



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Bassil A. Dakelbab	Project Number 31669
Project Title Seeing Through the Smoke	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to set up and prove that smoking Hookah is worse for you than smoking cigarettes.</p> <p>Methods/Materials Ten empty juice bottles Package of filtered and non-filtered cigarettes 4 foot pumps Duct tape Hookah Pipe Hookah tobacco Cotton Face Mask Scale that can measure in grams</p> <p>First I designed and built a "human lung" machine to test the different types of smoking tobacco. I tested equal amounts of Hookah tobacco, filtered cigarettes and non-filtered cigarettes. I ran a control lung first. Then three trials of non-filtered, three trials of filtered cigarettes and finally three trials of Hookah. I collected all my data then analyzed it, then formed my conclusion.</p> <p>Results After weighing all the bottles, I proved that smoking Hookah is worse for you than smoking cigarettes. Even though the bottles of cigarette smoke appear to be dirtier, the hookah bottles had more residue trapped inside them so they weighed more.</p> <p>Conclusions/Discussion Originally an Iranian physician created the Hookah as a healthier alternative to smoking. He thought that people could smoke it and because the smoke passes through water it would be purified. Smoking anything is very harmful to the human body and should not be marketed as one is being better for you than the other. There really is not that big of a difference when it comes to filtered and non-filtered cigarettes. Hookah which was supposed to be a healthier alternative to smoking, turns out to be even worse. Bottom line is smoking is no good for anyone and the environment.</p>	
Summary Statement To determine if smoking Hookah or cigarettes is more harmful to your body.	
Help Received Mother helped me purchase the tobacco products and supervised me while I was doing my experiments.	