

## CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

Jessica M. Winter

**Project Number** 

**J0636** 

**Project Title** 

# The Placebo Effect of Food Labeling

# Abstract

Objectives/Goals

My objective was to find out if food packaging affects the way a person perceives how a food will taste.

Using sixteen different food items I switched the packaging of seven items to find out if a person's perception of taste of regular and reduced or low fat foods is influenced by the packaging of the products.

#### Methods/Materials

Sixteen different food items were purchased which offered regular and low fat or reduced fat varieties. These items included liquid and solid refrigerated foods, as well as dry packaged items. The food items were presented to the testing group individually on a paper plate marked A or B. The subjects also saw the food item coming out of the packaging as it was prepared. After tasting item on plate A, they cleansed their palates with water and tested plate B. They then circled the item on their tally sheet which they thought was a "Regular Fat" food. This procedure was completed for all sixteen items. The food items that were tested in both varieties were: milk, oreo cookies, strawberry yogurt, Italian dressing, iceberg lettuce, plain bagels, Wheat Thin Crackers, saltine crackers, pretzels, white bread, Chex Mix, Cheez-It Crackers, popcorn, peanut butter, strawberry jelly, mayonnaise, deli turkey, chocolate pudding, pineapple tidbits, Sprite soda, and Ritz Crackers. The non food items that were used included; paper with clipboard for tally sheet, pencils, napkins, small paper plates, Dixie cups, paper bowls, plastic spoons, forks, knives, toothpicks.

#### Results

The items that were not switched had twenty seven percent incorrect answers and seventy three percent correct answers. The items that were switched and remained original were forty five percent incorrect and fifty five percent correct. The items that were switched had more incorrect answers as compared to the items that were not switched.

#### **Conclusions/Discussion**

This concludes that most consumers can't tell the difference between low fat or reduced fat foods as compared to regular fat items. When the items were switched, nearly half of the testing group had incorrect answers. My experiment proved that not only can you have a perception about how foods can taste, but you also can't tell the difference in taste between low fat and regular food items. From my results I would recommend that consumers should try to eat reduced or low fat food items to promote better health practices and as a way to lose weight.

### **Summary Statement**

The way a person perceives how a food item will taste is affected by the labels on the packaging.

### **Help Received**

Mother and close friend helped me prepare some of the food items.