

## Kids and Food Allergies- Discussion with Jodi Shroba, PNP

Jodi Shroba, CPNP, leads a discussion on pediatric food allergies.



Featured Speaker:

**Jodi Shroba, CPNP**

Jodi Shroba is a Certified Pediatric Nurse Practitioner in the Division of Allergy and Immunology at Children's Mercy Hospital in Kansas City. In addition to clinical duties, she is the Food Allergy Program APRN Coordinator and oversees the oral Immunotherapy (OIT) program. Jodi is also actively involved in research and education with multiple journal publications. She has spoken both locally and nationally on the topics of asthma, allergic rhinitis and food allergies. Jodi is the immediate past chair of the Allied Health Committee for American College of Allergy, Asthma, and Immunology (ACAAI) and serves on several committees for both ACAAI and American Academy of Allergy, Asthma and Immunology (AAAAI).

Transcription:

Trisha Williams (Host 1): Hi guys. Welcome to the second season of the Advanced Practice Perspectives. I'm Trisha Williams.

Tobie O'Brien (Host 2): And I'm Tobie O'Brien. This is a podcast created by Advanced Practice Providers for Advanced Practice Providers. Our goal is to provide you with education and inspiration. We will be chatting with pediatric experts on timely key topics and giving you an inside look at the various advanced practice roles at Children's Mercy.

Trisha Williams (Host 1): We are so glad that you're joining us today. So sit back, tune in and let's get started. Today, we are pleased to have Jodi Shroba with us. She is an APRN in the Allergy Clinic and she specializes in food allergies. Welcome to the podcast, Jodi.

Jodi Shroba, CPNP (Guest): Thank you. I'm happy to be here today.

Host 1: We are so glad that you're here. Can you tell us and our listeners a little bit about yourself?

Jodi: Sure. So again, my name's Jodi. I am a Nurse Practitioner in the Allergy Clinic. I've been with allergy for 14 years and I love it. I've loved every minute of it. It was funny, I was hired as a new grad and, my collaborating physician was warned new grads don't stick in their jobs for very long. And so the running joke in our department is 14 years later. It must not be very long because I'm still here and kicking.

But, I've loved allergy. I worked at Children's when I was in grad school, actually started my career at Children's, left for a little while. Did some travel nursing, so I could see the world or the country, I guess we should say, and decided that, you know, the grass isn't greener on the other side. So, I came back home and went to grad school and then been in the allergy clinic ever since. I do help run our food allergy program. As well as I do allergy, asthma and eczema as well. And then I also help with our Food Allergy Family Advisory Council, as well as, I've held some national positions in some of our allergy organizations, throughout the years.

Host 2: Wonderful. Again, thank you so much for joining us and bringing your expertise. And today we are going to focus on the pediatric food allergies, but I'm hoping that you can help us and our listeners understand a little bit more about pediatric food allergies. Maybe we could talk about just how common they are or if they're common and what likely are the most common culprits, and maybe even why it seems like there's so many more kids than there used to be say like 30 years ago.

Jodi: Sure. So, food allergies are definitely more common. I don't know, you know, the age of our listeners out there, but I can tell you, I'm a middle-aged woman and when I was growing up, I had not met anyone with food allergies until I was in college. And my roommate in college whipped out her EpiPen. And she said, do you know how to use this? And I said, no, we haven't had that lesson yet in nursing school. So, she had to teach me how to use an EpiPen. And that was my first experience with a food allergy. So, you know, they say there's about 15 million Americans with food allergies. And of that, about 8 million are kids.

If you want to break that down into numbers, that sound more normal, if you had a classroom of 25 kids, two kids in every classroom are going to have a food allergy. So extremely common. I have two kids at home. They do not have food allergies, but, they knew what a food allergy was probably by the time they were three and they were in preschool. They had some kids in their class with food allergies. In fact, my son came home one day and he said, I think he was three or maybe four at the time he goes, mama, I'm allergic to peas. And I said, oh yeah. I said, why? He goes, they make me cough and they are icky. And I said, well, nice try.

