



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Rhea A. Morais	Project Number S1113
Project Title Does Dog (Canis familiaris) Saliva Create Stains?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My goal was to find out if dog saliva has any effect on whether materials stain cloth or not. The scientific question I was trying to answer was: Does dog saliva set and create stains when mixed with other materials? My hypothesis was that it would.</p> <p>Methods/Materials Materials: 1 dog (male black Labrador Retriever), dog drool, 16 pieces of white cotton fabric, milk, apple juice, turquoise Easter-egg dye, 1 Sharpie marker, ketchup, chocolate syrup, grass, 1 pear Methods: Get dog to drool on half of the strips of clean white material by slowly feeding him cheese or popcorn. Pour one potential staining agent (milk, ketchup, apple juice, etc.) on each cloth with dog drool on it (one potential staining agent per cloth on the spots of dog drool). Next, pour the same materials on the other half of the white fabrics without dog drool on them. Label each fabric in order to remember what stain is what. Take photos of soiled cloths showing the results of the staining process. Wash the cloths to see if any of the stains come out. Observe results.</p> <p>Results My hypothesis was only true in some cases. I found out that it depends on what the materials were. The answer to my question, "Does dog saliva set and create stains when mixed with other materials?" is: occasionally. It depends on what materials, and it also depends on if you wash the cloth or not (like with the apple juice, it did leave a mark when mixed with the saliva until I washed the cloth). It also depends on how you dry the cloth in some cases (exposure to sunlight affected some, such as the grass). For some things, the opposite of my hypothesis was true (for all the non-food items before being washed).</p> <p>Conclusions/Discussion All the non-food items I tested (dye, grass, and the Sharpie) had less of a stain when mixed with dog drool than they did without the drool. All the food items (ketchup, chocolate syrup, milk, apple juice, and pear) had a variety of results. The fruit items (apple juice and pear) were opposites in results. The pear/dog drool mix had less of a stain than just the plain pear, and the apple juice/dog drool mix had more of a stain than plain apple juice. However, the food items that weren't fruit had the same results. All of those stains were the same, both with and without the drool.</p>	
Summary Statement To see if dog saliva sets and/or creates stains when mixed with various materials.	
Help Received Mother helped give ideas of variables to test and helped test them.	