

# **Posters from Section V**

#### Data base retrieval languages for food component databases: rationale for the design of Langual. Michele R. Chatfield.

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The design of a language to store and retrieve information about foods is of critical importance in the total database design. A language that captures relevant details of food components, i.e. fully describes the food indexed, is a necessity for relevant retrieval. This paper will discuss the development of the Langual food description language, including the rationale for a faceted/factored classification, the hierarchical design, how relevancy is defined and ensured in the language and the continuous improvements made in the vocabulary. This paper will focus on the information storage and retrieval for food databases rather than the content of these databases. Database retrieval will be discussed in terms of searching for foods with common ingredients or other common factors of health or dietary importance. As Langual is a controlled vocabulary, contrasts will be made with databases that feature sequential look-up and/or free-text searching and the value of a controlled vocabulary will be highlighted.

### The EuroNIMS Food Information Management System/ Computer demonstration. T. Arnouts.

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The EuroNIMS food information management system is being developed in a multinational collaboration to provide comprehensive facilities for the recording, documentation and evaluation of food composition and other food-related data; the system will be demonstrated. EuroNIMS handles analytical, calculated and imputed compositional values. A range of information on food items is supported including text documentation and images, with the handling of multiple grouping systems and food description using Langual currently under implementation. Sources for all EuroNIMS data are identified at the organisation and country/international levels for use in data interchange. Exchange is also aided through the multinational collaboration involving participating institutes from many European countries and the commonality of the data handling procedures implemented. The system is multilingual both in data storage and the user interface. It uses a client server architecture to provide multiplatform operability, with storage using a proprietary DBMS.

The first release of EuroNIMS was made in November 1994 and a full version, EuroNIMS 1.0, is nearing completion.

## **Documentation of analytical values in a food DBMS/ Computer demonstration.** T. Arnouts *et al.*

The types of documentary information supporting analysed compositional values for foods in the EuroNIMS food information management system are demonstrated and reviewed. Food items can be assigned to categories such as basic food, dish, additive or other industrial ingredient, and further described using text and images. Detailed descriptions of the analytical method can be recorded and linked to records for standard methods. A notation for showing multistep procedures in a concise text string has been developed. Methods and their variants can be organised hierarchically using the generalised grouping system support to be implemented in EuroNIMS. Information on the analysing laboratory can be stored. Further possible enhancements to the handling of analytical results documentation will be discussed.

# Langual: international organisation. J. Ireland-Ripert,<sup>a\*</sup> & A. Møller.<sup>b</sup>

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Langual is an international, descriptive coding system for foods, based on the principle of a faceted thesaurus, where each food coded is described by a set of standard terms grouped in facets. Langual is the only generally recognized method in common use for describing, capturing and retrieving data about food, adapted to national food composition and consumption databanks.

The International Langual Steering Committee is composed of permanent members representing core organizations, and rotating members representing projects with an eventual finite lifetime. At present, the permanent members are:

U.S. Food and Drug Administration (FDA-CFSAN)

U.S. Department of Agriculture (USDA)

Observatoire des Consommations Alimentaires-Centre de Recherche pour l'Etude et l'Observation des Conditions de Vie (OCA-CREDOC)

Centre National des Etudes Vétérinaires et Alimentaires-Centre Informatique sur la Qualité des Aliments (CNEVA-CIQUAL)

Ministry of Agriculture, Fisheries and Food (MAFF)