

MS Podcast - Allergies R3 Transcript

00;00;00;00 - 00;00;18;00

Dr. Scott Sicherer

Most of the world's population has trouble digesting lactose. I mean, we weren't made to be drinking from a cow. It's that's really the Cavs job. But obviously we've made a lot of out of milk products right. So we've gotten used to ice cream and yogurt and all these different things. But for some people that's going to be hard for them to digest.

00;00;18;04 - 00;00;38;12

Dr. Monica Kraft

Allergies are a real big contributor to about about half, maybe 50 to 60% of asthma, not all of asthma. So I'd like to change the perception that it's that it's all mild and no big deal. As I think I think a lot of people walk around with very high symptom burden and they just live with it.

00;00;38;14 - 00;01;03;08

Leslie Schlacter

Hello and welcome back to the vitals. The Mount Sinai Health System's groundbreaking roundtable video podcast. I'm your host, Leslie Schlatter, a neurosurgery physician assistant here at the Mount Sinai Hospital. Today, we're tackling a subject that touches millions of families allergies, whether it's seasonal sneezing, life threatening food reactions, or asthma triggered by allergens. Allergic disease is on the rise.

00;01;03;10 - 00;01;30;20

Leslie Schlacter

To help us understand the causes, challenges and latest treatments. I'm joined by two of Mount Sinai's foremost experts. First, we have Doctor Monica Craft System, chair of the Department of Medicine at the Icahn School of Medicine at Mount Sinai and world renowned leader in respiratory medicine and asthma research. And joining her is Doctor Scott Swisher, director of the Elliott and Roslyn Jaffe Food Allergy Institute and a national leader in pediatric food allergy research and care.

00;01;30;24 - 00;01;38;14

Leslie Schlacter

So thank you so much for being here. I really appreciate it. Thank you. So let's just start off with some of the basics. Allergies are on the rise.

00;01;38;15 - 00;02;02;16

Dr. Monica Kraft

Right, right. So I'll start. And I'd love to have my esteemed colleague to chime in. So our immune systems have sort of evolved over time because our environment has changed. And so we've been living especially in countries, more first world countries, we've been living in very

well insulated homes, so much so that we get exposed to allergens, you know, in every day especially, you know, at night when we're in our bedroom sleeping for eight hours at a time.

00;02;02;18 - 00;02;24;13

Dr. Monica Kraft

It could be house dust mite, fungal elements. And, and that is one sort of hypothesis as to why allergies are on the rise because of the exposure piece. There's also really the lack of the other things, infections that really skew the immune system the other way. And so that's been so. So in general, our immune systems are sort of skewed towards allergic diseases.

00;02;24;15 - 00;02;28;03

Dr. Monica Kraft

And so that's another hypothesis. You put that together with a change environment.

00;02;28;05 - 00;02;39;18

Leslie Schlacter

Wait time out. So what you mean is we are decreasing our exposure to like bacterial or viral pathogens, which increases our response to more allergic.

00;02;39;20 - 00;03;04;13

Dr. Monica Kraft

In a sense. I mean, in the sense we've we've eradicated a lot of infectious diseases, but that doesn't mean we're still not exposed to lots of viruses and allergens because we and environmental irritants, we absolutely are. But now we're seeing this. This is this intersection between the sort of predisposition to allergies over time because of our environmental exposures, and then the lack of other exposures that might skewer immune system the other way.

00;03;04;15 - 00;03;13;27

Dr. Monica Kraft

So in general, that has sort of led to this hypothesis that in fact, we are moving, moving forward toward an allergic predisposition.

00;03;13;29 - 00;03;26;20

Leslie Schlacter

Like let's just put things in categories. There's lots of different types of allergies. Right, right. So we have like our seasonal allergies pollen stuff like that. Anything out in like the environment. Right. And then our home allergies like what are the most common to house dust.

00;03;26;21 - 00;03;32;07

Dr. Monica Kraft

Yeah that's might be the most common fungal elements can be in some in some homes cockroach is an issue.

00;03;32;09 - 00;03;38;09

[Leslie Schlacter](#)

Okay. And then food various types of food. Right. What what are the most common allergies.

00;03;38;11 - 00;03;51;04

[Dr. Monica Kraft](#)

I would say for indoor probably things like house dust and then also pets. Cats and dogs for sure. And I say, just different fungi like *Ustilago*, *Aspergillus*, those sorts of, allergens. But for food.

