CHRIS Study

Interview – Nutrition

Version 1.1

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1. Introduction

This module stores information related to nutrition, that were collected at the interview, such as the frequency of eating specific food groups, and the consumption of coffee, black tea and fizzy drinks.

Participants book a morning appointment at the CHRIS study center, ranging from 7.45 to 8.45 a.m. Each study participant is assigned a workflow at the reception. If there are ten study participants (maximum capacity), there are ten different workflows, marked with the letters from "A" to "K". The current workflow is as follows: A-B-C-D-E-F-G-H-I-K. All the workflows can be found in the documentation of CHRIS Baseline/General information/Administrative data, in the file named "Workflows at baseline assessment". The interview occurs always after the spiralography and the blood drawing, for most as the last session, after the ECG assessment and the self-administered questionnaire (workflows B, C, E, F, H, I, L). For the remainder, the interview occurs after breakfast and just before the self-administered questionnaire (workflows A and G) or in between the blood drawing and the anthropometry (workflow D).

The interview full text and its corresponding answer lists are available at CHRIS Baseline/Interview. This module is based on the FOOD FREQUENCY module of the follow-up F4 questionnaire of the KORA Study (*Kooperative Gesundheitsforschung in der Region Augsburg*).

2. History version changes

Version 1 of this interview module was in use between August 24th,2011 and November 2nd, 2012, whereas Version 2 had been in use between November 5th, 2012 and May 16th, 2014.

Since May 5th, 2014, another questionnaire, the adapted GA2LEN Food Frequency Questionnaire, has been used. The latter is not included is covered in a specific section of the database, given the lack of comparability between the two questionnaires.

Between the different versions, the following changes have occurred:

Version 1 to Version 2:

variables added: x0fd30

Version 2 to Version 3:

variables dropped: all - introduction of the GA2LEN FFQ questionnaire (CHRIS Baseline/Self-Assessment/Food Frequency Questionnaire)

The cleaning process has added the variable x0fd35.

3. Data cleaning

1. The main CHRIS dataset was loaded.
2. The variable with comments, x0fdnote, was translated and categorized when possible.

3. All the numeric and categorical variables were set to "Not in use" (-98) if the visit was after May 16th, 2014, i.e. when only the GA2LEN FFQ questionnaire was in use.
4. All the categorical variables, x0fd01-x0fd29, had their remaining missing observations transformed into "Unexpected missing" (-89).
5. The variable on specific diets or dietary habits, x0fd30, had its missing observations transformed into:
   a) "Not in use" (-98) if the interview version, x0fdver, was after the first;
   b) "Unexpected missing" (-89) otherwise.
6. The score FFQ score, based on the "Ernährungskreis" of the German Society for Nutrition, 1989, was computed and saved into the variable x0fd35.
7. The age at regular espresso consumption start, x0fd31a, was corrected if the year instead of the age was recorded. The same was done for the age at black tea consumption start, x0fd32a, filter coffee consumption start, x0fd33a, and coke consumption start, x0fd34a.
8. For each drink type, participants could either give the exact age of the regular consumption start or an age category, below 13, between 13 and 18, above 18 years old. This information was respectively saved as x0fd31a and x0fd31b for espresso, x0fd32a and x0fd32b for black tea, x0fd33a and x0fd33b for filter coffee, x0fd34a and x0fd34b for coke. Being the age class variables more often answered, they were filled with information of the respective exact age variable when missing.
9. For each drink type, participants could either give the exact age when they stopped regular consumption or the duration in years of regular consumption. This information was respectively saved as x0fd31d and x0fd31e for espresso, x0fd32d and x0fd32e for black tea, x0fd33d and x0fd33e for filter coffee, x0fd34d and x0fd34e for coke. The espresso consumption duration, x0fd31e, was corrected when instead of duration years a calendar year was provided, using the espresso consumption age at stop.
10. All the variables on ever consumptions of drinks, x0fd31-x0fd34, had their missing observations transformed into "Unexpected missing" (-89).
11. For each drink type, the variables of exact age at consumption start, exact age at consumption stop, duration of consumption had the values "99" were transformed into "Don't know" (-88).
12. For each drink type, the variables of exact age at consumption start, age category at consumption start, current consumption, and quantity of consumption, had their missing observations transformed into
    a) "Missing by design" if the ever consumption was "Missing by design" or "Don't know" or "No";
    b) "Unexpected missing" otherwise.
13. For each drink type, the variables on consumption stop age and consumption duration were corrected using the age of consumption start, when they were missing.
14. For each drink type, the variables on consumption stop age and consumption duration had their missing values transformed into
    a) "Missing by design" if the current consumption is "Yes" or "Missing by design";
    b) "Unexpected missing" otherwise.
15. The ever consumption of espresso was changed to a "Yes" if the current espresso consumption was "Yes".
16. The baseline dataset was saved.

4. Advices for the analysis

The analyst should read the notes saved in the variable x0fdnote, where specific types of diets are reported.

The retrospective nature of this assessment makes the measurement of nutrition habits, especially the variables x0fd01-x0fd29, prone to recall bias more than a daily compiled "food diary". Furthermore, social desirability bias might have pushed participants to overstate their consumption of healthy foods like vegetables and understate their consumption of well-known unhealthy food options such as processed meat or fatty foods.

The third version of the nutrition module was instead administered with a paper questionnaire, that the participant needed to fill and bring at the CHRIS study center, and it can be found in CHRIS Baseline/Self-Assessment/Food Frequency Questionnaire.

Finally, the analyst should always take into account that the operator in charge of carrying out the interview might have influenced how the participant reported their answers. The analyst should therefore adjust for the operator variable, x0_opintc, when possible.

5. References

Winkler G, Döring A. Validation of a short qualitative food frequency list used in several German large scale surveys. Z Ernahrungswiss. 1998 Sep;37(3):234-41. DOI: 10.1007/PL00007377

Löwel H, Döring A, Schneider A, Heier M, Thorand B, Meisinger C. The MONICA Augsburg surveys - basis for prospective cohort studies. Gesundheitswesen. 2005;67(Sonderheft 1):S13–S18. DOI: 10.1055/s-2005-858234

Holle R, Happich M, Löwel H, Wichmann H-E. KORA-A Research Platform for Population Based Health Research. Gesundheitswesen. 2005;67(Sonderheft 1):S19–S25. DOI: 10.1055/s-2005-858235