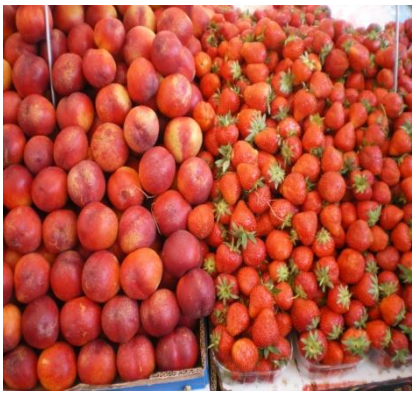
Food and Agriculture Organization
of the United Nations

FAO/INFOODS Databases

Analytical Food Composition Database
Version 1.1 - AnFooD1.1





FAO/INFOODS Analytical Food Composition Database Version 1.1 – AnFooD1.1

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Table of Contents

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Background

It is often difficult to distinguish compiled from analytical data in food composition tables, and to collect, if needed, analytical data from different sources. To overcome this problem, FAO/INFOODS decided to publish the FAO/INFOODS Analytical Food Composition Database (AnFooD) in order to assist countries to obtain high quality food composition data for their work.

Objectives

The FAO/INFOODS Analytical Food Composition Database was developed with the following objectives:

1. To publish a global compendium of scrutinized analytical data (without any additional estimations, imputation or calculation of missing values) for commonly consumed foods;
2. To assist food composition database compilers by providing an easy accessible data source of analytical data; and
3. To allow food composition database compilers to include these analytical nutritional values into their own national databases.

The FAO/INFOODS Analytical Food Composition Database is a global repository of solely analytical data and represents the equivalent of an archival database. No values have been estimated or calculated to complete the compositional profile for a food entry, except for conversion of the data to 'per 100 g edible portion on fresh weight basis'.

The current version of the FAO/INFOODS Analytical Food Composition Database is AnFooD1.1, which follows the first version AnFooD1.0 published in 2012. AnFooD1.1 comprises compositional data for 1360 foods and 322 components collected and compiled mainly by FAO interns and consultants. The compositional data are exclusively analytical data from primary sources, e.g. as published in the scientific literature, reports or dissertations, or as received from the INFOODS network.

The database is an archival collection of available analytical data with sufficient quality published in the scientific literature. With each edition more data are included covering all food groups.

The entire database is available in an MS Excel format and can be downloaded free-of-charge from the INFOODS website:

http://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases

Foods, food groups, and coding

AnFooD holds data of different edible parts of the same plant/animal food; different maturity stages; raw and processed food (cooked, preserved) and recipes (composite foods). Foods counting for biodiversity are published separately in the FAO/INFOODS Food Composition Database for Biodiversity (BioFoodComp) (FAO/INFOODS, 2016a).

Foods in AnFooD (*Table 1*) are categorized into one of 12 food groups, and each food entry has been assigned a unique food code (= food item ID). The code is constructed following the same pattern throughout all food groups: the first two figures indicate the food group followed by five sequential figures representing the food number within the respective food group.

Table 1: Foods groups/subgroups and number of food entries in the AnFooD1.1

Code of food group	Name of food groups and subgroups	Version 1.0	Version 1.1
01	**Cereals**	**13**	**111**
02	**Starchy roots and tubers**	**0**	**53**
03	**Legumes**	**0**	**7**
04	**Nuts and seeds**	**0**	**2**
05	**Vegetables**	**248**	**267**
06	**Fruits**	**0**	**11**
07	**Meat and poultry**	**0**	**2**
08	**Eggs**	**0**	**1**
09	**Fish and shellfish**	**878**	**900**
	Finfish	648	669
	Crustaceans	71	72
	Molluscs	159	159
10	**Milk**	**0**	**0**
11	**Herbs and spices**	**0**	**0**
12	**Miscellaneous**	**0**	**6**
Total number of food entries		**1139**	**1360**

In some cases the assignment of foods to one specific food group can be difficult (e.g. peanuts are botanically legumes but are considered nuts in most countries). With the growth of the AnFooD, this fact should be taken into consideration when compiling data for a food where the assignment to a single food group might not be unequivocal.

English names and scientific names are presented as originally given in the literature, and may therefore result in different information for the same food, e.g. two scientific names for

rainbow trout can be found in the database, depending on the old (*Salmo gairdneri*) or the new scientific name (*Oncorhynchus mykiss*) used in the original publication.

