Application of STROBE nut on recently published manuscripts to assess user experience and increase adherence to reporting guidelines: Cross Sectional Study

Trial protocol

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Introduction

The recent increase in systematic reviews publication in biomedical research has raised concerns regarding the completeness of research papers included in the reviews. In many cases, important information in the selected papers for the systematic review were missing thus making it difficult for inclusion in the Meta analysis[1]. Since systematic reviews are considered the golden standard for evidence-based decision making, there was a need to intervene by developing reporting guidelines including Consolidated Standards of Reporting Trials "CONSORT" for randomized controlled trials [2] and STrengthening the Reporting of OBservational studies in Epidemiology "STROBE" for three types of observational studies [3].

A research reporting guideline is a simple tool with a minimum number of essential information that need to be addressed when reporting research manuscripts. The application of the guideline aims to improve the scientific content of the papers without restricting the research creativity, and original thinking [4]. The ultimate goal is to have a clear description of what was done and found during the study in order for it to be fully assessed, understood, replicated, and used in practice. Therefore, a guideline is commonly organized as a checklist, explicit text, a flow diagram or a combination between these three elements that specifies the items to be reported during the write up of the study [5].

Nutritional epidemiology is a branch of biomedical research and it studies the associations between nutrition and health outcomes in human populations. A few systematic reviews in nutrition epidemiology have identified the shortfall in the included papers for analysis, regarding crucial details (e.g., recruitment, dropout, compliance, statistical methods, and dietary intake assessment) [6]. We have recently proposed recommendations for reporting nutritional epidemiology and dietary assessment research by extending the STROBE statement into

Strengthening The Reporting of OBservational Studies in Epidemiology – Nutritional Epidemiology “STROBE nut”

Currently reporting guidelines are used at the last stage of the writing cycle, and are endorsed by some journals as part of journal requirements. In an endorsing journal, researchers are asked to submit a filled reporting guideline table with the pages where the needed information can be found. Currently STROBE nut is endorsed by the International Journal of Behavioural Nutrition and Physical Activity for all nutrition papers submitted to the journal. Although there is some evidence that CONSORT has influenced the way published research is reported, the adherence to the reporting guidelines is still quite low[7, 8].

In order for the reporting guidelines to do what they intend to do, there is a need to look into aspects to assess user experience, including barriers of use and increase adherence to reporting guidelines [9]. STROBE nut was published less than two years ago and we do not know yet to what extent STROBE nut is helping researchers in writing their papers based on the items proposed by STROBE nut.

Objectives and hypothesis

The objective of the study is to test authors experience with applying STROBE nut table. We will ask the participants to familiarize themselves with the STROBE nut items, by applying a modified version on their recently published nutrition manuscript, and collect the filled table and their feedback through a Skype interview.

The application of STROBE nut table by researchers on their published manuscript can help increase intention of use during the writing process of their next manuscript. The reason of applying the reporting guidelines on a recently published paper is to give the authors an opportunity to be familiar with the checklist items in a relaxed setting (no pressure of publishing), on a familiar topic.

The idea is to practice self-judgment on whether using such guidance could improve their manuscripts scientific content or not.

Methods

A cross sectional study will be used. A convenient sample of authors from our extended personal network who have recently published nutrition will be invited. Authors will be recruited through convenient sampling. The study aims to collect feedback from 30 researchers.

The study will include two phases: 1- Assessment of STROBE nut application and understanding; two times separately by the paper's author and by two external experts DH and CL. 2- Skype interview with the paper's author to provide feedback on his/her experience using STROBE nut.

