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*Sleep-Deprivation Won't Make You A Dope*

The purpose of this experiment is to find the most effective dosing levels of L-dopa to compensate for the negative cognitive effects that sleep-deprivation cause. This will help benefit mankind by allowing those who are forced to be sleep-deprived, like those in the armed forces, be able to learn while sleep-deprived. The researcher created solutions of the drug L-dopa at the concentrations of 5%, 10%, 20%, 40%, 80% and a control group that doesn't get the drug. In each group there were ten fruit flies. After they were able to consume the drug, the researcher preceded by sleep-depriving the fruit flies. Throughout the night they were subjected to loud music, vibrations and light. The next day the researcher put them through a run in a T-maze. One end of the T-maze had a piece of apple, but that side was dark. The other side had light only, but had tonic water, a substance that fruit flies find bitter and unpleasant. They were released into the T-maze, one group at a time, from an equal distance from both ends and the researcher recorded how many go to either side. The researcher sleep-deprived the fruit flies and ran them through the maze for a total of two times, recording where they go each time. Overall I can conclude that the 10% solution group compensated for the cognitive effects of sleep deprivation the best.