

CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s)

Tori H.A. Takeshita

Project Number

J0519

Project Title

Burning Calories

Abstract

Objectives/Goals

The project is about finding the amount of calories stored in foods. .

Methods/Materials

- o Two tin cans, one smaller than other; o One wood dowel; o One cork; o One needle; o One graduated cylinder; o Distilled water (162 mL for each trial); o Thermometer (Celsius, range 20-100); o one lighter; o Scale (calibrating in grams); o Roasted Almonds and Peanuts; o Pieces of popcorn; o Marshmallows; o Goldfish; o Dry pet food.
- 1. Use calorimeter
- 2. Weigh the food and record the weight.
- 3. Measure the amount of water to pour into the smaller can, it should be half full.
- 4. Measure the temperature of the water.
- 5. Place the food item onto the needle and place the needle into the cork.
- 6. Light the food item.

Results

The almonds contain 3682 cal or 36.38 Cal, the peanuts contain 2171 cal or 21.71 Cal, the goldfish crackers contain 661 cal or 6.61 Cal, the marshmallows contain 566 cal or 5.66 Cal, the popcorn contains 519 cal or 5.19 Cal, the dog food contains 354 cal or 3.54 Cal. The percent difference between peanuts and almonds is 61%. The percent difference between goldfish crackers and almonds is 18%. Between the marshmallows and almonds, the percent difference is 15%. The percent difference between popcorn and almonds is 13%. The percent difference between the dog food and almonds is 10%.

Conclusions/Discussion

The conclusion is that almonds contain the most calories out of the other samples that were used.

Summary Statement

How much energy is stored in different foods

Help Received

none