Feasibility of innovative dietary assessment in epidemiological studies using an approach of combining instruments

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INTRODUCTION, OBJECTIVE

Research have confirmed the methodological advantage to combine dietary assessment instruments, but less is known about the feasibility of this approach.

METHODS

We applied a multilingual European Food Propensity Questionnaire (EFPO) in combination with three telephone-administered 24 hour dietary recalls (24H-DR) in a multi-centric study including five European countries and compared participation rates, reasons for non-participation, number of contact attempts, acceptance of the instruments and data provided by web analysis. (Figure 1).

During the subsequent three months three standardised telephone-administered 24-hour dietary recalls (24H-DR) were conducted using EPIC-SOFT software. Photographs of portion sizes and household measures depicted in pictures were mailed to the subjects in advance, after completing the EFPO. In addition an evaluation questionnaire at the end of the web-based EFPO was given.

The feasibility of this approach was compared to the Calibration of Methods (COM) study conducted in EPIC-Norfolk (UK) with one 24HDR, three 7-day diaries and two FFQs.

RESULTS

400 participants from five ongoing cohort studies in Estonia (Estonia Genome project, Tartu), Italy (EPIC-Florence), Spain (EPIC-San Sebastian), Norway (NOWAC, Tromsø) and Germany (EPIC-Potsdam) were randomly selected and invited to complete a single, self-administered EFPO, either web-based or in paper-format. Support to fill in the web-based EFPO could be requested.

Completion of the web- and paper-based EFPO differed among the study centres and participation in the 24HDRs decreased across the data collection rounds. Overall, this study supports the feasibility of multiple dietary assessment methods within culturally different study populations, including internet-based instruments.

CONCLUSIONS

Table 1: Total response, participation and % distributions for the European Food Propensity Questionnaire (EFPO) by IDAMES Center

Table 2: Current participation rates for the 24HDR by IDAMES Center

**Figure 1: study design**

https://nugo.dife.de/efbo/portal/en

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