Is It Worse Than Nicotine?

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I chose this project because the world around us is filled with information about products and substances. With the push of Vape sticks and alternatives like CBD, and the consequent sanctioning of the products got me thinking. How bad are these products compared to plain nicotine? I want to identify whether or not these products could be used for alternatives like cigarettes, and to see truly how bad these products can be on the user. I created a .01, .03, .1, .3, 1, 3, 10 solution percentages for the substances, Vape, CBD, and water soluble Nicotine. Mobility - I placed petri dishes on top of grid paper to count how many times they crossed a line, tracking their movement. Withdrawal - I transferred planarians from water to one of the substance solutions, then transferred back to the water to count the number of C-Shaped Hyperkinesia. Sensitivity - I placed planarians in either a light or dark environment with a different substance, then changed their environment and substance. Tolerances - I gave them small dosages to test if they would build up a tolerance. Vape had varying effects in each of the experiments, CBD acted as a depressant in trials and was easy to get addicted to, Nicotine acted as a stimulant and was easy to get addicted to. CBD and Vape should not be used as a replacement for Nicotine products.

Awards Won: