Treating Developmental Issues in Preterm Infants and Toddlers with a Nutraceutical

From 2013 to 2017, Cures Within Reach funded two projects led by Dr. Sarah Keim at the Research Institute at Nationwide Children’s Hospital that sought to address and improve latencies in developmental milestones or symptoms of Autism Spectrum Disorder and Attention Deficit Hyperactivity Disorder (ADHD) in preterm infants and toddlers using readily available fatty acid (FA) suppletations. Previously, various FA combinations had shown promise in a handful of small trials of mostly older children with autism. Dr. Keim was the first to test this intervention earlier, in infants and toddlers, and in a population at high risk for autism and ADHD. Dr. Keim demonstrated that the FA combination treatment reduced symptoms of autism in infants born prematurely. The pilot data showed that children who received the FA combination treatment exhibited greater improvements on behavioral tests than those receiving the placebo. Dr. Keim expanded her work to investigate the impact FAs could have on other developmental consequences of prematurity. Her results are being tested in larger trials, which could lead to broader impact for the youngest patients.

KEY FACTS
- CWR awarded $65,000 to help support 2 clinical trials addressing developmental issues in preterm infants and toddlers.
- Dr. Keim has received more than $5.3 million from the NIH for several follow-on studies.
- Dr. Keim confirmed the feasibility of large-scale trials in improving developmental outcomes in preterm infants, while discovering a potential low-risk alternative to drugs currently used to manage autism. Results have been published in over 10 papers to date.

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