



Public Health  
England

Protecting and improving the nation's health

# McCance and Widdowson's The Composition of Foods Integrated Dataset 2015 User guide

## About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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## Introduction

Public Health England (PHE) is responsible for maintaining up to date data on the nutrient content of the UK food supply in order to support the National Diet and Nutrition Survey, and funds a rolling programme of nutrient analysis of foods commonly consumed in the UK. Data from this programme, together with complementary data from other sources are published as McCance and Widdowson's The Composition of Foods – the UK food composition tables. Previous data has been published in book form as a series of supplements, each containing extensive data on a specific food group. The Composition of Foods Integrated Dataset (CoFID) was first published in 2008 and brought together for the first time all the available data in electronic format as a single, consolidated, dataset. This version (2015) is an update of the original published in 2008 and includes all the new and recently reviewed data. Foods calculated by recipe or calculated based on another food (eg, foods weighed with waste) have been recalculated to include the most recent data for ingredients and the dataset therefore contains some newly created codes which have not previously been published. A subset of the data has been published recently in book form as McCance and Widdowson's The Composition of Foods seventh summary edition.<sup>1</sup>

### Sources of data and methods of evaluation

It is essential that food composition data is regularly updated for a number of reasons. Since the CoFID was first published in 2008, many new fresh, ambient, frozen, and processed foods have become familiar items in our shops, and values for these have been included where possible. In addition, the nutritional value of many processed foods and composite dishes have changed and the nutrient content of unprocessed foods can also change over time. This can happen when there are new varieties or new sources of supply for the raw materials. New farming practices can affect the nutritional value of both plant and animal products. New manufacturing practices, including changes in the type and amounts of ingredients and changes in fortification practice can affect the content of processed foods. Many foods have been reformulated in line with government public health initiatives, including

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<sup>1</sup>Finglas P.M., Roe M.A., Pinchen H.M., Berry R., Church S.M., Dodhia S.K., Farron-Wilson M. & Swan G. (2015) McCance and Widdowson's The Composition of Foods, 7<sup>th</sup> summary edition. The Royal Society of Chemistry, Cambridge

reductions in the amount of fat, trans fatty acids, saturated fat, sugar and salt added. Methods of preparation and cooking in the home have also changed and can affect the nutrient content of foods consumed.

To ensure that the UK food composition data could continue to have as wide a coverage, and be as up-to-date as possible, the Ministry of Agriculture, Fisheries and Food decided in the early 1980s to set up a rolling programme of food analysis, the responsibility for which now lies with PHE. The analytical survey reports from 2002 onwards and some earlier reports are available in electronic form from [www.ifr.ac.uk/fooddatabanks/](http://www.ifr.ac.uk/fooddatabanks/) These reports comprise raw laboratory data and have not been evaluated to the same extent as data incorporated into the CoFID.

The following publications in The Composition of Foods series are currently available and contain data that is included in CoFID:

- Cereals and Cereal Products, supplement (1988)
- Milk Products and Eggs, supplement (1989)
- Vegetables, Herbs and Spices, supplement (1991)
- 5th Summary Edition (1991)
- Fruit and Nuts, supplement (1992)
- Vegetable Dishes, supplement (1992)
- Fish and Fish Products, supplement (1993)
- Miscellaneous Foods, supplement (1994)
- Meat, Poultry and Game, supplement (1995)
- Meat Products and Dishes, supplement (1996)
- Fatty Acids, supplement (1998)
- 6th Summary Edition (2002)
- 7th Summary Edition (2015)

Many of the values included in CoFID have been taken from the seventh summary edition and detailed supplements, themselves mainly derived from the analytical surveys programme. The main data source for each food is provided, where known, in the 'main data reference' column and refers to the references provided in appendix 1, which lists the reports and scientific literature from which data was taken. Where updated values have not been included, the previous values were reviewed and judged to be valid.

Where new analytical data was not available, and previous values were judged not to be valid, values have been taken from a number of sources including manufacturers' data, scientific literature, food composition datasets

from other countries and calculations based on previous values and/or ingredients. In particular, the values for sodium, sugar, saturated and *trans* fat content of many processed foods have been updated, to reflect the reductions achieved by food manufacturers since the sixth summary edition was published in 2002 (FSA, 2002)<sup>2</sup>. Fortified products have also been reviewed against label data and values updated where necessary to reflect current practices for the range and amounts of nutrients added. All recipes have been recalculated, using the most recent available data for ingredients, and ingredients used have also been updated where appropriate.

Some foods that were included in the 2008 CoFID have not been reviewed or validated in the 2015 update and those foods are published separately in a file containing data for 'old' foods. This data can be used in addition to the 2015 dataset but users should be aware that the values for some nutrients may not represent those foods as currently consumed.

Where the values in the tables were derived by direct analysis of the foods, care was taken when designing sampling protocols to ensure that the foods analysed were representative of those consumed by the UK population. For most foods a number of samples were purchased at different shops, supermarkets or other retail outlets, and, where appropriate, foodservice outlets or catering suppliers. Samples analysed were composite samples, consisting of equal quantities of each sub-sample purchased. When the composite sample was made up from a number of different brands of food, the proportion of the individual brands purchased was related to their relative shares of the retail market. Full details of samples are available in the reports given as main data references (appendix 1). If the food required preparation prior to analysis, techniques such as washing, soaking, cooking, etc. were as similar as possible to normal domestic practices. Cooking methods were based on manufacturer's recommendations for pre-packaged foods and methods for non pre-packed foods were based on review of 'usual' consumer preparation. Details of preparation procedures are available in the reports given as main data references (appendix 1).

Where data from literature sources was included, preference was given to reports where the food was similar to that in the UK, where the publication gave full details of the sample, method of preparation and analysis, and where the results were presented in a detailed and acceptable form. EuroFIR

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<sup>2</sup>Food Standards Agency (2002) McCance and Widdowson's The Composition of Foods, 6<sup>th</sup> summary edition. The Royal Society of Chemistry, Cambridge

(European Food Information Resource) datasets and tools ([www.eurofir.org](http://www.eurofir.org)) were used to help evaluate existing or new data values, and to calculate values for foods where suitable analytical or literature data were not available.

Where processed foods with brand names are included, they are restricted to leading brands with an established composition. No inference should be drawn from the inclusion of data for a particular brand.

The final selection of values published here is dependent on the judgement of the compilers and their interpretation of the available data. Due to the large natural variability of foods, it is unlikely that a particular item will have precisely the same composition as given in these tables. This is particularly true for unprocessed foods such as cereals, dairy products, eggs, meat, fish, fruit and vegetables. The values published here should be regarded as typical rather than definitive for the foods described.

