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*Fizz. Focus. Feel Good... Or Bad: The Effects Of Energy Drinks On Gronphadorhina portentosa*

The purpose of this project was to determine if energy drinks affect length, mass, activity, and respiration rates in Madagascar Hissing Cockroaches. This project benefits mankind by possibly warning teens of the dangers of energy drinks and help them live healthy lives. For the procedure, 3 energy drinks were used as well as a control. The energy drinks were Amp, Full Throttle, and Monster. The control was distilled water. The energy drinks were diluted with distilled water and then injected into the cockroaches everyday for 3 weeks. Every other day, the cockroaches were massed and length was determined. At the end of the injections respiration was tested with Vernier carbon dioxide probes and activity was also recorded with the sandbox method. For data the group on Amp had an average mass gain of 0.105 grams, Full Throttle had 0.15 gram loss, Monster had a 1.46 average gram loss, and the control had a 0.26 gram average gain in mass. It appears when compared to the control that Amp is the safest, followed by Monster, and Full Throttle was the most harmful. The data showed that the group that received Monster grew most in mass and length while the control group stayed close to its beginning size. Full Throttle showed the most activity in the “sandbox”. All of the cockroaches that were injected with energy drinks were more active in the sandbox 1 hour after the injections than 2 hours after the first trial.