



**CALIFORNIA STATE SCIENCE FAIR  
2013 PROJECT SUMMARY**

<b>Name(s)</b> <b>Daniel S.K. Lee</b>	<b>Project Number</b> <b>S0695</b>
<b>Project Title</b> <b>Leaching of Diethylhexyl Phthalate from Polyvinyl Chloride</b>	
<b>Objectives/Goals</b> The objective of this project is to detect the presence of diethylhexly phthalate in nonprescription pharmaceutical medication and dietary supplements through liquid chromatography. Diethylhexly phthalate(DEHP) is a carcinogen and endocrine disruptor. It is used to create polyvinyl chloride, third most widely-used plastic. Many studies have indicated that there was leaching of phthalates from various brands of bottle made from polyvinyl chloride(PVC). This project investigates the potential of DEHP leaching from various over-the-counter medication bottles and dietary supplements from different brands of bottles. My null hypothesis was tested through high performance liquid chromatography(HPLC). PVC containers from ten brands of over-the-counter medications were extracted with methanol water solvent and assayed for pthalates.	
<b>Abstract</b>	
<b>Summary Statement</b> Carcinogens in Medication and Dietary supplements	
<b>Help Received</b> Dr. Couchon helped me obtain the chemicals i needed for my project, Dr. T donated ACN, and Dr. Malhotra supervised my work	