But you do not have a pea allergy. So, the most common foods are not peas despite what kids might tell you. But, the most common foods are peanut, tree nuts, egg, milk, wheat, soy, fish, shellfish, and soon to be added is sesame. The US government just passed a bill in April that now will recognize sesame as one of the top nine allergens. Now, if you go overseas, sesame is actually really a much more prevalent allergy than what we see over here. But we definitely are starting to see more of it here in the United States. You know, of those allergies, egg, milk, wheat, soy tend to be the four that are the most outgrown with fish and nuts tending to be more lifelong allergies. And interesting, you can even develop fish and nut allergies, well into adulthood even after a lifetime of tolerance.

Why do we have so many more food allergies? I think we're more aware, is the first thing. I think they existed before, but we didn't really know what it was. And so I think, that's part of the reason. If we knew why there were so many food allergies, then I would be out of a job because then we would know how to cure them.

So for now, we have a lot of theories that we try to use as the reason why. The one that I think probably, I don't know, I probably claim the most is kind of the hygiene theory, that we are just too clean. We use a lot of cleaning products. We use a lot of hand sanitizer. We use a lot of soap. We use a lot of chemicals and, we just live in too clean of an environment. So, you know, the, the immune system is an amazing, amazing thing. And part of its job is it's supposed to fight. And if we clean our environment, then it has nothing to fight. And so then it starts attacking things that are normal and things that it shouldn't be attacking.

So that's the theory I like to go with. There are some theories that, you know, with infants, there's an immature gut, which can cause some leaking out into the cell which can cause you to become allergic to things. But I like to go with the hygiene theory is, is probably number one on my list.

You see much more allergies in westernized, modernized countries than you do in undeveloped countries. So I think that's why I gravitate to the hygiene theory a little bit more.

Host 2: That makes sense. Jodi, that is a funny story about your son. I know my kids have shared that same sort of concern for food allergies when it was just that they didn't want to eat anything. So thanks for sharing that story.

Jodi: I like telling that story. Yeah.

Host 1: I know I would be allergic to broccoli and cauliflower if that was a true statement. But your theory in regards to hygiene is fascinating to me, you know, because we preach cleanliness and hygiene. And, you know, especially during the era of COVID with hand-washing and exposure and things like that. So it's a very fascinating concept for me to kind of wrap my head around.

Jodi: And, you know, you can kind of also put that towards allergies too. You know I mean we have way more just environmental allergies. Again, I will never disclose my age on a podcast, but, I was a kid we drank from the hose outside. We came in, we were dirty, you know, and, I even now, like, I won't let my kids drink out of a hose, like, oh, forget it. I'm like, oh, that's disgusting. But you know, I think there is a difference in how I think some of us grew up and the differences I don't think we see quite as many allergies as we do in the younger kids. It's interesting when I have a lot of families that grew up in other countries, and then they come to the United States and they don't know anybody that has allergies and then they come up here and even they'll say I didn't have runny nose. I didn't have sneezing when I lived in these other countries. And then I come here and now I have allergies

and you know, their kids have food allergies. And I think it's a lot to be said of the environment that we live in.

Host 1: Very great points. So, with our podcast, we hope to reach some primary care providers, urgent care providers, advanced practice providers of that nature. And are there any key questions that we could ask our patients if we have a high susceptibility or a high suspicion of a food allergy, you know, cause we think that with food allergies, they have a rash, or they have anaphylaxis to the full degree, but like what kind of certain questions should we ask in our history to weed out food allergies and what it could potentially be?

Jodi: So, with food allergies, I think when you talk to people that specialize in food allergies across the country, we will say the treatment of food allergy is an art. It is not a science and medicine is a science. So, that seems very foreign to most medical providers, when I say don't treat food allergies as a science, treat it as an art, because it is very individualized and it may be different from patient to patient.

So, you can't always assume that everyone is going to be the same or that reactions are going to be the same. And so really in the world of food allergy, history is the best thing we have. It's important, again, the obvious question is, you know, what food is of concern. What are the symptoms that happen with that food? How often do they happen and do they happen every time? And those, how soon does it happen and does it happen every time are extremely important questions because with a food allergy, most of your symptoms are going to develop within minutes to probably about two hours, because you think about that's the time that your body takes in the food and digests the food. So, when someone comes in and they said, I think I'm allergic to shrimp. And I say, okay, what happens when you eat shrimp? And they say, well, I went to a restaurant, I had shrimp poppers. And the next day I woke up in a rash; that's too much time. That shrimp is already in your body and out of your body.

