FOOD STANDARDS
Australia • New Zealand
Te Mana Kounga Kai – Ahitereiria me Aotearoa

AUSNUT 2023 – About the Australian Dietary Guidelines

September 2025

Overview

AUSNUT 2023 provides the food composition data used in the 2023 National Nutrition and Physical Activity Study (ABS, 2025) to translate reported food and dietary supplement consumption into nutrient intakes. It also includes supporting information to help interpret the data and compare results with previous surveys.

Developing the Australian Dietary Guidelines dataset

The AUSNUT 2023 Australian Dietary Guidelines (ADG) dataset contains information to enable consumption from the 2023 study to be compared with the recommendations in the Australian Dietary Guidelines (NHMRC, 2013). It was developed following a similar process to that used for the 2011-13 Australian Health Survey (AHS) including:

- assigning all AUSNUT 2023 foods a code from the ADG classification system which have an associated ADG serve size
- assigning conversion factors to selected foods to ensure that the amount of the food reported is in the same form as the ADG serve size
- developing recipes for mixed foods to enable the amount of ADG food groups in each ingredient to be determined.

The process is summarised in Figure 1.

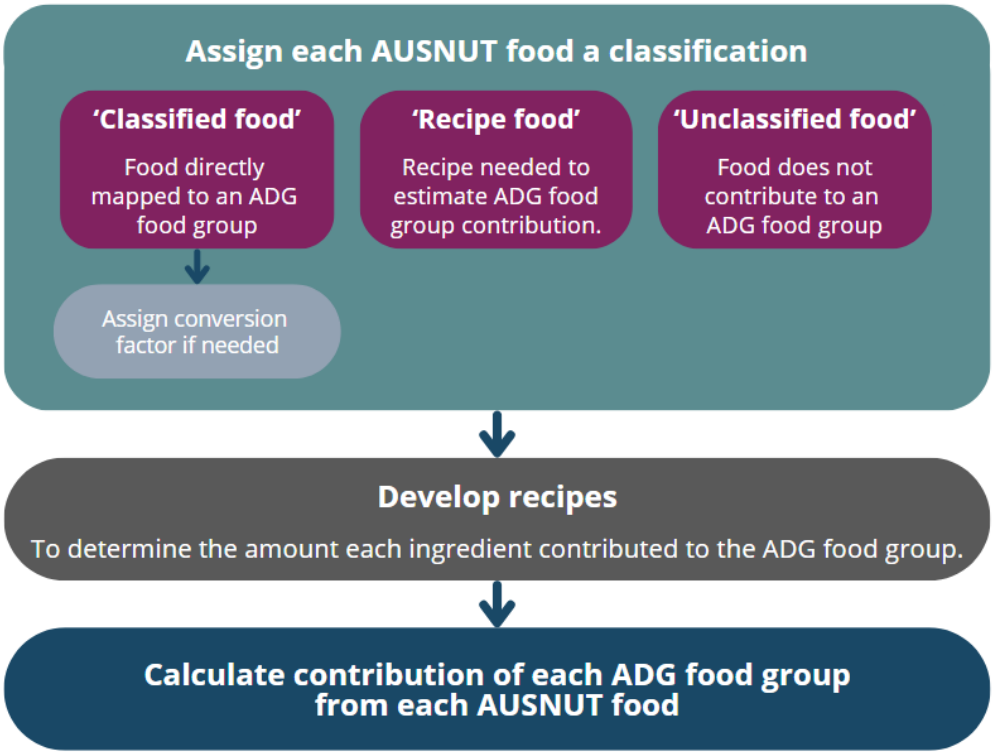

Figure 1: Development of the ADG dataset

This process resulted in 79 food group values for each of the 3,741 foods in the AUSNUT 2023 dataset. Further details on each of these steps are provided below.

Assigning classifications

Each AUSNUT food needed to be classified as one of the following to determine the amount of each ADG food group.

1. Classified food

Foods that could be matched directly to a specific ADG food group were considered 'classified' foods and mapped to the appropriate ADG food group. For example, white bread could be mapped directly to code 1021- Refined/Low Fibre Breads and carrot could be mapped directly to code 202 – Orange vegetables.

