



**CALIFORNIA STATE SCIENCE FAIR
2012 PROJECT SUMMARY**

Name(s) Jesse Wang	Project Number J0527
Project Title Organic vs. Conventional: Which Is Superior?	
Abstract Objectives/Goals The objective is to determine whether organic or conventional tomatoes have more nutrients. Along with that, testing will also be conducted to determine which type of tomato is preferred by the public in terms of taste, and if the public can determine which tomato is organic just off of taste. Methods/Materials The materials in the #Chemistry of Food Experiment Kit# (including Biuret#s reagent, indophenol powder, Lugol#s iodine, and Benedict#s solution) were used to test both organic and conventional tomatoes for starch, protein, glucose, and Vitamin C. People were anonymously given a slice of both organic and conventional tomato and then asked to determine which tasted better and if they could determine which tomato was organic. Results It was observed that the organic tomato had more glucose than the conventional tomato. The organic tomato also had almost 150% more Vitamin C than the conventional tomato. Neither starch nor protein was present in either tomato. In the survey portion of testing, 52% tested preferred the taste of organic tomato over conventional, 14% preferred neither, and the remaining 34% preferred the taste of conventional tomato. Conclusions/Discussion The organic tomato, although more expensive and also smaller than the conventional tomato, contains a lot more glucose and Vitamin C. The taste of the organic tomato is also preferred by the majority of the public. Because farming methods are the same for all organic crops, it is possible to conclude that most, if not all, of the other organic crops will have more nutrients than their conventional counterparts. If cost is not an issue, organic is a good choice. However, there are no obvious problems with eating conventional food; it is still a viable choice, especially if cost is an issue.	
Summary Statement This project was done to determine if organic tomatoes are truly superior to conventional tomatoes in terms of taste and nutrition.	
Help Received Mom helped me with testing and purchasing materials; Teacher helped edit work; Brother helped with testing and editing graphs.	