Users are advised to consult other sources of data (eg, product labels, manufacturers' data, published analytical reports) where appropriate, depending on their particular needs or interests, for the food item under consideration. It should be noted that manufacturers can and do change or reformulate their products and this will influence nutrient content. This is particularly relevant for foods where nutrients are added for fortification purposes, or for technological purposes, such as antioxidants or colouring agents. Information on processed foods, including fortification levels and reformulations, is often available from manufacturers' websites and from retailers.

## Data formats

CoFID data is provided as Excel workbooks containing data in worksheets related to nutrient groups and can also be made available, on request, as text files (7-bit ASCII format, compatible with any computer system capable of reading the ISO 646 character set). Data files are available from [www.ifr.ac.uk/fooddatabanks/](http://www.ifr.ac.uk/fooddatabanks/).

## Format of Excel files

The Excel workbook consists of 13 separate worksheets:

Factors

Proximates  
Inorganics  
Vitamins  
Vitamin Fractions  
Saturated fatty acids per 100g fatty acids  
Saturated fatty acids per 100g food  
Monounsaturated fatty acids per 100g fatty acids  
Monounsaturated fatty acids per 100g food  
Polyunsaturated fatty acids per 100g fatty acids  
Polyunsaturated fatty acids per 100g food  
Phytosterols  
Organic acids

Each sheet contains column headings in rows 1-3 of the spreadsheet, then data values for each individual foodstuff such that data values for a specific food code will occur in the same row in each of the 13 worksheets.

The following notes apply to the data values:

- a trace value for a nutrient is represented by Tr
- where a nutrient is present in significant quantities, but there is no reliable information on the amount, the value is represented by N
- in the EXCEL files, it is not possible to append nutrient-specific footnotes, and these are only available in the ASCII files. Food-specific footnotes do appear in the EXCEL version

## Food identification

Food Code (NUMB in the ASCII file) is a number, up to six digits, representing the unique CoFID code representing each food.

The two digit prefix generally refers to the codes used for the book supplement relating to specific food groups, eg, 11- for cereals and cereal products, 12- for milk products and eggs, 16- for fish and fish products. For foods where new data has been incorporated into an existing food, a new food code number has been given using the prefix for the appropriate supplement. Since the food code is unique for each food and these electronic datasets do not relate exactly to book publications, the codes used should not be considered to have any particular significance.



**Food name (NAME)** The food name has been chosen as that most recognisable and descriptive of the food referenced.

**Description (DESC)** Information given under the description describes the nature of the samples taken for analysis. Sources of values derived, either from the literature or by calculation, are also indicated under this heading.

**Group (GROUP)** In these files (but not in the printed publications) a one, two or three letter code is assigned to every food. The code letter(s) provide identification of the food group and food type to which the food belongs. A full list of the codes and their description is given in appendix 2.

**Previous (PREV)** Assigned to each food which has an earlier food code with different nutrient values associated with it. It is a number, up to six digits, indicating previous food codes (4<sup>th</sup>, 5<sup>th</sup> or 6<sup>th</sup> edition or a supplement). Some foods may have more than one previous code associated with them.

**Main data references (COMMENTS)** The main data reference indicates the principal report(s) or publication(s) from which the majority of the data for the food code are taken. Values for individual nutrients within each code may be taken from different sources, calculated or estimated from other codes. For foods that do not have an analytical report or literature source that can be referred to as the main data reference, the food description should indicate how the data have been estimated (eg, from manufacturer's data, calculated from related codes or calculated as a recipe). In some cases there is a main data reference referring to analytical data and the description indicates that industry data has also been used to update some nutrients, usually sodium, sugars, fats or added minerals and vitamins.

## Details of nutrient data

For more detailed definition and expression of the nutrients you should refer to the introductory pages of the 7<sup>th</sup> summary edition of McCance and Widdowson's *The Composition of Foods*<sup>3</sup> and of the supplement publications.

The more significant points for certain nutrients are provided in the notes below for convenience. For some nutrients, data which is 'old' and was analysed significantly earlier and on a different sample to the bulk of the nutrients is available. This data has not been updated but it is the only data available and may be of interest to some users and is available as a separate file. This applies to fibre fractions, Southgate fibre and sulphur.

### FACTORS worksheet

**Edible conversion factor (EDPOR)** Many foods are purchased or served with material that is clearly inedible or material that might be discarded as inedible by some consumers. For the purposes of this dataset 'waste' encompasses both types of material, which might include, for example:

- outer leaves or stalks of vegetables
- stones, pips or peel of fruit
- nut shells
- fish skin and bone
- meat fat and bones
- liquid content of canned foods

The edible conversion factor allows calculation of the nutrient content of foods when the inedible material is included in the weight and refers to the proportion of edible material remaining after the waste has been removed. The factor will vary between different samples of the same food and these values should be treated as a guide to the typical proportion of inedible waste.

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<sup>3</sup> Finglas P.M, Roe M.A., Pinchen H.M, Berry R., Church S.M., Dodhia S.K., Farron-Wilson M. and Swan G. (2015) *McCance and Widdowson's The Composition of Foods*, 7<sup>th</sup> summary edition. The Royal Society of Chemistry, Cambridge

**Specific gravity (SPECGRAV)** Specific gravity is the ratio of the density (mass of a unit volume) of a food to the density (mass of the same unit volume) of water.

**Nitrogen conversion factor (NCF)** Nitrogen conversion factor used is the factor used to calculate protein from total nitrogen. See **Protein**.

**Glycerol conversion factor (GCF)** Glycerol conversion factor is used to allow the calculation of the total fatty acids in a given weight of food. See **Fatty acids**.

## PROXIMATES worksheet

**Water (WATER)** For most foods, water has been analysed using gravimetric methods. In some cases where protein, fat or carbohydrate have been updated based on industry data, the water value has been estimated by calculation ( $100 - (\text{protein} + \text{fat} + \text{available carbohydrate} + \text{dietary fibre} + \text{ash})$ ).

**Protein (PROT)** For most foods, protein is calculated by multiplying total nitrogen values (TOTNIT) by the factors provided in the 'Nitrogen conversion factor' column of the 'Factors' worksheet, as described in the introduction of McCance and Widdowson's *The Composition of Foods 7th summary Edition*. Unless stated otherwise, a factor of 6.25 is used based on the assumption that proteins contain 16% nitrogen. The proportion of non-protein nitrogen is high in many foods, notably fish, fruits and vegetables. In most of these, however, this is amino acid in nature and therefore little error is involved in the use of a factor applied to the total nitrogen, although protein in the strictest sense is overestimated. For those foods which contain a measurable amount of non-protein nitrogen in the form of urea, purines and pyrimidines (eg, mushrooms) the non-protein nitrogen has been subtracted before multiplication by the appropriate factor.