Most 'classified' foods were mapped to a single ADG food group. However, legumes and oils were mapped to two ADG food groups to align with the Australian Guide to Healthy Eating (AGHE). This approach provides greatest flexibility when analysing and reporting the data.

Foods that are mapped directly to an ADG food group are assigned a serve size and contribute to estimating ADG consumption.

2. Recipe food

Foods that cannot be matched directly to an ADG food group because they contain two or more ingredients from different ADG food groups were considered 'recipe' foods and mapped to code 80 - Recipe. An example of a recipe food is fruit bread, which can be broken down into its ingredients bread and dried fruit, both of which can be mapped directly to codes 1021 – Refined/Lower Fibre Breads and 302 – Dried fruit, respectively. Not all ingredients map directly to an ADG food group, as some will map to another recipe or be considered Unclassified, as discussed below.

Each food classified as a Recipe food required the development of a recipe to determine the amount each ingredient contributed to the ADG food groups and contributed to estimating ADG consumption.

3. Unclassified food

Foods that cannot be matched directly to an ADG food group and were not considered a recipe food were considered 'unclassified'. This included foods:

- that were consumed in small amounts (e.g. yeast spreads)
- that were not typically eaten on their own (e.g. gelatine)
- with negligible nutrients (e.g. non-nutritive sweeteners)
- that are not necessary for a healthy balanced diet (e.g. confectionary), and/or
- that are not part of the ADGs (e.g. whey protein powder).

Unclassified foods do not contribute to estimating ADG consumption.

Assigning conversion factors

Conversion factors were assigned to selected Classified foods in the AUSNUT 2023 database to convert the amount of food reported in the study into the form of the ADG serve size for that food. Conversion factors were commonly assigned to grains, legumes and pastas in AUSNUT which change significantly in weight from their dry/uncooked state into their ready-to-eat form. For example, the food 'rice, white, uncooked' in the AUSNUT 2023 database, was matched to ADG food group 1022 – Refined/Low Fibre Grains (excluding oats) which has a serve size of 75 g for cooked rice. In this case, a conversion factor of 2.21 was applied to convert the raw amount of rice into its equivalent cooked amount.

Conversion factors were also assigned to selected meats, poultry, fish, seafood and vegetables to account for changes in weight between their raw and cooked forms. For example, an uncooked beef steak was matched to 5011 – Unprocessed meat (<10% fat) which has a serve size of 65 g for cooked steak. In this case, a conversion factor of 0.82 was applied to convert the raw amount into its equivalent cooked amount.

Most foods did not need a conversion factor applied because:

- the form of the food reported and the ADG serve size were already in the same form. For example, foods typically eaten in a raw state such as salad vegetables and fruit; or
- they could feasibly be consumed in either form such as protein powders.

The full list of ADG conversion factors is available in AUSNUT 2023 – Food details (Excel, 271KB).

Developing recipes

A recipe database was developed to ensure all 'recipe' foods containing ingredients from two or more ADG food groups could be disaggregated into their ingredients, to enable their ADG contribution to be determined.

The database drew on recipes developed for use in the food nutrient database where possible. Additional recipes were developed for foods without a nutrient recipe.

All recipes were developed following our standard food composition and recipe development principles discussed in detail in the recipe calculations section of AUSNUT 2023 – About the foods and nutrients (PDF, 249KB).

Calculating profiles

Once the above steps were completed, the contribution of each ADG food group was determined for each AUSNUT food. This was presented on a grams per 100 g and serves per 100 g basis.

Calculated profiles are available in AUSNUT 2023 – Australian Dietary Guidelines profiles (Excel, 2.35MB).

Database validation

The ADG dataset underwent an extensive internal and external data validation process.

Internal validation

FSANZ undertook a series of internal data validation activities following compilation of the complete dataset. Some activities focused on individual foods, while others focussed on specific food categories, recipe structure and system calculations.

FSANZ also undertook targeted validation activities focusing more detailed checks on the foods that were known to have changed nutrient composition and/or ADG classification since AUSNUT 2011-13, foods that were most likely to be frequently consumed, and foods that were likely to be the main drivers of intakes of specific ADG food groups.

External peer review

The AUSNUT 2023 ADG database underwent an expert peer review process which focused both on data which was not part of previously published datasets, such as newly generated analytical data and profiles developed for additional foods, as well as a comprehensive whole of dataset review.

References

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