Definition and expression of components

All values, including liquids, are presented per 100 g edible portion on a fresh weight basis (EP). All compositional data were standardized to this expression according to the *FAO/INFOODS Guidelines for Converting Units, Denominators and Expressions* (FAO/INFOODS, 2012b). Data, which could not be transformed to this expression, were excluded.

INFOODS component identifiers, also called tagnames (FAO/INFOODS, 2012c; Klensin, Feskanich, Lin, Truswell, & Southgate, 1989) were used to describe the components. A list of the components is found in *Annex 1*. It contains the INFOODS tagnames, the component names, units, and a list of food groups in which they are present. Comments on the individual components are given in the worksheet 'Components' in the Excel file of AnFooD1.1.

A food group only lists those components where values were available for them, resulting in diverse sets of components depending on the food group (e.g. wide range of fatty acids for fish and shellfish).

In general, the average values of food components given in the original documents were included in the database, while in some occasions the standard deviations (SD) were included as well. In a few cases, values were entered as a range, where no arithmetic means were indicated in the original source.

Decimal places and significant digits were not adjusted to commonly used guidelines (Greenfield & Southgate, 2003) as the archival database should reflect the original source and truncation is normally done at the level of a user database.

No data were estimated or calculated (except for changing units). Calculated values were included as long as they were given in the original source, e.g. values for 'carbohydrates calculated by difference', but not calculated by the compiler.

Arrangement of the Excel database and worksheets

For easy standardization of the data, the FAO/INFOODS Compilation Tool (Charrondière & Burlingame, 2011; FAO/INFOODS, 2012d) was used which is a simple food composition database management system in MS Excel. The tool was adapted for this purpose by adding new fields to the overall structure in order to capture additional information (Table 2). The database contains different worksheets with specific information:

- The 'Copyright' worksheet contains information concerning copyright.
- The 'Codes' worksheet contains information concerning codes and abbreviations used in the document
- The 'Subgroup' worksheet contains information concerning the food classification.
- A total of 13 spreadsheets are used to present data for each food group individually (e.g. '01Cereals' worksheet); only the food group '09Fish & Shellfish' is split in 2 separate sheets (one including all data on fatty acids and the other with the remaining data).
- The sheet 'Bibliography' presents the entire reference list with the corresponding ID
- The sheet 'Component list' gives an overview of all components used in the database, listing tagnames, units and comments, and indicating the food group for which the data was entered.

The following variables can be found for each food group and information is provided as completely as possible, i.e. as given in the publication.

Table 2: Explanation of columns used in the Excel worksheets

Column title	Description
'Food item ID'	Indicates a unique identification code for each food entry (see section *Foods, food groups and coding*).
'Subgroup'	Indicates, when a food group was divided into subgroups (see section *Foods, food groups and coding*); All subgroups are combined in one single spreadsheet
'Country, region'	Indication of the sampling place (country/region)
'Type'	Indication, if the food was farmed (F) or wild (W)
'Food name in own language'	Gives the food name in own/local language, if available
'Food name in English'	Gives the food name in English along with a food description
'Processing'	Minuscule letters indicate the state of the food and will not replace the indication in the food description: r= raw p=processed (e.g. cooked, grilled, fermented) d=dried Some examples for special cases: legumes: d

Column title	Description
	powder: d dried and processed: p smoked and dried: p fresh and frozen: r dried and raw: d
'Species/Subspecies'	Gives the scientific name as stated in the original source
'Season'	Indicates the sampling season; Months are abbreviated with the 3 first letters in English language (e.g. Mar 2012). If the season is reported as "raining season" or other, it is reported as stated in the paper
'Other'	Gives additional information on factors influencing the nutrient composition (e.g. slaughter weight, size, sex, feeding practices, maturity stage, soil conditions, storage time, cooking and preserving methods)
'n'	Gives the number of independent analytical samples (often composite samples) and should not be confused with the number of replicates
'Comments on data processing/methods'	Gives information on value conversion (e.g. conversion from dry matter to fresh weight, conversion of denominator to per 100 g EP), information on analytical methods and/or assumptions made on data expression
'Publication year'	Publication year of source
'BiblioID'	Indicates the reference as ID to link the table with bibliography; The ID starts with one (or more) lower case letter(s), followed by a number (e.g. fr1, fr2, ..., fr169,...; i1, i2, i3, ...;)
'Compiler ID'	Gives the identification of the compiler (two or three capital letters of initials); Compilers, who revise and change data of a food entry, add their acronym to the former ID (separated by a comma)
'Latest revision in version'	Indicates, when the last revision at the food level was carried out
In food group fish and shellfish (09) only:	
By using the ASFIS List of Species for Fishery Statistics Purposes (http://www.fao.org/fishery/collection/asfis), the scientific name of all fish and shellfish of the different sources were identified. Two codes are assigned for each aquatic animal: Commercial species are grouped by the ISSCAAP code (a two figure number) according to their taxonomy, ecology and economy while the 3-alpha code (a 3-letter code) is unique for each fish and shellfish on species level. The same ASFIS codes for different food entries	

