

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

J1129

Project Title

Determining the Crunchability, Floatability, and Stability of Breakfast Cereals

Objectives/Goals

Abstract

My goal for me and my project is for me to go as far as I can. The reason I choose this to be my goal is because I know I tried my hardest doing this project and so far my goal is doing fine.

Methods/Materials

For my science project I am testing the crunch ability, float ability, and stability of breakfast cereals. My test cereals are Cocoa Puffs and Kix. My tests are the crunch tests, the float tests, and the stability tests. For the crunch tests I would take each cereal from an unopened box and pour, drop by drop, drops of milk onto the cereal and determine how many drops it would take before the cereal collapsed. For the float tests I would also take one piece of cereal out of an unopened box and put it in a bowl of milk and time how long until the cereal would sink more then half way below the milk. For my final tests, the stability tests I would again take a piece of cereal out of an unopened cereal box and put plates on the cereal (each weighing a different amount of weight)and record how many pounds until cereal crushed.

The materials needed for this project were: Whole milk, Cocoa Puffs cereal, Kix cereal, Stopwatch, a Bowl, An Eyedropper, A Scale, A Spoon, and Tweezers.

Results

My hypotheses was that the Cocoa Puffs would be overall more stable because of the sugar. I thought the sugar in the cereal would give it more of a stability. In the crunch tests the overall average drops before the cereal collapsed was Kix , ten drops and Cocoa Puffs, nine drops. The overall average in the float tests was Kix, two minutes and thirty five seconds before sinking and Cocoa Puffs, four minutes and two seconds before sinking. In the final tests, the stability tests Kix had an overall average of three pounds before crushed and Cocoa Puffs had an average of five pounds before crushed. My results proved that Kix has a greater crunchability and that Cocoa Puffs has a greater stability and crunchability

Conclusions/Discussion

The results show that my hypotheses was correct and Cocoa puffs was more stable then Kix . One of my observations though was that the sugar in the Cocoa puffs was making the milk chocolate and this gives another reason why Cocoa Puffs is more stable. Some of my observations prove that although I have complete this science project it begins the start of another.

Summary Statement

I am determining whether Cocoa Puffs or Kix is more stable with three types of tests the crunch tests, the float tests, and the stability tests.

Help Received

Teacher helped typed; Teacher helped research