Reviewer's report

Title: An investigation into the ameliorating effect of black soybean extract on learning and memory impairment

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Reviewer: Jin Tae Hong

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An investigation into the ameliorating effect of black soybean extract on learning and memory impairment'

authors: Ji Hee Jeong et al.,

This study by Jeong et al. entitled "An investigation into the ameliorating effect of black soybean extract on learning and memory impairment' evaluates the ability of black soybean extract to improve memory function through antioxidant mechanisms as well as anti-AChE effect. This article focused on two events. However, the experiments have several deficiencies

1. How to prepare the Amyloid beta solution
2. What is the correlation between AChE inhibition and anti-oxidative damages
3. How authors explain the difference between significant in behavioral changes (memory improvement), but less significant changes in oxidative damages and AChE activity. Are there other mechanisms in the significant role of this compound in the memory improvement
4. What is the major component of this extract to improve memory function.

Thus, I recommend major compulsory revisions

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

Declaration of competing interests:

'I declare that I have no competing interests