Column title	Description
indicate that fish or shellfish are identical at their taxonomic level.	
'ISSCAAP code'	Gives ASFIS classification code (two figure code); The ISSCAAP codes for the five main groups presented are given in parenthesis: Freshwater fishes (11-13), diadromous fishes (21-25), marine fishes (31-38), crustaceans (41-47), molluscs (51-58)
'3_alpha code'	Gives ASFIS identification code (three capital letter code)
'Scientific name (ASFIS)'	Gives the scientific name according to the ASFIS list on genus/species level
'English name (ASFIS)'	Gives the scientific name according to the ASFIS list

Documentation and quality of data

Each food entry is listed together with the full bibliographic reference, the food name in English, the scientific name, the compiler ID and, if available, also with the name in own language, country, region, season, other specification, sample size, and any additional comment if relevant. The description of the food is as complete as provided by the original source.

Data were evaluated for data quality according to relevant sections of the *FAO/INFOODS Guidelines on Checking Food Composition Data prior to the Publication of a User Database/Table* (FAO/INFOODS, 2012e). The following checks at the component level were applied on the entire dataset:

- The sum of proximates (= water + protein + fat + available carbohydrate + dietary fibre + alcohol + ash) is within the acceptable range of 95 – 105 g
- The sum of individual constituents is in accordance with the corresponding component (e.g. Σ of minerals and ash content, Σ of individual amino acids and protein content, Σ of individual fatty acids and lipid content)
- Systematic checks, in order to detect errors, e.g. typing/unit errors or unreasonable high or low values of a component

Conspicuous data (e.g. the sum of minerals exceeds the value for ash, extremely low or high values), were marked in the database by using brackets, if no reasonable explanation could be found (e.g. analytical method, genetic variance). These data were not excluded from the database as it was aimed to reflect the broad range of available analytical values.

Any assumptions that have been made regarding data expression (e.g. based on dry matter or fresh weight) were comprehensibly documented in the field 'Comments on data processing/methods'.

Symbols and abbreviations used in the Table

tr trace

[ ] for data of low quality or implausible data

nd not detected

Changes in version 1.1 (as compared to version 1.0)

Data for 225 food records were added in in almost all food group, especially in cereals.

Data for 34 new components were added to the database in this update: CARTOID, CELLU, CHOCALOH, CYAN, ENERA, ERGCAL, F18D1N6, FIBAD, FIBINS, FIBND, FIBSOL, FLAVD, LIGN, PH, RETOLSUM, SB, STARCH, STARCH-, STARES, SUGAR-, SUGNRD, SUGRD, THIAHCL, VITB6C, VITK1, VITK2, F20D1CN11, F20D1N11_A_F20D1N13, F22D1N11_A_F22D1N13, FAPUCN3, FAPULCCN3, FAPUCN6, FAPUCN9, PSACNSS, PSACNSI.

The following INFOODS component names were changed as per the most recent INFOODS tagname update: PROPLA was changed to PROTPL, PROANI to PROTAN, PROCNT to PROTCNT and PROCNP to PROTCNP, and PSACNS to NSP. The component CHOTDF was corrected to CHOCDF for all food groups where it appears. PROT- was previously published without a unit; it was updated to PROT-(g) in all food groups with no change to the component values. EEA- was corrected to AAE- with no change of values.

In 09 Fish & Shellfish the amino acid values for foods 0901316 Sea bass, farmed, fillet, raw, 0901317 Sea bream, farmed, fillet, raw and 0901318 Common dentex, farmed, fillet, raw were reviewed and removed due to low quality.

Twelve foods that had been published in both BioFoodComp2.0 and AnFooD1.0 were removed from AnFooD1.1; these were foods 0100091-0100103 from the food group 01 Cereals foods.

Food codes are now independent of the INFOODS Food Composition Database for Biodiversity, BioFoodComp3.0.

