FoodWorks software
sets the standard
for labelling

"Instant" Nutrition Labelling has arrived

by Anny Dentener

Software package:
FoodWorks Nutrition Labelling Edition
Function:
Creating Nutrition Information Panels and ingredient statements from product formulations
Web site: www.xyris.com.au for free 30 day trial
Rating: ❶❶❶❶❶ (out of five stars)

Having software generate the Nutrition Information Panel and ingredient listing to go onto a label sounds like a dream come true. Entering all information correctly can be tedious and very time consuming. It can especially get complicated with multiple step recipes, e.g. when the same ingredient is used at different stages, and when moisture losses need to be taken into account. Then there are characterising ingredients or components to consider as part of the new ANZFA code coming into force on 20 December 2002.

In my March 2002 article I promised a review of FoodWorks vs 3, now renamed the 'Nutrition Labelling Edition'. What's the verdict and does it justify doubling the price (about $2,000) compared to version 2? If you are not familiar with the FoodWorks vs 2 features, please read my April 2001 review in this magazine. Alternatively, download the review as a PDF file from the FoodInc website (www.foodinc.co.nz/SoftwareRevs.html). Quick summary: FoodWorks vs 2 calculates nutrition profiles of foods based on data from the NZ FoodFiles (and/or Australian databases), and from ingredients entered. It is user-friendly but has limitations in terms of nutrients, % calculation and ability to see %RDI results. It has no capabilities in terms of nutrition labels and ingredient declarations.

The new FoodWorks version layout has been kept the same. On the left folders for filing your work,

in the middle entry panels for formulations and nutrients, and on the right the results. New is the "Label" icon on the task bar (See figure 1). Data available for the labelling version includes the official ANZFA nutrition labelling database, the NZ FoodFiles 2000, as well as Australian databases (optional). At the time of writing, the NZ data were not yet fully compliant with the new Regulations. In practical terms that means that the energy calculation (using the old 9/4/4 calorie-for-energy rule) and dietary fibre are incorrect. This can be addressed by manually recalculating energy using the ANZFA rules (37/17/17kJ plus 8 for dietary fibre). These values are then entered with the handy nutrient "Overrides" feature. The Override feature is improved, with original data maintained in the left column. When changing a formulation, make a note that you have used Override (it nearly caught me out once!). Dietary fibre, calculated according to Englyst and not the ANZFA prescribed AOAC method, is likely to be understated. If you want to make a nutrient statement for dietary fibre, get it analysed as on average it is 30% higher with the new method, depending on the types of dietary fibre involved (see the Hot Topics file: www.ifst.org.uk/hottop33).

Help files have been improved, and include several tutorials. The nutrients list has been expanded with the addition of:

1. Three different ways of calculating energy in kJ and Cal;
2. Oligo-saccharides, raffinose, maltodextrin, glycogen, resistant starch levels, lignin and total (not individual) organic acids, sugar alcohols and polydextrose;
3. Sodium and potassium in mmol and sulphur, chloride, iodine, nitrogen and the nitrogen conversion factor to protein. Iodine is listed in mg rather than microgram. Missing are chromium and molybdenum;
4. For vitamins, pantothenate and biotin have been added and the Vitamin A fractions part has been extended. Vitamin K is missing;

5. 41 fatty acid entries including calculated trans, Omega 6 and Omega 3 fatty acids totals;
6. List of 18 amino acids is followed by entry possibilities for theobromine, caffeine and phytosterols. Some amino acids are missing

Using 'Database Properties' you can select which specific nutrients to show in the results. It also explains the different energy calculation options available that include/exclude dietary fibre, sugar alcohols and organic acids. New separate databases can be set up, which means that I can hand over data without having to compromise the confidentiality of other information.