So, timing is important, you know, they say yes, I went out to dinner. I ate a shrimp and within 10 minutes I was covered in hives. Okay. That's going to raise my suspicion level way more than the person that says the next day I had a problem. We often have families come in and they're concerned that their eczema is caused by food and I'll say kind of tell me a little bit about it. And they're like, well, we think we're allergic to milk and I'm like, okay. And I said, do you notice any immediate symptoms when you drink milk? No, but my eczema flares up four days later. Well, you've eaten a lot of food between the time you drink that glass of milk and the four days later that you said your eczema flared up.

So, the timing is really important and that's going to be one of your most important items that you can get from them. The other thing that you can ask is does it happen every time you eat the food and sometimes people don't understand fully what they're eating. And when I say that I'm going to specifically talk about wheat because we'll have families come in and they're like and this is the common one. I think I'm allergic to gluten. And I said, okay what happens when you eat gluten? Oh, my stomach hurts. I said, okay, well, do you eat bread? No, no, no, no, no. I don't eat wheat bread. I eat white bread. Well, white bread still has wheat flour in it. And so there really can be misleading information as to what you're allergic to. If you're eating white bread, then you don't have a wheat allergy. Although wheat is not in the title, it still has wheat flour.

And so that's a misconception that a lot of families have is bread still has wheat in it. We have families that say, my kid can't drink milk. Every time he drinks milk, he has this. And so then we kind of talk about what else is in their diet. Well, but they are eating cheese and Mac and cheese.

And, you know, then I'll say when you make your Mac and cheese, do you put milk in it? Yes. Okay. So, now we're talking about, you're using cheese powder and you're putting milk in it. So maybe we don't really have a dairy allergy. Let's kind of try to fish this out a little bit more as to maybe what's going on when you're drinking that glass of milk.

So, your history is the most important thing that you can get and the other thing, that they come in with and they come in with five pages of labs and they say, I went to my doctor. I was concerned about this. And so they drew all this blood and now they told me I'm allergic to everything.

We go through the list and I'll say, well, do you eat bread? Yes. Okay. Well then you're not allergic to wheat. They'll say he drinks four glasses of milk a day. Well then you're definitely not allergic to milk. So, the history is really important because the history is going to drive where you go next. And so if that history does not give you any indication that there's a concern for a food allergy, you should stop right there. There should never be any testing done. If your history is we ate a food and we got a rash 12 hours later, and it only happened one time, but he's eaten it seven other times. Stop, don't do any testing. You're done. They do not have an allergy. And so that's why I say the history is really important of how often, what are they eating and how quickly do they have symptoms. And those are really kind of your three kind of most important questions.

Host 1: What are the symptoms that they can present with? Like I heard you say upset stomach, rash, are there other things that could be an alarm or a symptom within that time?

Jodi: Sure. So, the common symptoms that you usually see with a food allergy, well, not always, but, about 90% of food reactions will involve the skin and that typically is going to be hives, and or swelling. And so those are really your common signs you're going to see from skin, now. Yes, you may have a rash. But hives, this is going to perk my ears a little bit more than say a rash. The other symptoms that you may see, coughing, wheezing, vomiting, diarrhea, they may start saying that their throat feels tight. They may start sounding very hoarse, and if they start sounding very hoarse, like they're losing their voice, that is a huge red flag.

That is someone that needs emergency attention yesterday. Because that means there actually really is throat swelling. If they have that cough, that kind of like hacking cough, like they're trying to get something out again, very concerning symptom. People will often say that their throat feels tight and in that can be really hard, because if you are anxious, you can also tighten those vocal chords. And it's going to feel like it's tight in your airway, but you may not actually have that swelling of the airway. And in speaking to two ENT providers, you guys know that, you know, swelling of the airway, you're going to sound different, you know, and that tightness can just be that kind of fight or flight of that anxiety of something may be happening to me. So, there is a real difference and families will come in to me and they'll say, well, we had throat swelling and also did someone look down your throat and they'll be like, no.

And I said, well, explain your throat swelling. And they're like, well, just felt really tight and I'll say, you know, did the voice change, did you become hoarse? Did you start drooling? Did you have a hacking cough like something was stuck there and when they say no, then we kind of start talking about those anxiety symptoms as well.

