



**CALIFORNIA STATE SCIENCE FAIR  
2007 PROJECT SUMMARY**

<b>Name(s)</b> Saira Delgado	<b>Project Number</b> <b>J1509</b>
<b>Project Title</b> <b>A Nutritional Analysis of Japanese and American School Lunches</b>	
<b>Abstract</b> <b>Objectives/Goals</b> My project is to analyze the nutritional values of Japanese and American school lunches. <b>Methods/Materials</b> Contacted Kojiya Elementary School in Tokyo, Japan and requested lunch menu. Contacted Sanger Unified School Services and requested lunch menu. A nutritional breakdown of meals served over a 22-day period in Fresno County and Kojiya Elementary School was analyzed and graphed by categories. Calories, fiber, protein, fat, calcium, carbohydrates, vitamin C, sodium, and iron were charted. <b>Results</b> Iron content was lower than recommended daily value at 2.3mg; was higher in the United States, at 6.37mg and 277% of Japan's iron content. Vitamin C was lower than recommended daily value at 24mg, and was higher in the United States, at 55.69mg and 232% of Japan's vitamin C content. Fiber content was lower than recommended daily value at 4.9g, and was higher in the United States, at 10.62g and 217% of Japan's fiber content. Calorie content was under the recommended amount at 625kcal, and higher in the United States at 729kcal and 167% of Japan's calorie content. However, seeing that less calories are healthier, the Japanese menu was healthier. Sodium does not have a recommended daily value in either Japan or the United States. Japan was lower in sodium at 1210mg, and higher in the United States at 2265mg, which was 187% of Japan's sodium content. Calcium content was higher than recommended at 350mg, and was higher in the United States at 525.35mg, and 150% of Japan's calcium content. Protein content was lower than recommended at 24.8g, and higher in the United States at 29.02g, which was 117% of Japanese protein. Carbohydrates do not have recommended amounts in Japan or in the United States. Japan's carb content was 101.69g, and the United States was higher at 85.5g. Fat content was higher than recommended at 19.5g, and was higher in the United States at 24.05g, and 123% of Japan's fat content. <b>Conclusions/Discussion</b> I discerned that the American lunches were healthier than the Japanese lunches on the menu, but that is if the students take everything from the salad bar. Unfortunately, they do not, which would make the Japanese menu healthier. The explanation for this is Japanese lunches have their vegetables in their menu; there is no salad bar. There is no option for the Japanese students; you have to eat your vegetables. They do eat it, because they eat it at home and at school. It really lowers the obesity count.	
<b>Summary Statement</b> My project is about Japanese and American school lunches and their nutritional values; I analyzed them to find which was healthier.	
<b>Help Received</b> Sanger Unified School District Food Services provided nutritional breakdown; Kojiya Elementary School provided Japanese nutrition spreadsheet	