

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

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Project Number

J1711

Project Title

How Do Various Drinks Affect Blood Pressures with Exercise?

Abstract

Objectives/Goals

The objective is to determine how three different types of drinks, along with exercise, affect blood pressure.

Methods/Materials

Materials

Drinks- Coca Cola, Water, Gatorade

sphygmomanometer (blood pressure machine)

treadmill

stop watch

Method-

Each test subject will take a resting pulse, and blood pressure. They will then jog on a treadmill for four minutes. When finished, they will retake pulse and blood pressure.

I will then measure 12 oz of a liquid for each test subject. They will drink the liquid and rest for 30 minutes.

After 30 min. Test subject will once again, test resting pulse and blood pressure, get back on treadmill for 4 min, and immediately retake pulse and blood pressure.

retake pulse and blood pressure at 5 minute intervals until it had returned to original resting rate.

Repeat process for each person in the study, for the control, and each liquid.

Results

Coke made the blood pressure of each test subject spike after the second running test.

Gatorade lowered the rise of the blood pressures of each test subject after the second jogging test.

Water the lowered the rise of the blood pressures average after the second jogging test, but not as much as the Gatorade did.

Conclusions/Discussion

If a person has hypertension, they should drink Gatorade during and before exercise.

This will help keep their blood pressure under control.

They should stay away from Coca Cola because it causes your blood pressure to spike.

Summary Statement

The pupose of my project is to determine how different types of beverages affect people's blood pressures when they exercise.

Help Received

Teacher taught scientific method. Local doctor helped observe, and provided blood pressure machine.