

The rationalisation of the UK National Diet and Nutrition Survey (NDNS) Nutrient Databank (NDB) in preparation for automating dietary data collection in the NDNS

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Introduction

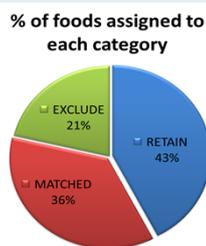
The National Diet and Nutrition Survey rolling programme (NDNS, 2008-2018) provides data on the nutrition status of the UK population critical to government nutritional surveillance. We are leading a programme of work to replace the traditional paper-based 4-day estimated diet diary method for capturing dietary intake in NDNS with a web-based 24-hour recall system, Intake24. With this change, NDNS respondents will report the foods they have consumed by selecting foods embedded in the online tool, rather than using the free text approach of food diaries which are later coded and processed by a trained research team. NDNS dietary data link to the UK Nutrient Databank for which food codes are maintained with a focus on Government public health nutrition policy. Our implementation of Intake24 incorporates system development and adaptation including updating and streamlining the Intake24 food list and the Nutrient Databank through a standardised rationalisation approach.

This presentation describes the approach taken to ensure that foods included are:

- up-to-date
- representative of the UK diet
- relevant to public health priorities
- capable of providing continuity of measurement for national nutritional surveillance
- proportionate in respect of the number of food choices participants are faced with when completing their recall and
- the NDB can be managed and maintained more efficiently.

Results

All foods reported in NDNS 2008-18 (n=5286) were reviewed. Subject to final confirmation most foods were retained or matched, and 21% of the foods were excluded.



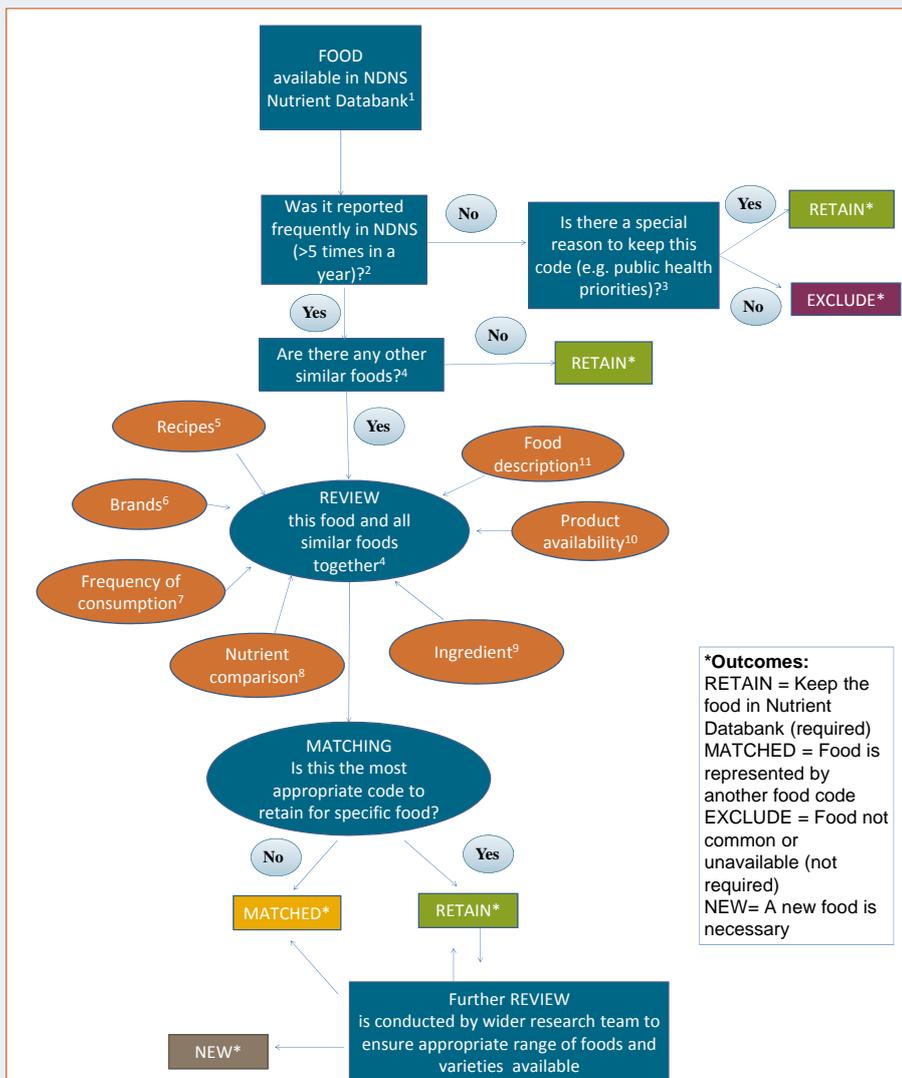
Conclusions

The standardised approach followed for the rationalisation of NDB effectively facilitated decision making. This was necessary to balance the need for preserving some of the heterogeneity of foods in UK, but also the need for simplicity and usability of foods to ensure the new automated tool was accessible for participants. This ongoing work has already identified a large number of foods which were not essential for NDNS. Next steps will include the evaluation of the impact on nutrient outputs. Overall our approach will feed into the development of Intake24 for use in NDNS and other studies, and will improve the efficiency of the Nutrient Databank.

Acknowledgements

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The Rationalisation Process



- 1- Each food included in the UK NDNS Nutrient Databank (all versions used between 2008-18) was assessed by two research assistants considering all the foods within a food group together and various other factors e.g. the frequency of consumption.
- 2- NDNS dietary intake data were examined to identify consumption rates of foods (average consumption frequency per year).
- 3- Some infrequently consumed foods were kept considering;
 - a) public health priorities such as keeping a low sugar drink due to UK sugar reduction policy³
 - b) possibility of survey participants not finding their food in tool, if there is no similar or alternative food (e.g. Turkish delight)
- 4- Where similar foods existed in the nutrient databank, these were reviewed together considering various factors
- 5- The composition of recipes of the foods with multi-ingredients reported in food diaries collected in previous survey years were reviewed, e.g. ingredients and energy content of most commonly reported omelette varieties matching to a food available in nutrient databank
- 6- The popularity of specific food brands
- 7- The most frequently used codes in each food group
- 8- The difference between the nutrient composition of foods.
- 9- The food is a common ingredient of recipes in the UK diet.
- 10- Availability of food in the current food market and its composition
- 11- Food descriptions to be user friendly