



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Grace A. Kumaishi	Project Number J1120
Project Title Take a Deep Breath: Lung Capacity, Age, and Exercise	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The purpose of this project is to see what effects age and exercise have on lung capacity.</p> <p>Methods/Materials My apparatus was made with a 1 gallon water bottle, plastic tubing, and a plastic tub. I filled the container with water, flipped it over into a tub of water (without spilling any) and put the tube into the opening of the bottle. Volunteers, ranging in age from 5-72, filled their lungs and blew into the tube, displacing water in the bottle. The amount displaced was their lung capacity.</p> <p>Results I found that people ages 18-49 had the greatest lung capacity and at around the age of 50, it began to decrease. Exercise doesn't seem to be as closely related to lung capacity as age.</p> <p>Conclusions/Discussion My conclusion is that age has a significant effect on lung capacity, while exercise doesn't have as much of an effect.</p>	
Summary Statement The purpose is to see what effects age and exercise have on lung capacity.	
Help Received Parents helped get materials; Mother helped to proofread writing.	