User’s Guide to the Catalogue of Food Composition Databases and Tables (CatFCDB)

About CatFCDB
Food composition data have many uses, including evaluating nutritional variation of plants and foods, analyzing relationships between nutrient intake and disease, and establishing dietary guidelines. Food composition data are generated through various methods including analytical measurements, calculations, and imputations. Many national and regional organizations, particularly governments, have developed their own food composition databases or tables (collectively abbreviated herein as FCDB) to provide information about the nutritional composition of foods relevant to a country or region. To facilitate easy access to these important resources, the ILSI Research Foundation has compiled a catalogue of publicly available databases and tables.

The Catalogue of Food Composition Databases and Tables (CatFCDB) is displayed as an interactive map that enables users to explore, analyze and filter 90 FCDBs from 92 countries and regions. CatFCDB is meant to be a starting platform for users to learn about available food composition databases and tables to determine which may suit their needs. CatFCDB provides hyperlinks to direct the user to the source databases and tables (when available).

Details about how the information compiled in CatFCDB was collected are provided below. For any questions or comments about CatFCDB, please feel free to contact the ILSI Research Foundation at CatFCDB@ilsi.org for more information.

Users of CatFCDB
CatFCDB was designed with researchers, dietitians, students, government officials, and database managers in mind. This catalogue serves to aide users in their initial assessment of the scope and depth of nutritional composition data available for certain countries and regions.

Features
- 90 Food Composition Databases and Tables
- 92 Countries and Regions
- 24 Food Classifications
- 39 Nutrients

Methods
The information in CatFCDB was obtained through a systematic review of accessible databases and tables. Each database and table was initially screened for information related to the categories and subcategories described below. After the initial review process, managers of the databases and tables were contacted to share the project goals, the scope of the information being collected, and provide any additional information that might be helpful for users. If a manager of a database or table couldn’t be identified to

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provide supplemental information, then the initial screening undertaken by the ILSI Research Foundation served as the source of content.

**Fields in the Database**

CatFCDB can be searched by category as below:

1. Descriptive Information
2. General Components
3. Food Classification
4. Nutrient Information
5. Percentage of Foods with Nutrient Information

Note: Fields are left empty if no information was available for a specific category.

I. Descriptive Information

This includes general information about the database or table, including the following (when available):

- Name
- Year Developed
- Year Updated
- Edition
- Institution Managing the Table/Database
- Contacts
- Database or Table
- Free/Subscription Access

II. General Components

Provides information about the total number and constituent categories of foods in each database or table.

**Number of Foods**
The number of foods included in each database or table. Foods are reported as separate entries by preparation method. For example, [chicken, raw] and [chicken, baked] are listed as two separate foods.

**Foods, Analyzed**
The number of raw foods analyzed in each database or table.

**Foods, Cooked**
The number of cooked foods contained in each database or table.

**Recipes**
The number of foods computed through a recipe. These data are generally not analytically derived although components of the recipe may have been analytically derived.
**Branded Foods**
The number of branded food products in each database or table. Branded food products are those that have been manufactured and nutrient composition data of the product is available. Branded foods are identified in individual databases or tables by their manufacturing name. These products are primarily prepared foods such as breads, cereals, canned and frozen foods, snacks, desserts, drinks, etc.

**Number of Nutrients**
The total number of nutrients included in each database or table. Note that this is an aggregated number of analyzed and calculated nutrients for each database or table.

**Number of Food Categories**
The number of categories into which foods are organized (see Food Classification below).

### III. Food Classification
Databases and tables usually classify foods by category or sub-category but the level of differentiation is variable by source i.e., some databases or tables have many categories/sub-categories, others fewer. The sub-categories chosen for CatFCDB are derived from [CODEX GFSA Online Food Category System](https://www.codexalimentarius.net/en/). However, CatFCDB does not include all the sub-categories from the GFSA, only those most frequently employed across databases and tables analyzed by the ILSI Research Foundation.

Database or table managers were asked to provide the number of foods for each sub-category, if available. Some databases and tables do not categorize the food at all or used a different classification system, and in these cases, fields were left empty.

