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*Got Energy? Alertness and Activity in Madagascar Hissing Cockroaches*

The purpose of this research was to investigate the physiological effects of energy drinks on *Gromphadorhina portentosa* (Madagascar Hissing Cockroaches). The researcher determined the effects of energy drinks by measuring the mass, length, activity, and alertness of the research specimens. The cockroaches were separated into four groups with three cockroaches per group. Their mass and length was first recorded. After making the energy drink diluted solutions, the cockroaches were injected with 0.1 cc of their energy drink every other day for two weeks. After injections were over, mass and length were again recorded as well as conducting the alertness and activity tests. According to the data, Red Bull was extremely harmful to the specimens. All three cockroaches injected with Red Bull died. The cockroaches injected with NOS showed the most alertness and activity. Looking at the data, the NOS group had an average alertness time of 10.07 seconds. In activity it also moved the most with an average of 63 squares traveled. The 5 hour energy drink did not do as well in activity and alertness. It had an average alertness time of 159.885 seconds and an average distance covered of 50 squares. Overall both NOS and 5 hour energy were effective in making the cockroaches more active when compared to the control. However, in the alertness test, only NOS was effective when compared to the control, 5 hour energy was very ineffective and made them less alert. NOS and 5 hour energy did cause weight gain and length at a more rapid rate than the control.