00;03;51;04 - 00;04;10;01

[Dr. Scott Sicherer](#)

Allergy. Yeah. The world of food allergy, there's certain foods that sort of rise to the top of being the most common ones. And we talk about them as the top nine milk, egg, wheat, soy, peanuts, tree nuts, fish, shellfish and sesame. They account for like more than 90% of the trouble, but you could be allergic to virtually any food.

00;04;10;04 - 00;04;12;22

[Dr. Scott Sicherer](#)

Those are just the more common ones, and some of the more severe ones.

00;04;12;27 - 00;04;17;16

[Leslie Schlacter](#)

How do you determine the difference between a true allergy versus like, a sensitivity?

00;04;17;18 - 00;04;18;26

[Dr. Scott Sicherer](#)

Well, that's that's a very.

00;04;18;27 - 00;04;19;26

[Leslie Schlacter](#)

It's like you're right.

00;04;20;00 - 00;04;40;12

[Dr. Scott Sicherer](#)

Like, yeah. Because, a lot of people say, oh, I'm allergic to milk. I can't have too much or I'll have like, bloating, stomach gas, diarrhea. That's lactose intolerance. That's the problem with digesting the sugar. That's in milk. But allergy is really an immune system response as Doctor Kraft was talking about how the immune system is responding.

00;04;40;14 - 00;04;55;25

[Dr. Scott Sicherer](#)

The problem with food allergy is that the immune system is essentially attacking the proteins that are in the foods, and in that attack we end up with the allergic reaction symptoms. And so it could be dangerous. And the person usually can't eat the food.

00;04;55;27 - 00;05;14;00

[Leslie Schlacter](#)

So an obvious one. So I don't I'm a neurosurgery physician assistant. I specialize in surgery. The way I see it is the obvious ones. Like my son's best friend has a nut allergy nut and cat allergy. So I had an EpiPen in my home at all times. That's the brand name. What do you call a non brand name?

00;05;14;00 - 00;05;14;24

[Leslie Schlacter](#)

EpiPen.

00;05;14;26 - 00;05;17;28

[Dr. Scott Sicherer](#)

And epinephrine. An up injection device.

00;05;18;01 - 00;05;27;17

[Leslie Schlacter](#)

That I know that's. I mean, that's scary. That's anaphylaxis. So how do you determine, like, what are some of the most common symptoms of like the sensitivity.

00;05;27;18 - 00;05;47;01

[Dr. Scott Sicherer](#)

Part of it is it's from the right part of it is from the story. So as I mentioned before, the symptoms of the gut problems after ingesting too much milk, the person is having trouble digesting. Most of the world's population has trouble digesting lactose. I mean, we weren't made to be drinking from a cow. It's that's really the Cavs job.

00;05;47;03 - 00;06;05;14

[Dr. Scott Sicherer](#)

But obviously we've made a lot of milk products, right. So we've gotten used to ice cream and yogurt and all these different things. But for some people, that's going to be hard for them to digest. Celiac disease is a very different problem. It's a different illness. It's not like our classical like food allergy. Like we think like a peanut allergy, for example.

00;06;05;16 - 00;06;30;07

[Dr. Scott Sicherer](#)

If you eat too many beans, right. There's a poem that goes with that, right? The magical fruit, the more you eat, you know the story. It's because the sugars that are in there are harder to digest, and that leads to having gas. But none of those are really dangerous. Those are, you know,

sensitivities or intolerance, but the allergy is actually potentially for certain foods and for certain people, really dangerous and potentially life threatening.

00;06;30;10 - 00;06;36;15

[Leslie Schlacter](#)

So what happens, like what actually is happening in the body during an allergy attack from food.

00;06;36;18 - 00;06;59;17

[Dr. Scott Sicherer](#)

So the body makes a protein called IgG. I like to think of it as little antenna, that these proteins float around the bloodstream and find their way to allergy cells that are throughout the body. They might be for dog and cat and pollen, or they might be for peanuts or treat different tree nuts, but they're very specific. Now, if you eat that food that you're allergic to, that little antenna sees it, tells that cell to release the chemicals.

00;06;59;22 - 00;07;21;07

[Dr. Scott Sicherer](#)

And those chemicals, like histamine and others make swelling happen. It makes, the trouble breathing. It makes, the heart may not be able to, get the blood to circulate properly. So the common symptoms you see are hives and rashes like mosquito bite looking rashes, stomach issues like vomiting, diarrhea. This is a crop. Come on very quickly.

00;07;21;07 - 00;07;37;01

[Dr. Scott Sicherer](#)

Usually within minutes of eating the food and then asthma type symptoms. We're going to hear more about asthma. Can be triggered at the same time. And then in the circulation that's anaphylaxis a severe allergic reaction potentially deadly. And so it could be quite a dramatic problem.