#### III.a. CatFCDB Food Classification Subcategories

- General
- Cereal and grain products
- Starchy roots, tubers and products
- Nuts, dried beans, seed and products
- Vegetables and vegetable products
- Fruits and fruit products
- Meat and other animal products
- Fish (including shellfish, finfish)
- Eggs and egg products
- Dairy and dairy products
- Fast food and restaurant food
- Desserts, pastries and snacks
- Fats and oils
- Sugar, syrup and confectionery
- Spices and condiments
- Alcoholic beverages
- Non-alcoholic beverages
- Combination/mixed dishes
- Baby and infant foods
- Nutritional supplements
- Diet products
- Vegetarian dishes
- Miscellaneous
- Native food

### IV. Nutrient Information
CatFCDB includes information about nutrient sub-categories that are common across databases and tables. The presence or absence of information for each nutrient sub-category listed below is recorded as “Yes” or “No”, respectively.
IV.a. CatFCDB Nutrient Information Sub-categories

- Energy (kcal)
- Water
- Protein (g)
- Total fat (g)
- Carbohydrates (g)
- Total ash (g)
- Dietary fiber (g)
- Insoluble fiber (g)
- Soluble fiber (g)
- Total sugar (g)
- Saturated fat (g)
- Cholesterol (g)
- Calcium (mg)
- Magnesium (mg)
- Iron (mg)
- Sodium (mg)
- Potassium (mg)
- Zinc (mg)
- Copper (mg)
- Phosphorus (mg)

- Fluoride (mg)
- Iodine (µg)
- Selenium (mg)
- Thiamin (mg)
- Riboflavin (mg)
- Niacin (mg)
- Pantothenic Acid (mg)
- Vitamin B6 (mg)
- Biotin (µg)
- Vitamin B12 (mg)
- Folate and Folic Acid (mg)
- Choline (mg)
- Vitamin C (mg)
- Vitamin A (µg)
- Retinol (µg)
- Beta-carotene (µg)
- Vitamin D (µg or IU)
- Vitamin K (µg)
- Vitamin E (mg)

V. Percentage of Foods with Nutrition Information

This refers to the percentage of foods in each database or table for which there are data for a specific nutrient (see IV.a.). For example, Finland’s national database (Fineli Open Data) contains soluble fiber data for 97% of foods included in that database.

Navigating CatFCDB

Opening CatFCDB

CatFCDB can be accessed through the ILSI Research Foundation website (www.ilsirf.org) or directly here.

CatFCDB is presented as an interactive map with information about each database and table linked to its country or region of origin.

The landing page shows a world map; highlighted in blue are countries for which there is at least one database or table available. To view information about a database or table, move your cursor to the country of interest and Descriptive Information will appear (see Figure 1). Double clicking on the country sends the user directly to the website for that database or table (when a website is available) or links to the database or table directly.

International and regional databases and tables are listed on the right side of the map. Descriptive Information about each can be found by hovering over the name. Double clicking on the name sends the
user directly to the website for that FCDB (when a website is available) or links to the database or table directly.

CatFCDB also includes other important search features.

Use the **Category Panel** drop down list to search CatFCDB for:

- Descriptive Information
- General Components
- Food Classification
- Nutrient Information
- Percentage of Foods with Nutrient Information

Use the **Sub-Category Panel** to refine a search by first selecting a **Category** and then a **Sub-Category** of interest from the drop-down list.

The **Sub-Category** panel also allows the user to select how information should be displayed. Options include: column chart, bar chart, time series graph, vertical bubble chart, line graph, and stacked area chart.

Figure 2 shows the result of the following search: category [Food Classification] subcategory [Dairy and Dairy Products] for region [Europe]. The information is presented as a column chart.
CatFCDB has additional feature buttons located at the bottom left of the screen.

- The full screen icon allows the user to show the map in full screen mode.

- The view icon in the bottom-left of the screen allows the user to see various options for showing or hiding map and graph elements.

- The proportional symbol map scales circle according to the subcategory being mapped. Each symbol represents the specific databases and tables.

- The table button in the bottom-left corner of the screen to get a data table of the selected subcategory (see Figure 3).

- The selection panel can hide the region panel.

- The email icon allows for the user to send any feedback or comments to the ILSI Research Foundation.

To overlay the table feature, select the table button icon (pictured above). See Figure 3 (below) for an example of this additional feature. This image reflects the category [Food Classification], and all the subcategory [Vegetable and Vegetable Products] for all regions. Adding the table allows you to select all subcategories for viewing simultaneously.
Limitations

While CatFCDB has many uses, several limitations exist with collecting and displaying this type of information. Users should be aware of this and should consult each database or table website for the most accurate information.

