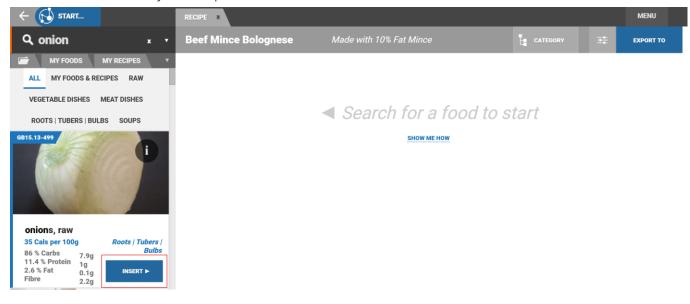
- Split your recipes into sub recipes, one for each 'pot' or cooking method
- Analyse base sauces, sides, and multi-purpose / batch recipes first
- Enter all ingredients as raw, with the exception of deep fried items and grilled fatty meats
- It is best to weigh your specific ingredients, rather than using the portion size suggestions
- Where possible, weigh ingredients in their prepared form (skin, stones, bone waste removed)
- Follow the on screen prompts that appear in the lower right corner of the screen as you log
- As you enter ingredients, the nutrition & allergen information will update in real time
- All changes are saved automatically, except the recipe photo, which must be saved after editing

Recipe Analysis – Step by Step

- 1. To open the recipe creator, click the 'Start' button, then click 'New 'recipe':
- 2. Enter a title for your recipe and optional description (useful for recipe source, web link, searchable keywords etc)

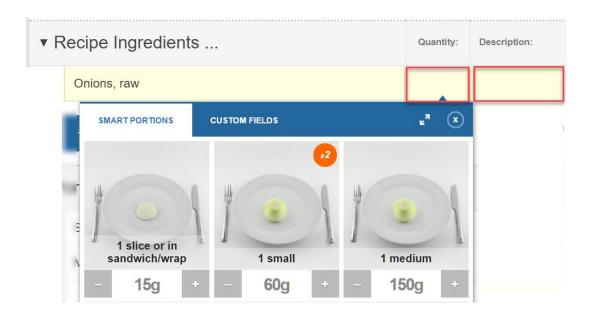


3. Search for ingredients using the search box at the top left of the screen, click the insert button to add the food to your recipe:



Pro Tip: It is best to enter ingredients in their prepared 'ready to cook' form

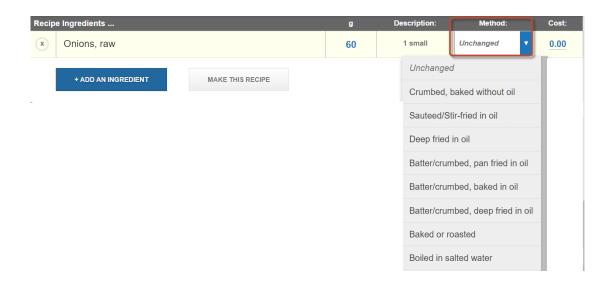
4. Click the 'Quantity' box to open the portion entry box. Choose one of the portion size options suggested or enter your ingredient weight directly in any unit):



5. Add any custom fields you wish to tag to the ingredient such as country of origin, shelf life or storage instructions from the custom fields setting:



6. Apply a cooking method as appropriate in the 'Method' drop down box to account for vitamin and mineral losses on cooking, as well as fat absorption, and salt absorption. This should only be applied if your ingredients are entered as raw (or applied to cooked ingredient where they have a second cooking method or process)



Pro Tip: If your ingredient is boiled in salt or fried in oil, it is important to include the specific fat or salt in your recipes ingredient list, and tag it with **the same** cooking method as the ingredients cooked

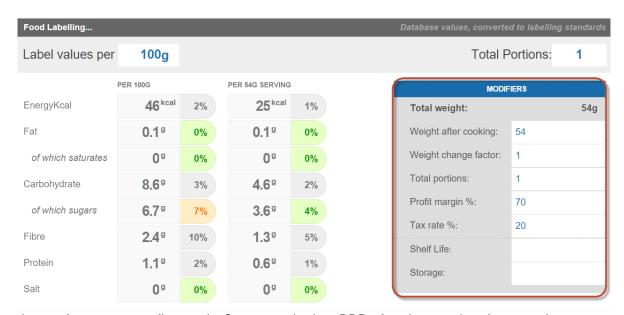
7. Input the ingredient cost to calculate the cost of your recipe batch and servings. Costs are entered manually in the box provided. Once you tag an ingredient with a cost, this amount is recalled each time you use the ingredient automatically

Pro Tip: Generate a table showing all your ingredients and costs from Menu>Output Tools>Ingredient Costs

- 8. Repeat steps 3-7 for each ingredient.
- 9. Scroll up the page to the food labelling section and enter the number of portions this recipe serves, 'per serving' label data will then be generated:



10. Input any other data on the recipe level in the 'Modifiers' box, such as recipe storage, weight



change factors, or profit margin & tax to calculate RRP of recipes and various portions.

Pro Tip: If you intend to report nutrient values per 100g, or with reference to any unit of weight (e.g. for food label), it is important to account for weight change on cooking by either entering either the weighed yield of your recipe, or entering an appropriate weight change / yield factor in the boxes provided. However, if you are simply reporting nutritional values 'per serving' (e.g. calories on menus initiative), it is not necessary to apply a weight change factor, but the weight of the serving must not be referenced

11. Add up to 5 portion size options in the box provided at the bottom of the screen, or type desired calories in the Kcal box and the portion weight will be calculated. Product barcodes may also

▼ Portion Size Options		Quantity:	Kcal:	Cost RRP:	Sale Price
1	Side / childs portion	100g	137	\$0.49 \$1.51	\$1.95
2	Main course portion	300g	411	\$1.46 \$4.54	\$4.95
3					

be added here for use in the label maker or in API integrations.

- 12. Add any cooking instructions and notes for your recipe in the text entry box, or photos to illustrate key steps of the preparation process
- 13. Scroll up the page to double check the allergen information indicated is appropriate for your specific ingredients, and change the 'May Contains' indicators to 'Unspecified' or 'Contains' as required (right click an allergen to toggle the context menu)

Pro Tip: If 'Automatic Allergens' is ON, this will recalculate the dishes allergens each time an ingredient is added, or each time the recipe is opened. If you have flagged allergens manually, it is important that 'Auto Allergens' remains OFF, or your manually flagged allergens will be overwritten to the database defaults.

- 14. Scroll up to the top of the page and add a photo to your recipe if desired.
- 15. Use the Export button or Menu>Output tools to publish your recipe to various outputs

Nutrient Losses and Gains:

In Nutritics, nutrient losses and gains (NLG's) are applied on the individual ingredient level, and moisture losses are applied on the total recipe level. These factors will ensure that nutrient and weight changes on cooking are accounted for, giving you the most accurate calculations possible. For more information on the factors and when they are used, please see appendix 1

Recipe Cost Assessment

The recipe creator can calculate the cost per portion or cost per 100g for each recipe. To add ingredient costs, simply click on the 'Cost' box corresponding to each ingredient and enter the cost per unit of weight. You may use any variable of price and weight Eg. €5/10kg, or £3.10 per lb. Once you add a cost to one ingredient, there is no need to continue to enter the currency symbol for subsequent ingredients. Once an ingredient is tagged with a cost, this will be reflected throughout all of your recipes that use this ingredient. If you cannot see the cost column beside your recipe ingredients, it is not a standard feature on your account. It may be added from Menu>Upgrade/Downgrade or by contacting us if required.



Food outlets may also add their Gross Profit Margin and VAT rate on a recipe to calculate Recommended Retail Price. This may be added in the 'Recipe Modifiers' box below the pie chart.



A table of all ingredient costs can be generated from Menu>Output Tools>Ingredient Costs Table. The costs table may be grouped by recipes, food category or alphabetical list of all ingredients.

Ingredient Costs Table

Recipes from Dinners, Low carb, Treats

Ingredient	Unit weight	Cost/unit	Cost/kg
100% whey protein powder (vanilla or unflavoured)	2500g	€36.00	€14.40
Almond Milk, unsweetened	1000g	€2.99	€2.99
Almonds, chopped	185g	€2.00	€10.81

Recipe Reformulation and Optimisation

Nutritics assists with recipe optimisation in real time as you add ingredients to a recipe:

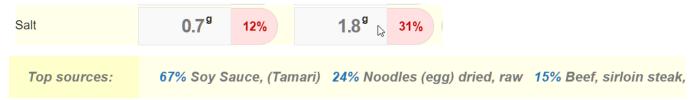
Allergen optimisation:

The trigger food for an allergen may be identified in a recipe by moving the mouse over the specific allergen indicator. You can then right click the food from your ingredient list to view or edit the food, or you can swap it out for an alternative ingredient to engineer the allergen out of your recipe entirely.

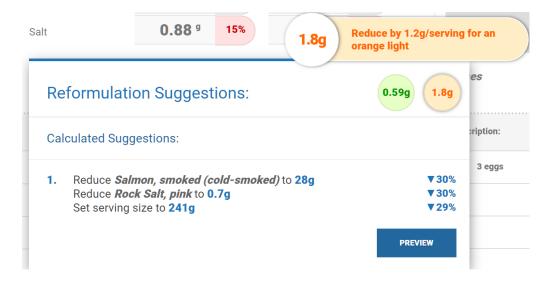


Nutrition Optimisation:

The nutritional content of your recipes is calculated in real time as ingredients are added. Move the mouse over the various label values to explore which foods are contributing most to a particular nutrient. You can then modify that ingredient to produce a more favourable nutrient profile.



Nutritics reformulation engine can also give specific recommendations on changes you can make to your ingredients to improve nutritional profile of your recipes. This powerful feature is available on our Premium and Enterprise packages only:



Cost Optimisation:

The cost of each ingredient is listed beside the quantity box. This is input initially by user (or uploaded in batch from excel). It is easy to identify high cost ingredients and dishes, and swap them out for more cost effective alternatives. The cost tables from Menu>Output Tools can also help identify your most expensive ingredients and recipes (available on food service packages or as an add-on)



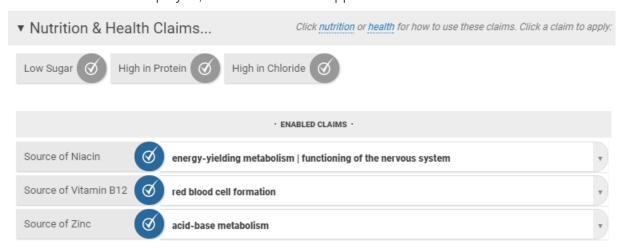
Recipe Scaling

Use the 'Scale this Recipe' function at the bottom of the recipe ingredients to calculate the stock required to produce a defined number of portions of a particular recipe. This can be particularly useful in catering and food manufacturing at volume and can effectively reduce waste from stock surplus

Nutrition & Health Claims

Nutritics will automatically display all applicable nutrition claims that can be made for your recipe under Regulation (EC) No 1924/2006. Simply click on the indicators to apply the claim to your printed reports and labels. After a nutrition claim has been elected for use, the associated Health Claims

for that nutrient are displayed, which can also be applied



Claims cannot be applied to recipes that are high in saturated fat, trans-fat, total sugars or salt. Claims such as 'Reduced energy', 'Reduced Fat' that require comparison across products are not available and should be consulted separately.

Nutrition & Health Claims are available on our premium and corporate packages only, or added from Menu>Add Features. Check our blog on <u>nutrition claims</u> and <u>health claims</u> for more background information, or refer to <u>Regulation EC1924/2006</u>

LABEL MAKER:

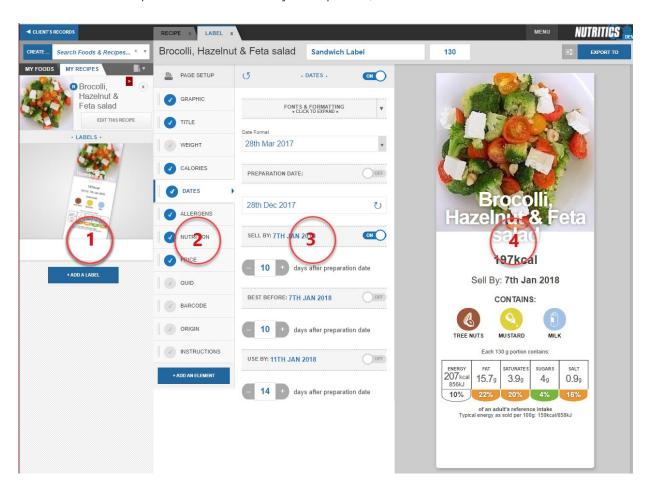
Nutritics label maker can be accessed from any recipe by clicking Export>Label Maker. This enables the production of EU, NLEA, FSANZ complaint food labels and Nutrition Information Panels (NIP). If the label maker is not available on your account, it is available as an add-on from Menu>Add Features

Label Templates:

Clicking Export > Label Maker, will open the pre-built label templates which you can apply to your label instantly. Alternatively, you can build a custom label by clicking the option to 'Start from Scratch' at the top right of the panel. Once you have created a label, this can be saved as a template to be applied to your other recipes from templates / settings button beside the export button:



The label maker is set up in a series of side-by-side panels, similar to the main Nutritics interface:



Panel 1: Label List (for this recipe)

Panel 2: Label Elements

Panel 3: Editing Panel

Panel 4: Label Preview

To modify the label, simply click on one of the elements from the list in panel 2, to expand that section in the adjacent editing panel. Click the toggle to activate this content to start editing. Panel 3 on the right shows a live preview of the final label design.

Each available element is described in more details below. Elements can be rearranged simply by dragging and dropping (Internet Explorer does not support this functionality)

Allows you to adjust your label dimensions and margins, print multiple labels per sheet (e.g. A4 label printing), or print in high contrast / low resolution mode (black only).

Graphic: Add a graphic or your logo to the labels from this element. It is also used for uploading a label image for pre-printed label rolls that you print black ink onto. Click 'Use as a template' to ensure that the uploaded label template won't be printed.

Title: Your recipe title and description will be prepopulated here. Changing the text here will not change your recipe details

Weight: Specify if you would like to display weight of product on your label. Remember to choose a portion size option at the top right of this panel

Calories: Toggle this element on to display calories on your label. Remember to choose a portion size option at the top right of this panel

Dates: Set the date format and preparation date. Clicking the small arrow on the preparation date box will input todays date in the box. You can then specify the number of day's durability for 'sell by', 'best before' and 'use by' for your product. Next time you print this label, simply update the 'prepared on' date, and these dates will be updated automatically

Allergens: Toggle on to display allergens as text or icons on your label

Nutrition: Choose from a range of built in nutrition panel designs for display on your label

Claims: This panel display the nutrition and health claims that may be applied to your food label

QUID: This is an editable text version of your recipes Ingredient list and quantities / QUID. Adjusting the text here does not change the QUID on the recipe development workspace

Barcode: Choose your barcode type and input the numeric values to generate a printable barcode for your product

Origin: This element will generate a country of origin stamp for your product, useful for meat and dairy based products in particular.

Instructions: This element is pre-populated with the instructions from your recipe workspace. Editing the text here does not affect the instructions in the main recipe workspace. Use it to give the consumer additional information, such as cooking or storage instructions for the product.



This option allows you to add any other custom text or image to your label

Printing & Exporting your labels:

Once finished designing a label, you can print directly or download the label as an image. Note that printing directly from the web browser will require you to set the specific label dimensions of your label in the printer dialogue box. You can find these dimensions in element 1 (Page setup).

Print quality will be improved for black only / thermal printers by selecting the 'low-res' option from the page setup element.

Label-Link Integration:

Nutritics can send nutritional information directly to BarTender, EnLabel, NiceLabel, Codesoft and Labels Direct via our Label-Link software. This enables automatic import of your calculated recipes and products and allows you to use your existing label printing software and label templates. To learn more about Label-Link, please contact our support@nutritcs.com

CREATING MENUS & MENU CYCLES

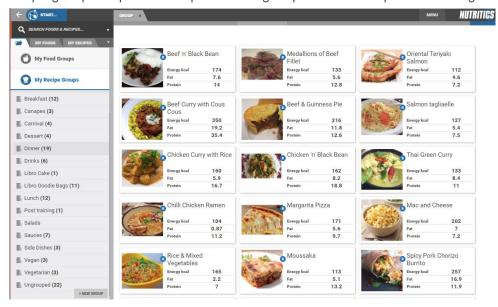
Recipes and foods can be organised into menus and cost assessed in the Foodservice version of Nutritics, or with the menus add-on for Nutrition professionals. After a menu is created, there are a number of display options available for use, including a digital interactive menu, a printable allergen & calorie summary report, and full menu cycle overview report. To create any of these reports, a menu must first be produced.

Follow the steps below to produce a menu:

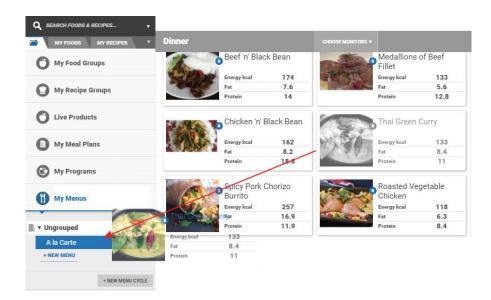
- 1. Click 'Start' then 'New Menu' to start creating a menu or menu cycle. Alternatively, click the folder icon below the food search box to open the Content Explorer, then select My Menus from the list of options
- 2. Enter a name for your menu, for example, Mondays Menu, á la carte, Early Bird, Weekend Specials etc.



- 3. Click 'My Recipe Groups', which is located near the top of the Tree Viewer list. This will expand your recipe groups in subfolders below
- 4. Click on a recipe group to open all recipes in that group in the workspace to the right



5. Drag items from the workspace into the newly created menu in the tree viewer, this will add the item to the menu plan:

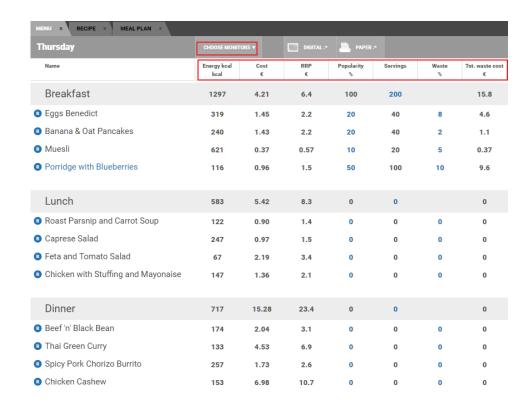


6. Repeat steps 4 & 5 for other recipe groups (eg. breakfasts, lunches)

Pro Tip: Switch the workspace view between tile and list mode by clicking the toggle in the bottom right of the screen:

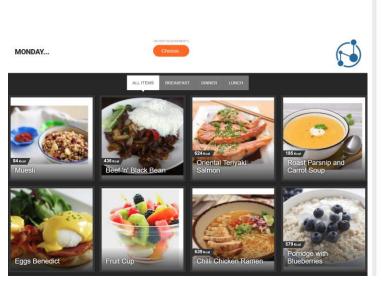


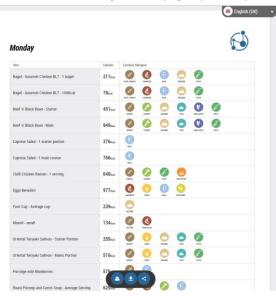
- 7. Next, repeat the process for 'My Food Groups', to add any single food items you wish to include on the menu (eg. drinks, confectionary)
- 8. Open the Menu to see the result of the menu plan. Click 'Choose Monitors' from the top toolbar to customise the detail that is available on display:



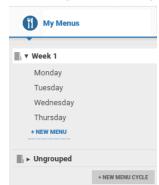
Pro Tip: The current view of the workspace can be captured at any time for print or email from Export>Report. Try adding different monitors in the Tree Viewer to generate custom report views showing key parameters of interest for your organisation. This works anywhere in the Tree Viewer — not just in My Menus!

9. Click the digital menu button in the top toolbar to preview your menu in digital format (left picture below) or click the paper menu to generate an allergen and calorie summary sheet (right picture):





Building a Menu Cycle:



Multiple Menus can be grouped together to produce a full scheduled plan for any number of weeks. Click the 'New Menu Cycle' button at the bottom of My Menus. Existing Menus can now be added to this folder by dragging and dropping, or a new menu can be created, nestled within this cycle by clicking the +New Menu button.

A Meal Summary Report can subsequently be produced from a menu cycle.