00;07;37;08 - 00;07;56;25

[Dr. Monica Kraft](#)

Well the same thing happens with the environmental exposure. So if you have really, very, very prominent allergies to environmental allergens. So this time it could be, it might be, certain trees or grasses, in addition to the indoor allergens we talked about. Go outside, you get you inhale it. And so the upper airway, the same type of reaction happens there.

00;07;56;25 - 00;08;16;12

[Dr. Monica Kraft](#)

It comes in contact with your with your nose. And there's a whole cascade of events that starts including that Iggy that knows that allergen and sees it again and tells cells to release all of these contents. And you get lots of swelling. So you might get, you know, rhinitis, difficulty breathing through your nose. But then when it extends to the lungs, it can cause an asthma attack.

00;08;16;17 - 00;08;29;07

Leslie Schlacter

Right? So to keep it, like super simple, an allergy is something that causes more of like a systemic response, like some throughout the body versus like a sensitivity that might aggravate, you know, one part of the body.

00;08;29;10 - 00;08;56;29

Dr. Monica Kraft

Sort of. Yes and no. I mean, I think milder allergies can cause really more rhinitis and upper airway symptoms. And that's sort of all certain people have. And so they'll get the Flonase or they'll do the rinses with saline, the using it, taking any histamine. And then they're fine. Then there there's some who have much stronger, more severe allergies that then really involve the lower airway because there's so much, you know, redness and swelling, just inflammation going on in the upper airway that it there's a lot of crosstalk between the upper and lower airway.

00;08;56;29 - 00;09;04;27

Dr. Monica Kraft

And when I say lower airway I mean the lungs. Yep. Yeah. And then the lungs themselves the airways get inflamed and they get narrowed. And that's how why it's difficult to breathe.

00;09;05;01 - 00;09;09;24

Leslie Schlacter

How is it that some people have no allergies. Some have some and some have severe. What's the difference in their body?

00;09;09;25 - 00;09;29;27

Dr. Monica Kraft

Great question. I think it's a combination of things. I think it's your inheritance. So if it runs in your family, the genetic inheritance, there's that piece, but there's also a whole area of investigation going on about how the environment actually changes your DNA and can make you more susceptible to future exposures to those same allergens. That's called epigenetics.

00;09;29;27 - 00;09;47;17

Dr. Monica Kraft

And that's a very hot area right now in research trying to understand that because some of that can be heritable, you can pass that on to your to your unborn child, or you yourself can have very severe disease because you've had your your DNA changed by this environmental exposure.

00;09;47;19 - 00;09;57;05

Leslie Schlacter

So what is the connection between allergies and asthma like I remember in PA school allergies,

asthma, eczema. But like what's the connection here specifically with asthma.

00;09;57;07 - 00;10;05;04

Dr. Monica Kraft

Sure. Well, there's this whole, entity called the a topic march that starts in childhood in some patients. Not everyone with asthma had it as a kid.

00;10;05;07 - 00;10;06;25

Leslie Schlacter

You say that again, a topic, a topic.

00;10;06;25 - 00;10;07;10

Dr. Monica Kraft

March.

00;10;07;10 - 00;10;07;24

Leslie Schlacter

March.

00;10;07;24 - 00;10;25;27

Dr. Monica Kraft

Okay, so it starts out with maybe atopic dermatitis with rash. And then it can lead to rhinitis which is runny nose and watery eyes, all those types of things and then lead to asthma. And that's sort of a process that happens in childhood and can move to adulthood doesn't always move to adulthood. So there's there's that side of things and that.

00;10;25;27 - 00;10;46;23

Dr. Monica Kraft

So those early allergens, can really set up a whole training of the immune system, if you will, that will then lead to the asthma later in life, usually by about age 6 or 7 for kids and then some kids manage to do, you know, kind of, quote, grow out of it, in their teens and then they don't really have asthma as a, as adults.

00;10;46;26 - 00;10;55;21

Dr. Monica Kraft

But then, a good percentage will develop it in adulthood and it switches genders. It's more common in boys as a child, more common in women as adults.

00;10;55;24 - 00;10;58;06

Leslie Schlacter

Do you think that is like a hormonal connection there?

00;10;58;08 - 00;11;08;00

Dr. Monica Kraft

I think it's, but I think it's part and part and part hormonal. But then also it has to do with the lung structure and development. Okay. And so it's sort of a combination and intersection of the two.

00;11;08;02 - 00;11;15;11

Leslie Schlacter

Okay. We were talking a little bit before, but we didn't want to jump into it that there's some misinformation out there about asthma specifically. What is that.