How to submit information on a current or new database or table

CatFCDB will be updated at least twice per year, and the ILSI Research Foundation encourages the submission of new or updated information about databases or tables as it becomes available. Please e-mail CatFCDB@ilsi.org for more guidance on submissions to CatFCDB.

Questions/Comments

Questions, comments and suggestions for improvements to CatFCDB are very welcome. Please feel free to contact the ILSI Research Foundation at CatFCDB@ilsi.org.
Appendix

List of databases and tables in CatFCDB

A
Armenia Food Composition Tables
ASEAN Food Composition Database

B
Bangladesh Food Composition Tables and Database
Brazilian Food Composition Table
Bulgarian Food Composition Database

C
Canadian Nutrient File
Central and Eastern Uganda Food Composition Table
Chilean Food Composition Database
China Food Composition Database
Croatian Food Composition Database
Cyprus Food Composition Table
Czech Food Composition Database

D
Danish Food Composition Databank
Dutch Food Composition Database (NEVO)

E
Energy and Nutrient Composition of Foods
EuroFIR

F
FAO/INFOODS Analytical Food Composition Database
FAO/INFOODS Density Database - Version 2
FAO/INFOODS Food Composition Database for Biodiversity - Version 3.0 (BioFoodComp3.0)
Fineli Open Data
Food and Nutrition in the Arabian Gulf Coast
Food Composition Database for Epidemiological Studies in Italy (BDA)
Food Composition Database of Uruguay
Food Composition Table for Bolivia
Food Composition Table for NepalFood Composition Table for Pakistan
Food Composition Table for use in The Gambia
Food Composition Tables for Mozambique
Food Composition Tables of Egypt
Food Composition Tables of Kingdom of Bahrain
Food Composition Tables of the Near East
Food Composition Tables/Composition and Requirements of Nutrients
French Food Composition Database

G
German Food Code and Nutrient Database (BLS)

H
Hellenic Health Foundation Database

I
Icelandic Food Composition Database
Indian Food Composition Database
Iranian Food Composition Table
Irish Food Composition Database
Israeli Food Composition Database

L
Label Insight
Laos Food Composition Database
Lesotho Food Composition Tables
Lithuanian Food Composition Database

M
Malaysian Food Composition Database
McCance and Widdowson's The Composition of Foods
Mexican Food Composition Database

N
New Zealand Food Composition Database (NZFCD)
Norwegian Food Composition Table
NuBel
Nutrient composition of commonly eaten foods in Nigeria-Raw, precessed and prepared
Nutritionix
Nutritive Value of Foods of Zimbabwe
NUTTAB
O
Österreichische Nährwerttabelle (ÖNWT)
P
Polish Food Composition Database
Portuguese food composition database INSA 2008
ProPAN Food Composition Table
S
Slovak food composition database
Slovenian Food Composition Database
Souci, Fachmann and Kraut. Food Composition and Nutrition Tables
Souci, S.W., Fachmann, W. and Kraut H. Food Composition and Nutrition Tables Online
Spanish Food Composition Database
Standard Food Composition Table
Standard Tables of Food Composition in Japan
Sudan Food Composition Table
Swedish Food Composition Database
Swiss Food Composition Database
T
Tabel Komposisi Pangan Indonesia - Indonesian Food Composition Table
Tabla de Composición de Alimentos Colobianos
Tabla de composición de alimentos de Centroamerica
Tabla de Composición de Alimentos de Costa Rica
Tabla de Composición de Alimentos en Cuba
Tablas Peruanas de Composición de Alimentos
Table de Composition des Aliments du Togo
Table Provisoire de Composition des Aliments du Sud-Cameroun
Tables of Food Composition for Use in Sri Lanka
Tanzania Food Composition Tables
Thai Food Composition Tables
The Pacific Islands Food Composition Tables
The Pacific Islands Food Composition Tables
The Philippine Food Composition Table
The South Africa Food Data System (SAFOODS)
Tunisian Food Composition Table
U
USDA National Nutrient Database for Standard Reference
V
Vietnamese Food Composition Table
W
West African Food Composition Tables
West African Food Composition Tables
Z
Zambia Food Composition Table