Table 1. Food Item IDs added in AnFooD1.1 as compared to AnFooD1.0

Code of food group	Name of food groups and subgroups	Food Item IDs added
01	Cereals	0100104-0100214
02	Starchy roots and tubers	0202010-0202062
03	Legumes	0300001-0300007
04	Nuts and seeds	0500603-0500621
05	Vegetables	0500617-0500621
06	Fruits	0600001-0600011
07	Meat and poultry	0700001-0700002
08	Eggs	0800001
09	Fish and shellfish	0902183-0902204
10	Milk	-
11	Herbs and spices	-
12	Miscellaneous	1200001-1200006

Future steps

FAO/INFOODS will continue to collect and compile high quality analytic compositional data of foods and publish new versions of this database regularly. It is hoped that in the near future, all food groups are covered, more data are entered per food group, and that more data, especially on micronutrients, will be generated and published. This information could be compiled into the FAO/INFOODS Analytical Food Composition Database.

Hopefully, more researchers will share their data and a closer collaboration with scientific journals will be established which will encourage authors of articles with compositional data to contribute actively to the FAO/INFOODS Analytical Food Composition Database as recognized data compilers.

Submission of data

Researchers are encouraged to submit their compositional data to FAO for inclusion into the FAO/INFOODS Analytical Food Composition Database. Only data that is fully documented can be accepted. Data, which has not been published yet, can also be included as long as a complete documentation exists.

