

Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: <https://reachmd.com/programs/peanutallergies/a-look-at-the-national-impact-of-childhood-food-allergies/10539/>

ReachMD

www.reachmd.com
info@reachmd.com
(866) 423-7849

A Look at the National Impact of Childhood Food Allergies

Announcer: This is ReachMD. The following episode in the series, *Cracking the Code on Peanut Allergies*, is brought to you through an independent educational grant from Aimmune Therapeutics.

Here is your host, Dr. Amy Mackey.

Dr. Mackey: The latest estimates are in for childhood food allergy prevalence in the U.S., and the results are nothing short of staggering. Not only are there more children suffering from food allergies than we thought, but an alarming number of them have also needed treatments in emergency departments over the past year. And the surprises go on, which is why today's program is going to walk through these updated findings with the lead investigator of the study itself.

This is *Cracking the Code on Peanut Allergies*, and I'm Dr. Amy Mackey. Joining me to review The Public Health Impacts of Childhood Food Allergies in the United States is Dr. Ruchi Gupta, lead author and Professor of Pediatrics at Northwestern University Feinberg School of Medicine.

DR. GUPTA: Thanks so much for having me.

Dr. Mackey: Let's start with a quick preface to your study, which is to get a better sense for how it came about and what your team was looking to find.

DR. GUPTA: We're excited to conduct this study to better understand the public health impact of food allergy in U.S. children. The study came about because we did not have accurate numbers in the United States of how many children are impacted by food allergy, the types of food allergy they're impacted by, the severity, their emergency department visits, their diagnosis history – so we were aiming to really better understand this on a population level.

Dr. Mackey: Before we talk more about how this study was conducted, let's just spend a minute going over one of the key results, which was the prevalence you found. Can you share this with our audience just to help level-set the scope and burden of food allergies in the U.S.?

DR. GUPTA: So, as we've seen in the United States, anecdotally, food allergy has been increasing in children. You can see it over a generation; the high numbers of food allergy in young children. What we found was that food allergy was a significant problem, impacting about 7.6% of children in the United States. Now, that's about 1 in 13 kids, you could say maybe about 2 per classroom, so it's a lot of children that food allergy impacts. We found the top food allergens, in order, include peanuts, milk, shellfish, tree nuts, egg, finned fish, soy, wheat, and now #9, sesame. Additionally, about 40% of kids in our sample had multiple food allergies, so this means that they could be allergic to peanut and tree nuts, or peanuts, milk, and sesame. So that makes life a lot harder for them because now they're having to avoid multiple foods.

Dr. Mackey: What does this finding in particular mean to you? Is it a call-to-action, in its own way?

DR. GUPTA: These findings are very important because they really help us understand the burden of food allergy in the U.S. There are a couple of calls to action here; one new finding that I think is really significant is about 1 in 5 kids with food allergy are going to the emergency room for a food-related reaction every year, so 20%. So that's a lot of these kids that are having reactions and ending up in the emergency room. Additionally, there are about 42% that said they had been to the emergency room for a food anaphylaxis in their lifetime. So almost half of these kids have had an emergency department visit for their food allergy. Now that's a significant burden for the families and for the healthcare system. So how do we better help families manage their food allergies and avoid their allergen. We conducted this study with a research firm, Nork, who has a representative sample of U.S. households, and they use this sample to better

estimate the national burden. We were able to survey almost 40,000 children across the United States; all race, all incomes, to better understand on a population level what food allergy looks like.

Dr. Mackey: In approaching this study, what were some of the factors that made this investigation so important for you and really brought it to life?

DR. GUPTA: I started studying food allergy about 14 years ago. And when I started, there was not a ton of information on it, and research had not picked up steam the way it has now. One of my major questions, because of my training as a health services researcher, was better understanding even what is the prevalence of food allergy in the U.S. We didn't even know that clearly at the time. So better understanding what parents think about, better understanding parents' perceptions of food allergies in their children, the types of foods, the reactions they were having, the severity of it – all of these things needed to be better understood to be able to determine what needed to be done next; both from a policy standpoint and a research standpoint. Additionally, a couple of years after I started studying food allergy, I had my daughter, who was diagnosed with food allergies, so it became not only my day job, but my 24/7 job. And it really opened my eyes to a lot of issues that are faced by families with children with food allergy. A lot of issues around daily living and management of food allergies, as well as quality of life, so yes, I am very passionate about this. It's my true hope that in the next decade or so, we will have treatments on the market, and more research and information to help and support families with food allergy.

Dr. Mackey: So, with that great background in mind, let's come back to the study and walk through some of its key findings. Can you give us an overview of what you found?

