



**CALIFORNIA STATE SCIENCE FAIR  
2008 PROJECT SUMMARY**

<b>Name(s)</b> <b>Elexis S. Padron</b>	<b>Project Number</b>  28388
<b>Project Title</b> <b>Comparing the Toxicity Levels of Various Types of Vitamins on Planarian</b>	
<b>Objectives/Goals</b> The purpose of my project is to compare the toxicity levels of various types of vitamins on planarian. This science project investigates how toxic different vitamins are to other organisms. <b>Abstract</b> <b>Methods/Materials</b> Bisected planarian were placed in two different amounts of vitamin solutions. I compared a set of groups with a mixture of: twenty-five milliliters of pond water and one milliliter of vitamin; to a set of groups with twenty-five milliliters of pond water and four drops of vitamin, and one control group with just twenty-five milliliters of pond water. The planarian were bisected between the anterior (head) and the posterior (tail). Then I placed them in a mixture of pond water and vitamin solution in a Petri dish and compared them with planarian in a control group filled with pond water only. I used four different vitamins: vitamin A, vitamin B12, vitamin D, and vitamin E. I used a control group so I can compare how fast they would die in their regular environment as opposed to the environment with vitamins. I observed the planarian daily, recording how many died each day until they were all dead. <b>Results</b> The results of my investigation of the toxicity levels of different vitamin solutions on planarian clearly indicates that vitamin E is the most toxic to planarian. <b>Conclusions/Discussion</b> Vitamin D is the least toxic to planarian and vitamin E is the most toxic. The vitamins we take to keep us healthy are toxic to planarian. The concentration of the vitamins was too high for the planarian.	
<b>Summary Statement</b> My project evaluates the effects of four different vitamins on planarian.	
<b>Help Received</b> Mother helped cut/glue paper to board on evenly, father supervised experimentation and supported me the whole way.	