For more information see

http://www.fao.org/infoods/infoods/tables-and-databases/faoinfoods-databases

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Annex 1: Components list

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
General description of food			
EDIBLE	Edible portion coefficient		09
PH	pH, hydrogen ion concentration		02, 05
Macronutrients including energy			
Energy			
ENERC(original)	Energy, total metabolizable; calculated from the energy-producing food components (original as from source)	kJ	02, 05, 09
ENERC(original)	Energy, total metabolizable; calculated from the energy-producing food components (original as from source)	kcal	01, 02, 05, 09
ENERA	Energy, gross; determined by direct analysis using bomb calorimetry	kJ	01
ENERA	Energy, gross; determined by direct analysis using bomb calorimetry	kcal	01, 09
Protein			
Individual amino acids and aggregations			
AAE-	Amino acids, total essential; unknown or variable which AS are included in total	mg	09
AANE	Amino acids, total non-essential	mg	09
AAT-	Amino acids, total; precise definition not specified	mg	09
AAT18	Sum of 18 amino acids (excluding glutamine and asparagine)	mg	05
ALA	Alanine	mg	01, 05, 09
ARG	Arginine	mg	01, 05, 09
ASP	Aspartic acid	mg	01, 05, 09
CYS	Cystine	mg	01, 05, 09
GLN	Glutamine	mg	09
GLU	Glutamic acid	mg	01, 05, 09
GLY	Glycine	mg	01, 05, 09
HIS	Histidine	mg	01, 05, 09
HYL	Hydroxylysine	mg	09
HYP	Hydroxyproline	mg	09
ILE	Isoleucin	mg	01, 05, 09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
LEU	Leucine	mg	01, 05, 09
LYS	Lysine	mg	01, 05, 09
MET	Methionine	mg	01, 05, 09
PHE	Phenylalanine	mg	01, 05, 09
PRO	Proline	mg	01, 05, 09
SER	Serine	mg	01, 05, 09
TAU	Taurine	mg	09
THR	Threonine	mg	01, 05, 09
TRP	Tryptophan	mg	05, 09
TYR	Tyrosine	mg	01, 05, 09
VAL	Valine	mg	01, 05, 09
AAS	Amino acids, total sulfur-containing	mg	09
ASN_A_ASP	Asparagine + aspartic acid	mg	09
GLN_A_GLU	Glutamine + gluamic acid	mg	09
Nitrogen and protein expressions, conversion factors			
NNP	Nitrogen, non-protein	mg	01, 09
NT	Nitrogen, total	g	01, 02, 09
PROTCNT	Protein, total; calculated from total nitrogen	g	01, 02, 05, 09
PROTCNP	Protein, total; calculated from protein nitrogen	g	01, 09
PROT-	Protein, total; method of determination unknown or variable	g	02, 05, 09
XN	Conversion factor to calculate total protein from nitrogen		01, 02, 05, 09
Other nitrogen containing compounds			
CYAN	Cyanide	mcg	02
Fat, fatty acids, fatty acid conversion factor			
FAT	Fat, total	g	01, 09
FATCE	Fat, total; derived by analysis using continuous extraction	g	01, 02, 05, 09
FAT-	Fat; method of determination unknown or mixed methods	g	01, 02, 05, 09
TGLY	Triglycerides, total	g	09
XFA (internal use)	Fatty acid conversion factor for internal use		09
Fatty acids			
F4D0	Fatty acid 4:0	g	09
F6D0	Fatty acid 6:0	g	09
F8D0	Fatty acid 8:0	g	09
F9D0	Fatty acid 9:0	g	09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
F10D0	Fatty acid 10:0	g	09
F11D0	Fatty acid 11:0	g	09
F12D0	Fatty acid 12:0	g	09
F13D0	Fatty acid 13:0	g	09
F14D0	Fatty acid 14:0	g	09
F14D0I	Fatty acid 14:0 iso	g	09
F15D0	Fatty acid 15:0	g	09
F15D0I	Fatty acid 15:0 iso	g	09
F16D0	Fatty acid 16:0	g	09
F16D0I	Fatty acid 16:0 iso	g	09
F16D0AI	Fatty acid 16:0 anteiso	g	09
F17D0	Fatty acid 17:0	g	09
F17D0I	Fatty acid 17:0 iso	g	09
F17D0AI	Fatty acid 17:0 anteiso	g	09
F18D0	Fatty acid 18:0	g	09
F19D0	Fatty acid 19:0	g	09
F20D0	Fatty acid 20:0	g	09
F21D0	Fatty acid 21:0	g	09
F22D0	Fatty acid 22:0	g	09
F23D0	Fatty acid 23:0	g	09
F24D0	Fatty acid 24:0	g	09
F12D1	Fatty acid 12:1	g	09
F14D1N9	Fatty acid 14:1 n-9	g	09
F14D1N7	Fatty acid 14:1 n-7	g	09
F14D1N5	Fatty acid 14:1 n-5	g	09
F14D1N3	Fatty acid 14:1 n-3	g	09
F14D1	Fatty acid 14:1	g	09
F15D1N9	Fatty acid 15:1 n-9	g	09
F15D1N7	Fatty acid 15:1 n-7	g	09
F15D1	Fatty acid 15:1	g	09
F16D1N11	Fatty acid 16:1 n-11	g	09
F16D1N9	Fatty acid 16:1 n-9	g	09
F16D1TN7	Fatty acid 16:1 trans n-7	g	09
F16D1N7	Fatty acid 16:1 n-7	g	09
F16D1	Fatty acid 16: 1	g	09
F17D1N9	Fatty acid 17:1 n-9	g	09
F17D1N8	Fatty acid 17:1 n-8	g	09
F17D1N7	Fatty acid 17:1 n-7	g	09
F17D1N5	Fatty acid 17:1 n-5	g	09
F17D1	Fatty acid 17:1	g	09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
F18D1CN11	Fatty acid 18:1 cis n-11	g	09
F18D1N11	Fatty acid 18:1 n-11	g	09
F18D1CN9	Fatty acid 18:1 cis n-9	g	09
