



**SDI Review Form 1.6**

Journal Name:	<a href="#">Asian Journal of Biology</a>
Manuscript Number:	Ms_AJOB_34230
Title of the Manuscript:	<b>MOTHER'S CAFFEINE INGESTION AFFECTS FECUNDITY AND OFFSPRING BIRTH WEIGHT IN MURINE MODELS</b>
Type of the Article	<b>Original Research Article</b>

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

**PART 1: Review Comments**

	<b>Reviewer's comment</b>	<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>
<b>Compulsory</b> REVISION comments	<p><b>In my opinion, the English quality of the manuscript is poor and, despite leaving some suggestions, I would recommend a major professional English revision before considering it for submission.</b></p> <ul style="list-style-type: none"> <li>. Page 1, line 14-17: <i>has been reported to have observable effects on female fertility as well as on embryo, fetal and child health</i>, instead of "has been suspected and reported in certain literatures to have observable effects on health of the embryo or foetus in such manners that it can affect parameters of reproduction for the mother and health indices for the embryo, foetus and possibly the offspring at birth. ☐"</li> <li>. Page 1, line 17-19: <i>This investigation was conducted to analyse the effect of different doses of caffeine on...</i>, instead of "This investigation was carried out to observe the various ☐doses of caffeine on pregnancy and foetus at birth"</li> </ul>	



SDI Review Form 1.6

	<p>with emphasis on the number of offspring and morphological parameters.”</p> <ul style="list-style-type: none"><li>. Page 1, line 19: <b>Thirty-two adult female pregnant mice</b>, instead of “Thirty 32 (n=32) adult female pregnant mice”</li><li>. Page 1, line 23: <b>was dissolved in distilled water to achieve the target dose for each group</b>, instead of “was dissolved in distilled water to achieve dosage for each group “</li><li>. Page 1, lines 25-26: <b>litter size</b>, instead of “litter number”</li><li>. Page 1, line 36: <b>Caffeine is produced commercially mainly</b>, instead of “Caffeine is produced commercially majorly”</li><li>. Page 1, Lines 37-39: When caffeine is administered orally, its Median Lethal Dose (LD<sub>50</sub>) is 192 milligrams per kilogram in rats and 150 - 200 milligrams per kilogram of body mass in humans. <b>Reference missing</b></li><li>. Page 1, Lines 41-43: <b>It is not usual for a person to</b></li></ul>	
--	---	--



SDI Review Form 1.6

	<p>consume 80 to 100 cups of coffee at once. However, this dosage can be achieved with caffeine pills or solutions of pure anhydrous caffeine powder. instead of “It is not normal for a person to consume 80 to 100 cups of coffee at time, however this dosage can be achieved with overdose of caffeine pills or solutions of pure anhydrous caffeine powder.”</p> <ul style="list-style-type: none"><li>Page 2, Lines 50-52 and 60-63: Do not repeat sentences “the physiologic effects and common use of caffeine during pregnancy call for examination of maternal caffeine consumption and risk of birth defects.”</li><li>Page 2, Lines 64-65. Watkinson and Fried [7] wrote that the most marked effects associated with heavy caffeine use (over 300 mg daily) in their study were</li><li>Page 2, Lines 81-82: after a monitored mating exercise, confirmed with the presence of a vaginal plug, instead of “after a monitored mating exercise that was also confirmed with</li></ul>	
--	--	--



SDI Review Form 1.6

	<p>the presence of a vaginal plug“</p> <ul style="list-style-type: none"><li>. Page 2, lines 85-88: “The lower dose of 10 mg/kg/day is roughly equivalent to taking about 2-3 normal cups ☐of coffee/tea per day or 2-3 coffee tablets or chewing 2-3 bar of caffeine-containing chocolate ☐or equivalent [8]. Thus, 10 mg/kg/day is equivalent to 2–3 cups of coffee/day in humans based on a metabolic body weight conversion.” What do the authors mean with this sentence? If I understand it correctly, the idea is repeated.</li><li>. Page 2, lines 93-93: “Animals were treated as <u>indicated</u> throughout ☐pregnancy that lasted 20-21 days.” Where is it indicated? ☐</li><li>. Page 3, Table 1: The authors do not indicate the frequency of administration of caffeine. I do not consider that the column “Rationale” adds to the column “Description”</li><li>. Page 4, Figure 1: Why is the chart title “Average litter number P2?”</li><li>. Page 4, Figure 1: “* Indicates Statistical</li></ul>	
--	--	--



SDI Review Form 1.6

	<p>Significance [<math>P \leq 0.05</math>]” However, there is no “*” in the chart. Therefore, we assume that the difference is not statistically significant.</p> <ul style="list-style-type: none"><li>. Page 4, Figure 1: The groups have been defined in Table 1. The authors do not have to repeat this information in Figure 1.</li><li>. Page 5, Figure 2: The difference is statistically significant between each treated group and the control group or between treated groups? This is not clear in the graph.</li><li>. Page 5, Figure 2: What are the units of the average litter weight?</li><li>. Page 6, Figure 3: I do not consider that this figure adds relevant information to the results.</li><li>. An appropriate “Results” section is missing. It can not be sequence of charts and tables.</li><li>. Page 7, Line 153: <a href="#">Had smaller litters</a>, instead of “had less number of litters” ☒</li><li>. Page 7, Line 154: <a href="#">The average litter size</a> instead of</li></ul>	
--	--	--



SDI Review Form 1.6

	<p>“the average litter in the treated groups “</p> <ul style="list-style-type: none"><li>. Page 7, Line 156-157: “This simply suggests that caffeine affected fertility or fecundity and this relationship is dosage dependent” The authors did not specify in the Methods section how they controlled the sample for other possible factors that may affect the fecundity. Therefore, we can not assume that caffeine was the direct responsible for the reduction in litter size.</li><li>. Page 7, Lines 157-158: “Obviously, it is important to note that more offspring would have resulted in high total sum of litter weight per birth as indicated on the second chart.” It is indicated by the third chart and this is why I believe this chartd is not significant for the results.</li><li>. Page 7, Lines 190-194: “When taken from both perspectives, caffeine actually reduced birth weight ∑sums in the treated groups and Group C had the least sum of birth weight. Group D might ∑ have higher sum and average weight per litter than C but the number of litter per mother was ∑quite relatively low in Group D.</li></ul>	
--	---	--



**SDI Review Form 1.6**

	<p>Generally, these results are consistent with many previous [ ] findings about caffeine's potential to reduce birth weight " This sentence is not clear. According to Figure 2 caffein increased birth weight.</p>	
<b><u>Minor</u></b> REVISION comments		
<b><u>Optional/General</u></b> comments		

Reviewer Details:

Name:	<b>Ana Raquel Neves</b>
Department, University & Country	<b>Department of Gynecology, Coimbra Hospital and University Center, Coimbra, Portugal</b>