Reviewer’s report

Title: Bioactive oat beta-glucan reduces LDL cholesterol in Caucasians and non-Caucasians.

Version: 1 Date: 24 July 2011

Reviewer: Kevin Maki

Reviewer’s report:

This paper reports results from a post-hoc analysis of a clinical trial to investigate the LDL-cholesterol lowering effects of beta-glucan preparations in Caucasian and non-Caucasian subjects. The paper is well written and the study appears to have been well-conducted. I have several minor comments for the authors’ consideration.

1. Throughout the paper it would be preferable to use the term LDL-C to differentiate cholesterol carried by LDL particles from the LDL particle concentration, which was not measured.

2. It would be of interest to see the LDL-C percent responses by week in the control and bioactive beta-glucan groups by ethnicity. Many published papers do not show responses over time. Our experience has been that the effects of viscous dietary fibers are maximal in 1-2 weeks and it would be of interest to allow the reader to evaluate the time course of the effect in the present study.

3. I recommend that the authors include 95% confidence intervals for the LDL-C effects in the Caucasian and non-Caucasian subsets. While the study may not have had sufficient statistical power to detect a significant treatment by ethnicity interaction, there was a pattern suggesting that a substantially lower response in the non-Caucasian subjects can be ruled out with a fair degree of confidence. The 95% confidence interval for each group would help the reader to guage the range of differences that could be reasonably excluded.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I have received research grant funding and/or consulting fees from companies that manufacture dietary fiber containing food products or ingredients that are intended to lower cholesterol levels. These include: Kellogg, General Mills, Dow Chemical, National Starch/Corn Products, and Proctor & Gamble.