



## Research

Highly accessed

Open Access

 Nutrition Journal  
Volume 4

## Viewing options:

- Abstract
- Full text
- PDF (226KB)

## Associated material:

- Readers' comments
- Pre-publication history
- PubMed record

## Related literature:

- Articles citing this article
  - on BioMed Central
  - on Google Scholar
  - on PubMed Central
- Other articles by authors
  - on Google Scholar
    - Dehghan M
    - Al Hamad N
    - Yusufali AH
    - Nusrath F
    - Yusuf S
    - Merchant AT
  - on PubMed
    - Dehghan M
    - Al Hamad N
    - Yusufali AH
    - Nusrath F
    - Yusuf S
    - Merchant AT
- Related articles/pages
  - on Google
  - on Google Scholar
  - on PubMed

## Tools:

- Download references
- Download XML
- Email to a friend
- Order reprints
- Post a comment
- Sign up for article alerts

## Post to:

- Citeulike
- Connotea
- Del.icio.us
- Digg
- Facebook

# Development of a semi-quantitative food frequency questionnaire for use in United Arab Emirates and Kuwait based on local foods

 Mahshid Dehghan<sup>1</sup> ✉, Nawal Al Hamad<sup>2</sup> ✉, AfzalHussein Yusufali<sup>3</sup> ✉, Fathimunissa Nusrath<sup>3</sup> ✉, Salim Yusuf<sup>1</sup> ✉ and Anwar T Merchant<sup>1</sup> ✉

<sup>1</sup> Hamilton General Hospital, Population Health Research Institute, 237 Barton, Street East, Hamilton, ON L8L 2X2, Canada

<sup>2</sup> Administration of Food and Nutrition, Ministry of Health, P.O. Box 42432, Shuwaikh 70655, Kuwait

<sup>3</sup> Cardiology & Cardio Thoracic Centre, Dubai Hospital, Department of Health & Medical Services, P.O.Box – 7272, Dubai, UAE

✉ author email    ✉ corresponding author email

*Nutrition Journal* 2005, 4:18    doi:10.1186/1475-2891-4-18

Published: 27 May 2005

## Abstract

### Background

The Food Frequency Questionnaire (FFQ) is one of the most commonly used tools in epidemiologic studies to assess long-term nutritional exposure. The purpose of this study is to describe the development of a culture specific FFQ for Arab populations in the United Arab Emirates (UAE) and Kuwait.

### Methods

We interviewed samples of Arab populations over 18 years old in UAE and Kuwait assessing their dietary intakes using 24-hour dietary recall. Based on the most commonly reported foods and portion sizes, we constructed a food list with the units of measurement. The food list was converted to a Semi-Quantitative Food Frequency Questionnaire (SFFQ) format following the basic pattern of SFFQ using usual reported portions. The long SFFQ was field-tested, shortened and developed into the final SFFQ.

To estimate nutrients from mixed dishes we collected recipes of those mixed dishes that were commonly eaten, and estimated their nutritional content by using nutrient values of the ingredients that took into account method of preparation from the US Department of Agriculture's Food Composition Database.

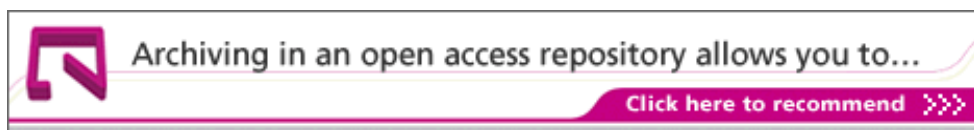
### Results

The SFFQs consist of 153 and 152 items for UAE and Kuwait, respectively. The participants reported average intakes over the past year. On average the participants reported eating 3.4 servings/d of fruits and 3.1 servings/d of vegetables in UAE versus 2.8 servings/d of fruits and 3.2 servings/d of vegetables in Kuwait. Participants reported

eating cereals 4.8 times/d in UAE and 5.3 times/d in Kuwait. The mean intake of dairy products was 2.2/d in UAE and 3.4 among Kuwaiti.

## Conclusion

We have developed SFFQs to measure diet in UAE and Kuwait that will serve the needs of public health researchers and clinicians and are currently validating those instruments.



Archiving in an open access repository allows you to...  
Click here to recommend >>>

  
**BioMed Central**  
The Open Access Publisher

Published by