## **International Interface Standard And Langual**

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## International Interface Standard

An interface standard, which incorporates LANGUAL as the food description language, is under contractual development at the Food and Drug Administration (FDA) to allow international exchange of food composition, food consumption, and other food-related data. The interface standard will provide a means for clearly and precisely identifying foods and the data associated with them. The intent of this effort is to improve and standardize food descriptions, allow for matching of foods among databases, facilitate sharing and exchanging of data, and facilitate retrieval of information from databases.

The first task of this project, the refinement and implementation of the schema for the interface standard, has been completed. The aspects of the schema are food name and synonyms, LANGUAL factors, other descriptive factors (agricultural and storage factors), ingredients and recipes, and data sources. Thus, it includes complete LANGUAL coding, as well as descriptive terms for other aspects of foods. It provides a means of capturing full ingredient and recipe information.

The second task, which is funded and ongoing, is the development of a personal computer program for retrieval of information (a series of queries), using the standard interface. The third task calls for the dissemination of the results of this project to an international audience through demonstration projects for international symposia and pilot tests for scientific applications.

## LANGUAL

LANGUAL, which stands for "Langue des aLiments" or "language of food," is an automated method for describing, capturing, and retrieving data about food. It has been developed by FDA over the past 20 years as an ongoing cooperative effort of specialists in nutrition, food technology, and information science. LANGUAL is based on the concept that:

- foods (or food products) can be systematically described by a combination of characteristics;
- these characteristics can be categorized and coded for computer processing; and
- the resulting codes can be used to retrieve data about the food from external databases.

There has been considerable international interest and use of LANGUAL, particularly in the European Community (EC). Some of these activities are listed below:

- LANGUAL is being adapted for use in the European Prospective Study on Nutrition, Cancer, and Health by the International Agency for Research on Cancer (IARC) in Lyon, France. This study includes more than 400,000 participants from at least seven countries over a ten-year period.
- LANGUAL has been used at the Centre Informatique sur la Qualite des Aliments (CIQUAL) in Paris for several years to describe the French foods analyzed by this organization.
- LANGUAL is being used at the Centre de Rescherche pour l'Etude et l'Observation des Conditions de Vie (CREDOC) in Paris for the evaluation of data from French national food consumption studies.
- A test of LANGUAL for use as the EC standard was completed last year by FLAIR (Food-Linked Agro-Industrial Research) EUROFOODS/ ENFANT (European Network on Food and Nutrition Tables). This is a concerted action program concerned with improvement of the quality and compatibility of food consumption and composition data in the EC. The results of the test were favorable and work is underway to determine how to incorporate LANGUAL into European databases.

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