The number one thing that is not a food allergy symptom is constipation. So, if they ever say to you, I eat this food and I'm constipated, that is not a symptom of a food allergy. Remember when your body doesn't like something, it's going to try to get it out as fast as possible.

Trisha Williams (Host 1): It's going to get it out.

Jodi: If it's getting stuck in there, that is never a food allergy and I can refer you to some really good GI providers.

Host 1: So, um, it's called the brick clinic.

Jodi: the brick Exactly. So, you know, I always, I always tell families I was like, if it's getting stuck, it's definitely not a food allergy because food allergies is gonna come out fast.

Host 1: I thought maybe you would say nasal congestion. I think in the ENT world, we get a ton of that. Like, oh, I think they're allergic to milk because they have a lot of nasal congestion. So I really try to talk to my families about you know, that's not necessarily a symptom. Kids get seven to 11 colds a year, you know, those kinds of conversations, but they're kind of difficult conversations to have, with them to try to steer them away with that, not being our specialty.

Jodi: But for sure. I will say nasal drainage and sneezing will be big ones and again, that same thing, like their body's trying to get it out as fast as possible. So, I mean, we had one child that we were doing a oral challenge in our clinic. We thought that they had outgrown the food and he actually reacted in clinic.

This kid had snot rockets like you, I mean, I have never seen copious amounts of snot come out of anybody. And I used to take care of RSV babies. I mean, those babies had nothing on this kid. I mean, the amount of mucus that was coming out of this child's nose, was crazy. And I mean, he sneezed I think 12 times in a row. So again, same thing with the nose. If it's getting stuck up there, not a food allergy, if it's coming out in copious amounts, after you eat the food, then maybe, we need to evaluate that.

Host 1: Yeah. Would it still be in that same timeframe though? You know, that immediate to two hours after?

Jodi: Yes.

Host 2: And what is the difference between like an intolerance versus an allergy? I'm just curious. Cause I'll hear people say like I'm intolerant to dairy. Could you talk about that a little bit?

Jodi: Yeah. So when we talk about the word allergy, just really kind of in general, when you come to my clinic, we're talking about that your immune system has become involved. And so, a lot of times when I get food allergy presentations, I like to show a giant golf umbrella because when people use food allergies very loosely and so we say a lot of terms fall under that umbrella, but then you really kind of have to cut it down the middle.

And again, is your immune system involved or non-involved? If your immune system is involved, then you're talking a food allergy. When your immune system is not involved, then you're talking about your intolerance. Intolerances, historically have been GI symptoms. So, lactose intolerance when you can't break down the sugar in the milk and you get a lot of gas and bloating and GI pain, some people have a gluten intolerance, again, it's going to be that bloating, constipation, upset stomach, where the allergy, your immune system has been activated saying, this is something that can cause severe harm to me.

And the immune system immediately starts attacking that item because it needs to get it out. And so when we talk about food allergy, we're talking about, you're going to have immediate symptoms. They have the potential to be life-threatening because your immune system has been activated. Where, when you're talking about an intolerance, you eat something. Yes, you may be miserable for a small amount of time, but it's usually a GI discomfort. And then it goes away from there. Now, intolerance, you know, you can hear people say, MSG is a popular one. Like they say, you know, I don't tolerate MSG. It gives me a headache. Again, intolerance, not an allergy. Some people have trouble with dyes or, caffeine. Again, all intolerances, your immune system has nothing to do with that, there is no harm coming to you when you have an intolerance. Where an allergy, you gotta be on alert and ready to go, because this could be a dangerous situation.

Host 2: Interesting. Will you talk a little bit about the testing? So, is that when you find these symptoms and they match up with like, the symptom is happening within the right amount of time. So your, red flag goes up and you're like, okay, I'm thinking allergy, what sort of testing do you order and say for our community providers, APPs, would you prefer that they just send them to you guys first to kind of figure that out? Or do you like them coming with testing?

