



**CALIFORNIA STATE SCIENCE FAIR
2011 PROJECT SUMMARY**

Name(s) Sukhdeep Singh	Project Number J1820
Project Title Energy Fruit	
Abstract Objectives/Goals Question: What fruit or vegetable is the best conductor of electricity? The avocado will be the best conductor of electricity because of the high amount of iron. Methods/Materials Materials/Methods: I used a voltmeter, copper wire, wire cutters, galvanized nails, and alligator clips on ginger, potatoes, mandarin oranges, ruby grapefruit, bok choy, banana, avocado, white onion, and fuji apples. I put the nails and the wire into the fruit to measure the voltage. A 9 volt battery was attached to the alligator clips to close the circuit so voltage could be measured. This was repeated twenty times to see which fruit or vegetable conducted the electricity the strongest. Results Results: The project showed that ginger was the best and apples were the worst. The high were mandarin 2.18v, potato 1.72v, white onion 1.76v, ruby grapefruit 1.44v, avocado 2.33v, bok choy 2.03v, fuji apple 1.41v, banana 1.88v, and ginger 3.1v. The lows were mandarin 1.6v, potato 1.28v, white onion 1.49v, ruby grapefruit 1.2v, avocado 1.71v, bok choy 1.7v, fuji apple 0.77v, banana 1.69v, and ginger 1.79v. Conclusions/Discussion Conclusion: My hypothesis was not supported I stated avocado would have the most volts conducted due to its high percentage of copper, zinc, and iron, but it only got in the way. My data table shows that ginger 3.1volts beat the avocado 2.33volts by almost a volt.	
Summary Statement My project is about fruit conductors.	
Help Received my father bought the supplies.	