

Reviewer's report

Title: In vivo tissue uptake of intravenously injected water soluble all-trans beta-carotene used as a food colorant

Version: 3 **Date:** 26 August 2009

Reviewer: Sherry A Tanumihardjo

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Major Compulsory Revisions

Figure: An error is noted in the amount of beta-carotene that is calculated to be in the liver. It is impossible that almost 200 microg/g is detectable at 6 hours in the liver when only 200 microgram were administered. The liver size is probably between 6 and 8 grams alone.

Minor Essential Revisions

I. 1: ABSTRACT 1: Water soluble beta-carotene (WS-BC) is a carotenoid form that has been developed as a food colorant.

(n=7/time)

Mid paragraph: Spelling of "testes"

P. 2, final line: "Because carotenoids are fat soluble,..."

P. 3, I. 5: Spelling of "provitamin"

P. 3, middle of page: The author's state two large trials but only give one reference. At least one of these trials also included a pharmacological level of preformed vitamin A and this should be clear.

P. 3: Delete "of" in the following: "are difficult because several factors"

P. 6: Please clarify which tissue was most affected in the following series: "were increased in kidney, lung, intestine and liver which was the most affected tissue [16]." Should it read: were increased in kidney, lung, intestine and liver, with liver being the most affected tissue [16]."

P. 6, fourth line from bottom: Spelling of "retinoids".

Figure: An error is noted in the amount of beta-carotene that is calculated to be in the liver. It is impossible that almost 200 microg/g is detectable at 6 hours in the liver when only 200 microgram were administered. The liver size is probably

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests.