

### Review Form 3

Journal Name:	<a href="#">Journal of Applied Life Sciences International</a>
Manuscript Number:	Ms_JALSI_124225
Title of the Manuscript:	<b>Curcumin improves cognitive function by restoration of neurotransmitter balance, attenuate oxidative stress, inflammation and improves hippocampal integrity in intestinal ischemia/reperfusion injury induced-cognitive deficit in aged female Wistar rats</b>
Type of the Article	

#### PART 1: Review Comments

<b>Compulsory</b> REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</b>	<p>Although the work carried out is undeniable, its presentation as a scientific work has serious drawbacks.</p> <p>The authors establish a direct and unique relationship between IIR and brain damages, but they do not consider the role of the intestinal ischemia on the gut microbiome-brain-axis. A lot of studies have established the influence of this axis on mental disorders, including cognitive impairments.</p> <p>The work is difficult to follow due to the English grammar mistakes.</p>	<p>The study is aimed at investigating how IIRI could affect the hippocampal function. However, to show that there is a link between the gut and the brain, it has been mentioned in the introduction.</p> <p>The manuscript will be proofread to correct any grammatical mistakes.</p>
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The title must be shortened. For example: Effects of curcumin on cognitive impairment in aged female Wistar rats subjected to intestinal ischemia-reperfusion	Thank you for the title suggestion, it has adjusted to "effects of curcumin on cognitive impairment in aged female Wistar rats subjected to intestinal ischemia-reperfusion"
<b>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</b>	<p>The Abstract section must be rewritten, because is too long, and part of it might be transferred to the Introduction and Material and Methods sections.</p> <p>The authors must be more precise in the description of their experimental design and the results and conclusions obtained.</p>	The abstract has been adjusted.
<b>Are subsections and structure of the manuscript appropriate?</b>	<p>The Material and Methods section seems a lab protocol. The subsections may be grouped to better understand the methodology used.</p> <p>Not is established clearly why the treatment with D-galactose during 8 weeks induce the aging in rats. It should be included a reference.</p>	<p>Section 3.6 explains the step-by-step approach used to induce intestinal ischemia reperfusion injury in rat model. This was done for the sake of reproducibility.</p> <p>Also, the protocol used for the biochemical assays were reported</p> <p>Before the commencement of the research, D-Galactose was used to achieve aging in rats when administered at 200mg/kg for 8 weeks as reported by previous studies which has been cited in corrected version of the manuscript.</p>
<b>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</b>	<p>The results, although robust, are not clearly presented, requiring numerical values of the means and standard deviation.</p> <p>Sometimes the reader is lost with the inadequate explanation of the results obtained.</p> <p>The work is technically correct.</p> <p>The micrographs corresponding to histological pictures must be improved.</p> <p>A paragraph should be included with the limitations of the study in discussion section.</p>	<p>Graph pad prism V 7 was used for data analysis and one-way ANOVA followed by Tukey's post hoc test with statistical significance set <math>p &lt; 0.05</math>.</p> <p>The value of significance as indicated in the analysis using graph pad prism V 7 has been indicated below the figure.</p> <p>Limitation of the study has been added.</p>

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<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>More actualized references must be cited. The cited references do not present a homogeneity of style and many are incomplete.</p>	<p>The referencing style has been adjusted in the revised manuscript</p>
<p><u>Minor</u> REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>A complete review of English is necessary.</p>	<p>The manuscript has been revised by the authors.</p>
<p><u>Optional/General</u> comments</p>		

**PART 2:**

	<p><b>Reviewer's comment</b></p>	<p><b>Author's comment</b> <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i></p>
<p><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	