Right click the Menu Cycle name heading (Week 1 in the screenshot above) and click export to generate this report:

Week 1

MONDAY	TUESDAY	WEDNESDAY	THURSDAY					
• BREAKFAST •								
Muesli	Eggs Benedict	Fruit Cup Nutty Banana Bread	Eggs Benedict					
Omlette - Smoked Salmon & Spinach Kale Juice Fruit Cup	te - Smoked Salmon & Spinach Porridge with Blueberries luice Fruit Cup		Banana & Oat Pancakes Muesli Porridge with Blueberries					
		· LUNCH ·						
Roast Parsnip and Carrot Soup Chicken with Stuffing and Mayonaise Turkey pitta Vegetable Soup	Hummus with Carrot & Pita cken with Stuffing and Mayonaise Caprese Salad ckey pitta Superfood Salad		Roast Parsnip and Carrot Soup Caprese Salad Feta and Tomato Salad Chicken with Stuffing and Mayonaise					
		• DINNER •						
Chicken 'n' Black Bean Medallions of Beef Fillet Oriental Teriyaki Salmon Moussaka	s of Beef Fillet Beef & Guinness Pie eriyaki Salmon Rice & Mixed Vegetables		Beef 'n' Black Bean Thai Green Curry Spicy Pork Chorizo Burrito Chicken Cashew					

Pro Tip: If the same menu appears in mutliple Menu Cycles (eg. week 1, week 3 and week 5) it can be copiedby holding the ctrl key while dragging it in to the new location, or assigned to mutliple cycles from the settings button at the top right of the My Menus workspace

Digital Menus:



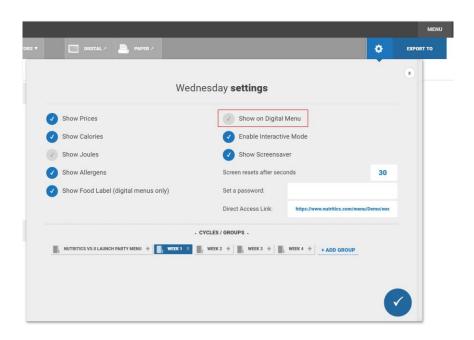
The Nutritics Digital Menu display is intended for use by Food Businesses, providing a front-of-house view where your customers can browse your menu and make better informed meal choices very efficiently without staff involvement. The digital menu is updated in real time as you make changes to your recipes, thus avoiding versioning issues associated with printed menus and allergen lists. They can

can be displayed on your own on-site tablets or TV's, or they can be accessed on the customers own smartphone by scanning a unique QR code.

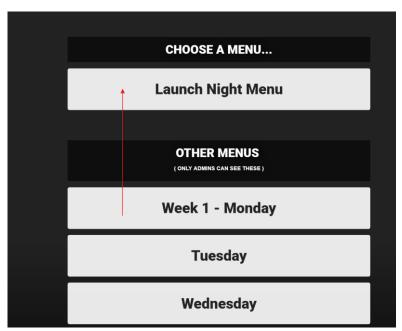
1. In order to create a digital display, you will first need to create a menu by following the steps above



2. Click the settings button at the top right of the My Menus workspace and set your menu display preferences. Click 'Show on Digital Menu' afterwards to elect to publish this menu to the display terminal:



- 3. Once finished, click the button in the top toolbar to open your digital menu as the administrator
- 4. Here you will see all your currently live published menus and all the inactive menus previously created. Menus can moved from live to inactive by drag and drop. Your customers won't see 'Other Menus':



Pro Tip: Add a background image of your store or kitchen to give your digital menus display a more professional finish – just click the 'Add Background Image' button at the bottom right of the screen

5. Once satisfied, you're ready to make the display available your customers. These are all kept up to date as you make changes to your recipes in Nutritics and your customer can filter dishes specific to their allergen and dietary requirements

Menu Access:

- Intended for display on an on-site kiosk or table side tablet / menu
- Access by entering the URL <u>www.nutritics.com/menu/USERNAME</u> on any device
- Allows staff to select the appropriate menu before handing the tablet to the customer, or you can allow customers to browse all menu types (eg. Early bird, á la carte, specials)

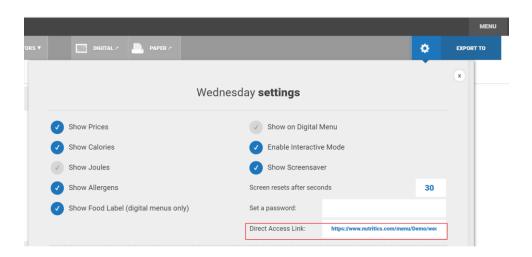
 Does not require internet access after initial load (but changes to your recipes won't sync until internet access is recovered)

QR Code:

- Intended for display on customers own smartphone devices
- Accessed by customer by scanning a barcode which can be printed / stuck onto your printed menus, or printed as a 'tent' display for the table (or any other location)
- Generate your QR code from Start>Digital Menus within Nutritics
- Allows customers to browse your menu even if they are not 'on-site'

Direct Access:

- Intended for display on any device provides access to one specific menu only
- Most useful for enhancing your website online simply add the direct access link to your
 website to provide instant access to an interactive menu
- Copy and paste the access link from the settings within 'My Menus' in Nutritics anywhere



Print Menu

The Paper Menu provides a summary table displaying a list of meals on your created menu (see steps above on creating a menu), complete with calorie and allergen information:

Salmon tagliaelle	918 _{Kcal} / 3851 _{kj}	UHEAT WHEAT	TREE NUTS	EGGS	MILK	FISH	
Spicy Pork Chorizo Burrito - Standard Burrito	449 _{Kcal} / 1872 _{Kj}	WHEAT	MILK	SULPHITES	LUPIN		
Strawberry and Banana Smoothie - Small serving	137ксаІ / 581кј	MILK					
Superfood Salad	269 _{Kcal} / 1121 _{kj}	VEGETARIAN	SESAME				
Vegetable Soup - Small	130ксаІ / 546кј	CELERY	JLZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ				
Vegetable Soup - Medium	156ксаІ / 655кј	CELERY	JL/L				

19 Recipes total

Generated by Nutritics Professional v5.0 on 23rd Jan 2018

Just click the 'Paper' icon at the top toolbar of 'My Menus' to generate a paper menu. The display options can also be customised from the settings cog to the right of the top toolbar.

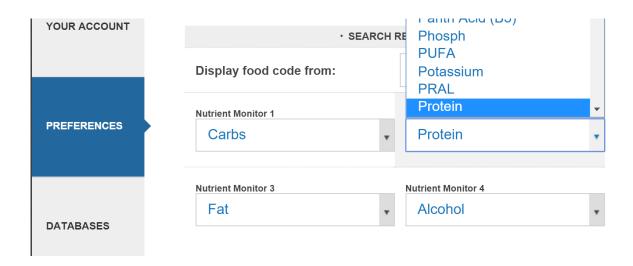
RESEARCH EDITION OVERVIEW



Nutritics for Research has a number of additional features which are useful for performing large scale project and population based investigations. This section assumes you are familiar with the standard version of Nutritics as detailed above.

Customisable Food Search:

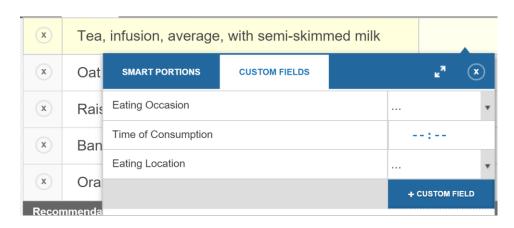
When performing a food search, the search results will provide a preview of the foods Energy, Carbohydrate, Protein, Fat and Alcohol per 100g as standard. The nutrients displayed in this summary box can be customised from Menu>Settings>Preferences and changing the dropdown boxes to your preferred layout. This is useful where your investigation is concerned with a particular nutrient, to ensure there are no missing values in the foods selected.



Foods can be looked up by Nutritics ID number, by typing the ID number in the food search box. If you would prefer to use the source database food code (such as the McCance & Widdowsson code), this can be set in the preferences menu.

Adding Custom Fields:

Custom fields can be set on an account and tagged for each period of consumption. To set up custom form, click the 'custom fields' button which appears when adding portions size information for a food.



