

Teens Drinking Caffeine Can Create Such a Scene

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Abstract:

Many adults and teenagers consume caffeine daily. It is believed this can have a negative effect on health. In an experiment, after being in an exposure chamber, some worms burrowing time increased while some decreased. This happened because if you put it into a real life scenario some people react to caffeine in a more energized way representing the worms going faster and some can have muscle spasms representing the earthworm going slower.

Materials and methods:

The scientists used Diet Pepsi, Mt. Dew, and Red Bull. For the exposure chamber the scientists use 2 solo cups and 2 circles of coffee filters. Next 3 worms were placed inside of the exposure chamber and the scientists waited for 1 minute then put them inside of a cup filled with dirt to see how the caffeinated drinks could affect the red worms burrowing time. This was repeated with 5 minutes and 10 minutes. To record the results a stop watch was started and the time was recorded every time one redworm was done burrowing.

Introduction:

Many adolescents consume caffeine every day most of the time through soda. Many of these adolescents don't even realize that they are consuming caffeine. But many of adolescents get the undesirable effects such as anxiety, dehydration, diarrhea. Caffeine is used to restore mental awareness. For adolescents it can be dangerous to consume more than 100mg of caffeine per day. But many consume 60-800mg of caffeine per day. This can be dangerous because it can cause abnormal heart patterns that can lead to death. The hypothesis made by the scientists was If the scientists expose red worms to caffeine, then the red worms burrowing time will decrease depending on the exposure time. This is because caffeine makes you feel energetic which would cause the red worms to burrow faster.

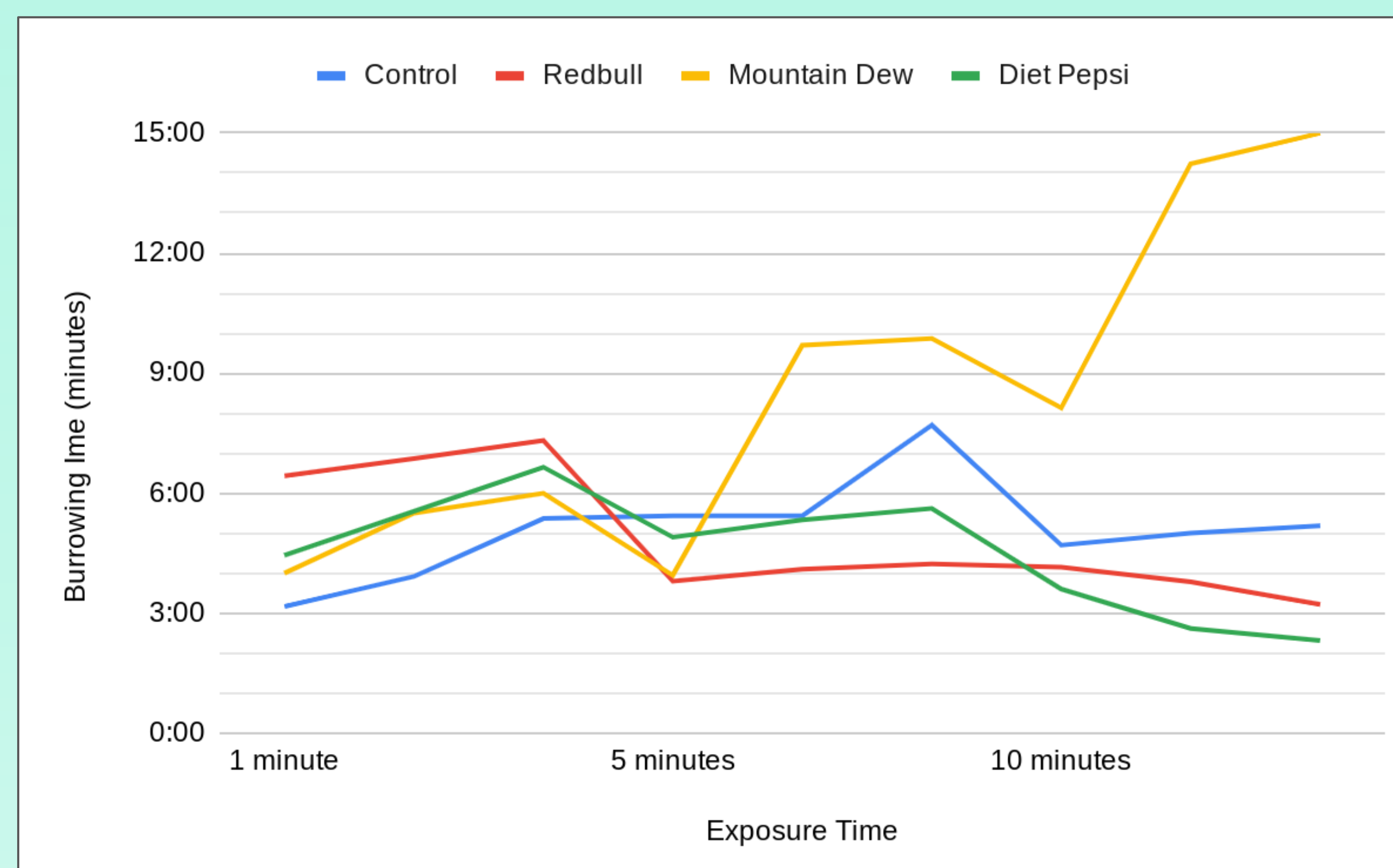


Discussion:

The red worms burrowing times both increased and decreased because of the side effects of caffeine. Caffeine is a stimulant drug, which means that it makes you more alert and energetic. Caffeine also have negative effects, which contribute to the reason why some burrowing times increased. Caffeine can cause muscles spasms which would decrease the red worms ability to control their movements, which would increase the burrowing time. The results both supported the hypothesis of, if the scientists expose red worms to caffeine, then the red worms burrowing time will decrease depending on the exposure time. This is because caffeine makes you feel energetic which would cause the red worms to burrow faster.

Results

The 5 scientists collected the earthworms burrowing time to find out when exposed to caffeine how redworms reacted. To find out how they were affected, the scientists timed the red worms burrowing time. The red worms burrowing time increased greatly when exposed to Mountain Dew, while with Red bull and Diet Pepsi, the burrowing times decreased, but only slightly. A t-test indicates most trials were statistically significant when compared to the control.



Sources cited:

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