Author’s response to reviews

Title: Effectiveness of the National Program of Complementary Feeding for older adults in Chile on vitamin B12 status in older adults; secondary outcome analysis from the CENEX Study (ISRCTN48153354)

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Author’s response to reviews: see over
Santiago, July 15, 2013

Dr. Gabriela Nehme
Editor in Chief
Nutrition Journal

Dear Dr. Nehme

We are enclosing you the revised version of the manuscript entitled "Effectiveness of the National Program of Complementary Feeding for older adults in Chile on vitamin B12 status in older adults, secondary outcome analysis from the CENEX Study (ISRCTN48153354)" of the authors: Hugo Sánchez, Cecilia Albalá, Lydia Lera, Alan D Dangour and Ricardo Uauy. The changes and observations in relation to the comments and suggestions made by Mary Rose Sweeney have been incorporated to the manuscript or are answered in this letter when correspond to questions that do not necessarily mean changes to the text.

Reviewer comments and answers

1. Remove sentence “rapid aging” - the population are not rapidly aging
   Sentence was changed by “the process of ageing”

2. Can the authors provide a table or figure showing a breakdown of the compliance/adherence to the diet, showing how many did not comply at all for example and how many complied most of the time, and what food items they complied with.

   In the results section, at the end of first paragraph we added:
   “Only one person did not comply at all, and 61.6% complied most of the time”.

We attach also a figure supporting the asseveration.
3.- The outcome that shows an overall decrease in B12 levels during this period which the authors propose is due to the CENEX programme reducing their B12 programme does not explain why folate levels also reduced. These changes in folate and B12 status indicate that sources of both vitamins were removed from their diet during this period. If this is the case the authors should quantify the exact changes made and state how this would have impacted on the intakes and levels of both vitamins in the population under study. This was not an optimal time to be testing the impact of a B12 fortification programme when the remainder of their dietary intake is not stable. This may even invalidate the findings.

Since 2000, in Chile exist a national mandatory program of flour fortification with Folic acid 2.0 a 2.4 (mg/Kg) as was mentioned in the introduction. In the discussion section it was written white flour instead of wheat flour. That phrase would be confusing. We were referring to the wheat flour fortification - compulsory all over the country- not about CENEX foods.

We rephrase the paragraph as follows:

"After the intervention, the folate levels decreased in both groups, showing that PACAM fortification with folic acid has little or no effect. Taking into account that the absorption of folic acid is not influenced by age, and bread consumption in Chile is very high in all groups of age, it is possible to postulate that this decrease is due to a reduction in the amount of folic acid in wheat flour during the years when the CENEX study was carried out, as described by Castillo [4]."
We are attaching a table as published by Castillo et al. (14) where it is clear the decrease in the amount of folic acid in wheat flour during the 2005-2008 period.

Tabla 1. Contenido de ácido fólico (mg/kg) en harina de trigo según percentiles (P). Chile 2005-2008

<table>
<thead>
<tr>
<th>Año</th>
<th>n</th>
<th>P10</th>
<th>P20</th>
<th>P30</th>
<th>P40</th>
<th>P50</th>
<th>P60</th>
<th>P70</th>
<th>P80</th>
<th>P90</th>
<th>P95</th>
<th>P97</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>338</td>
<td>0</td>
<td>0.59</td>
<td>1.21</td>
<td>1.51</td>
<td>1.9</td>
<td>2.2</td>
<td>2.5*</td>
<td>3*</td>
<td>4.3*</td>
<td>5.9*</td>
<td>7.4*</td>
</tr>
<tr>
<td>2006</td>
<td>391</td>
<td>0.2</td>
<td>0.65</td>
<td>1.01</td>
<td>1.36</td>
<td>1.61</td>
<td>1.99</td>
<td>2.4*</td>
<td>3*</td>
<td>5.03*</td>
<td>9.8*</td>
<td>15.9*</td>
</tr>
<tr>
<td>2007</td>
<td>279</td>
<td>0.1</td>
<td>0.58</td>
<td>0.99</td>
<td>1.27</td>
<td>1.51</td>
<td>1.77</td>
<td>2.3*</td>
<td>2.8*</td>
<td>4.8*</td>
<td>8.6*</td>
<td>10.1*</td>
</tr>
<tr>
<td>2008</td>
<td>243</td>
<td>0</td>
<td>0</td>
<td>0.3</td>
<td>0.68</td>
<td>1.1</td>
<td>1.5</td>
<td>1.8</td>
<td>2</td>
<td>2.6*</td>
<td>3.2*</td>
<td>3.7*</td>
</tr>
</tbody>
</table>

Fuente: calculado a partir de la base de datos proporcionada por el instituto de salud Pública (isP). *valores sobre la norma chilena de fortificación de harina de trigo con ácido fólico (2,2 mg/kg). (14)

4) Please supply a reference to the table supplied in the reference section. The reference was added to the table including the internet site


Yours sincerely,

[Signature]

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