You can use the form builder to create any type of custom field for the log:

Text: Suitable for free text entry to a food diary

Number: This field will only allow data in numeric format

Dropdown: You can set up a drop down list for selection during logging. Type a list of options for your dropdown, separated by commas (eg. Breakfast, Snack, Lunch, Dinner, Evening Snack)

Checkbox: Enables a checkbox on the food diary (useful to verify peer review, for food diary entry, for example)

Date: This field will only allow data in date format (dd/mm/yyy)

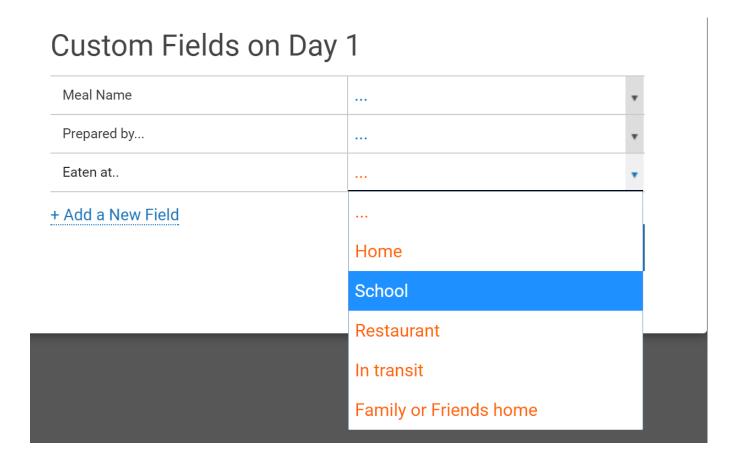
Time: This field will only allow data in time format (24hr clock)

Nutrient: This field is useful for adding custom nutrients to the food diary. For example, fortified folic acid or B12 added to a product.

The 'Attach to food' checkbox should be used where the data entered is not variable. In other words, use this box when you want the information to be recalled each time the food is used automatically. Examples of when this box should be ticked include if the nutrient field type is used, or if you are tagging the country of origin or shelf life or other property to the specific ingredient or food. Examples of

when it should not be ticked include fields for date, time, or most drop down type fields, as these would usually be required as variable fields so they can be set for each consumption occasion individually.

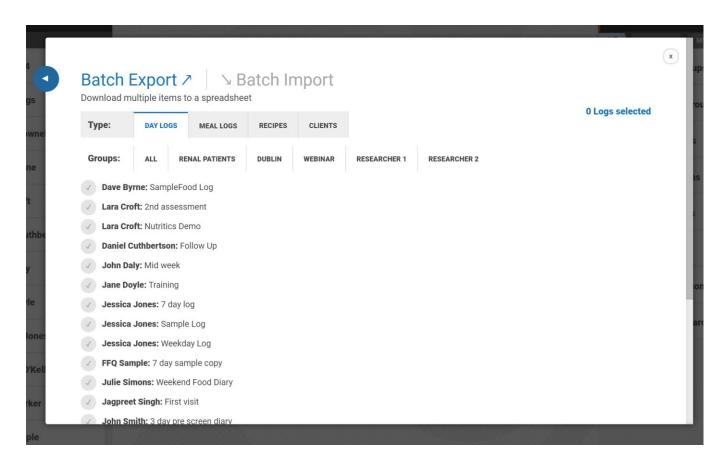
Custom fields can also be set on a column level within a log, just click the heading at the top to create these fields. When used, the field will apply to all foods within the column:



Batch export:

Batch Export enables download of multiple food diaries in one file. This is accessed from Start>Batch Jobs>Batch Export

The batch export is based on your client/participant group folders, but you can also select food diaries individually:



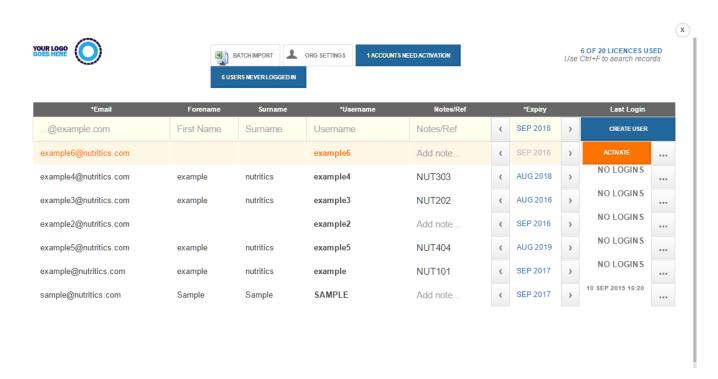
Once you have selected food diaries you wish to download, you can choose two output types from the dropdown at the bottom of the log list. 'Do Not Group' provides a full food file, showing every food consumed by each participant complete with any custom fields included. This is useful for creating pivot tables or for data import into SPSS. The 'Daily Totals' download will present a table showing each participants average intake, including standard deviation.

On the 'Do Not Group' option, recipes can be expanded out to their ingredient components for more comprehensive analysis on contributions at the food category level. Note this requires the diet logs to have been built using composite recipes made from specific ingredients, rather than using the average sample data provided in Standard Reference databases.

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LICENCE MANAGEMENT PLATFORM:

The licence management platform allows you to view, add, and manage licences under your organisation. The platform is accessible from Menu>Manage Users for elected administrators. The number of licences allocated and used are shown at the top right of the panel. Note that you may activate an account for multiple years in initial set up, and only one licence slot will be used.



Adding Users:

Users can be added to your organisation in 3 ways.

Manual Method:

Simply fill in the blank fields in the top row of the table and click the button to set up a new account.

*Email	Forename	Surname	*Username	Notes/Ref	-10	*Expiry		Last Login
@example.com	First Name	Sumame	Usemame	Notes/Ref	<	SEP 2016	>	CREATE USER

Batch Method:

Multiple accounts can be created at once from an excel / .csv file upload.

- 1. Click the BATCH MPORT button
- 2. Click download our sample spreadsheet
- 3. Fill in the spreadsheet for all users. Note that all fields are required
- 4. Remove the **top 3 rows** from the sheet
- 5. Save the sheet to your computer
- 6. Upload the modified spreadsheet by clicking Upload modified template...
- 7. Import the users by selecting the MPORTUSERS button.

Automatic Method:

Each organisation has a custom sign up page for user self-registration. To access this page, click the button, then click the URL that is shown.

Users can register on this page using a unique licence activation code. Up to 4 codes can be set for an organisation from within this panel, each with a unique expiry date. Once a user registers on the custom registration page, their account is activated accordingly and the user's details appear in the licence management platform.

Activating accounts

Users who sign up using the **Automatic** method are activated immediately upon registration. Users who are added using the **Manual** or **Batch** method are added to the licence management platform immediately, but the accounts are not active until you click the button. Inactive accounts will appear in orange in the management platform, and may be activated in batch by clicking the button at the top of the panel. Once an account has been activated by the administrator, the user will be sent an email with their login details.

Adjusting Expiry Dates:

Expiry dates are set to the end of September by default. Contact us to change your default licence run period. You can change the licence activation period in years by adjusting the date in the 'expiry' column. To reclaim a licence, simply set this expiry date to a year in the past, and a new licence slot will become available for redistribution. Once a licence has been expired for more than 1 year, it will be archived into a folder at the bottom of your user list. Click this folder to view archived users and to reactivate an expired account if necessary.