Assessment of STROBE nut Application and Understanding

STROBE nut is an extension of STROBE. By default, researchers are asked to include information stated in STROBE nut in addition to STROBE. STROBE contains 22 items to be reported, and STROBE nut provide an additional 24 items [6]. The focus in this study is on STROBE nut items. It is worth noting that certain items are not applicable for all study designs and study purposes. Also, certain items contain more than one component to report on e.g. STROBE nut 8.1 see table. Moreover, there might be a risk that researchers state an item as reported on a certain page while it is partially reported. Thus we have developed a modified checklist (table 1) to be sent to participants to fill in the following information for each item for the specific paper they will report on: 1-Irrelevant/not applicable 2- Fully/ Partially reported on page/pages+ the copied text 3- Reasons for partial reporting 4- Reasons for not including.

Upon acceptance to participate, baseline information will be collected (Annex 1); authors will be given the STROBE nut modified checklist layout (Annex 2, table

1). Authors will be asked to go through their recently published manuscript and fill the modified table for all items.

Example for illustration

STROBE **nut-8.1** “Describe the dietary assessment method(s), e.g., portion size estimation, number of days and items recorded, how it was developed and administered, and how quality was assured. Report if and how supplement intake was assessed.”

How to fill the table?

NA column

1. In this study, you need to state if this item is not applicable in your published manuscript.

Fully reported on page #

2. If it is applicable and it is fully reported, then you are asked to state the number of the page/s where the information is in the manuscript in the second column of the MS word table.

Partially reported on page #

1. We have added a special column for the purpose of this study called “Partially reported on page #” Since an item can ask for more than one piece of information, of which you could have reported on one or two but not all. If for instance, in the given example STROBE nut-8.1 you only report on portion size estimation, number of days and items recorded without reporting on how the tool was developed and administered, or how the quality was assured, then you need to explain reasons for partial reporting in the third column. . Partial reporting can have many reasons including, the information is not relevant for the study, overlooking the issue, having it done in another study, or having done it yet not explicitly stating it in the text.
2. Reasons for exclusion or partial exclusion
3. If the item is applicable yet you haven’t reported on it in the published manuscript, or you have it partially reported then you could state reasons for exclusion. When you provide information on the reasons for exclusion,

it increases transparency and clarity. It is also part of good research practices, where authors can learn how pervious research was done.

So the idea it that authors go through the STOBE and STROBE nut items one by one and fill it in the same way explained above. Participants will be given a period of a week (It is tested: filling the table takes between 15-60 minutes). After this exercise, participants will be asked to schedule a Skype interview to provide us with feedback based on their experience filling in the table.

Two researchers DH and CL as external experts will also fill the table for each participant's publication simultaneously. External experts can only fill the first two columns (not applicable+ fully/ partially reported on page/pages). Consensus for each manuscript's items will be reached through discussions between the experts. The result will be considered against the submitted answer for each respondent, to check the understandability of the checklist items.

Skype Interview

After the return of the filled STROBE nut checklist, a short semi structured interview conducted in English to understand user's experience with the reporting guidelines will be organized. The proposed questions can be found in (Annex 3). We are mainly interested to have a better view on barriers of use, added value of the checklist and the intention for use in the next manuscript. No previous validated questionnaire is available. Therefore, interview guidance has been developed derived from the experience of the co-authors and modified a few times based on discussions. The questionnaire has been pretested with a few PhD students (n=3) at Ghent University to assess content validity. Open questions such as "Have you encountered any difficulties applying the reporting guidelines? Is followed by specific probing question like "How can we remove the barriers to make the guidelines more user friendly?" in case of negative answer.

The interview will start with a quick overview of the study, intended uses of the interview results, and reassurance that the confidentiality and anonymity will be protected. Permission to tape recording and note taking will be asked. The Skype call will take between 30 minutes and 1 hour.

Study setting and selection of participants

Participants will remain in their research environment. Administration and follow-up will be conducted from distance via online communications. The communication between the principal investigator and the participation will be through email (sending the baseline questionnaire, the STROBE nut guidelines). The interview will be done over Skype.

The participants of the study will be a sample of PhD students, Post Doctorate researchers, Researchers and Professors at different universities, invited from various faculties with the focus on nutritional epidemiology research through a personalised email for each participant. Snowballing will be encouraged, and co-authors of the STROBE nut will be asked to mobilize their networks.

Participants will be sent an invitation letter explaining the study and an informed consent for participating. The baseline questionnaire and the table will be sent upon invitation acceptance. And a Skype interview will be scheduled as they send back the checklist table.

Pilot testing

The baseline questionnaire, the table and the Skype interview will be tested with a few PhD students at the department of Food Technology, Safety, and Health.

Data collection and outcome measures

Descriptive analyses will be used. For each binary question in the baseline questions and in the Skype interview, answers will be calculated and summarized, and results will be reported as percentages.

Two experts will fill in the modified STROBE nut table for each selected study.
For each STROBE nut item in the submitted tables agreement between the author's and the experts answer will be calculated. If there is agreement, the items will be coded 1 if there is no agreement the item will be coded 0, if there is partial agreement the items will be codes as 0.5. This will be done for all included studies, and for each item on the list. The results will be presented as mean agreement rate between participants and experts for each item across all studies.
The mean for positive fully reported items will be calculated for each item across studies.
For the Skype interviews, data will be analysed using NVivo. DH will analyse the interview records, code answers in recurring themes. Themes will be grouped based in similarity in bigger concepts, calculating the frequencies for each of the themes in Stata will show overview of the most reported responses. A second researcher CL will be consulted in case of any doubt in the coding process until clarity is reached. The data will be saved and stored until the paper is published and then the data will be discarded

Discussion

We aim to get feedback from researchers' on their experience when applying the reporting guidelines. The study will also give insights on the difficulties faced while using the reporting guideline. The agreement measurements between checklist developer and authors can give indication on user's ability to understand the items and fill it correctly. The measure of fully reported items across studies will give an indication on the items more reported than others on the list and will give an insight to look further on reasons for poorly reported items and help formulating suggestion for improving. For instance better formulation of the item, or finding ways to educate and raise the awareness between researchers on the less reported items The feedback will be used to do the necessary modification that would support the application of the guidelines

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Reference List

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Annex 1

Dear researcher

Thank you for accepting our invitation to participate in our study. Before the start of the trial, please complete this baseline questionnaire. The questionnaire should not take more than 5 minutes of your time.

Informed Consent

- ☐ I declare that I have been informed about the purpose of this study and understand that I can refuse to answer a particular question and withdraw when I like. My name won't be associated in any publication with the collected information. I accept that there is neither remuneration nor direct benefit for me.

General information

Before filling the questionnaire, please provide the following details

Full name:

Email:

Working title of thesis/ current paper:

Research experience:

-PhD student

-Post Doc

-Professor

- ☐ I confirm that I am in charge of writing the first version of the manuscript

Q3 Have you used a reporting guideline like PRISMA, CONSORT or STROBE before? (Tick all those that apply)

- Yes, to write or co-write a paper (1), specify which guidelines
- Yes, to review a paper (2), specify which guidelines
- No, it will be my first time to use reporting guidelines (3)

If answer is yes to the above question, then this question will show up

In General, how often do you use reporting guidelines?

Never Rarely Sometimes Usually Every time

Q4 What motivated you to use the guideline?

- Self motivation or motivation from colleagues or coauthors
- Journal suggestions to use checklists within the writing process
- Journal requirements to fill the checklist at the end
- Journal requirements during peer reviewing

Subjective knowledge

The following questions only apply to PRISMA, CONSORT, STROBE and STROBE nut

Q5 A) How do you rank your knowledge with respect to the utilization of the reporting guideline?

- Very knowledgeable
- Somewhat knowledgeable
- Neither knowledgeable nor unknowledgeable
- Somewhat knowledgeable
- Very unknowledgeable

Q5 B) how do you rank your knowledge with respect to the content of the reporting guideline?

