



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Gina M. Little</b>	<b>Project Number</b> <b>J1011</b>
<b>Project Title</b> <b>Maximize your Peak!</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The objective of this project is to determine the effects of exercise on peak flow readings on non-asthmatic human beings. <b>Methods/Materials</b> Using 4 human subjects, peak flow readings, using a peak flow meter, were measured and recorded every AM and PM for 4 weeks, at least 5 days per week. During weeks 2 through 4, 3 of the 4 subjects also recorded their peak flow readings just prior to aerobic exercise, immediately following aerobic exercise, and after recovery from this exercise. Subject #2 exercised the same amount during the 3 weeks, while subjects #3 and #4 increased the aerobic exercise by 5 minutes each week, starting at 10 minutes and progressing to 20 minutes. Subject #1 did not exercise but continued to record AM and PM peak flow readings. Exercise was walking quickly and/or running uphill to maintain an aerobic state. Recovery time was when subject returned to bottom of hill walking. <b>Results</b> Peak flow readings did not improve significantly on the subjects who exercised regularly prior to the experiment. Peak flow readings were markedly improved in subject who did not exercise regularly prior to experiment. <b>Conclusions/Discussion</b> My conclusion is that exercise will improve peak flow readings on non-asthmatics until their maximum peak is reached.	
<b>Summary Statement</b> My project is about exercise and the effect it has on peak flow rates on non-asthmatic human beings.	
<b>Help Received</b> My mother obtained the peak flow meters used in the project.	