Abstract Title: Mediterranean Diet Survey Results in a Population of Children with ADHD

Sabrina E.B. Schuck, Maryam M. Abdullah, Theresa Cordia, Annamarie Stehli, and

Francis M. Crinella

[1] *First, third, fourth and last Author Affiliation (University of California, Irvine, USA)*
[2]*Second Author Affiliation (University of California, Berkeley, USA)*

Abstract (not more than 300 words)

Attention Deficit/Hyperactivity Disorder (ADHD) is characterized by persistent over-activity, inattention, and impulsivity, with a worldwide prevalence of approximately 5%. Psychoactive medications have proven efficacious in many cases, but are neither uniformly effective nor devoid of side effects. Thus, many families seek complementary and alternative treatments. It is now estimated that about 60% of all children with ADHD have tried elimination diets and/or dietary supplements before medication. A Mediterranean Diet (MedDi) is characterized by eating practices traditionally found in countries that border the Mediterranean Sea. MedDi has been linked to central nervous system benefits including increased brain-derived neurotrophic factor, reduced oxidative stress, and enhanced brain-blood barrier integrity. Serra-Majem and colleagues (2004) reported findings from a MedDi compliance survey of 3850 Spanish children in which 53.4% of participants had diets that were "Poor/In Need of Improvement" and 46.6% had "Good" diets. Using the Serra-Majem criteria, the current study provides results from a group of 55 children with ADHD and their mothers at two time points. Over the course of nine months, participants were provided information regarding healthy eating and behavioral intervention. Initially, mothers reported 65% had "Poor/ In Need of Improvement" diets and 35% had "Good" diets. By self-report, 78% of the children reported "Poor/In Need of Improvement" diets and only 22% rated their diets as "Good." Contrasting the latter percentage with results from the Spanish survey, the disparity is highly significant (22% vs. 46.6%; z=3.60; p=.001). Post-intervention parent ratings did not change significantly, but there was a significant change in the children's self-ratings (p=.046) with more children reporting their own diets as "Good" compared to pre-intervention. This paper discusses the relations among changes in dietary practices, child versus parent perceptions of health, and measures of behavior change.

Keywords—*ADHD, behaviour, Mediterranean Diet, child nutrition*

Professional Biography (100-150 words)

Sabrina Schuck completed her Ph.D. at the University of California, Riverside and a post-doctoral fellowship in child neuropsychology at the University of California, Irvine Child Development Centre. She is an Assistant Professor of Paediatrics, Psychology & Social Behaviour, and Education. Dr. Schuck has served as the Executive Director, Child Development Centre School at UC Irvine since 2012. Dr. Schuck's research examines

innovative ways to improve executive functioning skills and build resilience in children with neurodevelopmental disorders including Attention Deficit/Hyperactivity Disorder (ADHD) and Autism Spectrum Disorders (ASD). At UCI she teaches courses in psychology and child development, and supervises residents, fellows and undergraduate researchers. She has published 15 papers in peer-reviewed scholarly journals, 3 book chapters, and serves as an editorial board member for the Journal of Applied Developmental Psychology.



Email Id: sabrina@uci.edu