Reviewer’s report

Title: Food availability of glucose and fat, but not fructose, increased in the US between 1970 and 2009: Analysis of the USDA Food Availability Data System

Version: 3 Date: 27 July 2013

Reviewer: Alan Barclay

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Food availability of glucose and fat, but not fructose, increased in the US between 1970 and 2009: Analysis of the USDA Food Availability Data System

1. Is the question posed by the authors new and well defined?

Overall, it appears that the study is about total fructose from added and naturally occurring sources in the USA for the years 1970-2009.

Minor Essential Revisions

It would assist the reader if the phrase ‘total fructose’ was utilised throughout the text and defined in the introduction.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?

Overall they are reasonably well described, but more detail is required to replicate the work.

Page 5, USDA data collection.

Minor Essential Revisions

1st paragraph, second sentence. It would be useful to list the 132 food items referred to in a table or appendix.

2nd paragraph. Every nation’s food supply is unique due to differing climate, soil, varieties of foods, cultural tastes, etc…so using the UK Composition of Foods to estimate fructose content may be problematic, although arguably necessary. It would be useful for readers to know what proportion of foods utilised UK data? And how this would affect results overall (depending on the proportion)?

3. Are the data sound and well controlled?

The written results are generally well described and adequate detail is provided. Adjectives like ‘only’ are arguably unnecessary, however.

I am unable to view the figures, however, due to an error with the PDF “Bad font object or font descriptor object”
4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
As I am unable to view the figures I cannot assess this.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
Overall, the discussion and conclusions are supported by the results and put into the context of the body of evidence.

Discussion

Minor Essential Revisions

Page 14, 1st paragraph. A number of individual studies are referenced. Systematic reviews and meta-analyses of the evidence concerning fructose and triglycerides, uric acid, body weight, etc...have been published in the past 18 months and should arguably be referred to instead.

Conclusion

Page 16, 4th sentence. The phrase ‘could not’ is used here, and other similar definitive statements are used throughout the text. This is arguably too strong because the data are not 100% perfect – ‘unlikely’ may be a more appropriate descriptor.

6. Do the title and abstract accurately convey what has been found?
The title is appropriate.

Suggestions made above should be incorporated into the abstract to improve its overall quality.

7. Is the writing acceptable?
Yes, it is very good.

Quality of written English: Acceptable

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

Declaration of competing interests:

I am the Head of Research at the Australian Diabetes Council (ADC) and Chief Scientific Officer at the Glycemic Index Foundation (GIF). I have been with the ADC since 1998 and the GIF since 2001, and am a founding director of the latter. Directors are unpaid. Both companies are not-for-profit and their primary
objectives are to help people prevent and manage diabetes. Via these companies I work with food industry to lower the glycemic index and load of foods and beverages. Companies are charged a fee for re-formulation advice. Advice is specific to carbohydrate containing foods and as such the foods are a mixture of sugars, oligosaccharides and starches. I am a co-author of a book on the prevention and management of diabetes that focuses on decreasing dietary glycemic load as a primary method of improving glycaemia. I am a co-author of both The Australian Paradox and The Australian Paradox Revisted papers referred to in the Vikkers et al study I have reviewed.