ABSTRACT

In recent years, the number of commercially available energy drinks has skyrocketed. They seem to market directly to a younger audience, including students, athletes, and those interested in fitness or performance. These drinks imply promises of enhanced energy and performance in sports and everyday tasks. Some research exists as to the validity of these implications, but much of it has been conducted on the active ingredients, such as caffeine, rather than a specific energy drink. The purpose of this study was to examine the effect of an energy drink containing specific human performance measures of muscular strength, muscular fatigue, and running speed. METHODS: Fifteen male students (age 20.5 ± 1.3 yr) were recruited for this single blind study. These were pre-tested on maximal voluntary isometric force production at the position of the assessor's peak and held while isometric force was measured using a load cell, with knees bent to 90 degrees. The time at which force reached 80% of maximal voluntary isometric (MVIC) was noted and was classified as a test for running speed. The time at which force dropped 20% from their maximal voluntary isometric contraction for an extended period of time. Rate of fatigue was measured as the time (s) it took for the subjects’ force production to drop 20% from their maximal voluntary isometric contraction.

RESULTS: Differences between the treatment (TRT) and placebo (PLC) trials (p<0.05).

CONCLUSIONS: Monster® energy drink does not improve performance on the assessed physical measures. According to the nutrition label on the Mio Fit® used to flavor and color the placebo drink, no sugars or caffeine were ingested via that product. Consequently, if there was a placebo effect it was entirely psychological. However, use of a control group in future studies is suggested in order to better understand that affect. More research is needed in this arena, utilizing other brands of energy drink, to better understand the effects these drinks might have on human performance.

REFERENCES
