

QUESTIONS ON NUTRITION AND OBESITY FOR USE IN A GAME TARGETED AT ADULTS AND OLDER PEOPLE: DEVELOPMENT AND VALIDATION

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Abstract

Background: Educational games have emerged as promising tools in health education for adults and older adults. When they rely on validated items, the semantic and content quality of such questions is critical to learning effectiveness. **Purpose:** To develop and validate the semantics and content of a Question Bank (QB) for a game on healthy eating habits and obesity prevention targeted at adults and older people. **Methods:** The QB was built through: (i) drafting 70 questions by a multidisciplinary committee; (ii) semantic review based on nationally adopted item-writing guidelines; and (iii) content validation by seven expert judges using a five-point Likert scale. The Content Validity Index (CVI) was calculated; items with $CVI \geq 0.70$ were deemed adequate, whereas those below this threshold were reformulated until the criterion was met. The study received prior approval from an institutional ethics committee. **Results:** The QB achieved an overall CVI of 0.889. Of the 70 items, 62 (88.6 %) were rated “adequate” or “fully adequate” in the first round; eight underwent wording adjustments for clarity or terminological precision. The most frequent revisions addressed consistent use of technical terminology (18 %), removal of ambiguity (11 %) and adjustment of complexity level (9 %). After refinement, all items met the CVI threshold. **Conclusion:** The development and evaluation phases ensured high linguistic, conceptual and content consistency, yielding a robust QB suitable for gamified interventions on obesity and healthy eating aimed at adults and older adults. **Implications:** The validated QB provides a replicable model for item development in health-focused educational games and supports the design of pedagogical strategies for adult and older populations. Implementation of the QB within a game-based environment is in progress.

Keywords: Health Education; Feeding Behavior; Gamification; Older Adult Health