Values for most of these "new nutrients" are not part of the underlying databases so will need to be entered. The missing value indicator '?' needs to be taken seriously, e.g. no caffeine values are entered against coffees in the databases. Own ingredients can be added to the database, or database ingredients re-named to suit. When setting up new ingredients you can select a different name to show in the ingredient list. Additives can have their code number entered so they will show up as e.g. Stabiliser (402). All entries with the same name will be declared as one entry in the list, e.g. as "Stabiliser (402, 412)". Ingredients of a compound ingredient can be entered for declaration purposes. You can also enter all nutrient values as "0", as unknown '?' or based on another database entry. An adjustment for moisture is possible should you need it, e.g. for semi-dried tomatoes use sun-dried tomatoes, and simply adjust the moisture level. Measures can also be entered, so if you know that the factory uses "1 cup" of a dried herbs blend, you can enter its weight and use the cup measure in the recipe calculations from here onwards.

Setting up a recipe from your own and database ingredients remains similar. When typing in a name it searches the database for matches and lists these to choose from, and database or folder where it was found. Ingredients can be entered with their compound ingredients intact using a right hand mouse click setting (font turns bold to warn you), or by default sub-recipes will be merged in the overall recipe. It is easy to compare ingredient lists for both settings and to choose one that suits best. It does however display the same sub-ingredients above and below the 5% cut-off mark, so you have to manually override this. The right hand mouse click also allows you to multiply or divide a recipe by 2-10 and 50. Once a recipe is set up you can display the results per serve, per 100 gram and 100 ml (for liquids if you enter the density in the measures part), and as per total. A moisture or yield adjustment for cooking losses is available, and number of serves per pack can be entered for the label. Results available are "General", "Nutrient Profile" (your selection of nutrients), "All Nutrients" (ticked on the database settings) and "Ingredient List". This last feature allows you to check ingredients %, useful for an overview of characterising ingredients and for costings. It can also give % contribution for any nutrient, e.g. sodium. Next is NIP Nutrients, including %Daily Intake and %RDI for other nutrients selected for the label. If you do not like the generated ingredient list, just use the Override feature to display exactly what you want.

Clicking the Label icon shows the label on screen with the ingredient list (Figure 2). The Tab indicating 'Aus/NZ' signals that in future label formats for other countries may be added. "Label properties" allows you to select "Show the % Daily Intake column" (also adding the explanation underneath the label) or to "Show per 100 ml, not 100 g" for beverages. Select the Nutrients you want to show or "Reset to Mandatory Nutrients". Where applicable this triggers the %RDI declaration. Manually nominate the characterising ingredient %, or set it automatically based on product name. For instant for "Pasta with Sauce", it automatically declares the % pasta. If you need to declare characterising components (e.g. % cocoa solids) you still need to work that out manually. The label information can be copied, published with Microsoft Word and Excel, or exported to a web browser. Page Set Up allows you to select printer settings, including faxing or conversion to a PDF file. All printable text can be published in Word2000, but I could not check this feature since I use Office97. A costing option in the software itself would be desirable, but this requires constant updating of costs, which in practice does not happen often. An option to transfer just the ingredients percentages to Excel could be just as preferable.

The Menu analysis is more suited for dietary analysis. However the "Adjusted RDI" output where %RDI is scaled up/down to 100% energy output could well suit formulating meal replacements, keeping in mind that the %RDI allowed in a one day quantity may vary considerably. The Nutrient list is however not as extensive as on the formulation side, possibly reflecting the fact that most information is from databases only? This would limit its use in formulating sports or infant foods where amino acid supplementation may occur.

Overall, I am very impressed with this software upgrade, both in terms of features and being user friendly. It does not only quickly calculate nutrition profiles but also automatically generates the information that needs to go onto the label.

