Reviewer’s report

Title: Effects of Cinnamon Supplementation on Expression of Systemic Inflammation Factors, NF-κB and Sirtuin-1 (SIRT1) in Type 2 Diabetes: A Randomized, Double Blind, and Controlled Clinical Trial.

Version: 2 Date: 23 Nov 2019

Reviewer: Antonio Inserra

Reviewer's report:

A few concerns need to be addressed:
* 2.7 Availability of data and materials. The dataset supporting the findings of this article is available upon request from the corresponding author. The reviewer is not sure whether this is in line with the Nutrition Journal Policy, and whether the dataset should be presented as a supplementary file instead of only upon request. Please discuss this with the editorial office
* The fact that the baseline hs-CRP level showed a trend towards being statistically significant (p=0.06) should be addressed somewhere
* The fact that CRP was significantly decreased in the placebo group should be discussed at the beginning of the discussion section, together with the other main results. (i.e. line 191). Same for NF-kb in the placebo group (p=0.055)- please mention that although not statistically significant there was a trend. This is important in terms of placebo effect, and should be mentioned at the beginning of the discussion, and later on during the discussion, along with a potential interpretation of this result
* In figure 2, it looks like some of the ELISA results are negative (although it doesn't seem to be a comparison (i.e. decrease from baseline), but absolute values.
* Line 404- Plasma surfaces? Did the authors mean plasma levels?
* Line 403: Did the authors mean "within groups"?

Do figure 2 and 3 represent the same datasets? In that case, it does not seem necessary to report the figures twice. If they represent different values, please be consistent with figure presentation format

The manuscript can be further improved for English structure correctness and typos (please see comments below)

Comments:
Line 65: "expected it will reach to 366 million" And this figure is expected to rise to 366…
Line 66: "than developed and it" than developed ones, and it…
Line 67: in the Iranian
Line 69: "features occur" features of this serious…
Line 77: "The use of cinnamon as a treatment" as a therapeutic treatment
Line 85: "Considering limited and unfocused reports about cinnamon's therapeutic value on NF-κB, SIRT1 and systemic inflammation factors including to date, in type 2 diabetes patients." Only limited and unfocused reports about cinnamon's therapeutic value on NF-κB, SIRT1 and systemic inflammation factors exist to date, in type 2 diabetes patients
Line 108: please remove basically
Line 109: according to the treating doctor's advice (outside the study? i.e. their private doctor?)
Line 115: maybe the authors meant "randomly" rather than "accidentally"?
Line 120: "after each main course for 8 weeks". Do the authors mean "after each main meal"
Line 121: "capsules were almost identical to cinnamon capsules and could hardly be distinguished from each other"
Line 134: "It was applied Sandwich Enzyme-Linkedimmunosorbent Assay (ELISA) kits (ZellBio
GmbH, Germany) to analyzing the plasma levels of SIRT1 (80 pg/ml sensitivity), hs-CRP, and NF-kB (1.5 pg/ml sensitivity)." To analyze plasma levels of SIRT1 (80 pg/ml sensitivity), hs-CRP, and NF-kB (1.5 pg/ml sensitivity), Enzyme-Linked immunosorbent Assays (ELISA) were performed (ZellBio GmbH, Germany)

Line 158: Additionally, to more clarifying, we also summarized blood glucose indexes in table 2. It can be seen from table 2, the baseline levels of fasting blood glucose and fasting insulin in both case and control groups were not significantly different.." Fasting blood glucose indexes are reported in table 2, and were not statistically different between groups at baseline ."
Line 167: at baseline
Line 173: we did not observe
Line 173: Also, we did not observe significant changes in the mean level of IL-6 in the cinnamon group (p=0.60), or placebo group (p=0.85)
Line 177: in the treatment group
Line 192: "cause to have a clear vision" please rephrase
Lines 198-202- please revise
Line 205- please revise
Lines 206-208- please report the dose used in that study and the extent to which those markers were reduced (i.e. about 30%, or similar)
Line 211: or because of the different provenience of the cinnamom employed, which could lead to different active principle concentration, leading to different pharmacological profiles
Line 212- "Type 2 of diabetes" type 2 diabetes. "is associated with (INCREASED? DECREASED?) NF-kb activity"
Lines 217-220: please revise
Line 221: "Activation of transcription factors, increase ROS cellular level" Activation of which transcription factor? In response to what?
Line 223: maybe the authors mean "nuclear factor kappa B"?
Line 237- diabetic
Line 236: "in animal study by A.Ashoor and et al that " in an animal study by Ashoor et al., that
Line 238-244: please revise and check for English sentence structure and typos
Lines 245-249: see comment above (See this revised version as an example: Although our findings were not statistically significant, further studies could assess the effects of higher doses of cinnamon, and longer intervention times. Additionally, taking into account other inflammatory biomarkers will prove valuable.
Lines 251-257: Before our findings can be extended to the general and diabetic populations, more investigations and longer intervention duration could be trialled. Further investigations on diabetic patients with common complications such as neuropathy, nephropathy and retinopathy are needed to fully elucidate the effects of cinnamon extract on plasma levels of inflammatory markers. In addition, social and geographical differences should be considered.
Line 256: please avoid using the term "racial" I believe this is not politically correct

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Please indicate how interesting you found the manuscript:

An article of importance in its field

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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