

Collecting diet quality and food security data with remote Aboriginal and Torres Strait Islander communities: results and reflections from a remote food security project

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Dietary assessment continues to be a cornerstone of public health nutrition research and practice, but the tools used must match the population.⁽¹⁾ While sophisticated methods like store sales data estimate diets for whole populations, individual level tools are needed for capturing diets of population sub-groups. The food environment for Aboriginal and Torres Strait Islander peoples has been described as living in ‘two cultural worlds’⁽²⁾; the complexity not only encompassing the traditional and Western food systems, but also the cultural and social practices associated with food. Contrarily, dietary research methods are situated within Western research paradigms, tools designed around Western eating practices. This work reports baseline dietary assessment results from a remote food security study, with researcher reflections on the use of the tools chosen in this setting. The co-designed trial assessed the impact of discounting healthy foods on diet quality and food security for Aboriginal and/or Torres Strait Islander pregnant and breastfeeding mothers, and children aged 6 months to 5 years. Diet quality was assessed using the online Menzies Remote Short-item Dietary Assessment Tool (MRSDAT) and a subset of 24-hour diet recalls, with the option to receive dietary feedback generated through the MRSDAT at follow up. Food security questions were a modified version of the US Department of Agriculture 18-item Household Food Security Scale Module (HHFSSM).⁽³⁾ Minimum meal frequency (MMF) was assessed using the WHO method. Data was collected using iPads. MRSDAT results suggest higher diet quality in children, particularly those < 2 years, compared to mothers, and 136 (76%) participants opted for feedback. While the MRSDAT was generally well received, reflections suggest that some participants had difficulty quantifying ‘usual’ frequency and servings given the variability in eating practices. Uptake of 24 hr recalls was lower than planned. HHFSSM scores for 71 (24%) participants were categorised food secure, while 80 (27%), 59 (20%) and 81 (28%) scores were categorised marginally, moderately, and very food insecure. Many participants wanted to self-complete the HHFSSM due to what data collectors interpreted as discomfort with the questions, and reflections suggest participants had difficulty answering questions owing to their wording, or perceived contextual relevance. MMF was met for 94% of children < 2 years, less frequently in those breastfed (92%) due to differing criteria. These results, at a population level, are consistent with those community leaders anticipated when provided preliminary findings, supporting their face validity. However, it was clear that some of the tools, particularly the HHFSSM, did not capture the ‘two cultural worlds’ constituting participants’ whole food environment. This demonstrates the value in research working with communities to develop Aboriginal and Torres Strait Islander specific tools and criteria, and that tools developed in this way, like the MRSDAT, come closer to achieving this goal.

References

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