- Very knowledgeable
- Somewhat knowledgeable
- Neither knowledgeable nor unknowledgeable
- Somewhat knowledgeable
- Very unknowledgeable

Objective knowledge

The following questions only apply to PRISMA, CONSORT, STROBE and STROBE nut

Q6 Answer the following statement with true or false

- The checklist should be used to evaluate the quality of papers
- The reporting checklists must be completely filled, or my paper will be rejected
- It is not acceptable to report that some items on the checklist are not applicable to my study
- Reporting on items that are not carried out will add more clarity to my paper and will not lead to rejection
- The checklists aim to make reporting more clear, complete and transparent
- The checklist aim to improve communication between co-author

Annex 2

1. PARTICIPANT INFORMATION SHEET

Application of Strengthening The Reporting of OBservational Studies in Epidemiology – Nutritional Epidemiology "STROBE nut" on recently published manuscripts to assess user experience and increase adherence to reporting guidelines: Cross Sectional Study

Coordinating Investigator: Prof. Carl Lachat
Principal Investigator: Dana Hawwash

Dear Student,
You are invited to participate in a study to test the application of STROBE nut during the writing of a scientific manuscript related to nutrition. Before you decide to participate in this study, it is good to read this form as it explains the study clearly and states your rights and our responsibilities.

PURPOSE AND DESCRIPTION OF THE STUDY

We have recently developed STROBE nut[1], which is a checklist of 24 relevant items in addition to Strengthening The Reporting of OBservational Studies in Epidemiology "STROBE" checklist that need to be reported in a nutrition manuscript when submitted for publication. The reporting guidelines aim to increase transparency and completeness of reporting. It is expected that the application of STROBE nut will support the completeness of the reporting of nutrition paper, yet we need to understand authors' experiences with the checklist, and make the necessary modifications to satisfy the needs of the authors, and increase the checklist applicability.

OBJECTIVE OF THE STUDY

The objective is to test authors experience regarding the application of STROBE nut table. We will ask the participants to familiarize themselves with the STROBE nut items, by applying a modified version on their recently published nutrition manuscript, and collect the filled table and their feedback through a Skype interview.
The reason of applying the reporting guidelines on a recently published paper is to give the authors an opportunity to be familiar with the checklist items in a relaxed setting (no pressure of publishing), on a familiar topic. The idea is to practice self-judgment on whether using such guidance could improve their manuscripts scientific content or not.

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[1] Lachat, C., et al., *Strengthening the Reporting of Observational Studies in Epidemiology-Nutritional Epidemiology (STROBE-nut): An Extension of the STROBE Statement.* PLoS Med, 2016. **13**(6): p. e1002036.

HOW THE STUDY IS DONE

To evaluate the objectives a cross-sectional study with convenience sampling is set up. The participants will stay in their research/ work environment.

Upon acceptance to participate, baseline information will be collected using online questionnaire; you will be given the STROBE nut modified checklist layout under the form of a Microsoft Word document (the table has four columns to fill: NA, fully reported on page, partially reported on page #, reasons for exclusion or partial exclusion). You will be asked to go through your recently published manuscript and fill the modified table for all items.

EXAMPLE

STROBE **nut-8.1** "Describe the dietary assessment method(s), e.g., portion size estimation, number of days and items recorded, how it was developed and administered, and how quality was assured. Report if and how supplement intake was assessed."

How to fill the table?

NA column

3. In this study, you need to state if this item is not applicable in your published manuscript.

Fully reported on page # column

4. If it is applicable and it is fully reported, then you are asked to state the number of the page/s where the information is in the manuscript in the second column of the MS word table.

Partially reported on page # column

5. We have added a special column for the purpose of this study called "Partially reported on page #" Since an item can ask for more than one piece of information, of which you could have reported on one or two but not all. If for instance, in the given example STROBE nut-8.1 you only report on portion size estimation, number of days and items recorded without reporting on how the tool was developed and administered, or how the quality was assured, then you need to explain reasons for partial reporting in the third column. Partial reporting can have many reasons including, the information is not relevant for the study, overlooking the issue, having it done in another study, or having done it yet not explicitly stating it in the text.