00;11;15;11 - 00;11;42;06

Dr. Monica Kraft

Sure. I think there's this perception that, as was not a big deal, that everybody knows somebody with asthma, and it's mild and it's just not a problem. And I can tell you from the patients that I take care of, and having been in the field for a while, that in fact, there is, a lot of severe asthma out there and very poorly controlled asthma that leads to very poor quality of life and in severe cases can lead to emergency department visits, hospitalizations.

00;11;42;07 - 00;11;43;19

Leslie Schlacter

And expensive condition.

00;11;43;19 - 00;12;04;02

Dr. Monica Kraft

Yes. And then the inhalers are un are expensive. There's high co-pays that can happen. And so I think that there's more to it than I think people really understand. And then allergies are a real big contributor to about about half maybe 50 to 60% of asthma, not all of asthma. And so therefore that's a it's an a really important link.

00;12;04;05 - 00;12;14;10

Dr. Monica Kraft

So I'd like to change the perception that it's, that it's all mild and no big deal. Because I think, I think a lot of people walk around with very high symptom burden and they just live with it. And we're.

00;12;14;11 - 00;12;15;27

Leslie Schlacter

Just like, keep rescuing it rather than.

00;12;15;27 - 00;12;20;10

Dr. Monica Kraft

Just exacerbate into the root cause. Absolutely. We don't get the right, right care.

00;12;20;13 - 00;12;30;21

Leslie Schlacter

Right. Matt, is there is that concept that she talked about, like how more common you said women girls and men, boys is the same thing happen with food allergies or is that totally different?

00;12;30;21 - 00;12;44;14

Dr. Scott Sicherer

It's it's interesting that in the younger age group, it's a little bit of a boy predominance of food allergy. And then as we get into the teen and later years, it's a little bit more girls and women and we're not exactly sure why that's the case.

00;12;44;14 - 00;12;45;11

Dr. Monica Kraft

Exactly.

00;12;45;14 - 00;12;50;10

Leslie Schlacter

What about the type of food allergies? Is there ones that present earlier versus later?

00;12;50;15 - 00;13;15;18

Dr. Scott Sicherer

So the very common food allergies in the youngest people are milk, egg, peanut, a little bit wheat and soy and tree nuts. As we look into older age groups, we see more tree nut, shellfish and fish as being more common. The good news for a lot of the younger children is that allergies to milk, egg, wheat, and soy do tend to be outgrown as children get older.

00;13;15;20 - 00;13;34;20

Dr. Scott Sicherer

The not so great news is that the other ones like tree nuts, fish, shellfish, peanut, they tend to be more persist. And so only about 20% of young children outgrow a peanut allergy. Only about 10% outgrow the tree nut, or seafood allergies.

00;13;34;22 - 00;13;47;06

Leslie Schlacter

I remember when my kids are 17 and 19 now, but I remember being a young mom and there was all this information of like, don't give your kids peanut butter or eggs or there was all these rules. What would be like your go to speech for all moms?

00;13;47;06 - 00;13;50;08

Dr. Scott Sicherer

Well, everything you just said, it's wrong now. Yeah.

00;13;50;11 - 00;13;51;10

Leslie Schlacter

Right. So, like, what's.

00;13;51;11 - 00;14;12;26

Dr. Scott Sicherer

Really turned around. So I mean, a little bit of a history lesson on this, but going back to the year 2000, the American Academy of Pediatrics came out with statements about, if you're allergy prone family, don't give that baby milk until age one, egg until age two, peanuts, tree nuts, fish till age three. And that came out when I was sort of early in my career, and it wasn't very evidence based.

00;14;12;26 - 00;14;19;15

Dr. Scott Sicherer

I had some information, but I was like, that means you wouldn't have birthday cake at your first year birthday. I mean, something's not right there.

00;14;19;17 - 00;14;21;09

Leslie Schlacter

Maybe we should fix that tradition anyway.

00;14;21;10 - 00;14;21;24

Dr. Scott Sicherer

So.

00;14;21;27 - 00;14;23;21

Leslie Schlacter

That was like fruit.

00;14;23;25 - 00;14;47;09

Dr. Scott Sicherer

So. So we learned we learned through studies that actually earlier introduction of these allergens is actually beneficial and more preventative. So it's really been at 180 turn on this one. So the recommendations now especially for children who show some of that atopic march signs like eczema early on, it's like oh. They might end up having more things going on for them.

