Author's response to reviews

Title: Nutrition transition among adolescents of a south-Mediterranean country: dietary patterns, association with socioeconomic factors, overweight and blood pressure. A cross-sectional study in Tunisia.

Authors:

Hajer Aounallah-Skhiri (hajer.skhiri@rns.tn)
Pierre Traissac (pierre.traissac@ird.fr)
Jalila El Ati (jalila.elati@rns.tn)
Sabrina Eymard-Duvernay (sabrina.eymard-duvernay@ird.fr)
Edwige Landais (edwige.landais@ird.fr)
Nourreddine Achour (nourreddine.achour@rns.tn)
Francis Delpeuch (francis.delpeuch@ird.fr)
Habiba Ben Romdhane (habiba.benromdhane@rns.tn)
Bernard Maire (bernard.maire@ird.fr)

Version: 6 Date: 8 April 2011

Author's response to reviews: see over
Dear Editor,

Following the April 6\textsuperscript{th} e-mail from the “Editorial Production Team”, you will please find as on-line submission the edited version of the paper entitled

\textit{Nutrition transition among adolescents of a south-Mediterranean country: dietary patterns, association with socioeconomic factors, overweight and blood pressure. A cross-sectional study in Tunisia.}

by


Reference MS: 7713576644819213

We have taken into account the recommended changes pertaining to figure numbering, removal of line numbers, removal of highlighting, cropping of figures as well as formatting of references.

Yours sincerely,

Pierre TRAISSAC
Authors’ response to reviewer Hélène Delisle

Reviewer's report

Title: Nutrition transition among adolescents of a south-Mediterranean country: dietary patterns, association with socioeconomic factors, overweight and blood pressure. A cross sectional study in Tunisia.

Version: 3

Date: 19 February 2011

Reviewer: Hélène Delisle

Reviewer's report:
The manuscript has improved considerably, and the authors have to be commended for this. In addition to three essential minor corrections in the abstract, however, there is still one previous comment which was not adequately addressed regarding the use of the DQI-I. Contrary to authors’ reply, the DQI-I, even if used in China, is based on the American recommended intakes, unless we are mistaken. Other diet quality indices or scores have been developed for international use, based on FAO/WHO dietary guidelines and recommended intakes. We strongly recommended that this be addressed in the discussion, including reference to indices developed, for instance, in West Africa, notably work by Sodjinou et al, and Ntandou et al in Benin. Indices do not have to be designed only for adolescents to be applicable to this age group.

Authors’ response: We thank the reviewer for the appreciative comments.

Regarding assessment of diet quality with DQI-I, as for the specific issue of recommended intakes, Kim et al. wrote that they have based the rationale of their DQI-I index (selection of components and scoring system) on “current worldwide and individual national dietary guidelines, the Food Pyramid Guide and several other dietary indices”; then in their assessment of US and Chinese diet quality (Kim et al. J Nutr 2003) they chose either US dietary guidelines or Chinese ones when available for the corresponding countries, meaning that one could choose local references without too many differences. We used basically the US references as we did not have any local references available, and thought that these would be appropriate for international comparisons based on the same index.

Indeed, other authors have used different indices of diet quality, e.g. various Mediterranean indices, or in West Africa, the one established by Sodjinou et al. (Sodjinou R, Agueh V, Fayomi B, Delisle H. Dietary patterns of urban adults in Benin: relationship with overall diet quality and socio-demographic characteristics Eur J Clin Nutr 2007;63:222-8). Beyond this, as explained by Kourlaba and Panagiotakos (Kourlaba G, Panagiotakos DB. Dietary quality indices and human health: a review. Maturitas 2009 Jan 20;62(1): 1-8.) it is likely that none of those is ideal nor absolutely all purpose and indeed one must be careful when making comparisons. We agree with the reviewer that this could have been more thoroughly addressed in the discussion section. In the revised version we have made changes accordingly and added the suggested references (page 16, lines 31-35).

Abstract:
1. Insert ‘was’ between ‘dietary intake’ and ‘assessed’(Methods section)

Authors’ response: this has been added in the revised version.
2. Decreasing relationship OF WHAT with total fat? (line 19)

**Authors’ response:** the decreasing relationship pertained also to the modern dietary pattern (traditional to modern gradient). The first part of the sentence (which is indeed quite long) assessed relationships with food groups, while the second part described the pattern from a nutrient perspective. This has been rewritten so as to make it clearer (cf line 19 & 20 in the revised version).

3. Last line: nutrients ASSOCIATED WITH LOWER RISK...

**Authors’ response:** the purpose of the second sentence of the conclusion in the abstract was to underline one of the main points of the study i.e. that the traditional to modern diet pattern has contrasted characteristics from a nutritional and health outcomes point of view (that we tried to emphasized by the “but” in the middle of the sentence). Indeed, it did feature relationships with several nutrients generally thought to be associated with higher risk of chronic diseases (increase in energy, free sugars and saturated fat and with also decrease of vitamin C, potassium and fibre) but (and this is one of the interesting points of the study), within the limits regarding methodological issues discussed in the paper, this modern score did seem also to be associated rather positively with specific health outcomes (e.g. lowering of prevalence of high blood pressure among girls). We have tried to make that point more clearly in the new version (line 28 to 30 in the abstract).

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

**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