



Biology: Alcohol and endocrine development

Paper citation: Payne EM, Moonis ZM, DeMaria M (2013). The Effect of Ethanol Concentration of Beta-cell Development in Zebrafish. J Emerging Investigators 17: 1-7

Paper questions

In reading through the assigned paper, please answer the following questions:

1. What is fetal alcohol syndrome?
2. What is the question being investigated by the researchers?
3. What are some normal functions of a healthy endocrine system?
4. Why are the zebrafish an appropriate animal model for development and toxicology studies?
5. What are fluorescent proteins, and how are they used in scientific research?
6. Describe the authors' experimental approach. What concentrations of ethanol do they test?
7. What were the results of the authors' experiments, and what is their interpretation?
8. What are some shortcomings of this paper?
9. Propose two follow-up experiments that could be performed given the data presented in this paper.