PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Using facilitator-receiver peer dyads matched according to
	socioeconomic status to promote behaviour change in overweight
	adolescents – a feasibility study
AUTHORS	Saez, Laura; Legrand, Karine; Alleyrat, Camille; Ramisasoa, Serge; Langlois, Johanne; Muller, Laurent; Omorou, Abdou; De Lavenne, Rozenn; Kivits, Joelle; Lecomte, Edith; Briançon, Serge; Trial Group, PRALIMAP-INÈS

VERSION 1 – REVIEW

REVIEWER	Jonas D. Finger Robert Koch Institute, Department of Epidemiology and Health
	Monitoring, Berlin, Germany
REVIEW RETURNED	09-Nov-2017

GENERAL COMMENTS	This interesting article presents results from a feasibility study on the qualitative evaluation of a peer intervention promoting behavior change in overweight pupils in the Vosges area in France by using the approach of facilitator-receiver peer dyads matched according to socioeconomic status. Minor revisions are suggested as follows.
	Page 4, line 21. Consider using present instead of past tense "() does not widen health inequalities".
	Page 5, line 8. The term "nutritional activity" (mastery experiences) seems to be somewhat misleading when appraising the activities that had been actually carried out during the intervention in the Table 2. Mostly they are physical activity-related and not nutrition-related tasks. Consider using a more appropriate term, e.g. "weight-control activity", this could help avoiding confusion.
	Page 9. Consider discussing based on your experience how the proportion of "successful" facilitators might be improved in future interventions. Was two hours training sessions not too short to prepare them for the task?
	Page 9. Consider discussing reasons why walking was the most frequent activity chosen by the facilitators? Could the stated time restrictions (Additional file 4) play a role in that walking as a mean of active transport from school to home requires not an extra investment of time?
	Page 9. Consider discussing what are the most successful "best practice" nutritional activities that can be recommended for future interventions based on the evidence of this feasibility study?
	Page 9. Consider elaborating on what are the reasons for the finding that enterpreneurs were more likely to manage and implement nutritional

activities and had a higher communication activity compared to ambassedors? Do you think that the larger age and socioeconomic background difference between ambassedors and receivers are the drivers behind this surprising finding? Or, did the enterpreneurs knew the receivers before because they were form the same year? What can we learn from this for future intervention planning?

Page 10. Communication exchange between facilitators and coordinators was quite intense (Table 3). Consider giving suggestions how this process can be made more efficient in future interventions?

Page 10 ff. As ambassedors and enterpreneurs performed differently in implementing activities consider distinguishing between the two groups when presenting results.

Page 10-12. Challenges. It could be useful for intervention planners if the authors take two different perspectives when discussion the challenges: 1) problems that can be solved by the coordinators and 2) problem which cannot be modified because they lay outside the control of coordinators. For instance lack of ideas for activities can be solved while lack of time cannot be solved.

Page 14, line 13. It is stated that 3 receivers did not remember being contacted for a peer intervention. Consider discussing that you can exclude the possibility that the facilitators and receivers did not carry out an activity they have reported although they have received financial funding for it?

Page 15 lines 32-33. Consider discussing potential reasons for the gender differences in that more girls participated in activities than boys. I think that just stating that more research is needed on this aspect is not enough. What can be done to increase participation among male pupils? A study from Ireland "Men on the Move"

(https://academic.oup.com/eurpub/article/27/suppl_3/ckx187.425/4556391) showed that recruitment of male participants into the study was more successful when the recruiter has the same characteristics as the potential receiver in terms that they should not only be from the same SES background but also from the same weight status group (overweight individuals recruit overweight individuals). Consider elaborating on whether this strategy could be also an option in the PRALIMAP-INES project.

Consider elaborating on how participatory approaches in terms that the receivers can contribute more in the process of selecting nutritional activities could help improving the participation rate in activities?

Page 15, lines 55-58. Considering the fact that lack of ideas for activities was mentioned as main challenge among the facilitators and considering the low rates of implementing activities, I disagree with the statement that the support given to the facilitators by the coordinators was appropriate. I think stating that more support is needed and the training session of the facilitators needs to be extended is more appropriate.

