Author's response to reviews

Title: No effect of 14 day consumption of whole grain diet compared to refined grain diet on antioxidant measures in healthy, young subjects: a pilot study

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Author's response to reviews: see over
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Nutrition Journal

To the editor,

We are pleased to submit to our revised manuscript now entitled “No effect of 14 day consumption of whole grain diet compared to refined grain diet on antioxidant measures in healthy, young subjects: A pilot study.”

We appreciate the Additional work of the reviewer and have revised the manuscript as suggested. The specific responses to the reviewer #1 are attached.

Thank you for considering our work for publication in Nutrition Journal.

Sincerely,

Joanne L. Slavin, PhD
Professor
Response to reviewer

1. The question about risk for a type II error has not been answered by the authors

When we designed this study, we could find no intervention studies that had been published on whole grain diets and changes in antioxidant measures. So we based our design on other published studies on whole foods, mostly fruits and vegetables, and changes in antioxidant markers. We have included these studies in our experimental design section and these studies helped us decide on our design and sample size (page 11, line 226).

In these studies,

- changes in urinary isoprostanes were found when tomato products were consumed (n = 12) (Visioli et al, 2003),
- changes in ORAC were found with consumption of strawberries, spinach, and red wine (n=8) (Cao et al, 1998)
- changes in Trolox equivalents were found with consumption of fruit juice (n=5) (Young et al, 1999)

Later studies, including Andersson et al (2007) had a larger sample size (n = 30). Also, we included healthy subjects and larger changes might be found in overweight subjects or subjects at increased risk for cardiovascular disease or diabetes.

Therefore, since we had no data to base a power calculation on, we could have been underpowered and at risk for a type II error. We have changed our title to “No effect of 14 day consumption of whole grain diet compared to refined grain diet on antioxidant measures in health, young subjects: A pilot study” since we had no preliminary data for a power calculation.

We have also included the studies we used to support our sample size decision in the manuscript (page 11, line 226)

2. Tables 1 and 2 are not referred to in the text (page 6, line 124).

Thanks you for your careful review of our manuscript.