Deleting Users:

Users can only be deleted from your management platform if they have not yet been activated. To delete a user click the button and then click 'Delete'. To remove an active user from your organisation, simply set their expiry date to a date in the past, and this account will be switched off. Accounts which have been expired more than 1 year are stored in the Archived Users folder at the bottom of your user list, so they may be reactivated in the future if required.

Sending Reminders:

The licence management platform will show the date each user was last active. You can send an individual reminder to a user from the button beside their name, or you can send a reminder to all users who have not yet logged in from the licence management panel. Administrators can also send password reset emails to users that have forgotten their passwords from this menu.

Searching for Users:

You can search for any user by name, email reference field or expiry date. To do this, press Ctrl + F on your keyboard, and type in the search term. As you type, any matches will be highlighted automatically.

Note that if the user has been archived, you will need to open the archive folder in order to search these users.

If you have completed the reference column as part of the import, the table can be filtered by this column which can be useful to identify class groups.

TECHNICAL NOTES ON NUTRIENT DATA:

Energy value (Kcals): Calculated using the conversion factors: protein 4 kcal/g, fat 9 kcal/g, carbohydrate (available, expressed as monosaccharides) 4kcal/g and alcohol 7 kcal/g.

Energy value (kJ): Calculated using the conversion factors: protein 17kJ/g, fat 37 kJ/g, carbohydrate 17 kJ/g and alcohol 29 kJ/g

Amino Acids Fatty acids: Fatty acids are available via the research edition of Nutrtiic Fatty acid and amino acid data are not readily available/accessible from manufacturers which would limit the extent to which Nutritics can complete food requests accurately.

Carbohydrates: Total carbohydrate (and its components, starch, sugars and total sugar but not NSP or fibre) are expressed as their monosaccharide equivalents by multiplying the weight of carbohydrate by the appropriate conversion factor. As result, carbohydrate content may be more than 100g per 100g of a food (e.g. 100g of maltodextrin powder has 106 g of carbohydrate). When entering new food requests or adding foods to the database, Nutritics applies these conversion factors to manufacturer's data. Carbohydrates are calculated at 3.75kcal per gram.

Starch: Includes dextrins but excludes resistant starch, starch is expressed as monosaccharide equivalents.

Sugars: Sugars include free monosaccharides and disaccharides. In cereals the contribution from glucofructans is also included. The value does not include any contribution from oligosaccharides which are provided separately. Note that the breakdown of sugar (glucose, fructose components etc) is incomplete in the databases, and therefore should be considered for indicative purposes only. These values are hidden in the report by default.

Free Sugars: All sugars that have been added by a food manufacturer, cook or consumer to a food and include those sugars naturally found in fruit juice, honey and syrups. They do not include sugars naturally found in milk and milk products, nor in fruit and vegetables.

Non-starch polysaccharides (Englyst method) Includes insoluble fibre (cellulose, insoluble non-cellulosic polysaccharides) and soluble fibre (soluble cellulosic polysaccharides). NSP is provided in weight of the actual component and not monosaccharide equivalents.

Total dietary fibre (AOAC method): Includes substances measuring as lignin and also resistant starch by weight. Fibre by the AOAC method is not included in the UK food tables, but has been added to Nutritics from other sources.

Glycemic Index: GI data is from the International table of glycemic index and glycemic load values and the University of Sydney (Human Nutrition Unit) GI database, or imputed from similar foods if no data is available. The reference food used is glucose (GI=100). A GI of 55 or less is considered low, 56-69 is medium and 70+ is considered high. It is important to be aware that GI can vary based on cooking method, duration, ripeness, season, food combination, manufacturing process and many other factors. The GI of meals is automatically calculated and should be considered for indicative purposes only.

Glycemic Load: Glycemic load is calculated from the formula (GI*carbohydrate)/100. GL may be is more useful than GI since it accounts for both the GI and the portion size of carbohydrate consumed. (GL = GI * carbohydrate of serving / 100). One GL unit is equivalent to the glycemic effect of consuming 1g of glucose. Interventions targeting weight loss, insulin resistance and the metabolic syndrome appear to benefit from low GL dietary strategies. A meal with a GL of <10 is considered low, 11-19 is medium and >20 is considered high. A daily total GL of <80 is considered low, <120 is medium and >120 is considered high.

LIST OF ABBREVIATIONS

ACSM – American College of Sports Medicine

ADA – American Dietetic Association

AI – Adequate Intake

AMDR – Acceptable Macronutrient Distribution Range

BMR – Basal Metabolic Rate

cMET – Corrected / Compensated Metabolic Equivalent

COMA – Committee on Medical Aspects of Food and Nutrition Policy

DIT – Diet Induced Thermogenesis

DOB – Date of Birth

DRV- Dietary Reference Values

EAR – Estimated Average Requirement

EAT – Exercise Associated Thermogenesis

EER – Estimated Energy Requirement

GDA – Guideline Daily Amounts

GI – Glycemic Index

GL– Glycemic Load

IOM – Institute of Medicine

LRNI – Lower Reference Nutrient Intake

MET – Metabolic Equivalent

NAE - Net Acid Load

NEAT — Non-Exercise Associated Thermogenesis

NHMRC – National Health and Medical Research Council

NIP — Nutrition Information Panels

NNR – Nordic Nutrition Recommendations

NRV – Nutrient Reference Values

NSP – Non starch polysaccharide

PAL – Physical Activity Level

PENG – Pocket Guide to Clinical Nutrition

PRAL — Potential Renal Acid Load

RDA – Recommended Dietary Allowance

RDI – Reference Dietary Intake

RI – Reference Intakes

RMR – Resting Metabolic Rate

RNI – Reference nutrient Intake

SACN – Scientific Advisory Committee on Nutrition

SI – Safe Intake

SUL – Safe Upper Limit

UL – Tolerable Upper Intake Level

TERMS & CONDITIONS

The Terms and Conditions set out below govern your use of Nutritics' software. By continuing installing or using Nutritics, you are deemed to have agreed to these terms. In the event that you do not agree, please do not proceed with installation of the software and contact support@nutritics.com.

Terms and Conditions and Parties

The Terms and Conditions set out below are issued by Nutritics Limited ("Nutritics"). For the purposes of these Terms and Conditions, the "Client" shall mean any individual or group that uses Nutritics' software for professional or personal purposes.

The Client represents and warrants that it has the power and authority to execute these Terms and Conditions

These Terms and Conditions are between the Client and Nutritics. The Client's relationship is solely with Nutritics as the entity providing the software platform ("the Software").

Responsibilities of the Client

The Client shall ensure that each member of the Client Group cooperates with Nutritics in connection with the performance of the Software

The Client shall be responsible for the performance of the personnel and agents of the Client Group, for the timeliness, accuracy and completeness of all data and information inputted into the Software.

Nutritics may use and rely on information and data furnished by the Client Group or others without verification. Nutritics will not be responsible for the consequences of this data or information not being complete, accurate or current.

Except as otherwise stated, the Client shall be solely responsible for, among other things: (A) making all decisions and performing all functions; (B) evaluating the adequacy and results of the Software; (C) accepting responsibility for the results of the Software; and (D) establishing and maintaining internal controls, including, without limitation, monitoring ongoing activities.