F18D1TN9	Fatty acid 18:1 trans n-9	g	09
F18D1N9	Fatty acid 18:1 n-9	g	09
F18D1CN7	Fatty acid 18:1 cis n-7	g	09
F18D1N7	Fatty acid 18:1 n-7	g	09
F18D1N6	Fatty acid 18:1 n-6	g	09
F18D1N5	Fatty acid 18:1 n-5	G	09
F18D1T	Fatty acid 18:1 trans	g	09
F18D1	Fatty acid 18:1	g	09
F19D1N11	Fatty acid 19:1 n-11	g	09
F19D1N9	Fatty acid 19:1 n-9	g	09
F20D1N11	Fatty acid 20:1 n-11	g	09
F20D1CN11	Fatty acid 20:1 cis n-11	g	09
F20D1N9	Fatty acid 20:1 n-9	g	09
F20D1N8	Fatty acid 20:1 n-8	g	09
F20D1N7	Fatty acid 20:1 n-7	g	09
F20D1T	Fatty acid 20:1 trans	g	09
F20D1	Fatty acid 20:1	g	09
F22D1N11	Fatty acid 22:1 n-11	g	09
F22D1N9	Fatty acid 22:1 n-9	g	09
F22D1T	Fatty acid 22:1 trans	g	09
F22D1	Fatty acid 22:1	g	09
F24D1N9	Fatty acid 24:1 n-9	g	09
F24D1	Fatty acid 24:1	g	09
F16D2N7	Fatty acid 16:2 n-7	g	09
F16D2N6	Fatty acid 16:2 n-6	g	09
F16D2N4	Fatty acid 16:2 n-4	g	09
F16D2	Fatty acid 16:2	g	09
F18D2TTN6	Fatty acid 18:2 trans, trans n-6	g	09
F18D2CN6	Fatty acid 18:2 cis n-6	g	09
F18D2TN6	Fatty acid 18:2 trans n-6	g	09
F18D2N6	Fatty acid 18:2 n-6	g	09
F18D2N5	Fatty acid 18:2 n-5	g	09
F18D2N4	Fatty acid 18:2 n-4	g	09
F18D2T	Fatty acid 18:2 trans	g	09
F18D2	Fatty acid 18:2	g	09
F20D2N9	Fatty acid 20:2 n-9	g	09
F20D2N6	Fatty acid 20:2 n-6	g	09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
F20D2C	Fatty acid 20:2 cis	g	09
F20D2	Fatty acid 20:2	g	09
F22D2N6	Fatty acid 22:2 n-6	g	09
F22D2C	Fatty acid 22:2 cis	g	09
F22D2	Fatty acid 22:2	g	09
F16D3N4	Fatty acid 16:3 n-4	g	09
F16D3N3	Fatty acid 16:3 n-3	g	09
F16D3	Fatty acid 16:3	g	09
F18D3CN6	Fatty acid 18:3 cis n-6	g	09
F18D3N6	Fatty acid 18:3 n-6	g	09
F18D3N4	Fatty acid 18:3 n-4	g	09
F18D3CN3	Fatty acid 18:3 cis n-3	g	09
F18D3TN3	Fatty acid 18:3 trans n-3	g	09
F18D3N3	Fatty acid 18:3 n-3	g	09
F18D3	Fatty acid 18:3	g	09
F20D3N9	Fatty acid 20:3 n-9	g	09
F20D3N6	Fatty acid 20:3 n-6	g	09
F20D3N3	Fatty acid 20:3 n-3	g	09
F20D3	Fatty acid 20:3	g	09
F22D3N6	Fatty acid 22:3 n-6	g	09
F22D3N3	Fatty acid 22:3 n-3	g	09
F16D4N4	Fatty acid 16:4 n-4	g	09
F16D4N3	Fatty acid 16:4 n-3	g	09
F16D4N1	Fatty acid 16:4 n-1	g	09
F16D4	Fatty acid 16:4	g	09
F18D4N3	Fatty acid 18:4 n-3	g	09
F18D4N1	Fatty acid 18:4 n-1	g	09
F18D4	Fatty acid 18:4	g	09
F20D4CN6	Fatty acid 20:4 cis n-6	g	09
F20D4N6	Fatty acid 20:4 n-6	g	09
F20D4N3	Fatty acid 20:4 n-3	g	09
F20D4	Fatty acid 20:4	g	09
F22D4N6	Fatty acid 22:4 n-6	g	09
F22D4N3	Fatty acid 22:4 n-3	g	09
F22D4	Fatty acid 22:4	g	09
F20D5CN3	Fatty acid 20:5 cis n-3	g	09
F20D5N3	Fatty acid 20:5 n-3	g	09
F20D5	Fatty acid 20:5	g	09
F21D5N3	Fatty acid 21:5 n-3	g	09
F21D5	Fatty acid 21:5	g	09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
F22D5N6	Fatty acid 22:5 n-6	g	09
F22D5N3	Fatty acid 22:5 n-3	g	09
F22D5	Fatty acid 22:5	g	09
F22D6CN3	Fatty acid 22:6 cis n-3	g	09
F22D6N3	Fatty acid 22:6 n-3	g	09
F22D6	Fatty acid 22:6	g	09
F18D1N7_A_F18D1N9	Fatty acid 18:1 n-7 + fatty acid 18:1 n-9	g	09
F18D1N11_A_F20D1N9	Fatty acid 18:1 n-11 + fatty acid 20:1 n-9	g	09
F20D1N9_A_F20D1N11	Fatty acid 20:1 n-9 + fatty acid 20:1 n-11	g	09
F20D1N11_A_F20D1N13	Fatty acid 20:1 n-11 + fatty acid 20:1 n-13	g	09
F22D1N11_A_F22D1N13	Fatty acid 22:1 n-11 + fatty acid 22:1 n-13	g	09
F20D4N6_A_F22D1	Fatty acid 20:4 n-6 + fatty acid 22:1	g	09
F22D1N9_A_F22D1N11	Fatty acid 22:1 n-9 + fatty acid 22:1 n-11	g	09
FACID	Fatty acids, total	g	09
FASAT	Fatty acids, total saturated	g	09
FAMS	Fatty acids, total monounsaturated	g	09
FAPU	Fatty acids, total polyunsaturated	g	01, 09
FATRN	Fatty acids, total trans	g	09
FAUN	Other fatty acids, not specifiied	g	09
FAPUN9	Fatty acids, total n-9 polyunsaturated	g	09
FAPUCN6(g)	fatty acids, total n-6 polyunsaturated in cis configuration	g	09
FAPUN6	Fatty acids, total n-6 polyunsaturated	g	09
FAPUCN9(g)	fatty acids, total n-9 polyunsaturated in cis configuration	g	09
FAPUN3	Fatty acids, total n-3 polyunsaturated	g	09
FAPUCN3	fatty acids, total n-3 polyunsaturated in cis configuration	g	09
FAPULCCN3(g)	fatty acids, total n-3 long-chain polyunsaturated in cis configuration	g	09
FAN6	Fatty acid, total n-6	g	09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
FAN3	Fatty acid, total n-3	g	09
FAFRE	Fatty acids, total free	g	01, 09
Fat components			
DGLY	Diglycerides, total	g	09
Phospholipids			
PHOLIP	Phospholipids, total	g	09
Carbohydrates, carbohydrate fractions			
