



Office for Health  
Improvement  
& Disparities



# National Diet and Nutrition Survey Nutrient Databank: Pre-version 1 User Guide

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# 1 Background

The National Diet and Nutrition Survey Rolling Programme (NDNS RP) is a cross-sectional survey with a continuous programme of fieldwork, designed to assess the diet, nutrient intake and nutritional status of the general population aged 1.5 years and over living in private households in the UK. The core NDNS RP is funded by UK government, currently delivered through the Office for Health Improvement and Disparities, Department of Health and Social Care in England (OHID, DHSC), and the UK Food Standards Agency (FSA). The NDNS RP is currently carried out by a consortium comprising NatCen Social Research (NatCen) and the Medical Research Council (MRC) Epidemiology Unit at the University of Cambridge. Interviewer fieldwork in Northern Ireland is carried out by the Northern Ireland Statistics and Research Agency (NISRA).

The NDNS provides the only source of nationally representative UK data on the types and quantities of foods consumed by individuals, from which estimates of nutrient intake for the population are derived and on their nutritional status from analysis of blood and urinary biomarkers. Results are used by government to monitor progress toward diet and nutrition objectives of UK Health Departments and develop policy interventions, for example to monitor progress towards a healthy, balanced diet as visually depicted in the Eatwell Guide.<sup>1</sup> The NDNS is an important source of evidence underpinning work of the Scientific Advisory Committee on Nutrition (SACN) and their advice to UK governments on nutrition related matters. The food consumption data is also used by the FSA to assess exposure to chemicals in food, as part of the risk assessment and communication process in response to a food emergency or to inform negotiations on setting regulatory limits for contaminants.

The NDNS programme began in 1992 as a series of cross-sectional surveys designed to be representative of the UK population, each covering a different age group. Since 2008, the NDNS has run continuously as a rolling programme (RP) covering adults and children aged 1.5 years and over. Methods used in the NDNS are kept under review to ensure they remain the best practical methods available.

For Years 1 to 11 of the NDNS RP (2008/09 -2018/19), the UK Nutrient Databank (NDB) has been saved as a survey year specific file i.e. NDNS\_Y11\_NutrientDatabank. With the change in diet method from a paper diary to the online automated 24-hour recall tool (Intake24) at the start of Year 12 in 2019 and the disruption of fieldwork for some survey years as a result of the COVID-19 pandemic, the NDB datasets are now given a version number and can be cross-referred to the dates of data collection in the NDNS RP. This means a version of the NDB may apply to more than one survey year.

The UK\_NDB\_pre1 is the version of the NDB used for data collected in the NDNS RP between October 2019 and October 2020. This includes all of the data for Year 12 and the diet and physical activity during COVID-19 follow-up study.

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## 2 Introduction to the NDB

The food level datasets from Intake24 provide nutrients for the foods in amounts as consumed whilst the NDB dataset provides nutrient information per 100g.

The NDB contains extensive information on the nutrient content of foods commonly consumed in the UK and enables nutrient intakes to be calculated from consumption data. Details on the history of the NDB can be found in Appendix A of the NDNS RP Years 9 to 11 report.<sup>2</sup>

The NDB is compiled with information from the UK Composition of Foods Integrated Dataset (CoFID),<sup>3</sup> supplemented by manufacturers' data gathered through food labels and web information and from the FSA Food Recipes Database<sup>4</sup> and manufacturers' data gathered through food labels and web information. In order to estimate nutrient intakes, values are assigned for all nutrients in all foods (no missing values). Where reliable information is not available for some nutrients, data is obtained by extrapolating estimates from similar foods. All data is carefully evaluated before being incorporated into the databank.

### 2.1 Rationalisation of the NDB for Intake24

Each year a programme of updates and revisions are made to the NDB including the addition of new food codes as well as the revision of data for existing food codes so that the databank is up-to-date and, as far as possible, reflects the nutrient composition of the food supply for each survey year reported. These are carried out by the MRC Epidemiology Unit in conjunction with OHID.<sup>5</sup>

To date, updates have been carried out annually with priorities based on reported consumed foods for each survey year in the NDNS RP, and to reflect changes in the UK food system. As a result, at the time of introducing Intake24 in Year 12, the NDB had grown unsystematically to contain over 5,500 food codes with many duplicative and redundant foods. Furthermore, there were differences in the way recipes were reported and coded between the paper diary and Intake24 and the NDB needed to be adapted to accommodate this difference. Therefore, the NDB required both a significant update and downsizing to enable efficient data management and application within Intake24. Details of the review and rationalisation process and an evaluation of the impact of these changes on the NDNS RP dietary data are described in the first stage of the evaluation of the changes in dietary methodology for the NDNS RP.<sup>6</sup> This resulted in the UK\_NDB\_pre1 version of the NDB which has around 2,500 food codes including new generic food codes created to allow a single code to represent a range of similar foods. These are mainly new generic codes for sandwiches and salads which were not required before the introduction of Intake24 as these items were previously coded as individual components.

