Author's response to reviews

Title: Effect of Lactobacillus acidophilus supernatants on body weight in rodents

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Author's response to reviews: see over
Dear Ms. Singhal:

We have revised our manuscript (MS: 8862757981550762 - Effect of Lactobacillus acidophilus). This is how we dealt with the reviewers’ comments and suggestions:

Reviewer no. 1:
Major Compulsory Revisions:
1. The angiogenic assay was deleted from the Result section and is referred to in the Background section, first paragraph on p. 4.
2. We were unable to obtain a neurogenic cell line at our institution, and, unfortunately, are not in a financial position to buy one at the present time. However, we added results of immunostaining for leptin in peripheral adipose tissue (top paragraph on p. 13, Figure 4). We also mention immunoblotting on adipose and intestinal tissues removed from the 3 experimental groups, they show an increase in leptin and its receptors in tissues from LS-treated animals (top paragraph on p. 13).
3. Figure improvement: most microphotographs were re-taken. We tried to photograph the same location in both control and treated brains as much as possible, we were not able to do better for Figure 2. It is likely that the two immuno slides were done in two different batches. Because the sections were cut from different brains (control and treated), and were not sequential, a total match was not possible. Figure depicting staining in choroid plexus was deleted as it did not add too much new information, and the staining was weak, it is mentioned in text as Data not shown, top of p. 13. A new figure 4 was added visualizing leptin staining in adipose tissues, though the staining is weak, it should project well on a computer screen (it does on mine).
4. We did reformulate the results. Because we did not have enough control animals at later time we had statistical analysis done for intra-group comparison only, i.e., we compared weight within the LS-treated group before and after treatment (Fig. 1). The results on all, control and treated, animals are presented in Table 1 without statistical analysis, and they show a trend towards weight loss in LS-treated animals, see p. 12. The statistical analysis was performed by Ms. Jian Zhang who has a graduate degree in biostatistics.
5. Rats were 6-8 weeks of age.
6. Conclusions were revised as suggested by the reviewer, see p. 3 (last paragraph of the Abstract) and in Discussion in the top paragraph on p. 14, the last paragraph of Discussion on p. 16.
Minor Essential Revisions:
2. Leptin discussion was expanded in the Discussion, last paragraph on p. 15.
3. Osmolality is discussed on top of p. 8: “… The osmolality of the LS (320 mOsm) and lactic acid (250 mOsm) solution was comparable. The osmolality had no effect in our in vitro experiments as it was immediately diluted at 200 x. In the in vivo experiments the dilution factor was likely comparable, and we never noticed any immediate effect on morbidity of the animals….”
4. Antigen retrieval was performed by microwaving the sections prior IHC, inserted in Materials and Methods, last paragraph on p. 8.

Discretionary Revisions:
1. We did not measure plasma leptin levels, but our results indicate increase in leptin in peripheral tissues of LS-treated animals (Fig. 4).

Reviewer no. 2:
1. The title was changed to “Effect of Lactobacillus acidophilus supernatants on body weight and leptin expression in rats” to make it more specific.
2. The first sentence on original p.11 was taken out (in part because of suggestions by reviewer no. 1).
3. The paragraph was moved in Materials and Methods, last paragraph on p. 7.
4. This paragraph was shortened and moved into Background, last paragraph on p.4.
5. Discretionary revisions: all done.

Thank you for considering our manuscript,

Dr. Jaroslava Halper