



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

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Project Title Calories: Do They Add Up?	
Abstract Objectives/Goals Through this experiment, this researcher hopes to discover if the #Nutrition Facts# section of pre-packaged, frozen meals give consumers accurate calorie counts. The problem this researcher hopes to solve is whether or not the amount of calories in certain foods that is stated on the package is incorrect, and if it is, by how many calories. Methods/Materials <ol style="list-style-type: none">1 glass test tube7 mL water1 C thermometer1 balance1 pack of matches1 food dehydrator1 small metal cup3 snack food items:<ul style="list-style-type: none">-1 Hostess Twinkies-1 Hostess Donettes: Crumb-1 Hostess Dunkin# Stix0.8 g catalyst (stand oil, turpentine, and bees wax solution) Results The calorific value was found in calories per gram, and then multiplied to get the amount in an entire snack item. The hypothesis was that the final calorie counts from the test would be 5% higher than the count given on the package. The tested amounts were really an average of 52% higher than the amounts given on the package. Conclusions/Discussion The Hostess Twinkies had 24% more calories, the Hostess Donettes: Crumb had 63% more calories, and the Hostess Dunkin# Stix had 69% more calories than the packages said. In the average of all three products, there were 52% more calories in the product than were marked on the package. Through this experimentation, it is concluded that the amount of calories written on snack food items is under marked.	
Summary Statement This experiment tested the accuracy of calorie counts on the Nutrition Facts section of food packages.	
Help Received Parents supervised the testing of the food and helped collect materials needed for experimentation.	