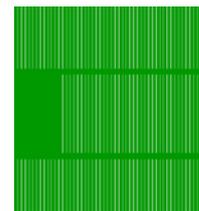


Web-based European Food Propensity Questionnaire

Heiner Boeing¹

¹Department of Epidemiology, German Institute of Human Nutrition Potsdam-Rehbrücke

Background (1)



- estimated average usage of internet in Europe:
25.1%
 - Internet use differ in different part of Europe (Germany, France, Norway ~65% vs. Greece, Spain ~ 20-30%)
 - **health-related** Internet use is increasing in Europe and worldwide
- **Potential** for prevention and research
 - e.g. dissemination of nutritional knowlegde
 - e.g. data assesment in large-scale population-based studies
- application of **webbased dietary assessment instruments** in nutritional epidemiology is currently limited

Background (2)

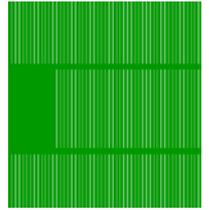
Possible strengths

- higher quality of data
 - immediate and automatic control for missing and implausible data
- direct data transfer to study centre
 - less costs (no costs for printing-& postage)
 - less organisational constraints (no manual checks for incomplete and implausible answers & no transfer of data to an electronic format, easily adaptable)
- higher compliance
 - completion any time & location, reminder messages, personalized feed-back, interactive help features

possible weaknesses

- finite food list with often closed ended response categories
 - No assessment of atypical consumed foods
- measurement error
 - often no quantification or imprecise estimation of portion sizes
 - retrospective: good rely on memory is required
 - possible bias due to direct previous food intake
- selection bias
 - limited access to internet
 - Internet- & Computer skills are required

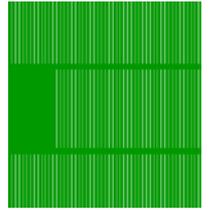
Objective



- development of a multi-languages web-based European Food Propensity Questionnaire (EFPQ), suitable to assess dietary intake in different European countries
- investigation of its feasibility and acceptance as epidemiological study instrument within a multi-centric pilotstudy
 - objective criteria: participation rates, reasons for non-participation, data provided by web analysis
 - subjective criteria: webbased evaluation questionnaire



Methods - EFFQ



- **EFFQ:**
 - developed on the basis of the German-specific 102-item FFQ applied in the **EPIC-Potsdam cohort** for the second dietary assessment using a **web-based working procedure**
 - European experts reviewed and modified an English version of the initial FFQ appropriately to the dietary habits in their countries, the common European version then was translated
 - queries about the **frequency of consumption** of 116 foods during the preceding year, demonstrated with **graphically displayed** portion sizes
 - **main purpose:** to reflect the ranking of the participants

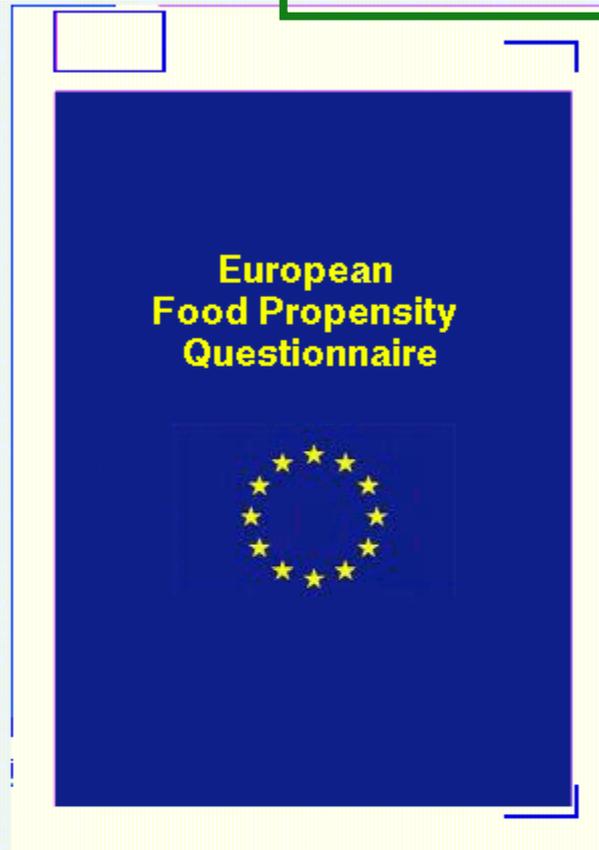


Internet based assessment tools in Epidemiology

European Food Propensity Questionnaire (EFPQ)

EPIC Potsdam - Food frequency questionnaire (FFQ)

common 6-languages
Food Propensity
Questionnaire:
English, Italian,
Norwegian, Spanish,
Basque, Estonian,
German



Version 1.0, last modified on 24 Nov 2008
developed by the Department of Epidemiology
of the German Institute of Human Nutrition Potsdam-Rehbrücke (DIfE) © 2008-2009
Photograms by [amedesign](#)

EFPQ: <https://nugo.dife.de/efbo/portal/en>



21:39:31

For study participants

Dear participant, thank you for your contribution to the research on diet and health. Please login with the user name and password you have received from the study office, using the form below. You will be connected to the right questionnaire. There you will receive further information about filling the online forms and whom to ask in case you need assistance.

