



**CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY**

Name(s) Mary E. Medeiros	Project Number J1321
Project Title Will The 10-Second Rule Save Food in the Nick of Time?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals Have you ever dropped your favorite treat on the ground and you and/or your friends cry out, "10-second rule!" making you feel not gross at all picking it up from the ground, blowing on it a little and eating the treat? My goal is to test a piece of ham that falls on the counter and ground for 10, 5, and 1 seconds. I want to see if it really will be clean enough to eat or if it will be crawling with germs.</p> <p>Methods/Materials 1. I sterilized the knife and tongs in boiling water for 5 minutes. 2. I got the knife out of the boiling water and cut the ham in small pieces while it was still in the package. 3. I sanitized my hands with antibacterial waterless hand sanitizer. 4. I tested the piece of ham that I was going to use for my 10-second test as my control for the kitchen floor. 5. I got the tongs out of the boiling water and grabbed the piece of ham that I tested for my control and I put the ham on the kitchen floor for 10 seconds. 6. I picked the ham up and sampled the ham with a sanitized cotton swab rubbing it across the gelatin in the Petri dish. I repeated this process for the five second and one second samples. I also tested the kitchen counter before and after I wiped it down with a sanitized towel. When I finished the tests, I set the Petri dishes in a warm and moist environment. I observed them everyday and then at the end of seven days I counted the bacterial colonies in the Petri dishes.</p> <p>Results According to the swab samples from the dirty kitchen floor and dirty kitchen counter, the Petri dishes grew several colonies of bacteria. Even the clean counter test showed that the ham picked up bacteria. The kitchen counter was dirtier than the floor and the amount of time the ham was in contact with a contaminated surfaces did not matter. They were all full of germs.</p> <p>Conclusions/Discussion There are levels of bacteria on every surface and they are quite nasty. You can be pretty sure that if you drop food on the floor or counter for even the shortest period of time that it will pick up whatever bacteria are present. My suggestion is to not eat food off the ground, let the vacuum get it or the dog.</p>	
Summary Statement I wanted to test the 10-second rule to see if the myth was fact or fiction.	
Help Received No help	