Page 16, line 22. More discussion is desired on enhancing supportive environments:

- Which measures in the school setting are important to be taken in light of the finding that all nutrition activities that had been implemented took place outside school?
- There is evidence for an association between parental SES and adolescent's PA and dietary behaviors (BMC Public Health 2015 15:498, IJBNPA 2014 11:43). Consider discussing whether parent involvement and

creating supportive environments within the family/household setting could enhance the success of interventions.

Consider elaborating on what we can learn from the feasibility study to increase sustainability of intervention programs? What were the "main lessons learned" and "biggest surprises"? How will the results be used for or integrated into the large-scale PRALIMAP-INES project?

Supplementary file 4: Abbreviations used like "um/umm" need to be spelled out at the bottom of the table. The content provided in the table in supplementary file 4 is quite interesting. Consider to include it into the main manuscript. If this is not possible for space reasons, consider to cite some striking quotes in the text of the result section.

The effectiveness of interventions is often low; however, reasons for this are rarely evaluated. I do appreciate the qualitative approach of this study in asking the facilitators and receivers about their main challenges faced during the intervention implementation. It may be helpful to read the article from the point of view of a colleague who is not familiar with the PRALIMAP-INES project or the field, and predict potential questions that could arise. Some of the suggestions above may help address this and further improve comprehension of this otherwise high quality article, which will be of value to those facing similar issues and decisions.

REVIEWER	Marieke De Craemer
	Ghent University, Belgium
REVIEW RETURNED	08-Dec-2017

GENERAL COMMENTS

In general, this is mostly a clearly written paper about a feasibility study in which adolescents form a duo in which they teach each other about behaviour change. However, I have some remarks and I need some clarifications before this paper can be eligible for publication.

1. Abstract

- In the title, you talk about behaviour change. In the abstract, you talk about nutritional behaviour. But in the end, the activities were mostly physical activity. This is very confusing. Please amend the title to specify the behaviour and please amend the abstract to specify the correct behaviour.
- The language in the abstract could be improved.
- 'participants': 'participated in the intervention' istead of 'accepted'
- How were sociodemographic and health characteristiscs analysed?
- What kind of acceptance? High acceptance/low acceptance?
- It is not clear what incorporates social difficulties.
- Strengths and limitations: this is mostly strengths?

2. Introduction

- Please clarify the age group in the paper from the beginning onwards.
- 'Students' = 18+?
- "young people feel stigmatised...": what do you mean exactly?
- Next sentence: 'furthermore, there seems to be an association between...': elaborate please.
- second last paragraph: This is somewhat strange after the first paragraph in which you promote the use of school-based interventions.
- Last paragraph: widen health inequalities: was this also evaluated? This comes somewhat out of the blue.

3. Methods

- 'experimental interventional': isn't this the same?
- middle-school & high-school: are these the internationally used terms?
- Please add a reference for the McCarthy cut-off values.
- Entrepreneurs/ambassadors/facilitators/receivers: difficult terms to follow. I would suggest to change the terminology. I also don't understand why it is important to have the difference between the entrepreneurs and the ambassadors.
- Feasibility criteria: 2nd paragrpah: how was acceptability assessed in terms of satisfaction and perceived appropriateness?
- What is HAD? Please explain the abbreviation.
- Normally, the data should be coded by two independent reviewers.

4. Results

- Score of 3.6-3.9 on a 4-point scale: there is almost no scatter.
- What are professional high schools?
- I was wondering how you could keep the implementers/facilitators engaged? How could you increase the programme fidelity?
- There were only 6 facilitators and 6 receivers (of which 4 were passive). Is this even enough to draw conclusions?
- Have you thought about using participatory health research in the whole process?

5. Discussion

- You start the first sentence with: 'successfully implemented' and 'sufficient number of participants'. However, reading the results I get the impression that it was not successfully implemented and certainly not with a sufficient number of participants...
- Main results are a repetition of the results section and unnecessary.
- The content of the activities was mostly PA, while you keep on mentioning these activities as nutrition-based. + the content of these activities are missing.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Jonas D. Finger

Institution and Country: Robert Koch Institute, Department of Epidemiology and Health Monitoring,

Berlin, Germany

Please state any competing interests or state 'None declared': None declared.

