Reviewer’s report

Title: Impact of diet on cardiometabolic health in children and adolescents

Version: Date: 30 July 2015

Reviewer: Jessy Abraham

Reviewer’s report:

The authors need to address the following issues before publication:

1. Page 4, Na and salt intake: Include a range of normal salt intake in children and the average increase in intake from snacks.

2. Page 5, Na and salt intake, Line 12: Why only results of children aged 3-4 years are mention. Is it because other age groups had different outcomes or it is because study subjects were only in this age group. The authors need to clarify.

3. Page 6, Line 4: "1 mmHg difference" is not a significant change in blood pressure values.

4. Page 6, Line 23-24: Authors need to elaborate on the diet pattern of "Seventh-day Adventist school". Reference to this diet pattern is again given in Page 20, Line8.

5. Page 7, Line 1: Authors need to elaborate on the type of "added fat". Also they need to clarify to what food the "fat" was added.

6. Page 7, Line 10: Flavored milk comes in many forms. The authors need to describe the type of milk in the flavored milk-fat free or whole milk used in the study and the effect of added sugar present in flavored milk on obesity.

7. Page 8, Lines 1-4: The statement made by authors is contradictory. The lower abdominal obesity can be interpreted as a result of active life style rather than low milk consumption as reasoned by the authors.

8. Page 8, Line 21: Authors need to define "servings per day".

9. Page 8, Line 24: Authors need to describe "high fat dairy".

10. Page 9, Line 13: it should be "and" instead of "but".

11. Page 10, Line 17: Authors need to give reasoning for including "polyphenols" as they are not vitamins.

12. Page 11, Lines 2-5: The writeup is confusing. Explain "in a fully adjusted model, but only in these obese pubertal study group"

13. Page 11, Lines 9 and 12: Authors need to detail whether "high" or "low" levels of serum levels of 25(OH) Vitamin D
14. Page 11, Lines 22: It will be more appropriate to use the term "decreased arterial stiffness" instead of "better arterial stiffness" as arterial stiffness generally describes the reduced capability of an artery to expand and contract in response to blood pressure changes.

15. Page 11, Lines 19-24: References for the different studies need to be included.

16. Page 15, Line 3: It will be more appropriate to use the term "lower cardiovascular risk factors" instead of "better cardiovascular risk factors".

17. Page 15, Line 6: No need to include "however"

18. Page 16, Line 3: Authors need to explain "due to energy under reporting"

19. Under introduction the authors mention that most studies related to diet are done on adults. Therefore, there is no need for the authors to repeat this information in the beginning of each sub heading.

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

Declaration of competing interests:

I declare that I have no competing interests