Reasons for exclusion or partial exclusion column

6. If the item is applicable yet you haven't reported on it in the published manuscript, or you have it partially reported then you could state reasons for exclusion. When you provide information on the reasons for exclusion, it increases transparency and clarity. It is also part of good research practices, where authors can learn how pervious research was done.

You need to go through the STOBE and STROBE nut items one by one and fill it in the same way explained above. You will be given a period of a week (It is tested: filling the table takes between 15-60 minutes of your time). After this exercise, you will be asked to schedule a Skype interview (30-45 minutes) to provide us with feedback based on your experience filling in the table.

The study consists of 3 steps:

1- Filling a 3 minutes baseline questionnaire, and providing the informed consent (online via email communication)
2- Filling and sending back the MS Table with number of page/s where the information are and providing comments when the item is not included within a period of one week. Two researchers DH and CL as external experts will also fill the table for each participant's publication simultaneously.

3- Half an hour Skype call scheduled with study organizer based on your availability to provide insight on your experience filling in the table

VOLUNTARY PARTICIPATION

Your participation in this study is entirely voluntarily. You have the right to refuse to participate in the study without explanation. You also have the right to stop your participation in the study at any time, even if you have signed this informed consent form.

INCONVENIENCES

The study will require some time investment from your end (one hour maximum filling the table and half an hour Skype call), and the application of the reporting guidelines on a paper that has already been approved and published.
The Skype call will be recorded. The data will be saved and stored until the paper is published and then the data will be discarded

BENEFITS

You will familiarize yourself with STROBE nut reporting guideline and choose for yourself to apply it on your next manuscript.
If you decide on using STROBE nut more often and you need feedback, you can schedule a Skype call with Dana Hawwash to provide further guidance.
Your effort will be acknowledged in the manuscript upon your consensus.

PROTECTION OF YOUR PRIVATE LIFE

Your identity and your participation in this study will be treated strictly confidential. The specific information we obtain from you (email address, Skype recording and the filled in table with the reasons of exclusion) will not be shared with anybody, except the study investigators. Reasons for exclusion are used in this study to give insight on the STROBE nut applicability and not on your ability to carry high quality research. All data will be anonymous by using participant unique identity numbers. Your name will not appear in any reports or publication resulting from this study. After the study is completed, you may request information about the study results.

ETHICS COMMITTEE

The study was presented to the Ethics Committee of the University Hospital in Ghent for review. No ethical clearance was required under the Belgian law. The study was approved by the commission number EC/2018/0636

CONTACT PERSONS IN CASE YOU HAVE QUESTIONS ABOUT THIS STUDY

If you have any questions concerning your participation in this study, you can always contact dana.hawwash@ugent.be

Informed consent form

Before you agree to participate in this study, you need to be aware that:

- The study was presented to the Ethics Committee of the University Hospital in Ghent for review. No approval was required under the Belgian law. The study was approved by the commission number EC/2018/0636
- This clearance is not to be taken as an obligation to take part in this study.
- Your participation is only voluntary. If you wish, you can withdraw from this study at any point, even after providing consent. You can withdraw by contacting the researchers through email or telephone. You do not have to motivate or explain the decision of withdrawal. Your data will be discarded and not be used in the analysis
- You can revise your answers to the questions before submission if you wish so, once the answers are submitted they cannot be changed.
- Your input will be stored anonymously; researchers not involved in the data collection will not have access to your personal data and name.
- You can contact the researcher or the coordinator of the project at any time if you wish to obtain more information regarding this study.

