



An e-Delphi study to evaluate content validity of the Teacher Food and Nutrition-Questionnaire

T. Jakstas^{1,2}, T. Bucher^{2,3}, A. Miller^{4,5}, V.A. Shrewsbury^{1,2} and C.E. Collins^{1,2}

¹School of Health Sciences, College of Health, Medicine and Wellbeing, The University of Newcastle, Callaghan, NSW 2308, Australia

²Food and Nutrition Research Program, Hunter Medical Research Institute, New Lambton Heights, NSW 2305, Australia

³School of Environmental and Life Sciences, College of Engineering, Science and Environment, The University of Newcastle, Callaghan, NSW 2308, Australia

⁴School of Education, College of Human and Social Futures, The University of Newcastle, Callaghan, NSW 2308, Australia

⁵Priority Research Centre for Teachers and Teaching, The University of Newcastle, Callaghan, NSW 2308, Australia

Teacher food and nutrition (FN) related factors include diet quality, health perceptions and FN attitudes. These factors are associated with both personal health and wellbeing, and teacher classroom FN practices. With Australian schoolteachers currently experiencing high levels of stress, anxiety and burnout, measuring and understanding the status of teacher FN-related health and wellbeing is needed. However, first there needs to be a comprehensive and validated tool to collect these data. This study aims to evaluate content validity of a new tool, the Teacher Food and Nutrition Questionnaire (TFNQ), to measure FN-related health and wellbeing of Australian schoolteachers. The TFNQ was developed following an extensive literature review of FN data collection methods previously used in schoolteacher populations internationally. It initially included 16 FN-related constructs alongside six constructs of wellbeing and mental health, and seven lifestyle covariates identified from the literature review. A two-round e-Delphi methodology was implemented using a mix of structured, rank-order and qualitative questions administered to an international, multidisciplinary group of experts via an online survey¹. Descriptive statistics were used to derive a consensus vote (set at 75%) of constructs and covariates to be prioritised for inclusion. Qualitative feedback was analysed to identify areas of potential change. Twenty-three experts participated in round-one from Australia (n = 15), Switzerland (n = 3), The United Kingdom (n = 2), Canada (n = 1), The United States of America (n = 1) and New Zealand (n = 1). Of the 29 constructs and covariates evaluated in round-one of the e-Delphi, all achieved above 75% consensus, yet qualitative feedback indicated potential to reduce and streamline the number of constructs. Rank order questions and qualitative feedback resulted in the removal of four FN and two wellbeing constructs along with four lifestyle covariates. Round-two included 19 (83%) experts from round-one, with 83% (n = 15) in agreement regarding question order. Final feedback indicated only minor adjustments to question item phrasing. The e-Delphi process modified the TNFQ and established content validity. Further construct validity and reliability testing is required to produce a robust tool for measuring FN-related health and wellbeing of contemporary Australian schoolteachers.

Keywords: e-Delphi; nutrition; schoolteachers; wellbeing

Ethics Declaration

Yes

Financial Support

This project is currently funded by the Teachers' Health Foundation. TJ is supported by a Higher Degree by Research (HDR) Scholarship Research Training Program (RTP) Stipend and RTP Allowance at The University of Newcastle and a King and Amy O'Malley Trust Postgraduate Scholarship with a PhD top-up scholarship from Teachers' Health Foundation. CEC is supported by an NHMRC Research Leadership Fellowship (L3).

Reference

1. Asher RC, Jakstas T, Lavelle F *et al.* (2022) *Nutrients* **14**(9), 1778.