Please leave your comments for the authors below

This interesting article presents results from a feasibility study on the qualitative evaluation of a peer intervention promoting behavior change in overweight pupils in the Vosges area in France by using the approach of facilitator-receiver peer dyads matched according to socioeconomic status. Minor revisions are suggested as follows.

ANSWER: Thank you for this feedback

Page 4, line 21. Consider using present instead of past tense "(...) does not widen health inequalities".

ANSWER: We agree with this suggestion but have modified the sentence based on the comment of Reviewer 2 on this particular sentence.

Page 5, line 8. The term "nutritional activity" (mastery experiences) seems to be somewhat misleading when appraising the activities that had been actually carried out during the intervention in the Table 2. Mostly they are physical activity-related and not nutrition-related tasks. Consider using a more appropriate term, e.g. "weight-control activity", this could help avoiding confusion. ANSWER: In France the PNNS (National Nutrition and Health Program) proposed to gather both diet and physical activity under the term 'Nutrition'. Since this appears to be confusing to both reviewers, we agree with your suggestion to replace this word with "weight-control activities".

Page 9. Consider discussing based on your experience how the proportion of "successful" facilitators might be improved in future interventions. Was two hours training sessions not too short to prepare them for the task?

ANSWER: We have provided several suggestions on how to increase the proportion of "successful facilitators" in the discussion section. One of the suggestions is indeed to have a longer training session (see p16, discussion, section "implementation and practicality", 3rd paragraph)

Page 9. Consider discussing reasons why walking was the most frequent activity chosen by the facilitators? Could the stated time restrictions (Additional file 4) play a role in that walking as a mean of active transport from school to home requires not an extra investment of time?

ANSWER: From our experience with the facilitators and the interviews, the main reason walking was such a popular activity was that it was perceived as the simplest, as it did not require any equipment, not even a ball, and hence it was one less thing to think about. This is indeed an interesting point and we have added it to the discussion (see p16, discussion, section "implementation and practicality", 3rd paragraph, first few lines highlighted in blue)

Page 9. Consider discussing what are the most successful "best practice" nutritional activities that can be recommended for future interventions based on the evidence of this feasibility study? ANSWER: This is very much linked to the previous comment: we believe walking was most popular because it was simplest, but many other activities were considered by the facilitators and this point has been added to the discussion. The best recommendation we can formulate is therefore to make other activities more accessible (as has been added to the discussion based on the comment above). Only then will it be possible to assess which activities can be more highly recommended.

Page 9. Consider elaborating on what are the reasons for the finding that enterpreneurs were more likely to manage and implement nutritional activities and had a higher communication activity compared to ambassedors? Do you think that the larger age and socioeconomic background difference between ambassedors and receivers are the drivers behind this surprising finding? Or, did the enterpreneurs knew the receivers before because they were form the same year? What can we learn from this for future intervention planning?

ANSWER: Thank you for these questions. We propose 2 reasons why entrepreneurs may have been successful for the implementation of activities in the discussion (p 15, first paragraph implementation and practicality): 1) That ambassadors had more school pressure 2) That entrepreneurs were in better health. The first reason may also explain their higher communication activity and this has been added to the text (see p15, discussion, section "implementation and practicality", 1rst paragraph, lines highlighted in blue). It is unlikely that the larger age difference between ambassadors and receivers is a driver in this finding since this was never mentioned in any of the exchanges with the participants but also the fact that a small age difference is often considered conducive to peer-led activities (for example: Santos et al., 2014 [23], Corder et al., 2016 [49]). The question on knowing each other before the intervention is indeed very important and was already mentioned in the results (all of the facilitators, both entrepreneurs and ambassadors, who successfully implemented an activity knew the receivers at least by sight before contacting them) (see p11, results, section "Facilitator viewsincreased need for support"). Since this seems such a crucial point, we have added the advantage of getting to know one another, even briefly, as an important additional reason for the recommendation

of organising the first meeting between the dyads in the discussion (p 15, discussion, section "demand and acceptability", 2nd paragraph, highlighted in blue).

