<table>
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<tr>
<th>Name(s)</th>
<th>Project Number</th>
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<tr>
<td>Grace A. Kumaishi</td>
<td>J1120</td>
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## Project Title

**Take a Deep Breath: Lung Capacity, Age, and Exercise**

### Objectives/Goals

The purpose of this project is to see what effects age and exercise have on lung capacity.

### 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.

### 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.

### Conclusions/Discussion

My conclusion is that age has a significant effect on lung capacity, while exercise doesn't have as much of an effect.

### 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.