**Fat (FAT)** The fat in most foods is a mixture of triglycerides, phospholipids, sterols and related compounds. The values in the tables refer to total fat and not just to triglycerides.

**Carbohydrate (CHO)** Total carbohydrate and its components, starch, total and individual sugars (glucose, galactose, fructose, sucrose, maltose, lactose) and oligosaccharides, but not fibre, are wherever possible expressed

as their monosaccharide equivalent. The values for total carbohydrate in the Tables have generally been obtained from the sum of analysed values for these components of 'available carbohydrate', contrasting with figures for carbohydrate 'by difference', which are sometimes used in other food tables or on the labels of processed foods. Such figures are obtained by subtracting the measured weights of the other proximates from the total weight and many include the contribution from any dietary fibre present, as well as errors from the other analyses.

**Energy value (KCAL)** Calculated using the conversion factors: protein 4 kcal/g, fat 9 kcal/g, carbohydrate (available, expressed as monosaccharides) 3.75 kcal/g and alcohol 7 kcal/g.

**Energy value (KJ)** Calculated using the conversion factors: protein 17 kJ/g, fat 37 kJ/g, carbohydrate (available, expressed as monosaccharides) 16 kJ/g and alcohol 29 kJ/g.

**Starch (STAR)** Includes dextrans but excludes resistant starch. Expressed as monosaccharide equivalents.

**Oligosaccharides (OLIGO)** Expressed as monosaccharide equivalents. Any known or measured contribution from oligosaccharides and/or maltodextrins has been included in the total carbohydrate value but not in the columns for starch or total sugars. In most foods oligosaccharides are present in relatively low quantities. In vegetables and some processed foods where glucose syrups and maltodextrins are added, oligosaccharides will make a significant contribution to carbohydrate content. Where oligosaccharides are present in foods, they are not always measured separately and may be included in the starch, sugar or fibre fractions, depending on the nature of the oligosaccharide and on the analytical methods used.

**Total sugars (TOTSUG)** Sugars are expressed as monosaccharide equivalents and include free monosaccharides (glucose, fructose and galactose) and disaccharides (sucrose, maltose and lactose). The value does not include any contribution from oligosaccharides present in the food.

**Alcohol (ALCO)** Values are given as g/100 ml. Pure ethyl alcohol has a specific gravity of 0.79, dividing values by 0.79 converts them to alcohol by volume (ml/100 ml).

**NSP (ENGFIB)** Non-starch polysaccharides<sup>4</sup> includes insoluble fibre (cellulose, insoluble non-cellulosic polysaccharides) and soluble fibre (soluble cellulosic polysaccharides).

**AOAC fibre (AOACFIB)** AOAC determinations<sup>5</sup> include resistant starch and lignin in the estimation of total fibre, rather than only the non-starch polysaccharides.

**Fatty acids** Values for total saturated (SATFOD), monounsaturated (MONOFOD), polyunsaturated (POLYFOD) and trans fatty acids (FODTRANS) are given as well as values for branched chain saturated fatty acids (TOTBRFOD), cis-monounsaturated (MONOFODc) and cis-polyunsaturated fatty acids (POLYFODc). Trans fatty acids are also included in total monounsaturated and total polyunsaturated fatty acids. For food labelling purposes trans fats are not included in the values for monounsaturated and polyunsaturated fats. Values for total fatty acids are given expressed as both g/100g food and also g/100g fatty acid methyl esters. The fat in most foods contains non fatty acid material such as phospholipids and sterols and to allow the calculation of the total fatty acids in a given weight of food, the glycerol conversion factors given in the 'Factors' worksheet were applied.

**Cholesterol (CHOL)** Values are expressed as mg/100g food. To convert to mmol cholesterol, divide the values by 386.6.

## INORGANICS worksheet

Values for are given for:

Sodium (NA)  
Potassium (K)  
Calcium (CA)  
Magnesium (MG)  
Phosphorus (P)

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<sup>4</sup> Englyst, H. N., Quigley, M. E. and Hudson, G. J. (1994). Determination of dietary fibre as non-starch polysaccharides with gas-liquid chromatographic, high performance liquid chromatographic or spectrophotometric measurement of constituent sugars. *Analyst*, 119, 1497-1509

<sup>5</sup> AOAC. (2011) In W. Horwitz, G. Latimer (Eds.), *Official methods of analysis (18th ed., Revision 4)*. ISBN: 0-935584-82-X

Iron (FE)  
Copper (CU)  
Zinc (ZN)  
Chloride (CL)  
Selenium (SE)  
Iodine (I)

## VITAMINS worksheet

### Fat-soluble vitamins

The two components of vitamin A are given separately as Retinol (RET) and Carotene (CAREQU).

**Retinol (RET)** is expressed as the weight of *all-trans*-retinol equivalent, *i.e.* the sum of *all-trans*-retinol plus contributions from the other forms after correction to account for their relative activities.<sup>6</sup> Where the retinol profile was incomplete, because values for 13-*cis* retinol and/or retinaldehyde were not available, it has been assumed that only *all-trans* retinol is present, leading to a possible underestimate in some cases.

**Carotene (CAREQU)** Represents the  $\beta$ -carotene activity and is the sum of the  $\beta$ -carotene and half of any  $\alpha$ -carotene or cryptoxanthins present. Where the carotenoid profile was incomplete, because only values for  $\beta$ -carotene were available, it has been assumed that only  $\beta$ -carotene is present. This may result in an underestimate of  $\beta$ -carotene equivalents, but as  $\alpha$ -carotene and cryptoxanthin are usually present in low levels in foods without complete carotenoid profiles, it is likely that any error is small.

**Total retinol equivalent (RETEQU)** The generally accepted relationship is that 6  $\mu\text{g}$   $\beta$ -carotene or 12  $\mu\text{g}$  of other active carotenoids are equivalent to 1  $\mu\text{g}$  of retinol,<sup>7</sup> *ie*,

Vitamin A potency as =  $\mu\text{g}$  retinol +  $\frac{\mu\text{g } \beta\text{-carotene equivalent}}{6}$   
retinol equivalent

<sup>6</sup> Sivell, L.M., Bull, N.L., Buss, D.H., Wiggins, R.A., Scuffam, D., and Jackson, P.A. (1984) Vitamin A activity in foods of animal origin. *J. Sci. Food Agric.* 35, 931-939

<sup>7</sup> Department of Health (1991) Dietary reference values for food energy and nutrients for the United Kingdom. Report on Health and Social Subjects No. 41, HMSO, London

**Vitamin D (VITD)** Few foods contain vitamin D from intrinsic sources. All those which contain vitamin D naturally are products of animal origin and contain D<sub>3</sub> (cholecalciferol) derived, as in humans, from the action of sunlight on the animal's skin or from its own food. Vitamin D<sub>2</sub> (ergocalciferol) made commercially has the same potency as D<sub>3</sub> in man. Vitamin D<sub>2</sub> and vitamin D<sub>3</sub> are both used to fortify a number of foods.

