

LANGUAL FOOD INDEXING SOFTWARE

Jayne D. Ireland¹, Anders Møller¹, Erik Nørby²

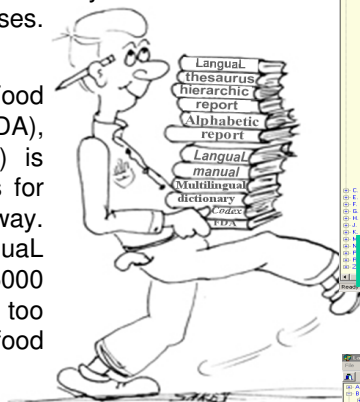
¹Danish Food Information (DFI), Roskilde, Denmark (ji@danfood.info) ²Polytec ApS, Nivå, Denmark

Rationale and objective

One of the recommendations of the 2nd International Food Data Conference (Lahti, Finland, 1995) was the use of a language-independent food identification system with structured food description and controlled vocabulary, encompassing parallel, complementary schemes and suitable for use in numeric databases.

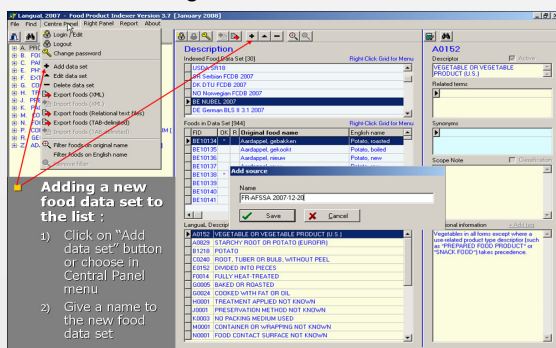
Methods

Originally developed by the US Food and Drug Administration (FDA), LanguaL (<http://www.languaL.org>) is a multilingual, faceted thesaurus for describing foods in a systematic way. However, in the past, the LanguaL thesaurus, with more than 5000 descriptors, was considered too cumbersome for common use in food composition databases.



In order to assist compilers index foods in their databases, EuroFIR (European Food Information Resource Network) therefore provided the Food Product Indexer software incorporating the LanguaL thesaurus and a number of already indexed data sets. Between 2005 and 2009, several short (one or two-day) food indexing courses were organized for food composition data compilers from all European countries, for the European Food Safety Agency, for LATINFOODS and for US FDA and USDA.

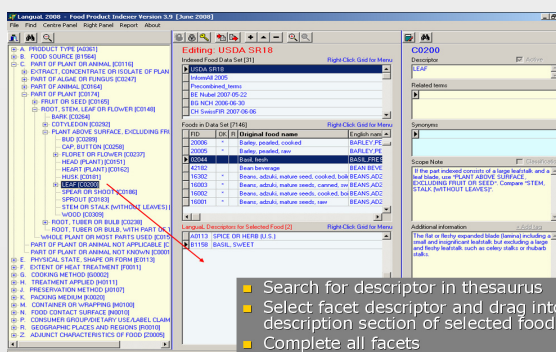
Introducing new food list in the software:



Adding a new food data set to the list:

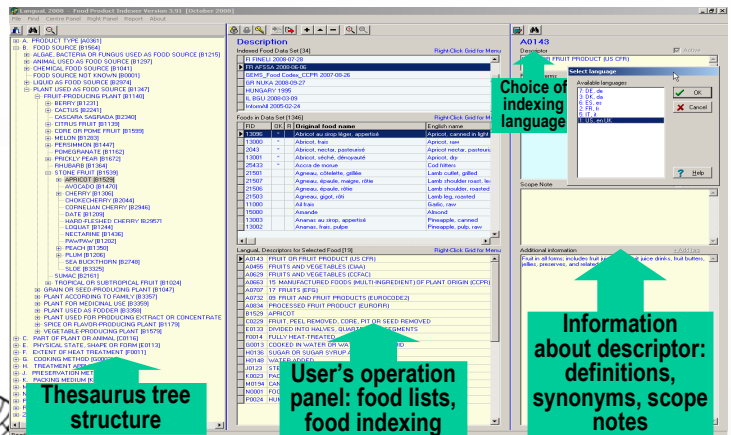
- 1) Click on "Add data set" button or choose in Central Panel menu
- 2) Give a name to the new food data set

Choosing descriptors from thesaurus (drag & drop):



- Search for descriptor in thesaurus
- Select facet descriptor and drag into description section of selected food
- Complete all facets

Food indexing software makes information available on one screen:

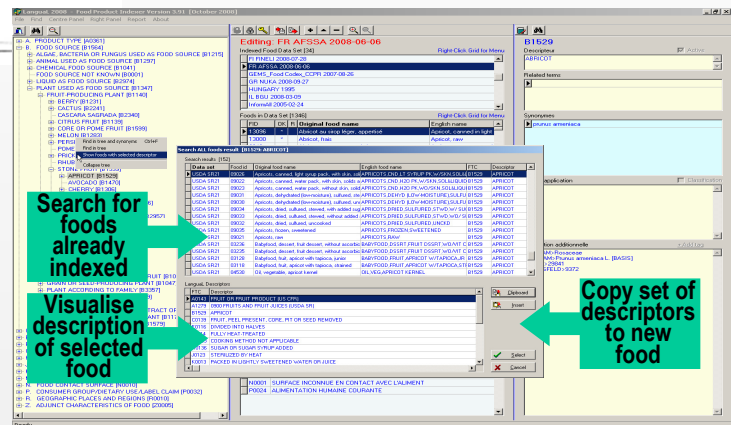


Thesaurus tree structure

User's operation panel: food lists, food indexing

Information about descriptor: definitions, synonyms, scope notes

and allows descriptions to be copied from other foods:



Search for foods already indexed

Visualise description of selected food

Copy set of descriptors to new food

Results

Food composition database compilers from the 27 countries in the EuroFIR network found the software to be easy to use in a multilingual context. The software provided a practical tool for indexing foods in a systematic way and allowed an average of 1000 foods to be indexed in each of the national databases.

The EuroFIR project has decided to make the Food Product Indexer software freely available on its technical website (<http://www.eurofir.org/eurofir/FoodDescriptionII.asp>). The software is also available on the LanguaL website, managed by the European LanguaL technical committee, where the thesaurus can be downloaded in English, Danish, French, German, Italian and Spanish (http://www.languaL.org/languaL_downloads.asp).

Conclusions

A short demonstration of the use of the LanguaL FPI software will be given at the 8th International Food Data Conference, in order to allow other compilers to use this tool to document foods in their databases. It is hoped that this initiative will be a step towards standardized food description and allow foods to be linked and compared across borders and language barriers.