## 3 Description of the NDB fields and variables

### 3.1 Food name and food code

All foods are assigned a food code and a clear name is given to describe the code. The name may include specific qualities of the food, informing the user it is a fortified food, or from a specific brand. The food codes in the NDB cannot be linked directly to foods in McCance and Widdowson's Composition of Foods.<sup>3</sup>

### 3.2 Food code markers

Each food code is assigned as an 'F' or 'R' code. 'F' indicates that the code exists as an atomic food and 'R' denotes a recipe code usually comprising 2 or more food codes. Details of the recipes held in the 'R' codes are not provided in this dataset.

### 3.3 Sub food group name and code

Each food code is assigned to a subsidiary (sub) food group, expressed as an integer with an alphabetical suffix, which is a food group level of greater detail than the main food groups. A full breakdown of the NDNS main and sub food groups is provided in the Appendix.

### 3.4 Water and vitamin loss

Recipe 'R' food codes may have water and vitamin loss assigned, which provides a correction to the nutrient data for associated cooking losses.

### 3.5 Base and unit (F codes only)

These fields describe how the nutrient data are expressed. For most foods the nutrients are entered per 100 grams (base = 100, unit = grams). For vitamin and mineral supplements, nutrients are entered per tablet, capsule, teaspoon or drop (base = 1, unit = tablet, capsule, teaspoon or drop). The base and unit of a food code must match the form in which items are recorded in the dietary assessment method.

### 3.6 Dilution

The majority of food codes have a dilution of 1. Concentrated soft drinks and dried products that are made up have a dilution factor greater than 1. For example, if a concentrated drink is usually made up 1 part concentrate to 4 parts water the dilution factor would be 5. This provides the user with additional detail regarding the food in its unconcentrated form; however this is not used in calculating nutrient intakes.

### 3.7 Edible portion

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The majority of food codes have an edible portion of 1; however this will be less than 1 for foods that include waste, such as meat weighed with bones.

## 3.8 Comments and descriptions

The comments box provides details on when the food code was created, including any updates and the data source. The description box provides details on the number and brand names of products included in calculating the nutrient information, or the food codes used in collating the recipe. Some food codes (particularly dietary supplements) contain nutritional compounds not measured in the NDB (e.g. vitamin K or lutein).

## 3.9 Nutrition data

Each food code in the NDB has a value assigned for 56 nutrients, including energy, provided in specific units of measurement (see table 1). Additionally, to ensure accurate reporting of specific food types in NDNS, each food code present in the NDB has been disaggregated into 28 specific food components (see table 2).<sup>7</sup> Disaggregation values (g amount in per base unit, e.g. 75g 'fruit' in 100g 'fruit pie') are assigned into the NDB. Nutrient values reported as 'trace' are assumed as zero in the NDB. Some data will have been rounded into the appropriate number of decimal places.

## 4 Quality assurance

The NDB is designed to perform automated quality assurance checks to nutrient data,<sup>8</sup> when food codes are added or updated:

kcal	$(\text{protein} \times 4) + (\text{fat} \times 9) + (\text{carbohydrate} \times 3.75) + (\text{alcohol} \times 7)$
kJ	$(\text{protein} \times 17) + (\text{fat} \times 37) + (\text{carbohydrate} \times 16) + (\text{alcohol} \times 29)$
Carbohydrate	total sugars + starch
Total sugars	sum of all individual sugars
Total iron	haem iron + non haem iron
Total carotene	$\beta\text{-carotene} + (\alpha\text{-carotene} \times 0.5) + (\beta\text{-cryptoxanthin} \times 0.5)$
Vitamin A	Retinol + (total carotene/6)
Total N	Protein/Nitrogen Conversion Factor (NCF)
Total fat	should be $\geq$ the sum of fatty acids
Fatty acids	$0.6 \times \text{total fat}$ is $\leq$ the sum of the fatty acids.