Meat can contain vitamin D<sub>3</sub> (cholecalciferol) derived from the action of sunlight or, for pigs and poultry, from the feed. Vitamin D<sub>3</sub> in meat may also be present in the form of the more active 25-hydroxy vitamin D<sub>3</sub>. For meat, meat products, and poultry, therefore, the total vitamin D activity has been taken as the sum of vitamin D<sub>3</sub> (cholecalciferol) and five times 25-hydroxy vitamin D<sub>3</sub> (25-hydroxy cholecalciferol), where data is available.

**Vitamin E (α-tocopherol equivalent) (VITE)** Values take into account vitamin E activity using conversion factors,<sup>8</sup> and are expressed as α-tocopherol equivalents.

**Vitamin K<sub>1</sub> (VITK1)** Phylloquinone, the predominant, naturally-occurring, vitamin K in foods.

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<sup>8</sup> McLaughlin, P.J. and Weihrauch, J.L. (1979) Vitamin E content of foods. *J. Am. Diet. Assoc.* 75, 647-665

## VITAMIN FRACTIONS worksheet

Values are given for some foods for vitamins that contribute to retinol equivalents (all-trans retinol, 13-cis-retinol, dehydroretinol and retinaldehyde), carotene equivalents (alpha-carotene, beta-carotene and beta-cryptoxanthins), vitamin D (cholecalciferol and 25-hydroxy-vitamin D<sub>3</sub>) and vitamin E equivalents (alpha, beta, gamma and delta tocopherol and alpha, beta, gamma and delta tocotrienols). In addition, there are some values for lutein, lycopene and 5-methyl folate.

## FATTY ACID worksheets

Worksheets are given containing values for individual fatty acid isomers where these are available. There are worksheets for saturated fatty acids, monounsaturated fatty acids and polyunsaturated fatty acids. Values for total fatty acids are given expressed as both g/100g food and also g/100g fatty acid methyl esters. The fat in most foods contains non fatty acid material such as phospholipids and sterols and to allow the calculation of the total fatty acids in a given weight of food, the glycerol conversion factors given in the 'Factors' worksheet were applied.

## PHYTOSTEROL worksheet

Values are given for some foods for a range of phytosterols including beta-sitosterol, brassicasterol, campesterol, delta-5-avenasterol, delta-7-avenasterol, delta-7-stigmasterol and stigmasterol.

## ORGANIC ACIDS worksheet

Values are given for a few foods for citric acid and malic acid.

## Format of 7-bit ASCII files

A line called RECTYPE starts each new record and is used to indicate the record type. For example, it may show that the record is an explanatory text record, a data record (nutrient values), a recipe record, etc.



Each record is terminated with three asterisks "\*\*\*\*" starting in column 1 of the line.

The files currently contain three record types:

## RECTYPE 0

This is a header record and gives information about the data and includes the title, version, creation date, copyright statement and any other relevant notes.

## RECTYPE -1

This is the descriptor record and gives explanatory text for RECTYPE 1 (data) records. The RECTYPE -1 record contains all possible fields of the RECTYPE 1 (data) records in the file and provide a full description of the meaning of the acronyms used in the data records. Generally, the RECTYPE -1 records will precede the corresponding data records. Each descriptor is output as a separate line preceded by the field acronym, a vertical bar (ASCII Dec.124, Hex.7C) and a space, eg,

CHOL | Cholesterol mg

where CHOL is the acronym used in the data records for cholesterol and mg are the units in which the nutrient value for cholesterol is expressed per 100g of food. The units information is separated from the nutrient description by two space characters. The order of the information in the RECTYPE -1 record is alphabetical by field acronym.

A complete listing of all field acronyms, their descriptions and units used (per 100g or 100ml of food) is given in appendix 3.

## RECTYPE 1

Each of the records of this type contain the data for a food. Each nutrient value (or food name, food number *etc.*) is output on a separate line and is preceded by its field acronym, eg:

NAME | Compound cooking fat  
CHOL | 425

Where the information in a field occupies more than one line, eg, data source, the acronym for the field is repeated at the start of each new line.

Food records are ordered by food code and the order of data for an individual food in this record type are as in the corresponding printed publication.

The following notes apply to data in RECTYPE 1 records:

1. Nutrient values within round brackets, ( ), are estimated.
2. A trace value for a nutrient is represented by Tr.
3. Where a nutrient is present in significant quantities, but there is no reliable information on the amount, the value is represented by N.
4. Footnote information is appended to the field to which it applies and is enclosed in square braces, [ ], and is separated from the corresponding value by three space characters.

## Food labelling

Nutrition information is increasingly being provided on food labels and from 2016 will be mandatory on the majority of pre-packed foods. Values from CoFID may be used for this purpose, but only if certain conditions are met. Values that meet the criteria below are included in CoFID, where possible.

New food information regulations (the EU Food Information for Consumers Regulation (EU FIC) No. 1169/2011), which bring EU rules on general and nutrition labelling together into a single regulation (replacing the previous food labelling regulations after a transition period), came into force in November 2011. Under the new regulations (available at: [http://ec.europa.eu/food/food/labellingnutrition/nutritionlabel/index\\_en.htm](http://ec.europa.eu/food/food/labellingnutrition/nutritionlabel/index_en.htm)), 'back of pack' nutrition labelling will become mandatory for the majority of pre-packed foods from 13 December 2016.

If a nutrition declaration is provided prior to 13 December 2016 on a voluntary basis, or is required because a nutrition and/or health claim has been made or vitamins and/or minerals have been added to the foodstuff, it must comply with EU FIC from 13 December 2014.

The mandatory declaration will comprise:

energy (kJ, kcal)  
fat  
saturates

carbohydrate

sugars

protein

salt

Salt is calculated as total sodium content multiplied by 2.5. Supplementary information on other nutrients listed in the Regulation can be provided on a voluntary basis. The additional listed nutrients are: monounsaturates; polyunsaturates; polyols; starch; fibre; and specified minerals and vitamins, present in significant amounts (as defined in the Regulation). If a claim is made for any of these nutrients, or if minerals and/or vitamins are added to a food, then the amount of the respective nutrient(s) must be declared in addition to the mandatory declaration outlined above.

