Reviewer’s report

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.

Version: 0 Date: 31 Mar 2017

Reviewer: Andrew Neilson

Reviewer's report:

Throughout the manuscript, figures and tables, the terms "epiaacetchin" (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

Line 180-189

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.

Line 442-443

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

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
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