DR. GUPTA: I think the main findings from this study include – well, first, of course, the prevalence, right. So, the 7.6%, about 1 in 13 – it's a lot of kids in the U.S. with food allergy. Second, I think understanding the morbidity a little bit better with knowing now that about 1 in 5 kids end up in the emergency room for food allergy every year is a significant finding. Third, understanding the top food allergens, which we knew the top 8, but this time we were able to understand #9, which is sesame. This is important because, currently, labeling laws require that the top 8 are listed in food labels very clearly. Sesame is currently not part of that. So, knowing now that sesame is a significant food allergy in the U.S., we can help move that policy forward. For epinephrine prescriptions, all children who have a food allergy and are diagnosed with a food allergy should know how to manage it and should know what to do in case of an emergency. Four, epinephrine right now is the only medication we have in case a child is experiencing anaphylaxis. And from our study, we found that only about 40% of these kids had an epinephrine prescription, so that's a call to action for physicians to make sure they not only diagnose the food allergy, but also give them the medications and management skills they need. Five, understanding that more children in the U.S. may perceive that they may have a food allergy than actually do, and this happens because there are so many food-related conditions, and understanding how to decipher what they have, is it truly a food allergy, is really important for physicians. So, in our study, we found over 11% of parents thought their child had a food allergy, but when we looked at the foods and the symptoms, we felt that only about 7.6% truly had a food allergy. So that means that these additional 4% may be unnecessarily avoiding the food they think they're allergic to, which really impacts their day-to-day lives.

Dr. Mackey: And what are the take-aways for clinicians who are going to implementing this? You know - What advice would you give to the ones that are treating food allergy in children?

DR. GUPTA: So, for physicians, clinical implications of this paper include the fact that many parents are reporting their child as having a food allergy and all of them may not truly have a food allergy and may be unnecessarily avoiding the food. So, we together have to make sure that these children are properly diagnosed and only avoiding foods that they are truly allergic to. Additionally, when we talk about managing their food allergy, we need to give them an action plan on what to do in case they have a reaction, what reactions to look out for, when to use epinephrine, and to make sure they have a prescription for an epinephrine autoinjector and how to use it in case of an emergency. Physicians are key to helping families understand their food allergy, their diagnosis, avoid the food and prevention, and how to treat it in case of an allergic reaction. Another finding from this study was that African-American children have higher rates of food allergy compared to white children. They also have a higher chance of having multiple food allergies. Physicians need to keep this in mind when talking to and counseling families, different racial groups, and different income groups. Oftentimes, low-income children do not get proper diagnosis or get to an allergist, so we need to also work hard to make sure these kids get the proper diagnosis and management they need.

Dr. Amy Mackey. The last question I have for you is, you know, what's on the horizon for treating allergies? Where do you hope the allergy field will go from here, and are there any next steps on the research end for you?

DR. GUPTA: So, it's very exciting right now – is that food allergy research is moving at a much faster speed, and there are so many things on the horizon. First, prevention – so, a landmark study called LEAP was published in 2016, and in 2017 our guidelines changed based on this study, encouraging families to introduce peanut products early in infancy. So, between 4 and 6 months, depending on if

the child is at high risk or low risk, parents are encouraged to introduce peanut products to their infants because it could potentially prevent a peanut allergy in their child. Additionally, there are new therapies coming our way. Many therapies are in phase 3 trials, meaning in the next year to two years we may have therapy treatments for children with food allergies. We, in our lab, are working very hard to better understand not only the public health impact, but clinical improvements we can make in managing children's food allergies, and in day-to-day activities like schools and quality of life. We are also working on looking at differences in food allergy by race to better understand phenotypic expressions of food allergy and developing a severity spectrum so that we know better who is at low risk for anaphylaxis and who may be at high risk. There is a ton going on right now all across the U.S. and world, and we're excited that food allergy research is moving at such a fast pace. Hopefully in the next decade we not only will be able to prevent it and treat it so that when we do a study like this again, the numbers will hopefully be lower for the first time.

Dr. Mackey: Well that's a great way to round out our discussion on these public health impacts of food allergies. Dr. Gupta, thanks for joining me today to bring us all up to speed on the latest updates from your research. It was a pleasure having you on the program.

Dr. Gupta: Thanks so much for having me.

Announcer: The preceding program was brought to you through an independent educational grant from Aimmune Therapeutics. To access other episodes in this series, visit ReachMD.com-slash-PeanutAllergies. This is ReachMD. Be Part of the Knowledge.

Aimmune is a clinical-stage biopharmaceutical company developing desensitization treatments to help protect people with food allergies from the potentially life-threatening consequences of accidental exposure. For more information, visit www.aimmune.com.