CHOAVLDF	Carbohydrate, available; calculated by difference	g	01, 02, 05
CHOCDF	Carbohydrate, total; calculated by difference	g	01, 05, 09
CHO-	Carbohydrate; method of determination unknown or variable	g	01, 02, 05, 09
Sugars			
SUGAR	Sugars, total	g	05
SUGAR-	Sugars, total, expression unknown	g	01
SUGNRD	Sugars, non-reducing	g	02
SUGRD	Sugars, reducing	g	02
Monosaccharides			
GLUS	Glucose	g	02
Disaccharides			
SUCS	Saccharose	g	01, 02, 09
Polysaccharides			
AMYS	Amylose	g	01
GLYC	Glycogen	g	09
PSACNSS	polysaccharides, non-starch, water-soluble	g	02
PSACNSI	polysaccharides, non-starch, water-insoluble	g	02
STARCH	starch, total	g	
STARES	starch, total, expression unknown	g	
STARCH-	starch, total; expressed in monosaccharide equivalents	G	
Dietary fibre, dietary fibre fractions			
FIBTG	Fibre, total dietary; determined gravimetrically by the AOAC total dietary fibre method (Prosky and similar methods)	g	01, 02, 05
FIBC	Fibre, crude	g	02, 05, 09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
FIBAD	Fibre; determined by acid detergent method	g	01
FIBINS	fibre, water-insoluble	g	
FIBSOL	fibre, water-soluble	g	
FIBND	fibre; determined by neutral detergent method	g	
FIB-	Fibre; method of determination unknown or variable	g	01, 02, 05
Dietary fibre fractions			
CELLU	Cellulose	g	01
LIGN	Lignin	g	01
Water			
WATER	Water	g	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
DM	Dry matter	g	01, 05, 09
Ash and other solids			
ASH	Ash	g	01, 02, 05, 09
Organic acids			
OXALAC	Oxalic acid	mg	01, 05
PHYTAC	Phytic acid	mg	01, 02, 05
Minerals and trace elements			
AG	Silver	mcg	09
AL	Aluminium	mcg	01, 05, 09
BA	Barium	mcg	09
BRD	Bromide	mcg	01, 09
CA	Calcium	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
CLD	Chloride	mg	01, 09
CO	Cobalt	mcg	01, 05, 09
CR	Chromium	mcg	01, 09
CU	Copper	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
FE	Iron, total	mg	01, 02, 05, 09
ID	Iodine	mcg	01, 09
K	Potassium	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
MG	Magnesium	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
MN	Manganese	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
MO	Molybdenum	mcg	09
NA	Sodium	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
NACL	Salt	mg	09
NI	Nickel	mcg	09
P	Phosphorus	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
RB	Rubidium	mg	01, 09
S	Sulphur	mg	09
SE	Selenium	mcg	01, 09
TI	Titanum	mcg	09
V	Vanadium	mcg	01, 09
ZN	Zinc	mg	01, 02, 03, 04, 05, 06, 07, 08, 09, 12
Heavy metals and contaminants			
AS	Arsenic	mcg	01, 09
CD	Cadmium	mcg	01, 09
HG	Mercury	mcg	09
PB	Lead	mcg	01, 05, 09
SB	Antimony	mcg	
SN	Tin	mcg	09
SR	Strontium	mcg	09
Vitamins			
Fat-soluble vitamins			
Vitamin A, retinol			
VITA_RAE	Vitamin A retinol activity equivalent (RAE); calculated by summation of the vitamin A activities of retinol and the active carotenoids	mcg	05, 09
VITA	Vitamin A; calculated by summation of the vitamin A activities of retinol and the active carotenoids	mcg	02, 05
ERGCAL	ergocalciferol	mcg	09
RETOL	Retinol	mcg	09
RETOLDH	Dehydroretinol	mcg	09
RETOL13	13-cis retinol	mcg	09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
RETOLDH13	13-cis-dehydroretinol	mcg	09
RETOLDHT	All trans dehydroretinol	mcg	09
RETOLSUM	summation, retinol = trans-retinol + cis-retinol	Mcg	09
VITA-	Vitamin A; method of determination unknown	mcg	09
Carotenoids			
CARTA	alpha-Carotene	mcg	09
CARTB	beta-Carotene	mcg	02, 05, 09
CARTBCIS	beta-Carotene cis	mcg	02, 05
CARTBEQ	beta-Carotene equivalents	mcg	05
CARTOID	carotenoids, total	mcg	05
LUTN	Lutein	mcg	05
NEOX	Neoxanthin	mcg	05
VIOLX	Violaxanthin	mcg	05
Vitamin D			
CHOCAL	Cholecalciferol (D3)	mcg	09
CHOCALOH	25-hydroxycholecalciferol	Mcg	09
ERGSTR	Ergosterol	mcg	09
Vitamin E			
TOCPHA	alpha-Tocopherol	mg	09
VITE-(IU)	Vitamin E; method or determination unknown or variable	IU	09
Water-soluble vitamins			
Thiamin (vitamin B1)			
THIA	Thiamin	mg	02, 05, 09
THIAHCL	vitamin B1 analysed and expressed as thiamin hydrochloride	mg	09
Riboflavin (vitamin B2)			
RIBF	Riboflavin	mg	02, 05, 09
Folate			
FOL	Folate, total	mcg	09
FOL-	Folate; method unknown or variable	mcg	05
Niacin			
NIA	Niacin, preformed	mg	02, 09
NIA-	Niacin; method or form unknown	mg	02, 09
Pantothenic acid			
PANTAC	Pantothenic acid	mg	09
Vitamin B6			
VITB6A	Vitamin B-6, total; determined by	mg	09