Page 10. Communication exchange between facilitators and coordinators was quite intense (Table 3). Consider giving suggestions how this process can be made more efficient in future interventions? ANSWER: We agree with this suggestion and have added a few lines in the discussion addressing this issue (p 16, discussion, section "implementation and practicality", 2nd paragraph, highlighted in blue)

Page 10 ff. As ambassedors and enterpreneurs performed differently in implementing activities consider distinguishing between the two groups when presenting results.

ANSWER: There seem to be too few of each (ambassadors and entrepreneurs) in order to distinguish individual differences from differences between the two groups. to separate them in the results.

Page 10-12. Challenges. It could be useful for intervention planners if the authors take two different perspectives when discussion the challenges: 1) problems that can be solved by the coordinators and 2) problem which cannot be modified because they lay outside the control of coordinators. For instance lack of ideas for activities can be solved while lack of time cannot be solved.

ANSWER: This is an interesting suggestion. However, in practice it seems complicated to determine what can and cannot be solved by the coordinators since it is so dependant on the individual school environment. For example, even lack of time could be solved if a school decided to set time aside for peer-led activities.

Page 14, line 13. It is stated that 3 receivers did not remember being contacted for a peer intervention. Consider discussing that you can exclude the possibility that the facilitators and receivers did not carry out an activity they have reported although they have received financial funding for it? ANSWER: We would like to clarify that facilitators and receivers did not receive funding for their activities. Financial support was available for carrying out specific activities that required a fee to be paid (for example swimming pool entry) but in practice this was never used by any facilitator.

Page 15 lines 32-33. Consider discussing potential reasons for the gender differences in that more girls participated in activities than boys. I think that just stating that more research is needed on this aspect is not enough. What can be done to increase participation among male pupils? A study from Ireland "Men on the Move"

(https://academic.oup.com/eurpub/article/27/suppl_3/ckx187.425/4556391) showed that recruitment of male participants into the study was more successful when the recruiter has the same characteristics as the potential receiver in terms that they should not only be from the same SES background but also from the same weight status group (overweight individuals recruit overweight individuals). Consider elaborating on whether this strategy could be also an option in the PRALIMAP-INES project.

ANSWER: We agree that addressing gender differences warrants further attention. We have added a few lines in the discussion explaining what we think may be the reason for gender differences in participation and suggest a potential strategy to increase participation of boys (p 15, discussion, section "demand and acceptability", 3rd paragraph, highlighted in blue). The recruitment of the facilitators was carried out by a wide range of professionals which does not enable us to draw any conclusions as to whether matching the recruiter and the potential facilitator on weight status would be beneficial, but this is indeed an interesting possibility. In terms of the interaction between the facilitators and potential receivers, the ambassadors (but not the entrepreneurs) did have a similar weight status, but this did not seem to increase their effectiveness.

Consider elaborating on how participatory approaches in terms that the receivers can contribute more in the process of selecting nutritional activities could help improving the participation rate in activities? ANSWER: Although we do not have any observational data into how the activities were determined amongst the facilitators and receivers, the discourse of the facilitators indicate that the choice of activities was always discussed as a pair and not pre-determined by the facilitators.

Page 15, lines 55-58. Considering the fact that lack of ideas for activities was mentioned as main challenge among the facilitators and considering the low rates of implementing activities, I disagree with the statement that the support given to the facilitators by the coordinators was appropriate. I think stating that more support is needed and the training session of the facilitators needs to be extended is more appropriate.

ANSWER: We agree with this comment and have modified the text to better reflect that support seemed appropriate from the point of view of the facilitators but could be improved in several ways (p 16, discussion, section "implementation and practicality", 2nd paragraph).

Page 16, line 22. More discussion is desired on enhancing supportive environments:

- Which measures in the school setting are important to be taken in light of the finding that all nutrition activities that had been implemented took place outside school?
- There is evidence for an association between parental SES and adolescent's PA and dietary behaviors (BMC Public Health 2015 15:498, IJBNPA 2014 11:43). Consider discussing whether parent involvement and creating supportive environments within the family/household setting could enhance the success of interventions.

ANSWER: Thank you for these interesting comments. We have added more discussion into how the school staff can be involved in order to create more supportive environments within the school setting (p 16, discussion, section "implementation and practicality", 3rd paragraph, last 6 lines highlighted in blue). However, the fact that activities were carried out outside of school premises is considered a positive result, as this is one of the main advantages of peer-led activities: spill over effects of the intervention in different settings.

