



**CALIFORNIA STATE SCIENCE FAIR
2013 PROJECT SUMMARY**

Name(s) Abdulkarim J. Alamad	Project Number J1202
Project Title Breastmilk + Baby = Autism? Debunking the Theory of Breastmilk as a Contributing Factor to Autism	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals This project was designed to debunk a study by neurologist Michael Merzenich at the University of California San Francisco linking breastmilk as a contributing factor to autism due to the amount of toxins present in breastmilk. My hypothesis states that breastmilk is not a contributing factor to autism. The study will prove that the percentage of breastfed children from the general public is more than that of children diagnosed with Autism.</p> <p>Methods/Materials The study consisted of two parts; one in Amman, Jordan, and another in Los Angeles County. A total of 160 surveys were filled by mothers of children ages 3-16, 80 from each location. 40 surveys were filled by mothers of children diagnosed with autism, and 40 were filled by mothers of children from the general public, not diagnosed with autism from each location. They were asked whether they exclusively breastfed, breastfed and formula fed, or exclusively formula fed their child for the first six months of life.</p> <p>Results The results showed that the percentage of breastfed children in both locations was higher in the general public than in autistic children. For the Amman, Jordan study, the general public were at 60% as opposed to 45% in children diagnosed with autism. For the Los Angeles County study, the general public were 52.5% as opposed to 30% in children diagnosed with autism.</p> <p>Conclusions/Discussion The hypothesis was supported by the results. The percentage of breastfed children in Amman, Jordan, and those in Los Angeles County from the general public was higher than the percentage of breastfed children in both locations diagnosed with Autism. Therefore, breast milk cannot be cited as a contributing factor to autism. The advantages of breast milk are too many to discard.</p>	
Summary Statement Debunking the theory of breastmilk as a contributing factor to autism.	
Help Received Mother helped beautify the board; Mr. Mohammad Dalhoum Dr. Taqwa Khreasat for allowing me to survey their patients; Nancy Spiegel, Mrs. Ines Echegaray, and Mr. Carlos Velasco for advertizing my surveys to potential participants.	