



**CALIFORNIA STATE SCIENCE FAIR  
2012 PROJECT SUMMARY**

<b>Name(s)</b> <b>Liza O. Mansbach</b>	<b>Project Number</b> <b>S0415</b>
<b>Project Title</b> <b>The Effect of Body Mass Index on Ability to Estimate Caloric Values in Foods</b>	
<b>Abstract</b> <b>Objectives/Goals</b> Based on the assumption that being overweight is related to lack of knowledge about caloric needs, the purpose of this study was to examine if weight status was related to a teen's ability to accurately estimate caloric content and if the relationship differed by gender. <b>Methods/Materials</b> A sample of Redwood High School freshman (n=96) were asked to estimate the calorie content of five foods displayed on plates : a bagel, a chocolate chip cookie , ½ cup of peanuts , a large apple and a medium size movie size popcorn and to record their height, weight , sex, and birth date. Students were categorized into four BMI categories &#8804;18.5; 18.6-21.9; 22-24.9 and &#8805;25. <b>Results</b> Most students underestimated calories. There were no differences across BMI groups in estimating the number of calories for any individual foods (all p-values >0.05) or for the totals across all foods (p=0.55). There was however a gender difference. Males were more likely to underestimate total calories than females (p=0.058). <b>Conclusions/Discussion</b> Students, regardless of gender or weight on average underestimated calories, especially for foods like peanuts that they perceive to be healthy but are high in calories. Education about calories and caloric needs may help improve a teen's ability to accurate estimate calories in foods commonly eaten.	
<b>Summary Statement</b> My project was to find out if teenagers knew the amount of calories in commonly eaten foods.	
<b>Help Received</b> Mother helped me interpret my statistics.	