



# Dietary assessment tools for ethnic minority groups in UK: A Systematic Review

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Dietary assessment tools are needed for estimating the dietary intake of different ethnic minority groups. It is important to validate these tools before utilisation. Challenges in assessing the dietary intake of ethnic minority groups include the lack of culturally specific dietary assessment tools, difficulties in recruiting participants, and language barriers, all of which can impact the accuracy of dietary assessment results<sup>(1,2)</sup>. A systematic review found several validated dietary assessment tools available for general population use by researchers in the UK<sup>(3)</sup>. The objective of this systematic review is to identify and assess the current literature on the validation of dietary assessment tools for ethnic minority groups in the UK.

A comprehensive search strategy has been developed to identify relevant studies the following electronic databases were searched: MEDLINE, EMBASE and CAB Abstracts published from inception until to January 2023. Further studies were also identified through manual screening of the reference lists of included studies and related reviews. Two reviewers independently evaluated the titles and abstracts of the identified studies for eligibility based on predetermined criteria using SR-Accelerator. Studies were considered for inclusion if they were conducted among ethnic minority populations in the UK and focused on validating dietary assessment tools. Full-text articles were obtained for potential studies, and the reviewers reached a consensus on the final selection. Two reviewers extracted data separately using a standardized data extraction form, which included study design, population characteristics, dietary assessment tools, validation methods, and outcomes.

A total of 142 studies were identified from searching three databases. After removing duplicates, and limiting to English language 98 papers remained. Reviewer 1 included 30 studies, and Reviewer 2 included 45 studies based on screening the abstracts. After full-text screening, 18 papers from 11 studies were included. The studies comprised of 8 South Asian, 3 African Caribbean, and 4 African populations in the UK. Six studies validated a food frequency questionnaire (FFQ) that was modified specifically for ethnic minority groups. These questionnaires incorporated common dishes from their cuisine. The majority of tools were compared against recalls or diaries for varying numbers of days, and some utilized enhanced food composition tables to include specific foods of relevance to the ethnic group. Other adaptations included use of ethnic language speakers and familiar with the local foods to collect the data. However, no tool was compared against independent biomarker data.

No studies specifically addressed the Chinese population, one of the major ethnic groups in the UK. This systematic review shows a limited number of validated dietary assessment tools available for ethnic minority groups in the UK.

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## References

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