00;14;47;12 - 00;15;03;19

Dr. Scott Sicherer

The idea is to get peanut into the diet earlier. So around six months of age or seven months of age in infants say, forms, which is its own little story because peanut butter is a choking hazard, peanuts are a choking hazard. So you have to smooth it out. And so we have to give our families instructions about this.

00;15;03;27 - 00;15;12;09

Dr. Scott Sicherer

But getting this into the diet early actually essentially teaches the immune system not to attack it and has a better 80% sure.

00;15;12;09 - 00;15;20;29

Leslie Schlacter

So that the a top atopic march. You called it. Yeah. If you see that that would be a sign to then reintroduce the food.

00;15;21;02 - 00;15;42;19

Dr. Scott Sicherer

So the general idea is not to wait forever to get any of these allergens into the diet, but particularly in a baby that you might see showing signs of allergy, which is typically the eczema topic dermatitis, that that would be a higher risk infant. That's demonstrating to us visually that their skin is itchy and red and allergic allergy prone.

00;15;42;22 - 00;15;47;13

Dr. Scott Sicherer

That's a baby that especially would potentially benefit from their introduction.

00;15;47;13 - 00;15;51;06

Leslie Schlacter

Opposite of what society would would say, which is actually what you're saying.

00;15;51;08 - 00;16;10;22

Dr. Scott Sicherer

Well, that's why it's it's great to have this as a conversation here because, there's it was very easy for families to just say, okay, I won't eat these things or not give it to my baby, basically. But doing something active, like giving egg earlier, giving peanut earlier is sometimes more anxiety provoking, but it's safe and it's the recommendation.

00;16;10;22 - 00;16;11;22

Dr. Scott Sicherer

Now talk to your nutrition.

00;16;11;27 - 00;16;26;26

Dr. Monica Kraft

But you're not. You remind me of the whole school of thought. There are these, the families that live on and especially in Europe, they live with, in the farm. On the farm. Right. And they're the way farm houses are in Europe. They're right above the barn. So there's a lot of contact with the cows and the pigs.

00;16;26;28 - 00;16;48;16

Dr. Monica Kraft

The prevalence of asthma is incredibly low because those early exposures to certain bacterial agents, in the case of, of allergy and asthma is really important. And the developing immune system. So you expose the immune system to certain entities early in life and sort of train it, if you will, to not not recognize it as harmful. And so there's.

00;16;48;16 - 00;16;52;22

Leslie Schlacter

Really going to upset all those people that still run around with like, masks and all these things.

00;16;52;22 - 00;17;04;09

Dr. Scott Sicherer

Well, that's a different story really. But but I you know, the lesson really is that, as you said in the very beginning, the world changed a lot faster than our immune system changed. And that that's sort of where the disconnect is.

00;17;04;09 - 00;17;04;24

Dr. Monica Kraft

Right?

00;17;04;24 - 00;17;22;01

Dr. Scott Sicherer

And, you know, if we if we rolled the clock back a few thousand years, how did babies eat, right? I mean, you'd have to imagine that there was no packaged foods or anything. No, none of those squeezezy things. The mother or father had to chew the food, presumably, and make mushes and spit it out and give it to the baby.

00;17;22;01 - 00;17;40;04

Dr. Scott Sicherer

That's a mush of a mixture of foods. Given early, with all of the different stuff that was in their mouth without brushing teeth or anything else. And with immune system, things that are in your saliva and dirty. So yeah. So it's very, you know, it's it seems like a long time ago, but in evolution it's not that long ago.

00;17;40;04 - 00;17;41;17

Dr. Scott Sicherer

And things changed fast.

00;17;41;20 - 00;17;53;19

Leslie Schlacter

So we know that, you know, research even here at Mount Sinai research clinical trials they save lives. So what what's going on right now in the world of research and clinical trials?

00;17;53;26 - 00;18;14;23

[Dr. Scott Sicherer](#)

Let me take real quick just off of what we just talked about. So, Doctor Kraft talked about how people living where it's more natural, you know, on farms and things have less allergy. We know it was noticed that babies born by C-section have higher rates of allergy than babies who are born vaginally and going through the vaginal canal.

00;18;14;24 - 00;18;36;17

[Dr. Scott Sicherer](#)

You get all of these different bacteria that are resident in that canal. So finding that those born by C-section have more allergy, a study was designed here and run here where mothers who are giving birth by C-section, it was randomized whether to take some of their vaginal secretions and basically rub it on the baby to see the baby with those bacteria.

00;18;36;19 - 00;18;46;23

[Dr. Scott Sicherer](#)

And then we're following those infants over time to see if it does have an impact on reducing their getting allergic or, atopic dermatitis as an outcome.

