



**CALIFORNIA STATE SCIENCE FAIR  
2009 PROJECT SUMMARY**

<b>Name(s)</b> <b>Antranik M. Byas</b>	<b>Project Number</b> <b>S1804</b>
<b>Project Title</b> <b>Investigating the Effectiveness of Urina in Preventing Wrinkles and Acne</b>	
<b>Abstract</b> <b>Objectives/Goals</b> The purpose of the study is to test whether urine (Latin name:Urina) could be used as a cheap alternative to preventing wrinkles and acne especially in middle-aged women. <b>Methods/Materials</b> Everything pertaining to urine was researched # how it is produced and excreted in the human body; its composition; and how it is artificially made. The experimentation process was supervised by a dermatologist included finding women who were willing to use their own urine as a facial solution for a month while their progress was constantly monitored by taking before and after pictures. They submitted a sample of their urine for analysis. Data collected included pH, temperature, specific gravity, presence of protein and glucose, appearance/clarity, color, odor, and analysis using a microscope to check for bacteria. <b>Results</b> Out of the total ten volunteers, seven showed significant improvement of their facial skin. There was tightening of the skin and smoothness. Three were already users prior to the study so their eagerness to participate. Three did not show a major difference on their facial skin. This might be due to their skin type since they all had oily skin. <b>Conclusions/Discussion</b> Based on the research conducted, urine is an aqueous solution consisting of 95% water; and 5% urea, dissolved salts, and organic compounds. Urea, also known as carbamide is used in a lot of dermatological products such as Umecta PD which is used as a tissue softener for nails and skin. Urotherapy has been practiced throughout history and has been in existence over decades in various countries. People around the world have drunk their urine to cure all sorts of symptoms like the common flu, toothaches, burns and epidermal conditions such as psoriasis. I am not sure that it will cure all of that; however it is a strong possibility.	
<b>Summary Statement</b> This project involves using urine therapy as a cheap alternative to reduce wrinkles and acne in middle-aged women.	
<b>Help Received</b> Dr. Sampson, the dermatologist who supervised the project; Ms. Adriatico, my teacher/advisor who guided me in the process of conducting my research.	