

## Format for ANSWERING REVIEWERS

July 23, 2015



Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 20051-Review.doc).

**Title:** Dashing away hypertension: Evaluating the efficacy of the dietary approaches to stop hypertension diet in controlling high blood pressure

**Author:** Preeya T Shah, Kyle D Maxwell, Joseph I Shapiro

**Name of Journal:** *World Journal of Hypertension*

**ESPS Manuscript NO:** 20051

The manuscript has been improved according to the suggestions of reviewers:

Reviewer #1:

Comments to the Authors:

The authors provide a timely and well written review on DASH diet and its biochemical aspects. The authors could provide a description of the search strategy used to compile the literatura on this topic. Page 16 "According to Sacks et al., The DASH ..." should be "According to Sacks et al., the DASH ..."

*We thank Reviewer 1 for the positive feedback. We have amended the Introduction section to mention our search strategy used to compile the literature. We have also amended page 16 as referenced above.*

Reviewer #2:

The authors summarized recent studies and discussed the potential role of diet in the development and prevention of hypertension, which provides some insightful knowledge of understanding of the relationship between diet and hypertension. The authors proposed that DASH diet is effective in reducing high blood pressure, which may be beneficial to public health.

*We thank Reviewer 2 for the positive feedback.*

Reviewer #3:

It is a clearly written, updated review on the benefits of the DASH diet with discussion of its potential physiological mechanisms. I have only a few comments: 1- On the 2nd paragraph of the Introduction

(pages 2-3), the authors stated that the 8th JNC entirely dropped the Hypertension classification based on BP levels. This is not completely true. In fact, the JNC8 (or preferentially, the report from the panel members appointed to the JNC8) was not intended to be a complete new guideline, but only to answer, based on evidences from RCTs, 3 questions: who should be treated with anti-hypertensive drugs; to what BP target; and what are the best drugs for each specific clinical condition. As the authors addressed, the 2nd answer was very controversial, as the JNC8 recommended a BP target of <150/90 mmHg for people over 60 years old. Hence, the “so-called” JNC8 did not address or discuss Hypertension classifications. 2- In Figure 1, what is meant by cardiotonic steroids? (cortisol? mineralocorticoid?)

*We thank Reviewer 3 for the constructive criticism. We have amended paragraph 2 of the Introduction section to clarify the modifications intended by the report from the panel members appointed to the JNC8. In reference to Figure 1, Cardiotonic Steroids (CTS) do not include cortisol or mineralocorticoid. Rather CTS (i.e ouabain, marinobufagenin) are steroid molecules that bind to the active site of plasmalemmal Na/K-ATPase. When bound to the sodium pump, the CTS cause a conformational shift that prevents the ionic pathway from functioning. More recently, CTS have also been found to activate a signal transduction cascade upon binding to its Na/K-ATPase receptor.*

Changes in the manuscript:

Section: Introduction

Page 3, addition to end of first paragraph. “This review utilized studies dating back to the early 1900’s in order to establish a background for the research being conducted today, however, the majority of data compiled for review in this paper was conducted from the INTERSALT study<sup>[19]</sup> in 1988 through present day.”

Page 3, lines 14-17 “The 8th edition of the report modified the above specifications, and took an alternate approach regarding the BP threshold of intervention, which treatment should be administered, and also the target blood pressure to be achieved.”

Section: Conclusion

Page 15, line 20 “According to Sacks et al., the DASH program...”