

# CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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**Project Number** 

J1302

**Project Title** 

The Five Second Rule: Dry Food vs. Wet Food

### **Abstract**

## **Objectives/Goals**

My objective was to learn if the five-second rule applies to dry food dropped on the floor. I thought that the dry food would have the same results as the wet food (Wet food was tested last year. I am comparing these results with this year#s project).

#### Methods/Materials

The materials used for this project were; graham crackers, a watch with a second hand, 40 Petri dishes, approximately 45 sterilized gloves, a black sharpie pen, a gallon-sized Zip-loc bag, agar, three different ground surfaces: grass, sidewalk, and kitchen floor, Q-tips, and a card table. My procedure was as follows. First I took a few graham crackers and put them in the gallon-sized bag. Then I broke each graham cracker into eighths. Next I gloved one hand and took a graham cracker out of the bag and swabbed it with a Q-tip. I swabbed the Q-tip in the Petri dish and put the top of the Petri dish back on. I repeated this process 9 more times for the Control Group. Then I gloved one hand, picked up a graham cracker, and dropped it on the kitchen floor for five seconds. I picked the graham cracker up immediately after five seconds were up, swabbed the side that touched the ground with a Q-tip, and swabbed the Q-tip in the Petri dish. Next, I closed the lid on the Petri dish. I repeated this process 9 more times for my Kitchen Floor Group. I repeated this process for my grass and sidewalk group, each 10 times. Finally, I taped the lids shut to all of the Petri dishes and placed them on a card table to watch them for 7 days.

### Results

After I monitored the Petri dishes for 7 days these were my results. The results consist of graham crackers (this year#s project) and bananas (last year#s project). Graham Crackers; Control 1out of 10, Kitchen Floor 3 out of 10, Sidewalk 7 out of 10, and Grass 10 out of 10 had growth on them. Bananas; Control 3 out of 10, Kitchen Floor 10 out of 10, Sidewalk 10 out of 10, and Grass 10 out of 10 had growth on them.

#### **Conclusions/Discussion**

The results I uncovered proved that dry food doesn#t have the same results as wet food. This knowledge can help everyone have a better understanding of germs and how they could affect us. This can also help us from getting sick. If we don#t pick food up off the ground then that gives us a better chance of not getting sick.

### **Summary Statement**

To learn if the five-second rule also applies to dry food dropped on the floor.

#### Help Received

Mom helped time the food on the floor, helped mix the agar, and helped put together the board.