Declared values for nutrients should be average values derived using one or more of the following methods:

- manufacturer's analysis of food
- a calculation from the known or actual average values of the ingredients used in the preparation of the food
- a calculation from generally established and accepted data

Generally established and accepted data for the UK include values published in CoFID, if the product or its ingredients are similar to those described. Nevertheless, it is important to note the following differences:

- protein should be given as total nitrogen x 6.25 for every food, whereas more specific factors have been used in CoFID
- carbohydrate is to be declared as the weight of the carbohydrates themselves and not their monosaccharide equivalents

The following factors may be used to convert monosaccharide equivalents from this edition to actual weights:

Total carbohydrate	Divide by 1.05 (unless it is known to be mainly starch or mainly oligosaccharide)
Starch	Divide by 1.10
Sucrose and lactose	Divide by 1.05
Glucose, etc.	As given

Different factors are to be used to calculate energy values and are shown below

	kcal/g	kJ/g
Carbohydrate (except polyols), expressed as weight	4	17
Polyols	2.4	10
Protein	4	17
Fat	9	37
Salatrim	6	25
Alcohol (ethanol)	7	29
Organic acid	3	13
Fibre	2	8
Erythritol	0	0

### 'Front of pack' nutrition labelling

EU FIC allows elements of the mandatory nutrition declaration which are of importance to public health to be repeated on the 'front of pack' in one of the following formats:

Energy value alone, or

Energy value plus amounts of fat, saturates, sugars and salt

Guidance on providing 'front of pack' labelling in line with UK government 2013 recommendation can be found at:

[www.gov.uk/government/publications/front-of-pack-nutrition-labelling-guidance](http://www.gov.uk/government/publications/front-of-pack-nutrition-labelling-guidance)

### Tolerances for nutrient values declared on a label

It is widely recognised that it is not possible for foods to always contain the exact quantity of nutrients declared on the label, owing to natural variation, and variations during food production and storage. However, in order to avoid consumers being misled, it is important that the deviation from declared values should be minimal. EU guidance has therefore been produced on tolerances, i.e. the acceptable differences between the nutrient values declared on a label and those established in the course of official controls by enforcement authorities. The tolerances, which vary by nutrient, by the amount present and take account of the uncertainty of measurement, are at: [http://ec.europa.eu/food/food/labellingnutrition/nutritionlabel/index\\_en.htm](http://ec.europa.eu/food/food/labellingnutrition/nutritionlabel/index_en.htm)

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## Appendix 2

### Food sub-group codes

#### Cereals and cereal products

	A
Flours, grains and starches	AA
Sandwiches	AB
Rice	AC
Pasta	AD
Pizzas	AE
Breads	AF
Rolls	AG
Breakfast cereals	AI
Infant cereal foods	AK
Biscuits	AM
Cakes	AN
Pastry	AO
Buns and pastries	AP
Puddings	AS
Savouries	AT

#### Milk and milk products

	B
Cows milk	BA
Breakfast milk	BAB
Skimmed milk	BAE
Semi-skimmed milk	BAH
Whole milk	BAK
Channel Island milk	BAN
Processed milks	BAR
Other milks	BC
Infant formulas	BF
Whey-based modified milks	BFD
Non-whey-based modified milks	BFG
Soya-based modified milks	BFJ
Follow-on formulas	BFP

Milk-based drinks	BH
Creams	BJ
Fresh creams (pasteurised)	BJC
Frozen creams (pasteurised)	BJF
Sterilised creams	BJL
UHT creams	BJP
Imitation creams	BJS
Cheeses	BL
Yogurts	BN
Whole milk yogurts	BNE
Low fat yogurts	BNH
Other yogurts	BNS
Ice creams	BP
Puddings and chilled desserts	BR
Savoury dishes and sauces	BV
<b>Eggs</b>	<b>C</b>
Eggs	CA
Egg dishes	CD
Savoury egg dishes	CDE
Sweet egg dishes	CDH
<b>Vegetables</b>	<b>D</b>
Potatoes	DA
Early potatoes	DAE
Main crop potatoes	DAM
Chipped old potatoes	DAP
Potato products	DAR
Beans and lentils	DB
Peas	DF
Vegetables, general	DG
Vegetables, dried	DI
Vegetable dishes	DR

<b>Fruit</b>	<b>F</b>
Fruit, general	FA
Fruit juices	FC
<b>Nuts and seeds</b>	<b>G</b>
Nuts and seeds, general	GA
<b>Herbs and spices</b>	<b>H</b>
<b>Baby foods</b>	<b>IF</b>
Baby foods, granulated/powder	IFB
Baby foods, canned/bottled	IFC
<b>Fish and fish products</b>	<b>J</b>
White fish	JA
Fatty fish	JC
Crustacea	JK
Molluscs	JM
Fish products and dishes	JR
<b>Meat and meat products</b>	<b>M</b>
Meat	MA
Bacon	MAA
Beef	MAC
Lamb	MAE
Pork	MAG
Veal	MAI
Poultry	MC
Chicken	MCA
Duck	MCC
Goose	MCE
Grouse	MCG
Partridge	MCI
Pheasant	MCK

	Pigeon	MCM
	Turkey	MCO
Game		ME
	Hare	MEA
	Rabbit	MEC
	Venison	MEE
Offal		MG
Burgers and grillsteaks		MBG
Meat products		MI
Other meat products		MIG
Meat dishes		MR
<b>Fats and oils</b>		<b>O</b>
	Spreading fats	OA
	Animal fats	OB
	Oils	OC
	Non-animal fats	OE
	Cooking fats	OF
<b>Beverages</b>		<b>P</b>
	Powdered drinks, essences and infusions	PA
	Powdered drinks and essences	PAA
	Infusions	PAC
	Soft drinks	PC
	Carbonated drinks	PCA
	Squash and cordials	PCC
	Juices	PE
<b>Alcoholic beverages</b>		<b>Q</b>
	Beers	QA
	Ciders	QC
	Wines	QE
	Fortified wines	QF
	Vermouths	QG
	Liqueurs	QI

