Reviewer’s report

Title: Nutrient intakes of rural Tibetan mothers: a cross-sectional survey

Version: 3 Date: 14 September 2010

Reviewer: Carl Lachat

Reviewer’s report:

General

The authors have made substantial improvements in the manuscript. The study is well presented and the findings presented are generally in line with the objective. I just have a few remaining issues that need further clarification.

Major Compulsory Revisions

Line 72. The objective of this paper is not to compare nutrient status. Please revise
Methods; please justify the classification of food groups in the appropriate section in the methods
Line 242 – 250 the discussion on bio availability of iron form Zanba is too elaborate. Please be concise and refer to the low bioavailability of iron from cereals.
Table 5. Indicate in the table which variable were significant, instead of adding footnote . Were there any tests significant at P<0.01 or P<0.001 if, so please specify using a different symbol. Specify again in the caption what test was used.
The discussion of the paper still does not compare the findings of the study with previous studies as indicated earlier. Please add a paragraph explaining how the findings compare with what is known in this population.

Minor Essential Revisions

Abstract

Line 28. please delete “dietary”
Line 31 add that you have analyses socio-economic differences.
Remove the reference to the Han influence. This statement is not supported by the results.
Line 34 State that the mothers were from surrounding areas of Lhasa, not Lhasa itself.
Line 45 abbreviate “day” as “d” as for other data

Line 51 Please revise “suboptimal intakes”. The results in the abstract do not present comparison with optimal intakes.

Line 59 add in china so the sentence read “anemia in China”

References

Some references contain the word “method” (eg; line 63,) sometimes the author is mentioned, sometimes the number. Please be consistent and revise according to the journal style

I don’t find the reference to the CDC in the list of reference.

Methods

Revise sentence because “there was not exactly Tibetan lactating mothers intake”. Did the authors mean that data on dietary intake of lactation mothers was not available? It seems this paragraph introduces the justification of the study. If so, please move it to the background section, right before the objectives.

Line 124. ‘in the current analysis…’ please remove this sentence here. It is already included in the result section.

Line 132 write “fitted” instead of ‘fit’

Line 135. The authors may wish to refer to studies that have validated the use of pictures to estimate portion sizes in rural settings (e.g.


Line 151 Please clarify the unit of vitamin A µg or RE

Line 153. please write; “in the present analysis, we compare ..”

Line 157 please remove the (retinol equivalents) the abbreviation is described above)

Line 177. revise write data were not normally distributed. Please include the test used to assess normality.

Line 183 Please explain how and why the P value for the Wilcoxon test was adjusted. It is not clear, when was statistical significance obtained P<0.05 or P<0.017?

Line 191 revise ‘the mean age of the mothers ‘.. instead of the mean of Tibetan mothers age
Line 200. please revise as “On average 73%, 11% and 24% of the energy was originated from carbohydrates, proteins and fat respectively.

Line 210 Introduce the fact that you analyse the ‘top 5 foods of the six dietary food groups” in the methods.

Line 217. Zanba or zanba please ensure consistency

Line 219 add “the” and write “close to the nutrient”

Discussion

Line 229 Please clarify what is meant with “basic”. based on staple foods or cereals?

Line 231 write “suggest” instead of “suggested”

It is a pity that the authors do not explicitly discuss which non-Tibetan Han foods have entered the diet. It would have been informative to describe this briefly in the discussion.

Line 258. I appreciated the revision from the previous paper. However to further improve this paragraph, I would suggest adding a reference to the low diversity of the diet. Dietary diversity is known to correlate with nutrient adequacy. Various good papers have been published on this topic.

Line 265-271 seems to be a discussion on the limitations of the study. Please include it after the paragraph discussing the socio-economic associations.

Line 267 rephrase nutrient biomarkers as biomarkers for nutritional status

Line 278. please revise ‘impact’. From cross-sectional data, no causal links can be inferred. Refer to “associations”. The explanation is quite speculative and it would be good to substantiate it with a reference.

Line 286. replace ‘childbearing women” with “women with children under 2”

Line 286 remove “however, our sample was random, and our data provide some useful information on the dietary intakes of Tibetan mothers with young children” this statement has no relation with the limitations on the design of the study. (Moreover, the same statement is repeated at the end of the paragraph)

Line 302. I still do not agree with the fact that the data show that nutrition education is a potential measure to improve dietary habits. There is a potential substantial environmental context that determines the dietary patterns to a larger extent than the education status. I would suggest arguing that the data call for more in-depth (qualitative?) studies on the causes of the dietary patterns.

Table 2: indicate in the footnotes 1/ what “/” means, 2/ the way you have calculated the proportions (in a way it is clear to the reader why it does not add up to 100%) and Revise the unit of Vitamin A
Table 3. Please revise numbering. Categories 8 and 9 for instance are not tabulated and can be removed from the list. Please ensure consistency in the way the figures in the tables are clarified in the captions. (Table 4 uses symbols, table 3 figures..)

Table 3: write “five most frequently consumed food” instead of “top five”

Table 4. Please specify if the data are mean intakes per day in the footnote of the title of the table

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests