

Reviewer's report

Title: Effect of an oral supplementation of a proprietary melon juice concentrate rich in superoxide dismutase on stress and tiredness in healthy people : a pilot, double-blind, placebo-controlled clinical trial

Version: 1 **Date:** 19 February 2009

Reviewer: Craig B Webb

Reviewer's report:

Minor Essential Revisions

1) Many grammatical errors throughout the paper, for example, "...workers of a prehospital emergency clinic..." should be either "workers at a..." or "workers in a..."; "...as a treatment to certain diseases..." should be "...treatment for certain..."; "...this melon juice..." should be "...a melon juice..."; "...as the cellular level,," is obviously meant to be "...at the cellular level." (period, no comma), etc. I will leave additional typographical and grammatical errors to the editors, but note that having discovered this many within the first page makes the review process inefficient and unnecessarily burdensome.

2) "Signs and symptoms linked to performance, including...and behavioral..."

3) Why "tiredness" instead of "fatigue"

4) Support for "constantly increasing"?

5) "affiliated" is a strange use of that term in this context

Major Essential Revisions

1) First paragraph contains numbers and claims with no references. Please add these.

2) "difficulty of contact"? please define.

3) "depression" introduced in first paragraph but not a focus of this paper, and no support given for "stress and tiredness" leading to depression. Please justify or remove.

4) Lots of ill-defined terms being used, for instance, how is "burnout" defined?

5) The purpose of the study should be stated as either a null or at least a two-tailed hypothesis.

6) Did the authors consult with a statistician? Is a paired t-test more appropriate than an ANOVA for 3 related time points? Was the data normally distributed?

7) Results discuss comparisons between groups, but the statistics discuss use of

“paired Student t test” which would be inappropriate for comparisons between groups. Very few P values given, no criteria given for significance. Statements like “tended to be significantly more improved” or “seemed then to be only improved by placebo” and “visibly improved” are very misleading.

8) Having a BMI < 30 is presented as an inclusion criteria but then 7 (10%) of the test subjects had a BMI > 30? Please justify.

9) No idea what “much more efficiently improved” means? Please explain.

10) Have any pharmacokinetic studies been done that demonstrate the bioavailability of this product in humans? Please provide references.

11) Significant effort should be put into making this a much more error-free and well-defined report. Important statements are made without references, the statistical methods appear inappropriate or poorly supported, and the presentation of trends or visual changes that are not supported statistically only adds confusion to statements and positions that rely on the excessive use of ill-defined terms.

Level of interest: An article of limited interest

Quality of written English: Not suitable for publication unless extensively edited

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I have completed one research project where Nutramax Laboratories provided me with a veterinary SOD enzyme supplementation free of charge.