## 5 Nutrient fields and disaggregation categories in the NDB

**Table 1 Nutrient fields available in the NDB**

Nutrient (unit of measure)		
Water (g)	Saturated fatty acids (g)	Vitamin B12 (µg)
Total Nitrogen (g)	Cis-monounsaturated fatty acids (g)	Folate (µg)
Nitrogen conversion factor	Cis-n3 fatty acids (g)	Pantothenic acid (mg)
Protein (g)	Cis-n6 fatty acids (g)	Biotin (µg)
Fat (g)	Total trans fatty acids (g)	Sodium (mg)
Carbohydrate (g) <sup>^</sup>	Cholesterol (mg)	Potassium (mg)
Energy (kcal)	Retinol (µg) <sup>^^</sup>	Calcium (mg)
Energy (kJ)	Total carotene (µg) <sup>^^</sup>	Magnesium (mg)
Alcohol (g)	Alpha-carotene (µg) <sup>^^</sup>	Phosphorus (mg)
Starch (g) <sup>^</sup>	Beta-carotene (µg) <sup>^^</sup>	Iron (mg)
Total sugars (g) <sup>^</sup>	Beta cryptoxanthin (µg) <sup>^^</sup>	Haem iron <sup>^</sup> (mg)
AOAC fibre (g) <sup>*</sup>	Vitamin A (retinol equivalents) (µg) <sup>^^</sup>	Non-haem iron (mg)
Glucose (g) <sup>^</sup>	Vitamin D (µg)	Copper (mg)
Fructose (g) <sup>^</sup>	Thiamin (mg)	Zinc (mg)
Sucrose (g) <sup>^</sup>	Riboflavin (mg)	Chloride (mg)
Maltose (g) <sup>^</sup>	Niacin equivalent (mg)	Iodine (µg)
Lactose (g) <sup>^</sup>	Vitamin C (mg)	Manganese (mg)
Other sugars <sup>^</sup> (g)	Vitamin E (mg)	Selenium (µg)
Free sugars (g) <sup>^ **</sup>	Vitamin B6 (mg)	

<sup>^</sup> Carbohydrate is expressed as monosaccharide equivalents. Other sugars include oligosaccharides, where data is available on their levels. Haem iron is calculated as 40% of the iron in fish and meat.

<sup>\*</sup> Includes resistant starch, lignin and non-starch polysaccharides captured by AOAC method.

<sup>\*\*</sup> Includes all monosaccharides and disaccharides added to foods by the manufacturer, cook or consumer, plus sugars naturally present in honey, syrups, unsweetened fruit juices, unsweetened vegetables juices, fruit purees and vegetable purees.

<sup>^^</sup> Vitamin A retinol equivalent is calculated as Retinol + (total carotene/6) where, Total carotene is β-carotene + (½ α-carotene) + (½ β-cryptoxanthin). Fortified sources of vitamin A are entered as retinol in the NDB.

**Table 2 Disaggregation categories used in the NDNS RP**

Disaggregation category (g)	
Fruit (Fresh and canned fruit)	Other Red Meat
Dried Fruit	Burgers (Burgers and grill steaks)
Fruit Juice	Sausages
Smoothie Fruit	Offal
Tomatoes	Poultry (white meat)



Tomato puree	Processed Poultry
Brassicaceae	Game Birds
Yellow red Green (Yellow, Red & Dark Green Leafy Vegetables)	White Fish
Other Vegetables	Oily Fish
Beans (Beans and pulses)	Canned Tuna
Nuts	Shellfish
Beef (red meat)	Cottage cheese
Lamb (red meat)	Cheddar Cheese
Pork (red meat)	Other Cheese
Processed Red Meat	

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# Appendix: Main and subsidiary food groups

Food groups are expressed as integers. Subsidiary food groups are integers with an alphabetical suffix

## **1 Pasta, rice and other cereals**

- 1C PIZZA
- 1D PASTA MANUFACTURED PRODUCTS & READY MEALS
- 1E OTHER PASTA INCLUDING HOMEMADE DISHES
- 1F RICE MANUFACTURED PRODUCTS & READY MEALS
- 1G OTHER RICE INCLUDING HOMEMADE DISHES
- 1R OTHER CEREALS

## **2 White bread**

- 2R WHITE BREAD (NOT HIGH FIBRE; NOT MULTISEED BREAD)

## **3 Wholemeal bread**

- 3R WHOLEMEAL BREAD

## **4 Other bread**

- 4R OTHER BREAD

## **5 High fibre breakfast cereals**

- 5R HIGH FIBRE BREAKFAST CEREALS

## **6 Other breakfast cereals**

- 6R OTHER BREAKFAST CEREALS (NOT HIGH FIBRE)

## **7 Biscuits**

- 7A BISCUITS MANUFACTURED / RETAIL
- 7B BISCUITS HOMEMADE

**8 Buns, cakes, pastries and fruit pies**

- 8B FRUIT PIES MANUFACTURED
- 8C FRUIT PIES HOMEMADE
- 8D BUNS CAKES & PASTRIES MANUFACTURED
- 8E BUNS CAKES & PASTRIES HOMEMADE

**9 Puddings**

- 9C CEREAL BASED MILK PUDDINGS - MANUFACTURED
- 9D CEREAL BASED MILK PUDDINGS - HOMEMADE
- 9E SPONGE PUDDINGS - MANUFACTURED
- 9F SPONGE PUDDINGS - HOMEMADE
- 9G OTHER CEREAL BASED PUDDINGS - MANUFACTURED
- 9H OTHER CEREAL BASED PUDDINGS - HOMEMADE

**10 Whole milk**

- 10R WHOLE MILK

**11 Semi-skimmed milk**

- 11R SEMI SKIMMED MILK

**12 Skimmed milk**

- 12R SKIMMED MILK

**13 Other milk and cream**

- 13A INFANT FORMULA
- 13B CREAM (INCLUDING IMITATION CREAM)
- 13R OTHER MILK

**14 Cheese**

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14A COTTAGE CHEESE

14B CHEDDAR CHEESE

14R OTHER CHEESE

**15 Yogurt, fromage frais and other dairy desserts**

15B YOGURT

15C FROMAGE FRAIS AND DAIRY DESSERTS MANUFACTURED

15D DAIRY DESSERTS HOMEMADE

**16 Eggs and egg dishes**

16C MANUFACTURED EGG PRODUCTS INCLUDING READY MEALS

16D OTHER EGGS AND EGG DISHES INCLUDING HOMEMADE

**17 Butter**

17R BUTTER

**18 Polyunsaturated margarine and oils**

18A POLYUNSATURATED MARGARINE

18B POLYUNSATURATED OILS

**19 Low fat spread**

19A POLYUNSATURATED LOW FAT SPREAD

19R LOW FAT SPREAD NOT POLYUNSATURATED

**20 Margarine and other cooking fats and oils NOT polyunsaturated**

20A BLOCK MARGARINE

20B SOFT MARGARINE NOT POLYUNSATURATED

20C OTHER COOKING FATS AND OILS NOT PUFA

**21 Reduced fat spread**

- 21A REDUCED FAT SPREAD (POLYUNSATURATED)
- 21B REDUCED FAT SPREAD (NOT POLYUNSATURATED)
  
- 22 Bacon and ham**
- 22A READY MEALS / MEAL CENTRES BASED ON BACON AND HAM
- 22B OTHER BACON AND HAM INCLUDING HOMEMADE DISHES
  
- 23 Beef, veal and dishes**
- 23A MANUFACTURED BEEF PRODUCTS INCLUDING READY MEALS
- 23B OTHER BEEF & VEAL INCLUDING HOMEMADE RECIPE DISHES
  
- 24 Lamb and dishes**
- 24A MANUFACTURED LAMB PRODUCTS INCLUDING READY MEALS
- 24B OTHER LAMB INCLUDING HOMEMADE RECIPE DISHES
  
- 25 Pork and dishes**
- 25A MANUFACTURED PORK PRODUCTS INCLUDING READY MEALS
- 25B OTHER PORK INCLUDING HOMEMADE RECIPE DISHES
  
- 26 Coated chicken**
- 26A MANUFACTURED COATED CHICKEN / TURKEY PRODUCTS
  
- 27 Chicken and turkey dishes**
- 27A MANUFACTURED CHICKEN PRODUCTS INCL READY MEALS
- 27B OTHER CHICKEN / TURKEY INCL HOMEMADE RECIPE DISHES
  
- 28 Liver, products and dishes**
- 28R LIVER AND DISHES
  
- 29 Burgers and kebabs**

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29R BURGERS AND KEBABS PURCHASED

