FoodWorks under the microscope

By Anny Dentener

Software package:
FoodWorks™ version 2.10
Function:
Calculation of food nutrition profiles
Site: www.xyris.com.au (30 day demo)
Rating: ✪✪✪✪ (out of five stars)

Following last month's general overview of nutrition software, let's put a package to the test. This month a close look at how FoodWorks deals with a simple milk ice block recipe, using a formulation based on NZ foods and some added food industry ingredients. For the foods I used NZ FoodFiles 2000 database in FoodWorks, but all food ingredients required manual entry to the database. Next step was to evaluate the calculated nutrition information in light of the new ANZFA nutrition label format.

FoodWorks' initial setting focuses on dietician use, but it is easy to set the default to "recipe" i.e. product formulations. The interface is user friendly, showing in one screen all folders set up, formulation worked on and nutrition results. Using foods for formulations from the database and entering the ingredients as new "food" with their nutrient details was straight forward. From the formulation the programme calculates nutrients per serving and per 100 gram, including the now compulsory sodium, sugars and saturated fat. It does however not calculate a percentage formulation from an input in other units. This would be needed for the characterising ingredient % declaration.

The resulting nutrient listing is handy when formulating against a target. Click on the nutrient and it will show which part of the formulation contributes how much (Figure 1). Crucial for instance when having to reduce sodium to meet "Pick the Tick". The table also indicates missing values with a "?". It is awkward that the product needs to be entered in the "food record" part in order to obtain the %RDI for nutrients in a serving. For different RDIs (e.g. for export) it is necessary to use the "Goals Min/Max" columns associated with the RDIs. The yield function allows adjustment for moisture changes, and an override function is available where nutrient losses due to processing need to be considered. More confusing is the "moisture%" feature as it does not show up in the Help file.

For labelling information the formulation and the nutrition profile (selected from the overall nutrient listing) for a serving and per 100 gram can be printed on one sheet. Print-outs can also include the full nutrient analysis, percentages (energy, fatty acid types) and nutrient contributions of all parts of the formulation. Alternatively, information can be published in MS Word with an update feature when formulations in FoodWorks are changed. In both cases it is necessary to manually round off the values before passing it on to the label designer.

Product formulations can subsequently be used as raw material for other products or for analysis of recipes for consumers. Formulations can be copied into MS Excel when required for costing and production planning. However pasting from Excel into FoodWorks is not possible as the information needs to be linked to the database. Limitations to the software are imposed by the limits of the NZ database which excludes some vitamins and minerals. This, and the lack of detailed fatty acid and amino acid profiles, can be a draw-back when formulating more complicated nutritional products. However, Xyris has indicated that this can be set up at cost at a customer's request.

Feedback from some of FoodWorks NZ users ranged from "good" to "absolutely recommend it". It rates as very user friendly. Being able to

check formulations against nutrition targets before starting to formulate new products was mentioned as useful. A limiting factor can be lack of sufficient nutrition information from suppliers. The lack of a search function for ingredients high or low in a nutrient was noted. Essential for one user was the link to KitchenHand foodservice software. Technical support from the NZ agent rates poorly, but that from Australia rated high with e-mail and 0800 contact.

Overall, using FoodWorks was an easy process and well ahead of plodding through spreadsheets. Proviso: I have not obtained analytical results of actual product to compare with the theoretical calculations.

Company: Xyris software.

Cost: NZ$945 with free updates, upgrades charged. System details: www.xyris.com.au. Databases included: NZ FoodFiles 2000, AusNut/Nuttab, Malaysia and Pacific Islands.

NZ agent: Crop and Food Research (06) 356 8300. Technical Help (Xyris, Australia): 0800-230-007 (international free call)

Next column: Review of Genesis R&D, a US software package with more features and a bigger database. However will the price tag of US $2,999 be worth it?

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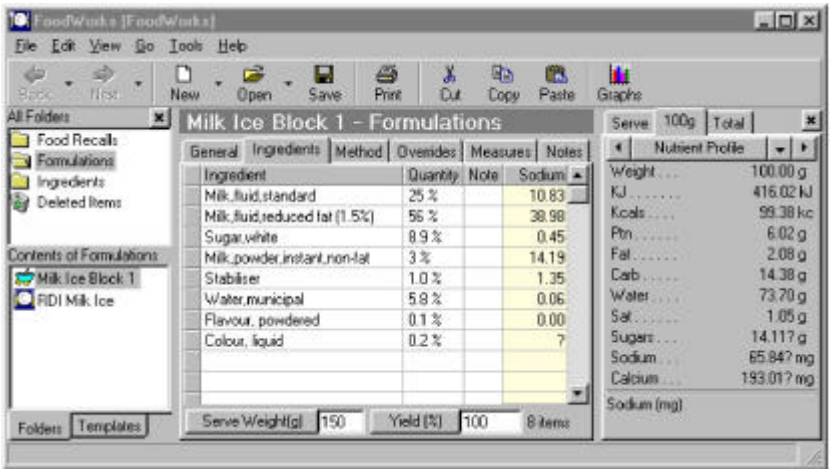

Screen image of the FoodWorks software highlighting the contribution of sodium in each ingredient of the milk ice block formulation.

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