00;18;46;23 - 00;18;48;06

[Dr. Monica Kraft](#)

Interesting. Well, there's also.

00;18;48;06 - 00;18;50;25

[Leslie Schlacter](#)

If we do we know the answer now. Yet.

00;18;50;27 - 00;19;01;04

[Dr. Monica Kraft](#)

And if kids go to daycare a lot less asthma because they get exposed to all those infections early in life. And again, it excuse the immune system away from allergic disease.

00;19;01;06 - 00;19;02;09

[Dr. Scott Sicherer](#)

Having a dog in the house.

00;19;02;09 - 00;19;06;06

[Dr. Monica Kraft](#)

And a dog, especially in first year of life. Huge, huge impact on asthma.

00;19;06;06 - 00;19;22;27

[Dr. Scott Sicherer](#)

Allergies, not having a dishwasher. Yeah. So you know like dishwashers really clean all of the

bacteria and stuff off of the dishes and things. Right. So that's making it even cleaner in your house not telling you that convenience is bad. But these are all little things, right?

00;19;22;29 - 00;19;38;16

[Dr. Monica Kraft](#)

I used to be called the hygiene hypothesis. We now think it's more of the kind of the gut development hypothesis, because actually, the way your GI tract develops in terms of its exposure to bacteria has a lot to do with how the lung immune system develops. They're very, connected.

00;19;38;18 - 00;19;52;07

[Dr. Scott Sicherer](#)

So another study that we're doing is giving babies communities of bacteria that we think will be helpful for developing the right immune response to allergens into foods and seeing what happens. I don't know if the results of that yet either.

00;19;52;09 - 00;20;05;25

[Leslie Schlacter](#)

Right. The treatment for this is kind of like exposing them to like, okay, let's back up. What is the treatment for allergies? Like treating them acutely and then treating them maybe to prevent or eradicate it.

00;20;05;28 - 00;20;23;22

[Dr. Monica Kraft](#)

Right. So it depends on how the age. So as a young child there's some think really some interesting innovations happening for prevention. As you heard, there's also a bacterial lysate out of Europe called bronchial axiom that's been given to six month to two year olds. It's a gram positive, gram negative, all kinds of bacteria in a powder to ingest.

00;20;23;22 - 00;20;44;20

[Dr. Monica Kraft](#)

It's oral to see if that prevents the development of asthma. So those are things that are done sort of early in life to train the immune system. Once asthma is established, then there's of course there's the treatment of allergies and asthma. So you want to take really good care of of your sinuses. So you do that with any histamines, nasal steroids like Flonase.

00;20;44;23 - 00;20;48;21

[Dr. Monica Kraft](#)

And especially if you have anything like nasal polyps, you want to see your friendly ENT physician.

00;20;48;21 - 00;20;51;04

[Leslie Schlacter](#)

What about like nasal sprays and nasal rinses? Yes.

00;20;51;04 - 00;20;54;02

Dr. Monica Kraft

Yeah. The nasal sprays would be like the Flonase and the. Oh, no.

00;20;54;02 - 00;20;55;01

Leslie Schlacter

I meant like, just even, like.

00;20;55;01 - 00;20;55;25

Dr. Monica Kraft

Sailing or sailing.

00;20;55;27 - 00;20;57;01

Leslie Schlacter

Straight to Neil med.

00;20;57;07 - 00;21;17;15

Dr. Monica Kraft

The Neil. I'm a huge fan of the Neil. You do that first and that in combination with Flonase is really great. And then if you need to add an antihistamine, either a pill or a spray, there's and it has to be a spray called, AST Astellas or AST a pro. That that's something you can do to take really good care of the upper airway to reduce the crosstalk with the lungs.

00;21;17;15 - 00;21;36;11

Dr. Monica Kraft

So that helps kind of protects the lungs. Once you have established asthma, there's a number of inhaler developed, you know, inhalers that you would use to really reduce the inflammation. And then when it gets beyond that, then we think about the biologics. And that's the that's a whole nother area for more severe asthma that targets certain kinds of inflammation.

00;21;36;13 - 00;21;38;19

Dr. Monica Kraft

It's really allergic asthma. Most of them are focused.

00;21;38;19 - 00;21;41;03

Leslie Schlacter

On what do you mean by biologics. What is that term.

00;21;41;05 - 00;21;59;29

Dr. Monica Kraft

So these are the we have about six at our disposal now. And they are there specific medications

that are given by injection that target certain types of inflammation. And in the case of asthma it's going to be that allergic allergic form of inflammation. So it's very specific in its use. And that's why it's kind of the term to biologic.