**30 Sausages**

30A READY MEALS BASED ON SAUSAGES

30B OTHER SAUSAGES INCLUDING HOMEMADE DISHES

**31 Meat pies and pastries**

31A MANUFACTURED MEAT PIES AND PASTRIES

31B HOMEMADE MEAT PIES AND PASTRIES

**32 Other meat and meat products**

32A OTHER MEAT PRODUCTS MANUFACTURED INCL READY MEALS

32B OTHER MEAT INCLUDING HOMEMADE RECIPE DISHES

**33 White fish coated or fried**

33R WHITE FISH COATED OR FRIED

**34 Other white fish, shellfish and fish dishes**

34C MANUFACTURED WHITE FISH PRODUCTS INCL READY MEALS

34D OTHER WHITE FISH INCLUDING HOMEMADE DISHES

34E MANUFACTURED SHELLFISH PRODUCTS INCL READY MEALS

34F OTHER SHELLFISH INCLUDING HOMEMADE DISHES

34G MANUFACTURED CANNED TUNA PRODUCTS INCL READY MEALS

34H OTHER CANNED TUNA INCLUDING HOMEMADE DISHES

**35 Oily fish**

35A MANUFACTURED OILY FISH PRODUCTS INCL READY MEALS

35B OTHER OILY FISH INCLUDING HOMEMADE DISHES

**36 Salad and other raw vegetables**

- 36A CARROTS RAW
- 36B SALAD AND OTHER RAW VEGETABLES
- 36C TOMATOES RAW

**37 Vegetables (not raw)**

- 37A PEAS NOT RAW
- 37B GREEN BEANS NOT RAW
- 37C BAKED BEANS
- 37D LEAFY GREEN VEGETABLES NOT RAW
- 37E CARROTS NOT RAW
- 37F TOMATOES NOT RAW
- 37I BEANS AND PULSES INCL READY MEAL & HOMEMADE DISHES
- 37K MEAT ALTERNATIVES INCL READY MEALS & HOMEMADE DISH
- 37L OTHER MANUFACTURED VEGETABLE PRODUCTS INCL RM
- 37M OTHER VEGETABLES INCLUDING HOMEMADE DISHES

**38 Chips, fried and roast potatoes and potato products**

- 38A CHIPS PURCHASED INCLUDING TAKEAWAY
- 38C OTHER MANUFACTURED POTATO PRODUCTS FRIED/BAKED
- 38D OTHER FRIED / ROAST POTATOES INCL HOMEMADE DISHES

**39 Other potatoes, potato salads and dishes**

- 39A OTHER POTATO PRODUCTS & DISHES - MANUFACTURED
- 39B OTHER POTATOES INCLUDING HOMEMADE DISHES

**40 Fruit**

- 40A APPLES AND PEARS NOT CANNED
- 40B CITRUS FRUIT NOT CANNED
- 40C BANANAS
- 40D CANNED FRUIT IN JUICE

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- 40E CANNED FRUIT IN SYRUP
  - 40R OTHER FRUIT NOT CANNED
  
  - 41 Sugars, preserves and sweet spreads**
  - 41A SUGAR
  - 41B PRESERVES
  - 41R SWEET SPREADS FILLINGS AND ICING
  
  - 42 Crisps and savoury snacks**
  - 42R CRISPS AND SAVOURY SNACKS
  
  - 43 Sugar confectionery**
  - 43R SUGAR CONFECTIONERY
  
  - 44 Chocolate confectionery**
  - 44R CHOCOLATE CONFECTIONERY
  
  - 45 Fruit juice**
  - 45R FRUIT JUICE
  
  - 47 Spirits and liqueurs**
  - 47A LIQUEURS
  - 47B SPIRITS
  
  - 48 Wine**
  - 48A WINE
  - 48B FORTIFIED WINE
  - 48C LOW ALCOHOL AND ALCOHOL FREE WINE
  
  - 49 Beer lager cider and perry**



- 49A BEERS AND LAGERS
- 49B LOW ALCOHOL & ALCOHOL FREE BEER & LAGER
- 49C CIDER AND PERRY
- 49D LOW ALCOHOL & ALCOHOL FREE CIDER & PERRY
- 49E ALCOHOLIC SOFT DRINKS

## **50 Miscellaneous**

- 50A BEVERAGES DRY WEIGHT
- 50C SOUP MANUFACTURED/ RETAIL
- 50D SOUP HOMEMADE
- 50E NUTRITION POWDERS AND DRINKS
- 50R SAVOURY SAUCES PICKLES GRAVIES & CONDIMENTS

