



**CALIFORNIA STATE SCIENCE FAIR  
2002 PROJECT SUMMARY**

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| <b>Name(s)</b><br><b>Brianna E. Page</b>  | <b>Project Number</b><br><br>22769 |
| <b>Project Title</b><br><b>Don't Drink That Water!</b>  |                                    |
| <b>Objectives/Goals</b><br>To discover whether putting various waters through a reverse osmosis process would lower the levels of pH, total dissolved solids, and alkalinity in them.<br><b>Abstract</b><br><b>Methods/Materials</b><br>My materials included two liters of water from the Arroyo in Moorpark, two liters of tap water, two liters of water from our public jacuzzi, and three bottles of Crystal Geyser bottled water, each 750 mL. I also used a pool chlorine balance test kit which included materials for the pH test and the alkalinity test and a total dissolved solid tester. The reverse osmosis process consisted of a sediment filter, pure carbon block, and the reverse osmosis membrane.<br><b>Results</b><br>The reverse osmosis process highly affected the various types of water. The pH levels were all brought down to 7, except for the bottled water which stayed constant at 5.5. The level of total dissolved solids was also brought down to 20 ppm (parts per million). The alkalinity was also considerably brought down to 10.<br><b>Conclusions/Discussion</b><br>My hypothesis was correct. Some people may be unaware of the importance of the reverse osmosp procedure and how often it is used in our society. This project was done to inform others about the quality of the water they are drinking. |                                    |
| <b>Summary Statement</b><br>The effects of reverse osmosis on various types of water.   |                                    |
| <b>Help Received</b><br>Used equipment of Mr. Tim Gayvert   |                                    |