



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Sanjeevani Kumar	Project Number J1416
Project Title How Bad Is Smoking?	
Abstract Objectives/Goals The objective of the project is to warn the smokers about the harmful effects of smoking on their bodies and to caution the nonsmoker never to start smoking. Methods/Materials I bought a breathing pump and alcoholic wipes. Then I went to a cigarette store and asked the smoker to sign the informed consent form and the smoker's questionnaire. Next, I asked them to inhale air out of the breathing pump three times. Then, I went to the houses of nonsmokers I knew and asked them to fill out the informed consent form. Lastly, I asked them to inhale air out of the breathing pump three times. All my subjects were about the same age and gender. Results The data indicates that nonsmokers are able to inhale out of the breathing pump for almost twice the milliliters as smokers. When the smoker exhaled the cigarette on tho a white handkerchief, there was a stain of tar on the handkerchief. Smoking has the same effect on our lungs. Conclusions/Discussion After doing this project I concluded that smoking directly affects the lungs and a nonsmoker has a larger lung capacity than a smoker. Some diseases that you can research on that smoking can cause are: bronchitis, emphysema, lung cancer, heart disease, and near or far sightedness.	
Summary Statement To see if a smoker can inhale as much air as a nonsmoker.	
Help Received Dr. Vinod Kumar supervised and advised me on the project.	