

Food Energy

- Hector Saiz
- Javier Tello
- Paula Rodriguez

Introduction

We are going to do an experiment to look the chemical energy of the food .

Materials

- Food
- A big tin
- A small tin
- Water
- A lighter
- Pin
- A test tube

Procediments

- First we have weigh the food items
- Then we have to measure 100ml of water and put it on the small tin.
- Measure the temperature of the water
- Put the food item on a tape and then put all on the big tin , with the lighter burn it and put with a pin the small tin into the big tin , wait and then measure the water , and measure the weight of the food item.
- Then put the measurements on a table.
- Repeat three times this and then do the average of the three.

Table of Results

	Trial	Food Mi (g)	Food Mf (g)	Water Ti (°c)	Water Tf (°c)	Q(water) Cal	Food (Cal/g)	
	1	0'46 g	0'18 g	23°	26°	300	1071,42	
	2	0,46 g	0,362 g	21°	22°	100	1020	Medium 933,543
	3	0,508 g	0,367 g	22°	23°	100	709,21	

Conclusions

Theoric value: 4960 cal/g

- When the food items are burned their energy is transform in thermic energy. Not all this energy is measured because some of the heat is lost in the walls of the tin. This makes that the experimental value is lower than the calories that are assumed in the bag of the item.