Author’s response to reviews

Title: C-Peptide and cardiovascular risk factors among young adults in a southern brazilian cohort study

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Author’s response to reviews:

Dear publisher
Jennifer Logue
Endocrine Disorders BMC

Thank you for your letter. We seek to respond to the reviewers' suggestions for permission to publish the article in question.

Revisor 1#

Authors tried to respond to all reviewer's remarks. They ammeliorated the introduction and the discussion. However, they decided not to correct the presentation of the results and declared that "To facilitate reader's comprehension, we chose to demonstrate a linear trend test for comparison between the means of the defects and the exposure in quartiles of pep-c". Again, results from ANOVA are presented in Table 2 with p-values, and Kruskal-Wallis was performed. In this case it has to be indicated those "p" are about which 2 columns? Results from the multivariate regression has to be presented with intercept and variables, with coefficient (beta), SE, 95% CI

Authors decided not to take in consideration the major comment of the reviewer #2. Me also, I am agree with her that "As we know or at least find it very likely that an increased C-peptide is associated with cardiovascular disease (CVD) it is actually not very interesting to know whether it is associated with risk-actors for CVD". This reviewer tried also to suggest another interesting point of view, i.e. the age ("That already at this age it is possible to see an association between C-peptide and risk-factors, it would be worthwhile to mention this in the discussion") which was also ignored by the author.
Authors discussed the strength of their study, but without mentioning their limitations, which were also suggested by the reviewers.

R-1: With due respect, in the version under review it no longer presents results of values of the Kruskal-Wallis tests as pointed out, the values of presented in table 2 refer to the trend tests explicitly referred to in the identification of the table by: * * Test for trend across ordered groups.

To provide a better understanding of the issue we modified the text segment of the methods on page 10, line No 51 of Analysis of variance was used to compare the means of the variables according to the peptide quartiles, for: The means of the variables according to the quartiles of Pep-C were evaluated according to the trend tests of the ordered groups.

R-2: Accept our apologies, regarding the data presented in table 3, we sought to add a new column to the chart showing the intercept, and the respective beta according to the quartiles of Pep-C with reference to the 1 quartile, attached document 1.

In order to provide the reader with more clarity, we elaborated the following graphs containing the cardiovascular risk components associated with Pep-C at 23 and 30 years of age, that were added on the page 16 line No13, with the following text: as shown in figure 1

Figure 1: attached document 2

R-3: We highlight our findings according to the condition of identified association of each cardiovascular risk condition to pep-c levels transversally at 23 years and longitudinally at 30 years and we commented about the presence of this association already at the first moment in page 15 line No 39 : Our findings are in line with the epidemiological profile indicated, since the associates found to be pre-findings point to a condition of insulin resistance associated with conditions of cardiometabolic risk already present at 23a and is maintained longitudinally at the end of the 3a decade of life.

R-4: Regarding the description of the limitations of the study we explicitly cited on page 16 line No 51 the text segment of Among the limitations, it could be pointed out that the biochemical tests were carried out in non-fasting samples. And justify with current guidelines... page 16 line No 56 On the other hand, more recent evidence indicates that casual exams allow better risk estimate45 and, furthermore, the analyses were adjusted for time of fasting.

Reviewer #2:

I just have one remaining issue. In table 2 sedentary lifestyle is reported in this line:

"Prevalence of sedentary lifestyle 4269 444.8 (428.3; 461.2) 3580 294.7 (282.5; 307.0)" where the first report is at 23 years and the second in the second in 30 years.
In your answer you say that physical activity was reported in a questionnaire as above and here it seems as if individuals at the age of 23 are less active than individuals at 30 years of age, which seems odd. Is this really correct?

R-1: Thanks for your note. We tried to clarify the issue with the modification of the layout of the table with the identification of the variable in the following terms: Physical activity practice per week (minutes).

We are grateful for the attention given to revising this manuscript with cordial greetings.

Best Regards!

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