Login for the questionnaire

User ID:

- -

Password:

[For Scientists](#)

View the Questionnaires and Web-Forms available on this Portal

[For Managers and Administrators](#)

Access to the management tools for authorized users

Version 1.0, last modified on 13 Feb 2009
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of the German Institute of Human Nutrition Potsdam-Rehbrücke (DIfE) © 2008-2009
Piktogramme by [armedesign](#)

source: <https://nugo.dife.de/efbo/portal/en>

European Food Propensity Questionnaire (EFPQ)



General information

Bread and Milk products

Fruit and Vegetables

Rice, pasta and egg

Meat and Fish

Mixed dishes

Cake and Sweets

Cakes

Sweets

Beverages

Fats

Portions

Supplements & Medication

Comments

Sweets

Cookies, biscuits (3 pieces)



- never
- once a month or less frequent
- 2-3 times a month
- 1-2 times a week
- 3-4 times a week
- 5 times a week or more frequent

Chocolate and chocolate candy (50g)



- Never
- once a month or less frequent
- 2-3 times a month
- 1-2 times a week
- 3-4 times a week
- 5-6 times a week
- 1 time a day or more frequent

Sweets and candy (1 handful)



- Never
- once a month or less frequent
- 2-3 times a month
- 1-2 times a week
- 3-4 times a week
- 5-6 times a week
- 1 time a day or more frequent

Back

Continue



▶ General information

▼ Bread and Milk products

▼ Fruit and Vegetables

▶ Rice, pasta and egg

▼ Meat and Fish

▶ Mixed dishes

▲ Cake and Sweets

▶ Cakes

Sweets

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European Food Propensity Questionnaire (EFPQ)

[Home](#)[Help](#)[Questionnaire](#)[Login](#)

other language versions



current time: Friday, 27 March 2009 - 21:59:49

I do not wish to evaluate this questionnaire. (Selecting this box will directly bring you to the Logout page)

Please evaluate the questionnaire on a scale from 1 (brilliant) to 6 (abysmal) in the following categories:

Clarity of the questions 1 2 3 4 5 6

Clarity of the explanations 1 2 3 4 5 6

Visual elements (Colors, font and font size, pictures, placing of the elements) 1 2 3 4 5 6

User friendliness (Clarity, navigation, logical structure) 1 2 3 4 5 6

Difficulties with estimating the usual intake of individual foods or a food group during the last 12 months

