



**CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY**

Name(s) Brandon M.W. Stubbs	Project Number J0418
Project Title Mummy Dogs	
Abstract Objectives/Goals The objective was to find out if body fat is a factor in the mummification process. Methods/Materials Hot dogs of different fat content (four turkey and four beef hot dogs, and four polish sausages) were weighed and measured. One of each was put in sand heated by a reptile lamp and heat pad. Three were put in containers filled with baking soda. As a control, three were placed in unheated sand, and three were placed in empty containers. After five days the hot dogs were weighed and measured, then replaced. This process was repeated after three more days, and continued every three days until there was no further change in weight and measurement for all the hot dogs. This test was repeated three times, using the same method. Results On average, in the sand test, the hot dog with the least fat, the turkey dog, mummified first, the beef second, and the polish sausage, with the most fat, mummified third. The hot dogs placed in baking soda stopped shrinking at the same time on two of the three tests. On the first test the polish sausage took slightly longer to mummify than the other two hot dogs. The baking soda control hot dog's weights and measurements never changed. The sand control hot dogs did shrink slightly, but had not ceased shrinking by the end of the experiment. Conclusions/Discussion The fat content of the hot dogs did have an effect on the amount of time it took the sand hot dogs to mummify. The fat content did not have an effect on the baking soda hot dogs. Also, the sand hot dogs became shriveled and hard, while the baking soda hot dogs remained smooth and flexible. The information from this project shows that in ancient Egypt the Pharaohs and wealthy citizens did not need to be slim, because they used a similar method of mummification as the baking soda method. The poor people, however, needed to be lean, because they used the sand method of mummifying.	
Summary Statement Hot dogs with different fat content were placed in sand and baking soda to determine the time it would take for them to mummify.	
Help Received My science teacher, Mr. Kyle, guided me through the project, giving me the steps necessary to make a science fair project. He also gave me advice. My mom verified my weights and measurements for each hot dog. She also typed the information for my science project from my hand written papers.	