Payment of Invoices

- (a) Invoices are payable on receipt of fee notes or requests for payment unless otherwise stated. VAT Invoices will be issued on receipt of payment.
- (b) Nutritics reserves the right to charge interest on amounts overdue in excess of 14 days at an annual rate of 2 per cent over the higher of the European Central Bank rate base rate ruling on the date payment is due or the rate ruling on the date payment is received.
- (c) Without limiting its other rights or remedies, Nutritics shall have the right to suspend or terminate the Software entirely or in part if payment is not received within thirty (30) days of the fee note date. The Client shall be responsible for all taxes, such as VAT, sales and use tax, gross receipts tax, withholding tax, and any similar tax, imposed on or in connection with the Software, other than Nutritics' income and property taxes.

Term

- (a) These Terms and Conditions may be terminated by Nutritics at any time, with or without cause, by giving written notice to the Client not less than 30 days before the effective date of termination, provided that, in the event of a termination for cause, the breaching party shall have the right to cure the breach within the notice period if the breach is capable of remedy.
- (b) These Terms and Conditions may be terminated by either party by written notice with immediate effect if any of the following events occur: (i) the other party passing a resolution for its winding-up or a court of competent jurisdiction making an order for the other party's winding-up or dissolution; (ii) the making of an administration order in relation to the other party, or the appointment of a receiver over, or an encumbrancer taking possession of or selling, an asset of the other party;

- (iii) the other party making an arrangement or composition with its creditors generally or making an application to a court of competent jurisdiction for protection from its creditors generally; or
- (iv) any event analogous to those set out in paragraphs (i) to (iii) in any relevant jurisdiction.
- (c) Nutritics may terminate these Terms and Conditions with immediate effect upon written notice to the Client if Nutritics determines that (a) a governmental, regulatory, or professional entity, or an entity having the force of law has introduced a new, or modified an existing, law, rule, regulation, interpretation, or decision, the result of which would render Nutritics' performance of any part of the Terms and Conditions illegal or otherwise unlawful or in conflict with independence or professional rules, or (b) circumstances change (including, without limitation, changes in ownership of the Client or any of its affiliates) such that Nutritics' performance of any part of the Terms and Conditions would be illegal or otherwise unlawful or in conflict with independence or professional rules or Nutritics policy.
- (d) Upon termination of the Terms and Conditions, the Client will compensate Nutritics for the Software provided and expenses incurred up to the effective date of termination.

Ownership of Nutritics Property and Work Products

To the extent that a Client utilises or develops any property (whether tangible or intangible), such property, including work papers, shall remain the property of the Nutritics. On payment of Nutritics fees due, each Beneficiary shall only obtain a non-exclusive license to use within the Client Group, subject to the other provisions of these Terms and Conditions. Nutritics shall have ownership (including, without limitation, copyright and other intellectual property ownership) of any data input into the Software and all rights to use and disclose its ideas, concepts, know-how, methods, techniques, processes and skills, and adaptations thereof in conducting its business, and the Client shall ensure that the Client Group does not assert or cause to be asserted against Nutritics or its personnel any prohibition or restraint from so doing.

Limitation on Damages

- (a) Nutritics shall not be liable, whether in contract, tort, including negligence, or otherwise to the Client Group for any claims, liabilities, losses, damages, costs or expenses ("Claims") relating to or arising out of or in connection with these Terms and Conditions or the Software for an aggregate amount in excess of the fees invoiced and received by Nutritics (net of VAT and expenses) for the Software which are the subject of Claims, except to the extent finally judicially determined to have resulted primarily from the fraud of Nutritics.
- (b) In no event shall Nutritics be liable, whether in contract, tort, including negligence, or otherwise for any losses resulting from third party claims, claims for loss of use, contracts, data, goodwill, revenues or profits, (whether or not deemed to constitute direct losses) or wasted management or staff time or any consequential, special, indirect, incidental, punitive, or exemplary loss, damage, or expense relating to or arising out of or in connection with these Terms and Conditions or the Software (including the performance, non-performance or delayed performance by Nutritics of any obligations under or in connection with the Software) which may have been or may be suffered by any person howsoever caused and whether or not this could have been reasonably foreseen by Nutritics.
- (c) Nor shall Nutritics be liable, whether in contract, tort, including negligence, or otherwise, for any Claims arising out of the use of the Software for a purpose other than the purpose for which they were provided by Nutritics;
- (d) The Client agrees that any liability which Nutritics may have to the Client Group under or in connection with these Terms and Conditions for any losses suffered by the Client Group shall (so far as permitted by law) be limited to such an amount as is finally determined to be just and equitable, having regard to the extent of responsibility of Nutritics, the Client Group (including the Client Group's directors, officers, employees or agents), and any person other than Nutritics who is jointly or severally liable to the Client for all or part of the said losses suffered by the Client Group. Any limitation or exclusion or restriction on the liability of any such other person under any jurisdiction, whether arising under statute or contract or tort or resulting from death, bankruptcy or insolvency, or any settlement of such liability agreed with the Client Group, shall be ignored for the purposes of determining whether that other person is liable to the Client and the extent of responsibility of that other person to the Client in assessing any liability of Nutritics.
- (e) In circumstances where all or any portion of the provisions of this Clause are finally judicially determined to be unavailable, the aggregate liability of Nutritics and their respective personnel for any Claims shall not exceed an amount which is proportional to the relative fault that their conduct bears to all other conduct giving rise to such Claims.

(f) Nothing in these Terms and Conditions shall exclude, restrict (or prevent a claim being brought in respect of) any liability of a party for (i) death or personal injury caused by the negligence of that party; (ii) any fraudulent pre-contractual misrepresentations on which either party can be shown to have relied; or (iii) any other liability which by the governing law of these Terms and Conditions cannot be excluded or limited.

Force Majeure

Neither party shall be liable for any delays or non-performance resulting from circumstances or causes beyond its reasonable control, including, without limitation, acts or omissions or the failure to cooperate by the other party (including, without limitation, entities or individuals under its control, or any of their respective officers, directors, employees, other personnel and agents), fire or other casualty, act of God, epidemic, strike or labour dispute, war or other violence, or any law, order, or requirement of any governmental agency or authority.

Limitation on Actions

No action, regardless of form, relating to these Terms and Conditions or the Software, may be brought by either party more than two years after the cause of action has accrued under the applicable law.

Confidentiality

- (a) To the extent that, in connection with these Terms and Conditions, Nutritics comes into possession of any information, trade secrets or other proprietary information relating to the Client Group which is either designated by the disclosing party as confidential or is by its nature clearly confidential (the "Confidential Information"), Nutritics shall not disclose such Confidential Information to any third party without the Client's consent. The Client hereby consents to Nutritics disclosing such Confidential Information (i) to legal advisors, auditors, insurers or as may be required by law, regulation, judicial or administrative process, or in accordance with applicable professional standards, or in connection with potential litigation; or (ii) to any person to the extent such Confidential Information (A) shall have otherwise become publicly available (including, without limitation, any information filed with any governmental agency and available to the public) other than as the result of a disclosure by Nutritics in breach hereof, (B) becomes available to Nutritics on a non-confidential basis from a source other than the Client which Nutritics believes is not prohibited from disclosing such information by a confidentiality obligation to the Client Group, (C) is known by Nutritics prior to its receipt from the Client Group without any obligation of confidentiality with respect thereto, or (D) is developed by Nutritics independently of any disclosures made by the Client Group to Nutritics of such information.
- (b) The Client shall keep confidential any methodologies and technology used by Nutritics in connection with the Software.

