

# CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

Tyler D. Johnson

**Project Number** 

J0715

**Project Title** 

**Food Coloring Mind Games?** 

#### **Abstract**

## Objectives/Goals

My objective was to see if the color of a drink would affect the way a person will think something tastes.

#### Methods/Materials

I used three pitchers of water with an equal amount of colorless, strawberry watermelon flavored juice powder in them. I put red food coloring in one, blue coloring in another and left the third one clear. I had ten different people taste the juice from each of the pitchers first with a blindfold on and then with the blindfold off in clear plastic cups so they could see the color. As they tasted each cup I wrote down what flavor they thought it was.

#### **Results**

All but one of the the people in the taste test thought that the same drink with a different color was a different flavor when they tasted them without the blindfold and they could see the color of the juice. Half of the people tested thought that the blue colored juice was a blue raspberry type of flavor when the blindfold was off. Only one person out of the ten said that all six cups of juice were the same flavor both blindfolded and unblindfolded. Twenty-four out of the thirty comparisons showed that the taste testers thought the same juice was a different flavor once the blindfold was taken off and they could see the juice.

#### **Conclusions/Discussion**

My conclusion is that the presence of food coloring does affect the way most people think something will taste. The brain seems to override the taste buds. However, at the end of the tests I feel like I had too many variables. If I did this experiment again I would only use the clear juice and one colored juice instead of two.

### **Summary Statement**

My project is about how simply changing the color of a juice will make people think it is a different flavor when tasted.

#### **Help Received**

Mom bought all of the materials I needed, helped me with things I didn't understand and drove me to the taste testers houses. My teacher gave me the project board.