



## Cognitively testing Aotearoa's food security questionnaire in the modern context

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The eight well-known food security indicators were developed in 1997 using a stepwise process that involved five focus group interviews (one Māori, one Pakeha, two Pacific, and one mixed ethnicity) of 8-16 people, all of whom were either on a low income or were government beneficiaries<sup>(1)</sup>. As part of the development of the tools and methods for a future New Zealand National Nutrition Survey, these eight indicators were considered for inclusion. The Māori and Technical Advisory Groups convened for the development of the National Nutrition Survey foresaw issues with the interpretation of some of the questions given the changes in the food environment and sources of food assistance in the last 25 years and recommended that cognitive testing should be conducted to see if changes were required. Participants were recruited through two community organisations, a local marae, and community Facebook pages. Participants were given the option of participating in a one-on-one interview or as part of a focus group. During each session, participants were asked five (three original and two new) questions relating to food security (running out of basics, use of food assistance, household food preparation and storage resources). After each question, the participants were asked a series of additional probing questions to ascertain whether they had interpreted the question as intended. All interviews were audio recorded and transcribed, and a qualitative analysis was performed on the transcripts to determine areas of concern with each question. A total of 46 participants completed the cognitive testing of the food security questions, including 26 aged 18-64 years, and 20 aged 65+ years. Participants also spanned a range of ethnicities including 8 Māori, 15 Pasifika, 15 Asian, and 8 New Zealand European or Other. Just over half of the participants ( $n=24$ ) reported themselves to be financially secure, 16 participants reported that their financial security was borderline, 1 participant reported that they were not at all financially secure, and 5 participants declined to answer. Variable interpretations of terms by participants were found in all questions that were tested. Therefore, answers to the food security questions may have not reflected the actual experience of participants. This study also identified other dimensions of food security not assessed by the current eight indicators (e.g., lack of time, poor accessibility). These findings indicate that the food security questions need to be improved to ensure they are interpreted as intended and that new questions are needed that considers all dimensions of food insecurity (i.e., access, availability, utilisation, and stability). These new and amended questions should be cognitively tested in groups that are more likely to be experiencing food insecurity.

**Keywords:** food security; cognitive testing; nutrition survey

### Ethics Declaration

Yes

### Financial Support

This work was supported by Manatū Hauora/New Zealand Ministry of Health.

### Reference

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