Spirits	QK
<b>Sugars, preserves and snacks</b>	<b>S</b>
Sugars, syrups and preserves	SC
Confectionery	SE
Chocolate confectionery	SEA
Non-chocolate confectionery	SEC
Savoury snacks	SN
Potato-based snacks	SNA
Potato and mixed cereal snacks	SNB
Non-potato snacks	SNC
<b>Soups, sauces and miscellaneous foods</b>	<b>W</b>
Soups	WA
Home made soups	WAA
Canned soups	WAC
Packet soups	WAE
Sauces	WC
Dairy sauces	WCD
Salad sauces, dressings and pickles	WCG
Non-salad sauces	WCN
Pickles and chutneys	WE
Miscellaneous foods	

## Appendix 3

### Acronyms, descriptions and units

<b><u>Acronym</u></b>	<b><u>Description</u></b>	<b><u>Units</u></b>
13CISRET	13-cis-retinol	µg
25OHD3	25-hydroxy vitamin D3	µg
5METHF	5-methyl folate	µg
ACAR	Alpha-carotene	µg
ALCO	Alcohol	g
ALTRET	All-trans-retinol	µg
AOACFIB	AOAC fibre	g
ATOPH	Alpha-tocopherol	mg
ATOTR	Alpha-tocotrienol	mg
BCAR	Beta-carotene	µg
BIOT	Biotin	µg
BRASPHYTO	Brassicasterol	mg
BSITPHYTO	Beta-sitosterol	mg
BTOPH	Beta-tocopherol	mg
BTOPH	Beta-tocopherol	mg
BTOTR	Beta-tocotrienol	mg
CA	Calcium	mg
CAMPHYTO	Campesterol	mg
CAREQU	Carotene	µg
CHO	Carbohydrate	g
CHOL	Cholesterol	mg
CITA	Citric acid	g
CL	Chloride	mg
COMM	Comments and data source	
CRYPYT	Cryptoxanthins	µg
CU	Copper	mg
D5AVEN	Delta-5-avenasterol	mg
D7AVEN	Delta-7-avenasterol	mg
D7STIG	Delta-7-stigmastenol	mg
DEHYRET	Dehydroretinol	µg
DESC	Food description	
DTOPH	Delta-tocopherol	mg
DTOTR	Delta-tocotrienol	mg
EDPOR	Edible proportion	
ENGFIB	Englyst fibre	g
FAC10:0	Decanoic acid per 100g fatty acids	g



FAC10:1	Decenoic acid per 100g fatty acids	g
FAC10:1c	cis-Decenoic acid per 100g fatty acids	g
FAC11:0xb	ex Br Undecanoic acid per 100g fatty acids	g
FAC12:0	Dodecanoic acid per 100g fatty acids	g
FAC12:0xb	ex Br Dodecanoic acid per 100g fatty acids	g
FAC12:1	Dodecenoic acid per 100g fatty acids	g
FAC12:1c	cis-Dodecenoic acid per 100g fatty acids	g
FAC13:0xb	ex Br Tridecanoic acid	g
FAC14:0	Tetradecanoic acid per 100g fatty acids	g
FAC14:0xb	ex Br Tetradecanoic acid per 100g fatty acids	g
FAC14:1	Tetradecenoic acid per 100g fatty acids	g
FAC14:1c	cis-Tetradecenoic acid per 100g fatty acids	g
FAC15:0	Pentadecanoic acid per 100g fatty acids	g
FAC15:0xb	ex Br Pentadecanoic acid per 100g fatty acids	g
FAC15:1	Pentadecenoic acid per 100g fatty acids	g
FAC15:1c	cis-Pentadecenoic acid per 100g fatty acids	g
FAC16 poly	unknown C16 polyunsaturated fatty acids per 100g fatty acid	g
FAC16:0	Hexadecanoic acid per 100g fatty acids	g
FAC16:0xb	ex Br Hexadecanoic acid per 100g fatty acids	g
FAC16:1	Hexadecenoic acid per 100g fatty acids	g
FAC16:1c	cis-Hexadecenoic acid per 100g fatty acids	g
FAC16:2c	cis-Hexadecadienoic acid per 100g fatty acids	g
FAC16:3c	cis-Hexadecatrienoic acid per 100g fatty acids	g
FAC16:4	Hexadecatetraenoic acid per 100g fatty acids	g
FAC16:4c	cis-Hexadecatetraenoic acid per 100g fatty acids	g
FAC16:UNID	16:unidentified fatty acid per 100g fatty acids	g
FAC17:0	Heptadecanoic acid per 100g fatty acids	g
FAC17:0xb	ex Br Heptadecanoic acid per 100g fatty acids	g
FAC17:1	Heptadecenoic acid per 100g fatty acids	g
FAC17:1c	cis-Heptadecenoic acid per 100g fatty acids	g
FAC18 poly	unknown C18 polyunsaturated fatty acids per 100 fatty acid	g
FAC18:0	Octadecanoic acid per 100g fatty acids	g
FAC18:0xb	ex Br Octadecanoic acid per 100g fatty acids	g
FAC18:1	Octadecenoic acid per 100g fatty acids	g
FAC18:1c	cis-Octadecenoic acid per 100g fatty acids	g
FAC18:1n7	n-7 Octadecenoic acid per 100g fatty acids	g
FAC18:1n9	n-9 Octadecenoic acid per 100g fatty acids	g
FAC18:2	Octadecadienoic acid per 100g fatty acids	g
FAC18:2cn6	cis n-6 Octadecadienoic acid per 100g fatty acids	g
FAC18:3	Octadecatrienoic acid per 100g fatty acids	g
FAC18:3cn3	cis n-3 Octadecatrienoic acid per 100g fatty acids	g