## **51 Tea, coffee and water**

- 51A COFFEE (MADE-UP WEIGHT)
- 51B TEA (MADE-UP WEIGHT)
- 51C HERBAL TEA (MADE-UP WEIGHT)
- 51D BOTTLED WATER STILL OR CARBONATED
- 51R TAP WATER ONLY

## **52 Commercial toddlers foods and drinks**

- 52A COMMERCIAL TODDLERS DRINKS
- 52R COMMERCIAL TODDLERS FOODS

## **53 Ice cream**

- 53R ICE CREAM

## **54 Dietary supplements**

- 54B EVENING PRIMROSE OIL AND OTHER PLANT OILS
- 54D FOLIC ACID

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- 54E IRON ONLY OR WITH VITAMIN C
  - 54F CALCIUM ONLY OR WITH VITAMIN D
  - 54G VITAMINS (TWO OR MORE INCL MULTIVITS) NO MINERALS
  - 54H MINERALS (TWO OR MORE INCL MULTIVITS & MINERALS)
  - 54I VITAMINS AND MINERALS (INCL MULTIVITS & MINERALS)
  - 54J NON-NUTRIENT SUPPLEMENTS (INCL HERBAL)
  - 54K OTHER NUTRIENT SUPPLEMENTS
  - 54L VITAMIN C ONLY
  - 54M SINGLE VITS OR MINS NOT Folic acid, Fe, Ca, Vit C
  - 54N COD LIVER OIL AND OTHER FISH OILS (INCL VIT A,D,E)
  - 54P MULTIVITAMIN AND/OR MINERALS WITH OMEGA 3

**55 Artificial sweeteners**

- 55R ARTIFICIAL SWEETENERS

**56 Nuts and seeds**

- 56R NUTS AND SEEDS

**57 Soft drinks, not low calorie**

- 57A SOFT DRINKS NOT LOW CALORIE CONCENTRATED
- 57B SOFT DRINKS NOT LOW CALORIE CARBONATED
- 57C SOFT DRINKS NOT LOW CALORIE RTD STILL

**58 Soft drinks, low calorie**

- 58A SOFT DRINKS LOW CALORIE CONCENTRATED
- 58B SOFT DRINKS LOW CALORIE CARBONATED
- 58C SOFT DRINKS LOW CALORIE RTD STILL

**59 Brown, granary and wheatgerm bread**

- 59R BROWN GRANARY AND WHEATGERM BREAD

**60 1% fat milk**

60R 1% Fat Milk

**61 Smoothies 100% fruit and/or juice**

61R SMOOTHIES 100% FRUIT AND/OR JUICE

**62 Sandwiches**

62R SANDWICHES

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# References

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- <sup>1</sup> The Eatwell Guide (2016) [[Internet](https://www.gov.uk/government/publications/the-eatwell-guide)]. Available from: [www.gov.uk/government/publications/the-eatwell-guide](https://www.gov.uk/government/publications/the-eatwell-guide)
  - <sup>2</sup> 'National Diet and Nutrition Survey: Results from Years 9 to 11 (combined) 2016/2017 to 2018/2019' (viewed on 17 August 2022)
  - <sup>3</sup> McCance and Widdowson's composition of foods integrated dataset. 2019. <https://www.gov.uk/government/publications/composition-of-foods-integrated-dataset-cofid> (viewed on 22 March 2022)
  - <sup>4</sup> MRC Human Nutrition Research. Food Standards Agency Standard Recipes Database, 1992-2012. [data collection]. UK Data Service. SN: 8159. 2017. Available from: <http://doi.org/10.5255/UKDA-SN-8159-1> (viewed on 22 March 2022)
  - <sup>5</sup> Previously FSA, Department of Health or Public Health England when ownership of the NDB lay with them and the MRC Elsie Widdowson Laboratory.
  - <sup>6</sup> 'Evaluation of changes in the dietary methodology in the National Diet and Nutrition Survey Rolling Programme from Year 12 (2019 to 2020): Stage 1' (viewed 17 August 2022)
  - <sup>7</sup> Fitt E, Mak TN, Stephen AM, Prynne C, Roberts C, Swan G & Farron-Wilson M. (2010) Disaggregating composite food codes in the UK National Diet and Nutrition Survey food composition databank. Eur J Clin Nutr 64: S32-S36
  - <sup>8</sup> Results from these calculations may not match the final values exactly (especially when comparing against analytical data) as a small margin of difference is acceptable in food composition.