00;22;00;04 - 00;22;06;23

Leslie Schlacter

So if something like how does somebody get treatment for this. They have to have like allergy testing to then see what biologic they would need.

00;22;06;26 - 00;22;25;07

Dr. Monica Kraft

Yeah. So first the idea is that you you want to figure out what kind of asthma a patient has. So you want to do allergy testing to see if allergy is driving that asthma. We also have these things called biomarkers. We can look at certain cells in the blood called there's a white cell called eosinophilic which is very much associated with allergies and asthma.

00;22;25;07 - 00;22;56;26

Dr. Monica Kraft

We want to see if that's elevated. We can measure, a a biomarker in exhaled breath called exhale nitric oxide that's associated with untreated inflammation in the lungs. So we do all these things to figure out does what does it a particular person have an allergic or eosinophilic type of asthma. Because and that would make them a candidate for these biologics that target that some of our patients don't have, that we have other options for them, although fewer and so so but the ones that have this allergic asthma, we have a lot of choices for them.

00;22;57;01 - 00;23;05;21

Dr. Monica Kraft

And then so we use these biomarkers and the clinical characteristics and age of onset and all sorts of things to come up with kind of an algorithm of which biologic to choose.

00;23;05;28 - 00;23;09;27

Leslie Schlacter

And does that treat it in hopes that it goes away, or is that just manage it.

00;23;10;00 - 00;23;29;22

Dr. Monica Kraft

It well, that's a great question. So they really were developed to reduce asthma attacks. That's the whole point. And maybe improve symptoms, improve lung function a little bit. Now over time there have been patients we've done really well with them and have been well controlled. And so we're actually talking about the word remission in asthma, which is so exciting.

00;23;29;22 - 00;23;49;23

Dr. Monica Kraft

I never saw it in my whole career. I get to talk about that. And so now there's a movement where can we actually taper the biologic, widen the dosing intervals, can control, be maintained. Do patients have to stay on biologics for their, you know, entire life? Maybe not. So we're actually designing up to one of the grants I'm working on is actually on that.

00;23;50;00 - 00;23;56;29

[Dr. Monica Kraft](#)

We're going to we it's it's a clinical trial to really look at being able to do that in a, in a very rigorous way to see if we can test that hypothesis.

00;23;57;01 - 00;24;05;22

[Leslie Schlacter](#)

How many clinical trials or research studies are going on right now at Mount Sinai related to just everything allergy, allergy, asthma.

00;24;05;25 - 00;24;07;23

[Dr. Monica Kraft](#)

Kind of. I don't know if I can tell.

00;24;07;25 - 00;24;09;01

[Dr. Scott Sicherer](#)

I was hoping you'd come up with I.

00;24;09;01 - 00;24;10;11

[Dr. Monica Kraft](#)

Know.

00;24;10;13 - 00;24;14;09

[Dr. Scott Sicherer](#)

I don't know that either of us have access to know exactly how many, but it's got to be dozens.

00;24;14;09 - 00;24;17;04

[Dr. Monica Kraft](#)

Oh for sure, at least maybe 50, 200 somewhere in there.

00;24;17;10 - 00;24;30;26

[Leslie Schlacter](#)

And then how do you like adults can. It's easy for an adult to make a decision of whether they want to participate or not. But it's got to be hard for parents with children. How do you approach that, especially with food allergies. How do you do it?

00;24;30;28 - 00;24;50;20

[Dr. Scott Sicherer](#)

We have a discussion. I mean, you know, we're doing a lot of different studies. We advertise our studies through the usual social media means and through our mailing lists. And as we discuss each of our patients, as we meet them, you know, to discuss their management on a one on one basis, and then whatever opportunities there are for being a participant.

00;24;50;20 - 00;24;58;14

[Dr. Scott Sicherer](#)

I mean, I think of these families are really the heroes. It's not easy being in a study. I mean, there's a lot involved as time involved. There's travel involved.

00;24;58;16 - 00;24;59;12

[Dr. Monica Kraft](#)

Because.

00;24;59;14 - 00;25;28;02

[Dr. Scott Sicherer](#)

Yeah, it's a huge commitment. And so it's not even just the child, obviously. It's also the parent or parents that are making these trips to come in for different things. We, we not being me, we but the entire food allergy, the entire community of those with food allergy are really depending on those volunteers, those heroes that are taking, you know, their time and some risk to be in these studies to see if what we're doing is going to help them.

00;25;28;02 - 00;25;40;26

[Dr. Scott Sicherer](#)

And happily, we've had a lot of great wins. And, you know, typically there are I mean, we're not we're studying things that we're hoping are going to work and make sense. And we've had some really great wins in that.

