

## **Reviewer's report**

**Title:** Fast food consumption and its associations with obesity and hypertension among children: Results from the baseline data of the Childhood Obesity Study in China Mega-cities

**Version:** 0 **Date:** 31 Jul 2017

**Reviewer:** Charlotte Evans

### **Reviewer's report:**

Review of fast food consumption in 4 mega-cities in China.

Thank you for giving me the opportunity to review this interesting paper. I have made some comments to further strengthen it.

Title

Include study design in the title (cross-sectional study)

Abstract

Methods - include study design (cross-sectional) and age range and/or mean, SD.

Results - p values not reported consistently. Report actual p values not cut offs ( $p < 0.05$ ) to 2 or 3 decimal places (dp).

Introduction

The first 2 sentences which are important in introducing the topic do not have any references. Please add references for both of these statements.

References are also needed in line 62

Line 76 - does this refer to children or adults? There is a well-established amount of literature in adults on sodium intake and BP.

Line 78-84 - very US focussed list of references. In UK there is published work on fast food and children in a longitudinal study by Fraser et al, 2012, American journal of preventive medicine.

Line 80 - include more details about this very large international cross-sectional study. E.g. it included Chinese adolescents but not children. You also need to compare the results from that study with your results.

Line 85 - 89 - split the references so it is clear which ones reported positive associations and which ones did not.

As there are quite a few Chinese studies I think further clarification is needed on what this study contributes to the existing literature.

## Methods

Line 117 - define necessary data

Line 118 - reference number for the ethics application is needed so it is possible to look it up, at least from New York. This is also needed under the separate section at the end of ethics approval.

Informed consent is usually from both parents and children under 16. Can you clarify when parent consent sought and when child consent sought.

Line 123 - were these physical examinations done for all students anyway as part of the school health programme or specifically for this study?

Line 145 - it isn't clear whether the question was asked regarding the previous week or habitual intake. This is important as different answers will be given. It is a limitation of measuring intake of fast food and should be discussed under limitations.

Line 148 - what was the rationale for the categories of fast food intake? Have other research groups used these cut offs?

Food stall is quite an ambiguous term. Could it include food items like noodle soup and other low fat dishes that are not fried? There is no one universally agreed definition of fast food and it is important that the reader understands what is included in this definition of fast food.

Statistical analysis methods contains too many tests that are not necessarily included in the main research questions. Multiple testing could be an issue.

## Results

Line 175 - please include age range.

Line 182 - this sentence implies you asked about habitual diet but in the methods it sounds like you asked them what they ate in the previous week.

There are too many p values related differences by gender. Gender was not even mentioned under your objectives.

Avoid using the ambiguous term 'all  $p > 0.05$ '. all p values should be reported as actual p values to 3dp (most common).

Line 220 - what about child BMI and BP? Report even if not-significant.

## Discussion

Line 248 - why is hypertension worsening in China while reducing in other countries? Sodium intake increasing while it is decreasing in other countries (eg UK)?

Compare results with the very large international cross-sectional study (Chinese adolescents in rural and urban areas?)

Line 276 - id don't think you need this level of detail with CI in the discussion.

More details on limitations needed, eg difficulties with defining fast food. Representativeness of this sample of urban children/adolescents,

The conclusions reads like a list and needs to be re-worded so it is more a synthesis of the results and recommendations for further research (or a separate section on further research could come after limitations).

Minor/grammatical

Line 63 - delete 'such as'

Line 63 diet rather than eating?

Line 164 - fitted not fit

### **Are the methods appropriate and well described?**

If not, please specify what is required in your comments to the authors.

Yes

### **Does the work include the necessary controls?**

If not, please specify which controls are required in your comments to the authors.

Yes

### **Are the conclusions drawn adequately supported by the data shown?**

If not, please explain in your comments to the authors.

Yes

### **Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**

If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

### **Quality of written English**

Please indicate the quality of language in the manuscript:

Acceptable

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