Author’s response to reviews

Title: The effect of vitamin D supplementation on the glycemic control of pre-diabetic Qatari patients in a randomized control trial.

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Author’s response to reviews:

Dear Editor,

We would like to thank you and the reviewers for the comments. We have modified the paper (with track changes) following these comments. Our point-by-point answer follows:

Reviewer 1:

Maryam Amini, Ph.D.
Thank you for selecting such a hot topic to answer an important question. I am wondering about the sentence you mentioned in page 10 "The baseline participant demographic characteristics were similar in both groups as shown in Table 1". According to that table Ethnicity was statistically different in two groups. It was needed to be controlled in further analyses.

In my idea your intervention had changed beta cells function in intervention group and it was a significant change. Why do not you consider it as an effect of supplementation?

Comment 1: I am wondering about the sentence you mentioned in page 10 "The baseline participant demographic characteristics were similar in both groups as shown in Table 1". According to that table Ethnicity was statistically different in two groups. It was needed to be controlled in further analyses.

Our response: We thank the reviewer for this comment. We clarified this point in the results section (paragraph 2, page 10). In addition, we adjusted ethnicity as covariate in the ANCOVA model for the primary outcomes (Table 2). This adjustment did not change the previously observed results. Table 2 (results section, page 14) and statistical analysis section (page 8) were updated accordingly.

Comment 2: In my idea your intervention had changed beta cells function in intervention group and it was a significant change. Why do not you consider it as an effect of supplementation?

Our response: We thank the reviewer for this comment. As shown in Table 2 for the β-cell function a significant reduction was observed for HOMA-β within the intervention (-18.6 [95% CI: -30.4, -6.8], P=0.003) but not within the control group (P=0.947). In group comparison we observed a significant difference (P=0.027) and significance persisted after adjustment. This suggested that vitamin D supplementation had an effect on β-cell function. However, in a more detailed analysis for β-cell function (insulinogenic and disposition indices and area under curve for insulin and glucose) we found no significant differences between the vitamin D group and the control group, therefore we cannot draw the conclusion that the changes in β-cell function can solely be attributed to vitamin D supplementation.

To clarify this, we changed the text in the first paragraph of discussion section (pages 16-17).

Reviewer 2:

Nora A. Althumiri, MS
“Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.”

Our response: Reviewer has no comment.