

Bruno Mediate

Junior Division Medicine & Health

Chewing Gum For Brain Activity

The purpose of this experiment is to test if chewing gum increases mental alertness. I hypothesized that if you chew gum, then you will be more alert. The investigation involved getting 50 human subjects and creating a memory test based off the University of Washington's memory test with a series of letters. The test I created consisted of ten trials. The first trial had five letters, the second and third trials had six letters, the fourth through the sixth trials had seven letters, the seventh through ninth trials had eight letters, and finally the tenth trial had nine letters. I tried to make it as random as possible (no acronyms or words). I passed out gum to half the subjects and then the test took place. They had seven seconds to look at each trial and try to memorize it. Then, they would try to remember the letters and write them down on a sheet of paper that I created (write down dashes for however many letters there are in the trial) on the corresponding trial. They also had seven seconds to write the letters on their sheet of paper. The data collected did support my original hypothesis. Subjects with gum scored higher on 80% of the trials. Also, subjects with gum did 3.6% better on average over all the trials. These results lead me to believe that if you chew gum you will improve your mental alertness.