FAC18:3cn6	cis n-6 Octadecatrenoic acid per 100g fatty acids	g
FAC18:4	Octadecatetraenoic acid per 100g fatty acids	g
FAC18:4cn3	cis n-3 Octadecatetraenoic acid per 100g fatty acids	g
FAC20 poly	unknown C20 polyunsaturated fatty acid per 100 fatty acid	g
FAC20:0	Eicosanoic acid per 100g fatty acids	g
FAC20:0xb	ex Br Eicosanoic acid per 100g fatty acids	g
FAC20:1	Eicosenoic acid per 100g fatty acids	g
FAC20:1c	cis-Eicosenoic acid per 100g fatty acids	g
FAC20:2	Eicosadienoic acid per 100g fatty acids	g
FAC20:2cn6	cis n-6 Eicosadienoic acid per 100g fatty acids	g
FAC20:3	Eicosatrienoic acid per 100g fatty acids	g
FAC20:3cn6	cis n-6 Eicosatrienoic acid per 100g fatty acids	g
FAC20:4	Eicosatetraenoic acid per 100g fatty acids	g
FAC20:4cn6	cis n-6 Eicosatetraenoic acid per 100g fatty acids	g
FAC20:5	Eicosapentaenoic acid per 100g fatty acids	g
FAC20:5cn3	cis n-3 Eicosapentaenoic acid per 100g fatty acids	g
FAC20:UNID	20:unidentified fatty acid per 100g FA	g
FAC21:5	Heneicosapentaenoic acid per 100g fatty acids	g
FAC21:5cn3	cis n-3 Heneicosapentaenoic acid per 100g fatty acids	g
FAC22 poly	unknown C22 polyunsaturated fatty acid per 100g fatty acid	g
FAC22:0	Docosanoic acid per 100g fatty acids	g
FAC22:0xb	ex Br Docosanoic acid per 100g fatty acids	g
FAC22:1	Docosenoic acid per 100g fatty acids	g
FAC22:1c	cis-Docosenoic acid per 100g fatty acids	g
FAC22:1n11	n-11 Docosenoic acid per 100g fatty acids	g
FAC22:1n9	n-9 Docosenoic acid per 100g fatty acids	g
FAC22:2	Docosadienoic acid per 100g fatty acids	g
FAC22:2cn6	cis n-6 Docosadienoic acid per 100g fatty acids	g
FAC22:3cn6	cis n-6 Docosatrienoic acid per 100g fatty acids	g
FAC22:4	Docosatetraenoic acid per 100g fatty acids	g
FAC22:4cn6	cis n-6 Docosatetraenoic acid per 100g fatty acids	g
FAC22:5	Docosapentaenoic acid per 100g fatty acids	g
FAC22:5cn3	cis n-3 Docosapentaenoic acid per 100g fatty acids	g
FAC22:6	Docosahexaenoic acid (DHA) per 100g fatty acids	g
FAC22:6cn3	cis n-3 Docosahexaenoic acid (DHA) per 100g FA	g
FAC22:UNID	22:unidentified fatty acid per 100g FA	g
FAC24:0	Tetracosanoic acid per 100g fatty acids	g
FAC24:0xb	ex Br Tetracosanoic acid per 100g fatty acids	g
FAC24:1	Tetracosenoic acid per 100g fatty acids	g
FAC24:1c	cis-Tetracosenoic acid per 100g fatty acids	g

FAC25:0xb	ex Br Pentacosanoic acid per 100g fatty acids	g
FAC4:0	Butanoic acid per 100g fatty acids	g
FAC6:0	Hexanoic acid per 100g fatty acids	g
FAC8:0	Octanoic acid per 100g fatty acids	g
FACTRANS	Total Trans fatty acids per 100g fatty acids	g
FAT	Fat	g
FE	Iron	mg
FOD10:0	Decanoic acid per 100g food	g
FOD10:1	Decenoic acid per 100g food	g
FOD10:1c	cis-Decenoic acid per 100g food	g
FOD11:0xb	ex Br Undecanoic acid per 100g food	g
FOD12:0	Dodecanoic acid per 100g food	g
FOD12:0xb	ex Br Dodecanoic acid per 100g food	g
FOD12:1	Dodecenoic acid per 100g food	g
FOD12:1c	cis-Dodecenoic acid per 100g food	g
FOD13:0	Tridecanoic acid per 100g food	g
FOD13:0xb	ex Br Tridecanoic acid per 100g food	g
FOD14:0	Tetradecanoic acid per 100g food	g
FOD14:0xb	ex Br Tetradecanoic acid per 100g food	g
FOD14:1	Tetradecenoic acid per 100g food	g
FOD14:1c	cis-Tetradecenoic acid per 100g food	g
FOD15:0	Pentadecanoic acid per 100g food	g
FOD15:0xb	ex Br Pentadecanoic acid per 100g food	g
FOD15:1	Pentadecenoic acid per 100g food	g
FOD15:1c	cis-Pentadecenoic acid per 100g food	g
FOD16 poly	unknown C16 polyunsaturated fatty acids per 100g food	g
FOD16:0	Hexadecanoic acid per 100g food	g
FOD16:0xb	ex Br Hexadecanoic acid per 100g food	g
FOD16:1	Hexadecenoic acid per 100g food	g
FOD16:1c	cis-Hexadecenoic acid per 100g food	g
FOD16:2	Hexadecadienoic acid per 100g food	g
FOD16:2c	cis-Hexadecadienoic acid per 100g food	g
FOD16:3	Hexadecatrienoic acid per 100g food	g
FOD16:3c	cis-Hexadecatrienoic acid per 100g food	g
FOD16:4	Hexadecatetraenoic acid per 100g food	g
FOD16:4c	cis-Hexadecatetraenoic acid per 100g food	g
FOD16:UNID	16:unidentified fatty acid per 100g food	g
FOD17:0	Heptadecanoic acid per 100g food	g
FOD17:0xb	ex Br Heptadecanoic acid per 100g food	g
FOD17:1	Heptadecenoic acid per 100g food	g
FOD17:1c	cis Heptadecenoic acid per 100g food	g
FOD18 poly	unknown C18 polyunsaturated fatty acid per	g

	100g food	
FOD18:0	Octadecanoic acid per 100g food	g
FOD18:0xb	ex Br Octadecanoic acid per 100g food	g
FOD18:1	Octadecenoic acid per 100g food	g
FOD18:1c	cis-Octadecenoic acid per 100g food	g
FOD18:1n7	n-7 Octadecenoic acid per 100g food	g
FOD18:1n9	n-9 Octadecenoic acid per 100g food	g
FOD18:2	Octadecadienoic acid per 100g food	g
FOD18:2cn6	cis n-6 Octadecadienoic acid per 100g food	g
FOD18:3	Octadecatrienoic acid per 100g food	g
FOD18:3cn3	cis n-3 Octadecatrienoic acid per 100g food	g
FOD18:3cn6	cis n-6 Octadecatrienoic acid per 100g food	g
FOD18:4	Octadecatetraenoic acid per 100g food	g
FOD18:4cn3	cis n-3 Octadecatetraenoic acid per 100g food	g
FOD19:0	Nonadecanoic acid per 100g food	g
FOD20 poly	unknown C20 polyunsaturated fatty acid per 100g food	g
FOD20:0	Eicosanoic acid per 100g food	g
FOD20:0xb	ex Br Eicosanoic acid per 100g food	g
FOD20:1	Eicosenoic acid per 100g food	g
FOD20:1c	cis-Eicosenoic acid per 100g food	g
FOD20:2	Eicosadienoic acid per 100g food	g
FOD20:2cn6	cis n-6 Eicosadienoic acid per 100g food	g
FOD20:3	Eicosatrienoic acid per 100g food	g
FOD20:3cn6	cis n-6 Eicosatrienoic acid per 100g food	g
FOD20:4	Eicosatetraenoic acid per 100g food	g
FOD20:4cn6	cis n-6 Eicosatetraenoic acid per 100g food	g
FOD20:5	Eicosapentaenoic acid per 100g food	g
FOD20:5cn3	cis n-3 Eicosapentaenoic acid per 100g food	g
FOD20:UNID	20:unidentified fatty acid per 100g food	g
FOD21:5	Heneicosapentaenoic acid per 100g food	g
FOD21:5cn3	cis n-3 Heneicosapentaenoic acid per 100g food	g
FOD22 poly	unknown polyunsaturated fatty acid per 100g food	g
FOD22:0	Docosanoic acid per 100g food	g
FOD22:0xb	ex Br Docosanoic acid per 100g food	g
FOD22:1	Docosenoic acid per 100g food	g
FOD22:1c	cis-Docosenoic acid per 100g food	g
FOD22:1n11	n-11 Docosenoic acid per 100g food	g
FOD22:1n9	n-9 Docosenoic acid per 100g food	g
FOD22:2	Docosadienoic acid per 100g food	g
FOD22:2cn6	cis n-6 Docosadienoic acid per 100g food	g
FOD22:3cn6	cis n-6 Docosatrienoic acid per 100g food	g
FOD22:4	Docosatetraenoic acid per 100g food	g

