



Nutrition Society Congress 2024, 2–5 July 2024

Development of an index to assess adherence to the Traditional Chinese Dietary pattern - a modified Delphi study

J. Niu¹, B. Li¹ and A. Papadaki¹

¹Centre for Exercise, Nutrition and Health Sciences, School for Policy Studies, University of Bristol, Bristol, UK

Adhering to traditional diets could significantly contribute to enhancing health and promoting environmental sustainability (1). China reports the highest incidence of non-communicable disease related fatalities globally (1). There has been no consistent definition of the traditional Chinese diet (TCD). Findings on the association between TCD and health outcomes are also inconsistent (2). Therefore, it is critical to establish a consensus on the definition of the TCD, including food groups that are characteristic of this diet and their quantities. The Delphi method is widely accepted as an effective tool for consensus-building among experts (3). Hence, this study aimed to 1) establish an index for assessing adherence to the overall TCD, involving inviting nutrition experts to achieve a consensus on which food groups, food quantities, and food-related habits define the TCD; and 2) develop five indices that characterise regional TCDs (for the eastern, western, southern, northern, and central Chinese regions).

From October 2023 to February 2024, a three-round modified Delphi study was conducted via an online platform. The eligible participants were nutrition experts, working in various fields, including academic professors, registered dietitians, and clinical nutrition physicians. Participants were invited to complete online questionnaires, to establish the food groups and food-related habits that characterise TCD by using a mix of Likert scales, a list of responses, and yes/no questions. Open-ended and free-text questions were also used to collect detailed comments/suggestions. Consensus was assessed by using percentages of agreement; median values and interquartile ranges were used to illustrate the recommended consumption ranges for each food group to be included in the index. Statistical analyses were performed using SPSS and NVivo 12.

Fifty-eight nutrition experts (a minimum of ten experts from each region) were involved in the first Delphi round. Response rates for the second and third rounds were 87.9% and 93.1%, respectively. The resulting overall TCD index comprises 15 food groups plus one dietary habit, with scores ranging from 0 to 23 (minimum to maximum), where higher scores reflect higher adherence to TCD. Rice, various vegetables, fruits, eggs/egg products, wheat/wheat products (excluding wheat with filling), and starchy roots and tubers scored two points when meeting the consumption range. Wheat with filling, pork/pork products, fermented foods, deep-fried wheat, corn/coarse grains, legume products, beef/beef products, poultry and cooking by steaming and/or boiling were scored one point each when meeting the consumption criteria. Five regional TCD indices, including food groups and the range of quantities for each food group, were also developed.

This modified Delphi study achieved consensus for developing TCD index and five regional TCD indices for the first time. These indices can be utilised as essential instruments for future research on exploring adherence to TCD and its impacts on health outcomes and environmental sustainability.

References

1. Zhou M, Wang H, Zeng X *et al.* (2019) *Lancet* **394**, 1145–1158.
2. Niu J, Li B, Zhang Q, Chen G, Papadaki A. (2024) *Nutrition Reviews* **nuae013**, 1–20.
3. Okoli C, Pawlowski SD. (2004) *Information & Management* **42**, 15–29.