As for family involvement, we believe the many reported family problems by the adolescents interviewed indicate that this is likely to be counterproductive in the present sample of less advantaged high school adolescents. We have added this argument in the discussion (p 16, discussion, section "implementation and practicality", 4th paragraph, lines highlighted in blue).

Consider elaborating on what we can learn from the feasibility study to increase sustainability of intervention programs? What were the "main lessons learned" and "biggest surprises"? How will the results be used for or integrated into the large-scale PRALIMAP-INES project?

ANSWER: We have added the "biggest surprise" in the section after the abstract "strengths and limitations" but we feel adding the main lessons learned would render the article too lengthy. Furthermore, many "lessons learned" feature prominently in the discussion. The results and lessons of the peer approach will be taken into account in the general analysis of PRALIMAP-INES of which all activities will be considered in further programs after adaptation to the specific contexts of implementation.

Supplementary file 4: Abbreviations used like "um/umm" need to be spelled out at the bottom of the table. The content provided in the table in supplementary file 4 is quite interesting. Consider to include it into the main manuscript. If this is not possible for space reasons, consider to cite some striking quotes in the text of the result section.

ANSWER: Um is meant as an onomatopoeia signalling hesitation. To make this more explicit, we have added this at the top of the table. For space reasons it does seems complicated to add quotes to the text but if the editor agrees we could add the quotes in boxes directly in the results section.

The effectiveness of interventions is often low; however, reasons for this are rarely evaluated. I do appreciate the qualitative approach of this study in asking the facilitators and receivers about their main challenges faced during the intervention implementation. It may be helpful to read the article from the point of view of a colleague who is not familiar with the PRALIMAP-INES project or the field, and predict potential questions that could arise. Some of the suggestions above may help address this and further improve comprehension of this otherwise high quality article, which will be of value to those facing similar issues and decisions.

ANSWER: Thank you very much for this feedback and your suggestions

Reviewer: 2

Reviewer Name: Marieke De Craemer

Institution and Country: Ghent University, Belgium

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

In general, this is mostly a clearly written paper about a feasibility study in which adolescents form a duo in which they teach each other about behaviour change. However, I have some remarks and I need some clarifications before this paper can be eligible for publication.

1. Abstract

- In the title, you talk about behaviour change. In the abstract, you talk about nutritional behaviour. But in the end, the activities were mostly physical activity. This is very confusing. Please amend the title to specify the behaviour and please amend the abstract to specify the correct behaviour.

 ANSWER: Thank you for pointing this out. In France the PNNS (National Nutrition and Health Program) proposed to gather both diet and physical activity under the term 'Nutrition'. Since this appears to be confusing, we have chosen to use the term "weight-control activities", suggested by Reviewer 1, throughout the article to refer to activities based on diet or physical activity.
- The language in the abstract could be improved. For space reasons, some phrases are not complete sentences but convey the main information according to the BMJ open guidelines.
- 'participants': 'participated in the intervention' istead of 'accepted' ANSWER: There are several levels of "participation" and the abstract word limitations do not allow us to elaborate. The 32 receivers accepting the intervention were participants in the peer intervention in that they are included in the analysis, in the same way that the 18 facilitators are included in the analysis. However, only 8 receivers actively participated in that they benefited from a peer-led activity. It therefore seems misleading to say that "Thirty-two of 56 potential receivers participated in the intervention". We have therefore clarified by stating "Thirty-two of 56 potential receivers agreed to participate"
- How were sociodemographic and health characteristiscs analysed?

 ANSWER: We are not able to provide this information in the abstract due to word limitations but have elaborated these methodological points in the "Methods" section (see p4, methods, section "PRALIMAP-INES study", and p6, methods, section "feasibility criteria, material and analysis", 4th paragraph)
- What kind of acceptance? High acceptance/low acceptance? ANSWER: In this sentence we used "acceptance" to indicate the binary concept of consent to participation (yes/no). We have used the phrasing "agreed to participate" to make it clearer.
- It is not clear what incorporates social difficulties.

