Reviewer's report

Title: Modern dietary pattern is prospectively associated with earlier age at menarche: data from the CHNS 1997-2015

Version: 0 Date: 16 Jun 2020

Reviewer: Anna Ek

Reviewer's report:

This paper is the first to assess the associations between different food patterns (modern, vegetative or animal) and age at menarche in a Chinese population. The authors use data from 711 girls with food recalls in the China Health and Nutrition Survey. This is a well written manuscripts and I only have a few comments that are found below.

Please describe the design of the cohort study in a bit more detail so that it becomes clear how old the children/girls were when they entered the cohort and how they were recruited.

Line 151-154: Please clarify how factor scores were calculated. Did you not just calculate mean scores for each factor (pattern), I don't see the necessity of using multiple regression here? "the factor scores of each dietary pattern were calculated for each participant by multiple regression method, with a higher factor score indicating a higher adherence to the corresponding dietary pattern."

English is not my native tongue but should it not be a "are" instead of an "is" in the title, also, add a comma after "but not animal food pattern".

Abstract:
-I find this sentence somewhat strange: "Multivariate regression analyses were performed in 711 China Health and Nutrition Survey (CHNS) girls with three-day 24-hour recalls and information on potential confounders at baseline (i.e. 1-4 y before the onset of menarche)." Do you perform analyses on data or on girls? I would rephrase to " analyses on data from 711 girls participating in the CHNS".
-Consider presenting mean (95% CI) as 12.50 y (95% CI: 12.29-12.70) instead of "mean (95% CI) 12.50 y (12.29, 12.70))" if this is in accordance to the journal guidelines
-Is vegetative food pattern different from vegetarian or vegetable-rich food patterns? To me "vegetative" is not as commonly used.
-Line 181: "based on the Chinese reference curves" should it be "based on a Chinese reference population"?

Table 1: Why is lollipops and ice cream described under beverages? Lollipop also occurs under sugar and preserves (where I would think it sits better).
Table 2: I suggest including n=711 at the top of the table under Values, and next to values (mean ± SD/n (%)). Include numbers before % in the table. In the legends it does not say that you used Cole et al to calculate BMI z-score only the Chinese reference data. Please correct here or in the manuscript.
The authors do not say anything about the fish and shellfish being included in the Animal food pattern. Could this be of importance as to why you did not see an association with age at menarche?

Line 214, 222, 235: change "were" to "are"
Line 359: change to research
References: Are there page numbers missing in references 6 and 20?

Level of interest
Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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