

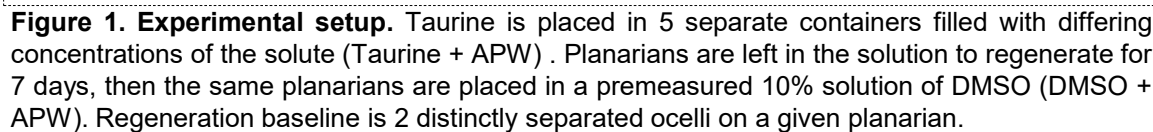


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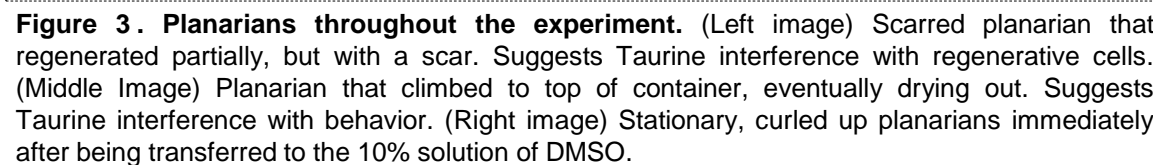
ABSTRACT

Discussion: Prolonged exposure to Taurine inhibits most regenerative cell reproduction, causing harm to the organism when placed again in a dangerous environment. Additionally, prolonged exposure to Taurine leads to an expression of abnormal behavior.

METHODS



PLANARIANS THROUGHOUT THE EXPERIMENT



REGENERATION AND TOXICOLOGY RESULTS

resumed.

Regeneration Study Result

Trial	% Ocelli Formed
Trial 1	100
Trial 2	100

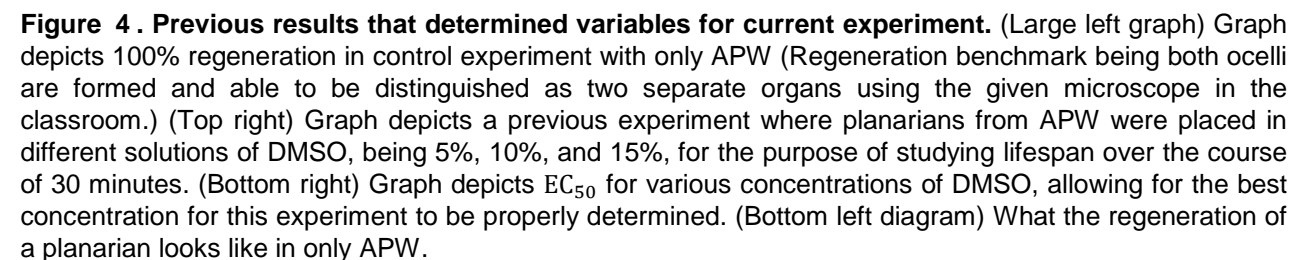
Planarian Lifespan in DMSO after bathing in Taurine

Time (mins)	Control Group (% Survival)	Experimental Group (% Survival)
0	100	100
5	100	0
10	100	0
15	100	0
20	100	0
25	100	0
30	50	0

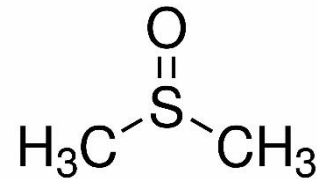
Time	Control Group	Experimental Group
0	100	100
5	100	0
10	100	0
15	100	0
20	100	0
25	100	0
30	50	0

Figure 2. Results of Regeneration and Lifespan Experiment. (Left graph) Results of first part of the experiment; 100% planarian regeneration in both trials. (Middle graph) Results of the second part of the experiment; all planarians die before the 5-minute mark, compared to the control group. P-value of 0.004**. (Right Table) Written results of graph in the middle.

PREVIOUS STUDY RESULTS

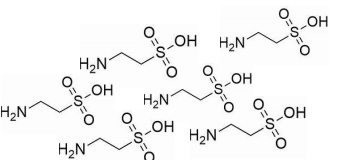


TAURINE REACTION AND DIMETHYL SULFOXIDE



DMSO (Dimethyl sulfoxide)

- Remains toxic to small organisms (planarians) past 10 minutes
- Has no significant reaction with Taurine that would cause harm to small organisms



A large concentration of Taurine

CONCLUSIONS AND DISCUSSION

These results suggest that while Taurine has known neuroprotective properties, its extended exposure in this context may negatively impact stem cell activity and regeneration, as well as behavioral aspects. Future studies should further investigate the duration and concentration of Taurine exposure to better understand its role in regenerative processes.

ACKNOWLEDGEMENTS AND LITERATURE CITED

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