Assignment

Neither party may assign or otherwise transfer these Terms and Conditions without the prior express written consent of the other. Neither party will directly or indirectly agree to assign or transfer to a third party any claim against the other party arising out of these Terms and Conditions.

Indemnification

(a) The Client agrees, to the fullest extent permitted by law, to indemnify and hold harmless Nutritics against all Claims incurred in connection with any third party claim, except to the extent finally and judicially determined to have resulted directly from the fraud of Nutritics. In circumstances where all or any portion of the provisions of this paragraph are finally judicially determined to be unavailable, the aggregate liability of Nutritics for Claims shall not exceed an amount which is proportional to the relative fault that their conduct bears to all other conduct giving rise to such Claims.

Governing Law and Submission to Jurisdiction

These Terms and Conditions, including exhibits and all matters relating to it, shall be governed by, and construed in accordance with, the laws of Ireland (without giving effect to choice of law principles). Any action or proceeding arising out of or relating to these Terms and Conditions or the Software shall be brought and maintained exclusively in the Courts of Ireland. The parties hereby expressly and irrevocably (i) submit to the exclusive jurisdiction of such courts for the purposes of any such action or proceeding and (ii) waive, to the fullest extent permitted by law, any defence of inconvenient forum to the venue and maintenance of such action in any such courts.

Electronic Communications

- (a) Except as instructed otherwise in writing, each party may assume that the other approves of properly addressed facsimile, email (including email exchanged via Internet media) and voicemail communication of both sensitive and non-sensitive documents and other communications concerning these Terms and Conditions, as well as other means of communication used or accepted by the other.
- (b) It is recognised that the internet is inherently insecure and that data can become corrupted, communications are not always delivered promptly (or at all), and that other methods of communication may be appropriate. Electronic communications are also prone to contamination by viruses. Each party will be responsible for protecting its own systems and interests and, to the fullest extent permitted by law, will not be responsible to the other on any basis (contract, tort or otherwise) for any loss, damage or omission in any way arising from the use of the Internet or from access by Nutritics personnel to networks, applications, electronic data or other systems of the Client Group.

Entire Agreement, Modification and Effectiveness

- (a) These Terms and Conditions supersede any previous agreement, understanding or communication, written or oral, relating to its subject matter.
- (b) No variation to these Terms and Conditions shall be effective unless it is documented in writing and signed by authorised representatives of both parties.

Limitation on Warranties

Nutritics warrants that the Software will be provided with reasonable skill and in good faith. The express representations, warranties and obligations of Nutritics in these Terms and Conditions are made expressly in place of and to the exclusion (to the fullest extent permitted by law) of all other representations, terms and conditions, express or implied, statutory or otherwise, relating to anything supplied or to be supplied and services provided or to be provided by or on behalf of Nutritics under or in connection with these Terms and Conditions, including without limitation any implied terms as to performance, fitness for a particular purpose, satisfactory quality or otherwise relating to the Software or any part.

Other Clients

Nothing in these Terms and Conditions will prevent or restrict Nutritics, from providing the Software to other clients, subject to the obligations of confidentiality set out above even if those other clients' interests are in competition with the Client Group.

Staff

(a) The Client will not offer employment to any Nutritics staff member or induce or solicit any such person to take up employment with the Client Group; nor will the Client Group use the services of any such person, either independently or via a third party, for a period of six months following the end of any involvement by that person with any engagement for the Client. Breach of this condition will render the Client liable to pay Nutritics liquidated damages, the rate of which will be determined by the Nutritics Board and at a minimum be equal to the three times the existing salary of the individual concerned.

Marketing Material

Nutritics is permitted to use the Client's service marks, logos, and/or branding in external publicity material without such other party's prior written consent as and when reasonably required.

Use of Client Name

Notwithstanding anything herein to the contrary, Nutritics may use the name of the Client and their use of the Software in marketing and publicity materials, as an indication of its experience, and in internal data systems.

Data Protection

In providing the Software to the Client, Nutritics may process personal data within the meaning of the Data Protection Acts 1988 and 2003 (the "Data Protection Acts"). Nutritics complies with the Data Protection Acts and nothing in these terms will create a duty, warranty or obligation in relation to compliance with the Data Protection Acts, nor shall they create any liabilities for Nutritics in the event of non-compliance by Nutritics with any term or provision of the Data Protection Acts in connection with Software provided to the Client.

Notice

Any notices to be served on either of the parties by the other shall be sent by prepaid recorded delivery or registered post or by facsimile or by electronic mail and shall be deemed to have been received by the addressee within 3 business days of posting or 1 business day of transmission if sent by facsimile or by electronic mail to the correct facsimile number (with correct answerback) or correct electronic mail address.

Miscellaneous Fees

If Nutritics personnel are present on the Client's premises, the Client will provide without charge suitable office accommodation with use of telephone, fax, telecommunication facilities and secretarial services.

Clients shall reimburse all out-of-pocket expenses that may be incurred in connection with providing the Software, including travel and subsistence and the cost of providing the services of specialist support staff unless otherwise agreed in writing. Expenses, including travel and subsistence, and goods and services purchased on the Client's behalf, are charged at cost. For travel, Nutritics' standard policies apply which are to use first class rail and economy class air travel within Ireland and business class or equivalent for overseas travel.

By using or installing Nutritics, you are agreeing to the terms and conditions listed above.

Appendix 1: Nutrient Losses and Gains

Calculation:	Used for:	Acts on:	Applied from:	Other information required / Notes	Required where:	Not required where:
Edible Portion	Removal of inedible waste from ingredients, which are removed from the recipe or ingredients before consumption (e.g. bones, skins)	Ingredient weight / Final Recipe Weight	Prompt when portion is manually typed into the smart portion box (and there is an edible factor available)	Only applicable to foods listed as 'weighed with bones', 'weighed with skin' etc	Ingredients have been entered with waste and nutrition will be reported with reference to a unit of weight	Nutrition reported per portion (and no weight referenced)
Nutrient Retention Factor	Adjusting for nutrient losses on cooking	Ingredients vitamin &, minerals content, macronutrients, fibre, sodium etc	Recipe workspace - Cooking method drop down beside QTY box	Typically only applied to raw foods, unless the ingredient is subject to two stages of cooking	Micronutrient content is to be reported and recipe is entered from raw ingredients which are served cooked	Vitamin and mineral values are not reported
Fat Absorption	Accounting for fat absorption on frying, roasting, deep frying etc	Fat content of ingredients	Cooking method (automatically)	Fat source with matching cooking factor must be added to ingredients (i.e. if food is deep fried, oil should be entered as deep fried too)	Ingredients are entered raw and cooked in fat or oil	Ingredients are entered in their fried form already
Cooking Salt Absorption	Accounting for salt absorption on boiling	Salt content of ingredients boiled in salt	Cooking method	Total salt added to water must be added to ingredient list	Foods are boiled in salted water	All other cooking methods
Yield Factor	Accounting for change in moisture content on cooking	Recipes total water content and total recipe weight	Modifiers Box below pie chart: 'Weight Yield Factor' or 'Recipe Weight after Cooking' boxes	For most accurate results, weigh your recipe after cooking, rather than applying a generic yield factor	Recipe will be reported against a unit of weight (eg. per 100g / food label)	Nutrition reported per portion or serving (and no weight referenced)