CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY

Name(s)
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Project Number
S1518

Project Title
Effects of Energy Drinks on Blood Sugar Levels

Abstract

Objectives/Goals
I believe energy drinks are only sugared beverages that have little effect on energy. I hypothesize that the body metabolizes sugars in an energy drink like any other food or beverage.

Methods/Materials
Methods:
1) Checked Blood Glucose Level(BG) for baseline data prior to consuming drink. Noted time on data table.
2)Each test subject had ten minutes to consume entire beverage.
3)Checked BG after 30 minutes; recorded data.
4)Repeated BG checks three more times, every 30 minutes for a total elapsed time of two hours.
**No other food or drink was consumed during the test.
Materials:
-4 test subjects
-4 different energy drinks [list of drinks on displaty]
-OneTouch Ultrasmart Glucometer
-OneTouch Ultra Test Strips
-OneTouch UltraSoft Diabetic Lancing device
-OneTouch UltraSoft Lancets
-BD Alcohol swabs
-Bio-Hazard Waste Disposal Container
-Stopwatch

Results
It was noted that after the initial 30 minutes, all four test subjects showed a dramatic increase in Blood Glucose Levels. Following that, for the next 1 1/2 hours, BG Levels dropped steadily ack to near normal or below baseline levels.

Conclusions/Discussion
In my hypothesis I stated that energy drinks would have little effect on energy and that the body would metabolize the sugars like anything else we consume. My data supports my hypothesis.
The body uses sugars and carbohydrates for energy. Since energy drinks are mainly sugar, the body metabolizes them accordingly. I believe the uses of energy drinks really provide a quick sugar/carbohydrate rush to the body.

Summary Statement
I gave four subjects, four brand energy drinks and measured the effects and modifications on blood sugar.

Help Received