FOD22:4cn6	cis n-6 Docosatetraenoic acid per 100g food	g
FOD22:5	Docosapentaenoic acid per 100g food	g
FOD22:5cn3	cis n-3 Docosapentaenoic acid per 100g food	g
FOD22:6	Docosahexaenoic acid (DHA) per 100g food	g
FOD22:6cn3	cis n-3 Docosahexaenoic acid (DHA) per 100g food	g
FOD22:UNID	22:unidentified fatty acid per 100g food	g
FOD24:0	Tetracosanoic acid per 100g food	g
FOD24:0xb	ex Br Tetracosanoic acid per 100g food	g
FOD24:1	Tetracosenoic acid per 100g food	g
FOD24:1c	cis-Tetracosenoic acid per 100g food	g
FOD25:0xb	ex Br Pentacosanoic acid per 100g food	g
FOD4:0	Butanoic acid per 100g food	g
FOD6:0	Hexanoic acid per 100g food	g
FOD8:0	Octanoic acid per 100g food	g
FODTRANS	Trans fatty acids per 100g food	g
FOLT	Folate	µg
FRUCT	Fructose	g
GALACT	Galactose	g
GLUC	Glucose	g
GROUP	Food sub-group code	
GTOPH	Gamma-tocopherol	mg
GTOTR	Gamma-tocotrienol	mg
I	Iodine	µg
K	Potassium	mg
KCAL	kcal	
KJ	kJ	
LACA	Lactic acid	g
LACT	Lactose	g
LUT	Lutein	µg
LYCO	Lycopene	µg
MALA	Malic acid	g
MALT	Maltose	g
MG	Magnesium	mg
MN	Manganese	mg
MONOFAC	Monounsaturated fatty acids per 100g fatty acids	g
MONOFACc	cis-Monounsaturated fatty acids /100g FA	g
MONOFACtr	trans monounsaturated fatty acids per 100 FA	g
MONOFOD	Monounsaturated fatty acids per 100g food	g
MONOFODc	cis-Monounsaturated fatty acids /100g Food	g
MONOFODtr	trans monounsaturated fatty acids per 100g food	g
NA	Sodium	mg
NAME	Full food name (including any preparation details)	
NCF	Nitrogen conversion factor	

NIAC	Niacin	mg
NIACEQU	Niacin equivalent	mg
NUMB	Food number	
OLIGO	Oligosaccharide	g
Other CHOL and PHYTO	Other Cholesterol and Phytosterols	mg
P	Phosphorus	mg
PANTO	Pantothenate	mg
PHYTO	Phytosterol	mg
POLYFAC	Polyunsaturated fatty acids per 100g fatty acids	g
POLYFACc	cis-Polyunsaturated fatty acids /100g FA	g
POLYFACtr	trans polyunsaturated fatty acid per 100g fatty acid	g
POLYFOD	Polyunsaturated fatty acids per 100g food	g
POLYFODc	cis-Polyunsaturated fatty acids /100g Food	g
POLYFODtr	trans polyunsaturated fatty acid per 100g food	g
PREV	Previous food number	
PROT	Protein	g
PYR	Pyridoxine	mg
PYRAL	Pyridoxal	mg
PYRALP	Pyridoxal phosphate	mg
PYRANP	Pyridoxamine phosphate	mg
PYRNE	Pyridoxamine	mg
PYRPH	Pyridoxine phosphate	mg
RET	Retinol	µg
RETALD	Retinaldehyde	µg
RETEQU	Total retinol equivalent	µg
RIBO	Riboflavin	mg
SATFAC	Saturated fatty acids per 100g fatty acids	g
SATFACx6	Saturated fatty acids excluding branch per 100 g fatty acid	g
SATFOD	Saturated fatty acids per 100g food	g
SATFODx6	Saturated fatty acids excluding branch per 100 g food	g
SE	Selenium	µg
SOLD	Total solids	g
SPECGRAV	Specific gravity	
STAR	Starch	g
STIGPHYTO	Stigmasterol	mg
SUCR	Sucrose	g
THIA	Thiamin	mg
Total PHYTO	Total Phytosterols	mg
TOTBRFAC	Total branched chain per 100g fatty acid	g

TOTBRFOD	Total branched chain per 100g food	g
TOTn3PFAC	Total n-3 polyunsaturated fatty acids per 100g fatty acid	g
TOTn3PFOD	Total n-3 polyunsaturated fatty acids per 100g food	g
TOTn6PFAC	Total n-6 polyunsaturated fatty acids per 100g fatty acid	g
TOTn6PFOD	Total n-6 polyunsaturated fatty acids per 100g food	g
TOTNIT	Total nitrogen	g
TOTSUG	Total sugars	g
TRYP60	Tryptophan divided by 60	mg
UNIDFAC	Unidentified fatty acid per 100g FA	g
UNIDFOD	Unidentified fatty acid per 100g food	g
VITB12	Vitamin B12	µg
VITB6	Vitamin B6	mg
VITC	Vitamin C	mg
VITD	Vitamin D	µg
VITD3	Cholecalciferol	µg
VITE	Vitamin E	mg
VITK1	Phylloquinone	µg
WATER	Water	g
ZN	Zinc	mg