Jodi: You know, I think it depends on it. I think there's some amazing providers in the community that have a good understanding of food allergies and they do a really great job. And so I think I would never say they should never test, because I think there are some that really do a great job. I will caution if as a community provider, if you are fishing, don't test, just don't. Send them to us. Don't do it. But you know, the, the child that comes in to the primary care's office and, you know, mom fed them peanuts. They broke out in hives, they started wheezing. They had to go to the emergency room, they got treatment. They follow up with their primary care, their primary care draws a peanut level, totally appropriate. Excellent management of care. Now that same child comes in with a peanut allergy and a food panel is drawn. That's looking at milk, eggs, wheat, soy peanuts, all these other foods. When the only food that was in question was peanut should never have been done. So your testing should be driven by what the symptoms that the patient is presenting with.

So, if they tell me that they're drinking milk every single day, you should never draw a milk level. Your history is going to determine what you test. We do testing by blood tests. We do testing by skin testing. At diagnosis, I like to do a skin test and a blood test. Our kids with eczema, a blood test can be unreliable. Because kids with eczema tend to have higher IgE levels. So if they do have, eczema, I try to skin test them first and then blood test them and use the combination of the two. And then after a kid's been diagnosed, the blood test is used on a yearly basis to see if they've outgrown it. In our clinic, we never do a food panel.

That is an option at some outside labs. And it's a pediatric profile and it will draw, I think, 12 foods. There is no child on this planet that is allergic to 12 major foods. So, the panel is never needed, pick and choose the foods that you should test based on what the symptoms that they're having. If they come in and they say, I keep breaking out in hives. I don't know what's causing it. And I can't pinpoint it back to a food. Don't go fishing by doing a panel. You're not doing anybody, any service whatsoever. You're just wasting time, money and that poor child's blood. So, you know, really testing should always be focused on what your history got.

So again, back to that food allergy is an art, your color palette should match what the history was given to the patient. So, history is the most important thing you can do and your testing only supports the history that you obtained. In other specialties, testing is the most important thing you can do. And with food allergy, it's the exact opposite. Testing is the least important thing that we do.

. And so that's kind of the take you got to take with food allergies, which is very different than other specialties.

And really even kind of different than even just in the allergy specialty, because I wouldn't necessarily say the same thing about allergic rhinitis. The testing is very important in allergic rhinitis. And we do do panels for that. So, it is definitely, a little bit of a nuance compared to other things and, I would say in most training programs for physicians and nurse practitioners, I don't know much about the training program for physician assistants.

So I do apologize, but there's very little training on food allergies. There's very little training on allergies really. And so, part of it is having these podcasts so that we can try to bring a little bit of education about food allergies, because it is one that is really glossed over in most training programs. You might get a page in a medical textbook and that's about it.

Host 1: When you say it affects two students in every classroom, you would think that it would get a little bit more than a page in a textbook.

Jodi Shroba, CPNP (Guest): And you also have to remember that food allergies affect literally almost every moment of somebody's day. When you think about, you eat three meals a day, you probably eat two to three snacks a day. And so that's five to six times a day, you have to think and be responsible enough to make sure that you're not putting, quote unquote a poison into your child's body.

Every single social gathering that we do in America, revolves around food, birthday parties, going to the ballpark, going to carnivals, school parties, dances, holidays, everything revolves around food. So, for these families, they have to be vigilant, with the exception of maybe the time that you're sleeping, 18 hours of the day, they have to be on alert and be ready to go. And that's a lot of pressure. If you think about it, that they have to be vigilant every minute of a waking day to make sure that they stay safe.

Host 2: I think that's really true. One of my daughters had a friend over with several anaphylactic allergies. And I followed her around. I mean, I just felt so much pressure her even being at my house. I was like, I can't imagine being her mom, like, my friends that have kids with allergies, I think they're amazing because they really, like you said, they're on guard all the time and they tell me they get used to it and that's sort of their life, and they know how to manage it, then the children know how to manage it.

But, I was constantly kind of making sure she I'm like, are you okay? Even if she wasn't eating anything, I think she was like, can you leave me alone now? But I do think it's really important. And, you know, do you have any tips about how to best educate our kids or what do you talk to the kids in your clinic about when they do have a food allergy? How do you best equip them and their families?

Jodi: You can start this really early. We have a patient in our clinic and he's only two years old and he's going through our peanut desensitization program and we're already at two teaching him about, being safe and not being safe and you know, how much does a two-year-old comprehend.

We start early, that's for sure. The things that you can really work with kids on is telling them, if an adult's giving you food, asking them what is it before you just take it? Don't share your food. You can share your crayons, you can share your markers, but don't share your food.

