

Progress in Peanut Allergy Research

Like many parents of children with severe medical concerns, Caren was tracking news of any developments in the treatment of peanut allergies. Her son Alex has a severe peanut allergy, and it has been a very difficult way to live. Inadvertent exposure to peanuts is always a possibility, and the fear of a fatal or near fatal reaction is always present.

Caren's personal investigations into peanut allergy treatments came across clinical studies occurring at ACH and Duke University. At ACH, Dr. Stacie Jones and colleagues are conducting a variety of food allergy studies. Dr. Wesley Burks of Duke pioneered early food allergy research at ACH and now continues this important work at Duke in collaboration with Dr. Jones' team.

A friend with a child in an oral immunotherapy trial under the direction of Dr. Jones told Caren about the study. In the study, children are given a minute amount of peanut protein under close supervision. If the child continues with the study after the initial amount, he or she is then given gradually increasing amounts every two weeks with the theory that the child will become less allergic over time.

Caren and her son Alex came to ACHRI's Pediatric Clinical Research Unit (PCRU) for his initial treatment. Alex was given a tiny amount of peanut protein to start with incrementally building to the full dose to be given on that day. He also had standard blood and allergy skin testing. "On that first day, Alex had a reaction that required an EpiPen," says Caren, "but we were able to continue in the trial."

For a year they came to Little Rock every two weeks. At each visit, Alex was given a supervised increased dose at the PCRU. The family returned home with new daily doses to last until the next visit.

After a year of treatment, Alex received a food challenge to determine how much peanut he could tolerate. A year ago Alex had a severe reaction to an amount equal to one-fiftieth of a peanut. Now he could eat a peanut butter sandwich. Alex had no harmful reaction. Caren explains, "He was safe, but it was a struggle to get it down...he doesn't like the taste of peanut butter!"

Now Alex and Caren come every 4 months to the PCRU. His daily doses are a blend of peanut butter and strawberry jelly. He still is not having any allergic reactions and is adapting to the taste.

At the beginning of the study, the family would not have considered sending Alex to school because of a possible exposure to peanuts. Now Alex is 5 and attending Kindergarten. Caren says, "The trial has given Alex the ability to lead a more normal life."



Enrolled in a peanut allergy study, Alex finds trips to the PCRU to be an adventure.

Though their experience in the trial has been life changing, Alex still has a peanut allergy. Caren notes, "We're still vigilant but know he is safer." She adds, "The work they're doing is life saving...my family feels like a miracle has occurred."



Established in 1989, Arkansas Children's Hospital Research Institute provides an on-site research environment for faculty of the University of Arkansas for Medical Sciences working on the Arkansas Children's Hospital campus. Over 120 pediatric researchers with expertise and experience that span the breadth of medical disciplines comprise ACHRI's roster of investigators who work to fulfill its mission to improve children's health, development, and well-being through high quality research. For more information, visit <http://achri.archildrens.org>.