ANSWER: We are not able to provide this information in the abstract due to word limitations but have elaborated these points in the "Results" section (see in particular p13, results, section "receiver views-social environment")

- Strengths and limitations: this is mostly strengths? ANSWER: We agree. We have elaborated on another limitation to balance out the section (see p3, "strengths and limitations", highlighted in blue).

2. Introduction

- Please clarify the age group in the paper from the beginning onwards.

ANSWER: We have replaced many ambiguous terms throughout the introduction to reflect a clear focus on adolescents (often in the literature adolescents are included in the category of "children" but we agree this is misleading).

- 'Students' = 18+?

ANSWER: The use of the term "student" is indeed misleading, thank you for bringing this to our attention, we have used the term "pupil" instead, to reflect school-aged adolescents.

- "young people feel stigmatised...": what do you mean exactly?

 ANSWER: Young people think that adults consider them a "risky age group", they therefore feel victims of negative prejudice which leads to the feeling of stigmatisation. We have re-worded the sentence with the aim of making the sentence clearer (see p3, introduction, 2nd paragraph, highlighted in blue).
- Next sentence: 'furthermore, there seems to be an association between...': elaborate please. ANSWER: We have added a sentence to elaborate on this association (see p3, introduction, 2nd paragraph, highlighted in blue).
- second last paragraph: This is somewhat strange after the first paragraph in which you promote the use of school-based interventions.

ANSWER: The argument is that school-based interventions should perhaps include components that are delivered outside the school setting. Most of the PRALIMAP-INES interventions were delivered in the school setting but the peer intervention offered this possibility of carrying out activities outside of the school premises which turned out to be invaluable since this ended up being the case of all peerled activities implemented. However, we agree this can appear strange in the flow of the introduction and have moved move the argument on self-appraisal in the discussion, when the result that all activities where carried out outside of the school premises is discussed. We have also moved the choice of a non-formal approach allowing activities to be carried out outside of school in the methodology section. (see p5, methods, section "peer intervention description and logic model", 5th paragraph, highlighted in blue AND p14, discussion, section "demand and acceptability", 1rst paragraph, highlighted in blue)

- Last paragraph: widen health inequalities: was this also evaluated? This comes somewhat out of the blue.

ANSWER: We did not evaluate "widening health inequalities" specifically for the peer intervention but all PRALIMAP-INES activates were designed not to widen health inequalities and this is evaluated in the large-scale trial. However, to be more accurate we have changed the sentence with "intending not to widen" as opposed to "which does not widen".

3. Methods

- 'experimental interventional': isn't this the same?

ANSWER: The PRALIMAP-INES study is interventional in that interventions are delivered to adolescents but also experimental in the sense that it includes a component of randomisation. However, the word "interventional" seems superfluous given that the study is already labelled as a "trial" so we have removed it.

- middle-school & high-school: are these the internationally used terms? ANSWER: We used these terms as equivalents for the French school structure but we agree it is important to specify. We have therefore added the French terminology to be more specific. (see p 4, methods, "PI study", highlighted in blue)

- Please add a reference for the McCarthy cut-off values.

ANSWER: We agree with this proposal. (see p 4, methods, "PI study", highlighted in blue)

- Entrepreneurs/ambassadors/facilitators/receivers: difficult terms to follow. I would suggest to change the terminology. I also don't understand why it is important to have the difference between the entrepreneurs and the ambassadors.

ANSWER: The term facilitator is an umbrella term which refers to the mission of the recruited adolescents: to carry out peer-led activities. The terms ambassador and entrepreneur distinguish the two types of facilitators recruited. We believe it is important to distinguish them because they differ in several important ways: recruitment timepoint, age, weight status, health status. Furthermore, the ambassadors and entrepreneurs, although having the same mission of being a facilitator, differed in their ability to carry out the role and this is an important point in the discussion. In order to clarify the terminology used in the article, a table could be provided if the editor agrees:

Peer facilitator

(recruited to facilitate the implementation of weight-control activities for receivers)

Peer entrepreneur Peer ambassador

No previous experience of the PRALIMAP-INES programme Previous participation in the PRALIMAP-INES programme

(defined by their sense of entrepreneurship) (defined as ambassadors pursuing their interest in the programme)

- Feasibility criteria: 2nd paragraph: how was acceptability assessed in terms of satisfaction and perceived appropriateness?

