



**CALIFORNIA STATE SCIENCE FAIR
2009 PROJECT SUMMARY**

Name(s) Shreya Banerjee	Project Number J2203
Project Title Beware of Saturated Fats	
Abstract Objectives/Goals In the project, different cooking oils were tested to see which one had the most saturated fat. Methods/Materials Four test tubes were filled with 20ml. of vegetable oil and one drop of tincture of iodine was added to three test tubes and the fourth test tube was left as control. These four test tubes were heated in a water bath. If the test tubes with tincture of iodine did not change color, another drop of iodine was added and the test tubes were heated again. This process of heating and adding was continued until the oil (in the three test tubes) changed color and the drops of tincture of iodine were recorded. The experiment was repeated for olive, sunflower, grapeseed, canola, mustard, almond, peanut, and coconut oil. The oil that needed the least number of tincture of iodine drops was the most saturated. Saturated fats are unhealthy and can cause heart attack and stroke. Results Sunflower oil was the least saturated and coconut, peanut, and almond oil were the most saturated. Conclusions/Discussion Saturated fats are unhealthy and can cause heart attack and stroke. Sunflower, vegetable and canola oil are recommended for regular cooking. Olive oil is also healthy because it has high amount of monounsaturated fat and antioxidants. Coconut oil is unhealthy.	
Summary Statement In my project, I found which cooking oil has the most saturated fat and what saturated fat does to your heart.	
Help Received Mother helped with project. Dr. Anupom Ganguli (scientist), my father (cardiologist), and my mother supervised the project	