Reviewer's report

Title: Polymorphism of the FABP2 gene: a population frequency analysis and an association study with Cardiovascular Risk Markers in Argentina.

Version: 2 Date: 17 February 2007

Reviewer: Minoru Okubo

Reviewer's report:

General

Gomez, et al. report on the population frequency of the minor allele (Thr54) in the FABP2 gene in Argentina, which was almost the same in European countries. They found no association between the Thr54 allele and any of five markers (blood pressure, Framingham Risk Index, total cholesterol, BMI, and glycemia) in 202 volunteers. They claim to observe a tendency to increased total cholesterol and elevated BMI in Thr54 carriers.

The study did not provide new ideas on the association between the FABP2 polymorphism and the five markers, but their findings might be of some importance to those with research interests on the FABP2 gene.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. I am not convinced that there is a tendency to increased total cholesterol and elevated BMI in Thr54 carriers in Figure 1. Please compare the number of the Thr54 carriers who had increased total cholesterol and elevated BMI with that of the Thr54 non-carriers by a statistical method. It seems to me that it was not significant. If so, the author’s conclusion should be changed accordingly.

2. Some studies suggest that differences between men and women may be present with respect to polymorphism of the FABP2 gene (for example, ref 12). Please reanalyze the data separately with respect to gender on the association between the Thr54 allele and the five markers.

3. I wonder if the authors could stratify the amount of consumption of beef in 202 volunteers and reevaluate the association between the 54Thr allele and the five markers, because it has been reported that the 56Thr is associated with some markers only if subjects are consuming a high-fat diet (reviewed in ref 2).

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. Previous studies have suggested that the FABP2 is related to insulin resistance. If you have any data on insulin resistance, please describe this in the revision.

2. The frequency of the FABP2 polymorphism in South American countries, such as Brazil and Chile, has been reported (Canani et al. Diabetes, 2005; Albala et al. Obes Res 2004). Please include these data and compare those with your data.

3. The authors compared the frequency in Argentina with the frequencies in Europeans. Where do most people in Argentine come from? It would be helpful to readers to add historical and ethnical features of people in Argentina.

4. Please give some demographic details on the study subjects (mean age, mean BMI, mean blood pressure, mean total cholesterol, and so on). Were there any diabetics in the study group?

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Discretionary Revisions (which the author can choose to ignore)
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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.