ANSWER: Then end of the paragraph detailing the material analysed is applicable to all three constructs mentioned (acceptability, implementation and practicality). Satisfaction and perceived appropriateness to inform acceptability were therefore obtained from the focus groups, telephone notes, SMS exchanges and interviews. We have added a few words in brackets to distinguish the two concepts. (see p6, methods, "feasibility criteria", 2nd paragraph, highlighted in blue)

- What is HAD? Please explain the abbreviation.

ANSWER: We have detailed the abbreviation (see p6, methods, "feasibility criteria", 4th paragraph, highlighted in blue).

- Normally, the data should be coded by two independent reviewers.

ANSWER: We agree that coding by two independent reviewers would have been ideal. However, this was not possible due to resource constraints, but we believe the numerous sources and types of data and their triangulation ensure a reasonable reliability of results.

- 4. Results
- Score of 3.6-3.9 on a 4-point scale: there is almost no scatter.

ANSWER: Satisfaction was indeed very high, with little scatter. However, the wording of the sentence was unclear and we have detailed average score for each question (the scatter is actually 3-4 on the 4 point scale) (see p7, results, "recruitment and participation", 1rst paragraph, highlighted in blue)

- What are professional high schools? ANSWER: Thank you for pointing out this word is unclear. We have changed it to « vocational » (see Table 1)
- I was wondering how you could keep the implementers/facilitators engaged? How could you increase the programme fidelity?

ANSWER: Although the data is not presented, for the adolescents that engaged in the program, they remained engaged throughout the school year which was achieved by regular SMS and phone contact. In fact, many of the peer-led activities were carried out later on in the academic year. Only two facilitators quit mid-year through lack of motivation to continue. The others that dropped out of the intervention did so for reasons beyond their control (health issues or no receivers interested in their school). We therefore believe increasing programme fidelity would best be achieved by lifting the many organisational challenges raised by the facilitators and increasing motivation of the receivers in ways that are suggested in the discussion.

- There were only 6 facilitators and 6 receivers (of which 4 were passive). Is this even enough to draw conclusions?

ANSWER: The aim of the current study was to assess feasibility, not the impact of the intervention which would indeed require many more participants and this has been stated in the discussion and strengths and limitations. Furthermore, there were 6 facilitators who managed to implement a peer-led activity, but the analysis is based on many different exchanges with all 12 facilitators that pursued after the training session. Although the 6 interviewed receivers represent an exhaustive sample in one school, we agree that, had time constraints permitted, interviews with more receivers would have enabled stronger conclusions to be drawn.

Have you thought about using participatory health research in the whole process? ANSWER: Participatory health research was attempted in the PRALIMAP-INES trial. Adolescent school representatives were invited to participate even in the early stages of design and development of the trial, particularly to choose and design the intervention adapted to less advantaged adolescents. However, complex logistical, administrative and juridical problems led to this approach being abandoned.

5. Discussion

- You start the first sentence with: 'successfully implemented' and 'sufficient number of participants'. However, reading the results I get the impression that it was not successfully implemented and certainly not with a sufficient number of participants...

ANSWER: We agree to start the discussion with a more factual sentence and have changed it accordingly. Once more we would like to stress that the number of participants is only "sufficient" in relation to the objective of evaluating the feasibility of the intervention. (see p14, discussion, 1rst paragraph)

- Main results are a repetition of the results section and unnecessary.

ANSWER: The BMJ open author guidelines suggest starting the discussion with a statement of principle findings. We have therefore kept the introductory sentence to the discussion but have removed the repetition of the main results as the article is already lengthy. (see p14, discussion, 1rst paragraph)

- The content of the activities was mostly PA, while you keep on mentioning these activities as nutrition-based. + the content of these activities are missing.

ANSWER: We have addressed the issue of the word "nutrition" in your first comment. The content of the activities is detailed in Table 2.

VERSION 2 – REVIEW

REVIEWER	Jonas D. Finger Robert Koch Institute, Department of Epidemiology and Health
	Monitoring
REVIEW RETURNED	09-Feb-2018

GENERAL COMMENTS	Dear Authors,
	I appreciate your efforts to address the reviewer's comments.
	Before this paper is published, you might take one more careful look
	at the language.