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
	analysis		
VITB6-	Vitamin B-6, method unknown or variable	mg	09
VITB6C	Vitamin B-6, total; calculated by summation	mg	09
PYRXN	Pyridoxine	mg	09
PYRXNHCL	Pyridoxine HCl	mg	09
Vitamin B12			
VITB12	Vitamin B-12	mcg	09
Vitamin C			
VITC	Vitamin C	mg	02, 05, 09
ASCL	L-ascorbic acid	mg	02, 05
ASCDL	L-dehydroascorbic acid	mg	05
VITC-	Vitamin C; method unknown or variable	mg	05
Vitamin K			
VITK1	Vitamin K-1	mcg	09
VITK2	Vitamin K-2	mcg	09
Sterols			
STERT	Sterols, total	mg	09
Plant sterols			
BRASTR	Brassicasterol	mg	09
CAMT	Campesterol, total	mg	09
SAPON	Saponins	mg	05
SITSTR	Sitosterol	mg	09
SQUAL	Squalene	mg	09
STGSTR	Stigmasterol, unspecified	mg	09
Cholesterol			
CHOLE	Cholesterol; determined by enzymatic or chromatographic method	mg	09
CHOL-	Cholesterol; method unknown or variable	mg	09
Bioactive compounds			
Flavonoids			
Flavonols			
FLAVD	Total flavonoids	mcg	05
ISOHA	Isohamnetin	mcg	05
KAEMF	Kaempferol	mcg	05
QUERCE	Quercetin	mcg	05

TAGNAME	DESCRIPTION	UNIT	WHERE USED (FOOD GROUP)
Tannins			
TAN	Tannins, total	mg	01, 05