There are a few things that can be improved, but nothing major. I have found the service from Xyris good, responding quickly to e-mail questions. For urgent matters I use their 0800 number. In my opinion FoodWorks "Nutrition Labelling Edition" is an excellent tool for the food industry.
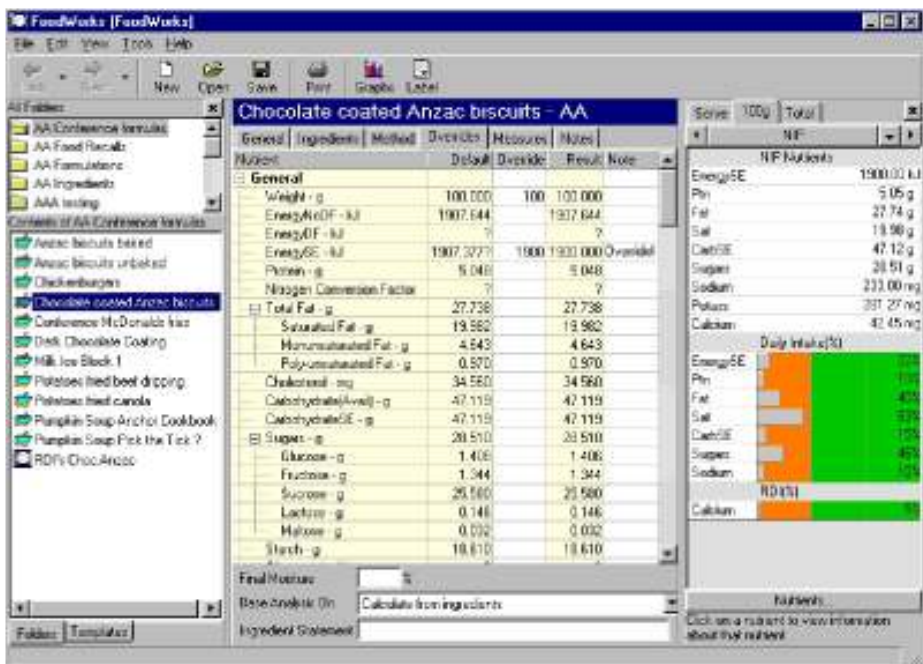

Figure 1: Overview of FoodWorks "Nutrition Labelling Edition" with Override feature and NIP information
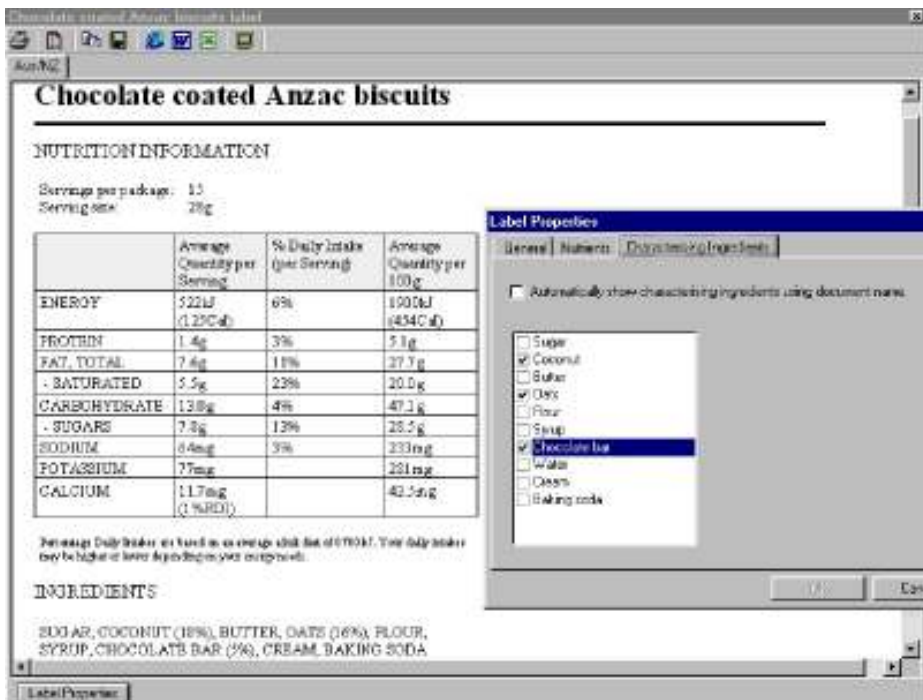

Figure 2: NIP, ingredients list and label property selection

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