I declare that I have been informed about the purpose of this study and understand that I can refuse to answer a particular question and withdraw when I like. My name won't be associated in any publication with the collected information. I accept that there is neither remuneration nor direct benefit for me.
My consent will be confirmed by clicking this link to the baseline online questionnaire

Principal Investigator
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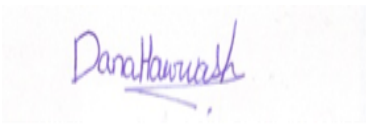
MSc, Department of Food Technology, Safety and Health, Faculty of Bioscience Engineering

dana.hawwash@UGent.be



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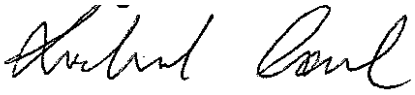

STROBE nut table

Item	Item nr	STROBE recommendations	Extension for Nutritional Epidemiology studies (STROBE-nut)	NA	Fully reported on page #	Partially reported on page #	Reasons for exclusion or partial exclusion
Title and abstract	1	(a) Indicate the study's design with a commonly used term in the title or the abstract. (b) Provide in the abstract an informative and balanced summary of what was done and what was found.	**nut-1** State the dietary/nutritional assessment method(s) used in the title, abstract, or keywords.				
Introduction							
Background rationale	2	Explain the scientific background and rationale for the investigation being reported.					
Objectives	3	State specific objectives, including any pre-specified hypotheses.					
Methods							
Study design	4	Present key elements of study design early in the paper.					
Settings	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection.	**nut-5** Describe any characteristics of the study settings that might affect the dietary intake or nutritional status of the participants, if applicable.				
Participants	6	a) Cohort study—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up. Case-control study—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls. Cross-sectional study—Give the eligibility criteria, and the sources and methods of selection of participants. (b) Cohort study—For matched studies, give matching criteria and	**nut-6** Report particular dietary, physiological or nutritional characteristics that were considered when selecting the target population.				

Item	Item nr	STROBE recommendations	Extension for Nutritional Epidemiology studies (STROBE-nut)	NA	Fully reported on page #	Partially reported on page #	Reasons for exclusion or partial exclusion
		number of exposed and unexposed. Case-control study—For matched studies, give matching criteria and the number of controls per case.					
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	**nut-7.1** Clearly define foods, food groups, nutrients, or other food components. **nut-7.2** When using dietary patterns or indices, describe the methods to obtain them and their nutritional properties.				
Data sources - measurements	8	For each variable of interest, give sources of data and details of methods of assessment (measurement).Describe comparability of assessment methods if there is more than one group.	**nut-8.1** Describe the dietary assessment method(s), e.g., portion size estimation, number of days and items recorded, how it was developed and administered, and how quality was assured. Report if and how supplement intake was assessed. **nut-8.2** Describe and justify food composition data used. Explain the procedure to match food composition with consumption data. Describe the use of conversion factors, if applicable. **nut-8.3** Describe the nutrient requirements, recommendations, or dietary guidelines and the evaluation approach used to compare intake with the dietary reference values, if applicable. **nut-8.4** When using nutritional biomarkers, additionally use the STROBE Extension for Molecular Epidemiology (STROBE-ME). Report the type of				

Item	Item nr	STROBE recommendations	Extension for Nutritional Epidemiology studies (STROBE-nut)	NA	Fully reported on page #	Partially reported on page #	Reasons for exclusion or partial exclusion
			biomarkers used and their usefulness as dietary exposure markers. **nut-8.5** Describe the assessment of nondietary data (e.g., nutritional status and influencing factors) and timing of the assessment of these variables in relation to dietary assessment. **nut-8.6** Report on the validity of the dietary or nutritional assessment methods and any internal or external validation used in the study, if applicable.				
Bias	9	Describe any efforts to address potential sources of bias.	**nut-9** Report how bias in dietary or nutritional assessment was addressed, e.g., misreporting, changes in habits as a result of being measured, or data imputation from other sources				
Study Size	10	Explain how the study size was arrived at.					
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why.	**nut-11** Explain categorization of dietary/nutritional data (e.g., use of N-tiles and handling of nonconsumers) and the choice of reference category, if applicable.				
Statistical Methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions. (c) Explain how missing data were addressed. (d) Cohort study—If applicable, explain how loss to follow-up was addressed. Case-control study—If applicable, explain how matching of cases and	**nut-12.1** Describe any statistical method used to combine dietary or nutritional data, if applicable. **nut-12.2** Describe and justify the method for energy adjustments, intake modeling, and use of weighting factors, if applicable. **nut-12.3** Report any adjustments for measurement error, i.e,. from a validity or				

Item	Item nr	STROBE recommendations	Extension for Nutritional Epidemiology studies (STROBE-nut)	NA	Fully reported on page #	Partially reported on page #	Reasons for exclusion or partial exclusion
		controls was addressed. Cross-sectional study—If applicable, describe analytical methods taking account of sampling strategy. (e) Describe any sensitivity analyses.	calibration study.				
Results							
Participants	13	(a) Report the numbers of individuals at each stage of the study—e.g., numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analyzed. (b) Give reasons for non-participation at each stage. (c) Consider use of a flow diagram.	**nut-13** Report the number of individuals excluded based on missing, incomplete or implausible dietary/nutritional data.				
Descriptive data	14	(a) Give characteristics of study participants (e.g., demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) Cohort study—Summarize follow-up time (e.g., average and total amount)	**nut-14** Give the distribution of participant characteristics across the exposure variables if applicable. Specify if food consumption of total population or consumers only were used to obtain results.				
Outcome data	15	Cohort study—Report numbers of outcome events or summary measures over time. Case-control study—Report numbers in each exposure category, or summary measures of exposure. Cross-sectional study—Report numbers of outcome events or summary measures.					
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted	**nut-16** Specify if nutrient intakes are reported with or without inclusion of dietary supplement intake, if applicable.				

Item	Item nr	STROBE recommendations	Extension for Nutritional Epidemiology studies (STROBE-nut)	NA	Fully reported on page #	Partially reported on page #	Reasons for exclusion or partial exclusion
		for and why they were included. (b) Report category boundaries when continuous variables were categorized. (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period.					
Other analyses	17	Report other analyses done—e.g., analyses of subgroups and interactions and sensitivity analyses.	**nut-17** Report any sensitivity analysis (e.g., exclusion of misreporters or outliers) and data imputation, if applicable.				
Discussion							
Key results	18	Summarize key results with reference to study objectives.					
Limitation	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias.	**nut-19** Describe the main limitations of the data sources and assessment methods used and implications for the interpretation of the findings.				
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence.	**nut-20** Report the nutritional relevance of the findings, given the complexity of diet or nutrition as an exposure.				
Generalizability	21	Discuss the generalizability (external validity) of the study results.					
Other information							
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based.					
Ethics			**nut-22.1** Describe the procedure for consent and study approval from ethics committee(s).				
Supplementary material			**nut-22.2** Provide data collection tools and data as online material or explain how they can be accessed.				

* Certain items have more than one component to report on, make sure you include all. E.g. STROBE nut item 8.1

Annex 3

Skype Interview questionnaire

Proposed questions

- How was your experience with using STROBE nut on your published paper?
- How much time did it take you to fill in the table?
- Was it easy to understand what you have to fill in each column?
- How was it for you to fill in the column “partially included”?
- How was your experience with filling in the reasons for exclusion/partial exclusion?
- Was there any item on the STROBE nut list that was difficult to understand? Can you give an example?
- How can we remove the barriers to make the guidelines more users friendly?

Open-ended

- What is the added value for using STROBE nut for you? (Enriched manuscript, more informative)
- Would you use reporting guidelines e.g STROBE nut on your next manuscript?
- After your experience with STROBE nut application, would you consider the application of other reporting guidelines? If yes, what motivates you to use reporting guidelines?
- Is there anything else you’d like to tell me?
- Can I contact you later in case you have additional questions?