Reviewer's report

Title: Effects of Pistachios on Risk Factors of Metabolic Syndrome

Version: 2 Date: 23 October 2011

Reviewer: Frank f Greenway

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Major Compulsory Revisions:
1. This article was designed as a parallel arm study. Such a study should be analyzed primarily as a comparison between the arms. When the arms are compared there are no statistically significant differences. The authors analyzed the study as if there were no control group and compared each group to its baseline. The authors then express these significant differences as an indication that the study has positive conclusions to draw. Although the secondary analysis comparing the results in the individual arms to baseline could be a justification for contending that the study was underpowered to show a positive result and should be repeated in a larger population, the study should be described as a negative study. If the authors want to describe this as a positive study, they could change purpose or hypothesis to pistashios not causing the weight gain predicted from their fat content.

Minor Revisions:
1. The abstract on line 6: I believe you should eliminate the "in" immediately after the parenthesis symbol.
2. In the introduction in lines 3-6: You list 5 continents and give two percentages for three different definitions of the metabolic syndrome. It is not clear to this reader to what the two percentages refer (eg 9.6%~55.7%). Please restate this sentence so as to make it clearer to what the percentages refer. Is this the range of metabolic syndrome across the various continents? If so, why is the symbol "~" used instead of the symbol ",-"?
3. In the methods line 6: You say the coordinators and physicians randomized the subjects at the sites. How was this randomization done and was it consistent across sites?
4. Please put error bars on the graphs in your figures.

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

Quality of written English: Needs some language corrections before being published

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

I have consulted to companies developing pharmacologic agents, dietary herbal supplements and medical foods for the treatment of obesity, but I have no competing interests relative to this paper.