Abstract

Introduction: Semi-quantitative Food Frequency Questionnaires (FFQs) analyze average food and nutrient intake over extended periods to associate habitual dietary intake with health problems and chronic diseases. A tool of this nature applicable to both women and men is not presently available in Mexico. Objective: To validate a FFQ for adult men and women. Methods: The study was conducted on 97 participants, 61% were women. Two FFQs were administered (with a one-year interval) to measure reproducibility. To assess validity, the second FFQ was compared against dietary record (DR) covering nine days. Statistical analyses included Pearson correlations and Intraclass Correlation Coefficients (ICC). The de-attenuation of the ICC resulting from intraindividual variability was controlled. The validity analysis was complemented by comparing the classification ability of FFQ to that of DR through concordance between intake categories and Bland-Altman plots. Results: Reproducibility: ICC values for food groups ranged 0.42-0.87; the range for energy and nutrients was between 0.34 and 0.82. Validity: ICC values for food groups ranged 0.35-0.84; the range for energy and nutrients was between 0.36 and 0.77. Most subjects (56.7- 76.3%) classified in the same or adjacent quintile for energy and nutrients using both methods. Extreme misclassification was <6.3% for all items. Bland-Altman plots reveal high concordance between FFQ and DR. Conclusions: FFQ produced sufficient levels of reproducibility and validity to determine average daily intake over one year. These results will enable the analysis of possible associations with chronic diseases and dietary diagnoses in adult populations of men and women.

Keywords
Diet, Questionnaire, Nutrients. Energy intake, Validation.