No, everything could be estimated without problems

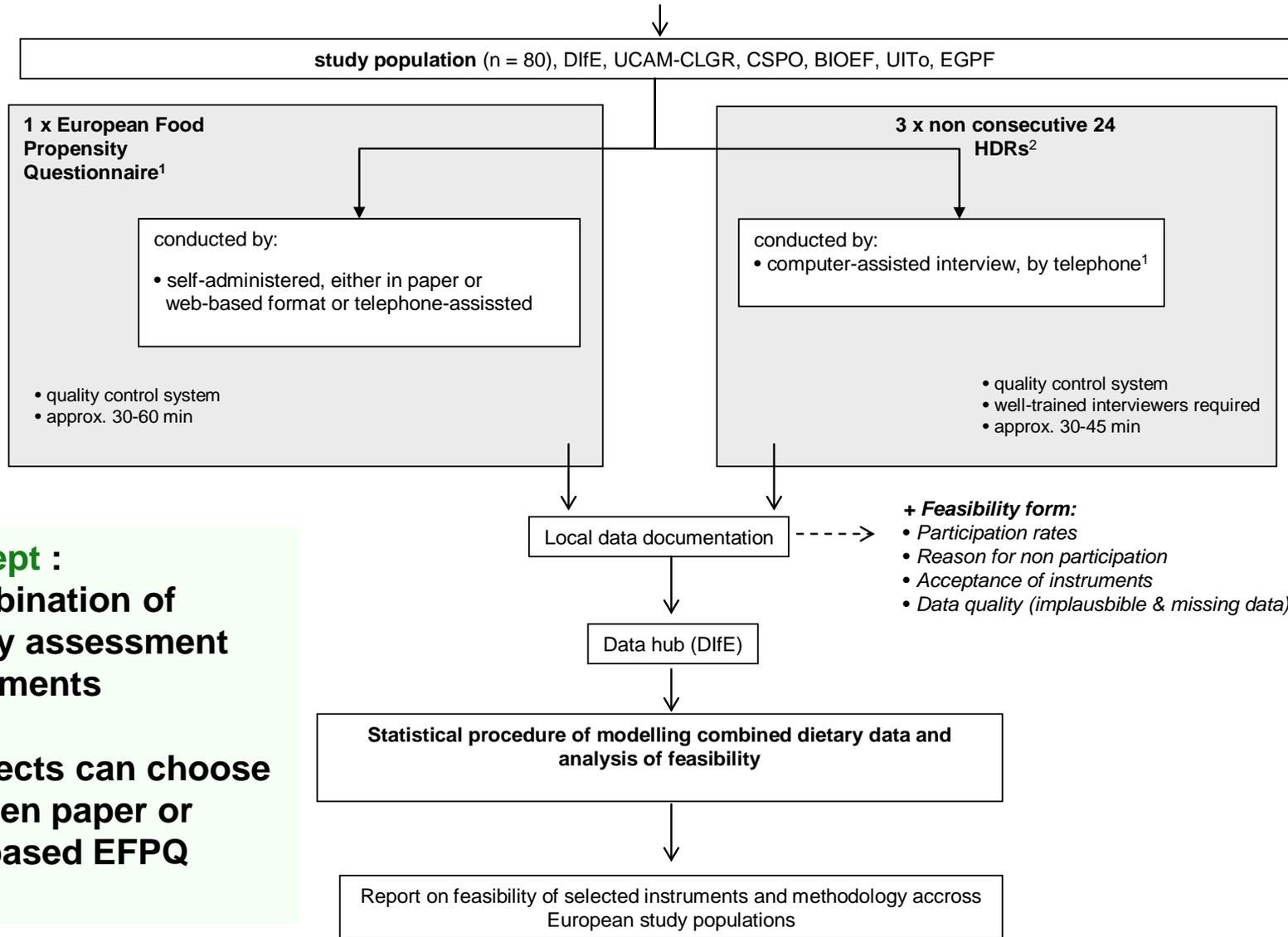
Yes, I had difficulties with the following items:

Expenditure of time for the completion of the questionnaire

less than 20 minutes

between 20 and 40 minutes

Recruitment from local cohorts



Concept :

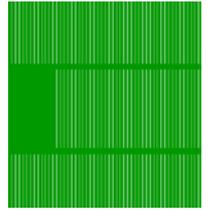
- combination of dietary assessment instruments

- subjects can choose between paper or web-based EFPQ

¹ EFPQ

² local versions of EPIC soft

Preliminary results



IDAMES -centre	Total response rate		Total participation rate		response rate for Online-EFPQ*		response rate for Paper-EFPQ*	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Florence (I)**	49	61.3	38	47.5	22	57.9	16	41.1
Potsdam (D) San Sebastian (E)**	75	93.8	55	68.8	19	34.5	36	65.5
Tartu (EE)**	80	100	67	83.8	62	77.5	5	6.25
Tromsoe **(NOR)	34	42.5	26	32.5	20	76.9	6	23.1

* EFPQ: European Food Propensity Questionnaire

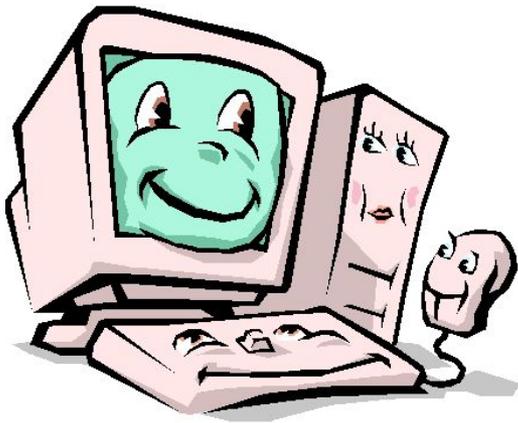
** ongoing recruitment (E) or recruitment within baseline interviews

Data refer to the response sheet. Not all questionnaires are currently completed.



Summary & outlook

- The **EFPQ** seems to be a feasible and suitable dietary assessment instrument in **multi-centric** cohort studies
- further development is needed to refine its methodology for an enlarged application in other countries
- The use of a **combination** of dietary assessment instruments, including **internet technologies** is methodologically a promising approach for future dietary assessment



Thank you very much for your attention

All IDAMES-partners:

Nadia Slimani

Dagrun Engeset

Gianluca Tognon & Simonetta Salavini

Heather Ward

Taie Kaasik

Pilar Amiano

<http://www.idames.eu>