Author’s response to reviews

Title: The effect of an apple polyphenol extract rich in epicatechin and flavan-3-ol oligomers on brachial artery flow-mediated vasodilatory function in volunteers with elevated blood pressure.

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Author’s response to reviews:

Reviewer #1: Throughout the manuscript, figures and tables, the terms "epiacetchin" (when referring to treatment/supplementation), "epicatechin treatment" or "epicatechin supplementation" should be replaced with "apple extract" (when referring to treatment/supplementation), "apple extract treatment" or "apple extract supplementation"…epicatechin was only one component of the extract

Our response:

- We have replaced "epicatechin" with "apple extract" throughout the manuscript, figures and tables
Reviewer #1:

More information is needed regarding the apple extract and the dose.

Is this a commercial extract or was it prepared by the investigators? If commercial, who is the supplier? How was the extract prepared in either case (solvent, hot water, etc.)? What type of apples? Is this a peel extract, a flesh extract, or peel and flesh? How was the extract stored?

How were the epicatechin and flavanol oligomer levels determined?

How was the dose determined? What is the basis for the dose?

Also, the authors provided no information regarding the composition or dosing of the placebo. This needs to be corrected.

Our response:

- We have added information regarding the apple extract and the dose, and answered these questions in page 8-9 (Investigational product). Added text shown in red

Reviewer #1:

One explanation is that the subjects did not have significant enough hypertension for the effects of the extract to be significant. This should be mentioned

Our response:

- This mention has been added to text, Discussion page 17 (shown in red)

Reviewer #1:

Table 3

It is not clear from the title whether this table shows blood levels, and native epicatechin only or the sum of all metabolites

Our response:

- We have added(now Table 4) that the table shows change in total epicatechin and it’s metabolites concentration
Reviewer #2:

- Method section is too elaborative; would benefit from being shortened.

Our response:

- We have shortened the Method section and removed text concerning Visits 1-4 and replaced the text with Table 1