00;25;41;01 - 00;25;46;03

[Leslie Schlacter](#)

Is it the same concept as like the immunotherapy, the biologics or is it different for food?

00;25;46;04 - 00;26;03;12

[Dr. Scott Sicherer](#)

There's a lot of different approaches. But you know some examples I mean in the in the last if I, if you were asking these questions five years ago, it'd be like, well the main treatment for food allergy would be don't eat the food. It's pretty straightforward, right? You're allergic to peanuts. Don't eat it. You're allergic to cashews. Don't eat them.

00;26;03;14 - 00;26;19;29

[Dr. Scott Sicherer](#)

Living like that, though, it's like living in a minefield, right? Every meal, every snack, every party, every birthday, every. You know, everything is around food and asking questions, reading the

labels, checking for cross contact, a hidden ingredient. I mean, that's the way you're living when you have food allergies. It's not easy. The quality of life is highly impact.

00;26;19;29 - 00;26;45;01

[Dr. Scott Sicherer](#)

It's a lot of anxiety. So but that's all we were saying, right? But in studies that we've done here, we learned that about 70% of children with a milk or egg allergy can tolerate milk or egg when it's a minor ingredient in baked foods like cookies, muffins. It used to be just don't eat it. And when we had them eating it, we're able to regress them to most of them, to most to eventually be able to have the regular forms of the food.

00;26;45;03 - 00;26;47;00

[Dr. Scott Sicherer](#)

And then came oral immunotherapy like.

00;26;47;01 - 00;26;47;29

[Leslie Schlacter](#)

Exposure therapy.

00;26;48;00 - 00;27;08;14

[Dr. Scott Sicherer](#)

Exposure therapy, and then came more oral immunotherapy. Like you're allergic to this, but we're going to give you, very carefully measured small amount under medical supervision. Don't try this at home kind of thing, but under supervision. And then work up gradually where they take the food as medicine, almost like a daily dose. We got one FDA approved product for this, for peanut allergy.

00;27;08;14 - 00;27;28;22

[Dr. Scott Sicherer](#)

But in real life, we're doing this for multiple foods. And we have had this out, you know, more than 1000 patients that we've treated for this and we study them also. It's all part of the research that we're doing as well. But it doesn't even in there, I mean, we're looking at biologics as Doctor Kraft was talking about, one of these biologics was recently approved for food allergy.

00;27;28;22 - 00;27;48;19

[Dr. Scott Sicherer](#)

And it's approved for age one and up for whatever you're allergic to. And it raises the threshold. So a lot of people are like, well, you know, it's little bit of the food would send me to the emergency room or worse. Now on this treatment, I'm able to not worry about that so much because it raises the threshold at least somewhat, so that a small accident wouldn't be a problem for some people.

00;27;48;19 - 00;28;02;09

Dr. Scott Sicherer

This treatment that we just finished studying and had of the approved, this treatment for some people makes it almost like they could eat a meal of the food. So it's it's quite a change. Just in the last few years.

00;28;02;11 - 00;28;24;13

Leslie Schlacter

So I go back to like my son's friend who has this peanut allergy, and I would have the epinephrine pen. I see you brought them with you right now. Let's say someone who doesn't manage their allergies, just like they told to have their allergy. They have their EpiPens at home. What do people need to know about EpiPens? So like how to manage that allergy after it happens.

00;28;24;13 - 00;28;46;03

Dr. Scott Sicherer

Yeah. So most people are avoiding the food as their management plan. And some people might be allergic to one thing. Some people might allergic to multiple things. And what they're allergic to is part of how difficult it is to do that. If you're allergic to milk, think about it. If you're allergic to a small amount of milk, you know, you walk into a coffee shop and they're steaming milk and now you're getting it's almost like you've had a lot of dog exposure, adjustment, exposure.

00;28;46;08 - 00;29;05;16

Dr. Scott Sicherer

You might have a pretty bad reaction just from that type of exposure. So the amount of the exposure in the air, usually minor contact like with the skin, doesn't matter. But something like that is a special thing. And milk splatters, spills, splashes. So it's hard to avoid in a restaurant situation, peanut might be easier to avoid. You know, people are more aware of it and things like that.

00;29;05;16 - 00;29;23;18

Dr. Scott Sicherer

So all of these are part of the discussion and decision making with this. But the instruction is to read your labels, to talk to the restaurant. When I have my patient in front of me, I'm spending about a half an hour just going through those types of things of how to avoid getting into trouble with the food. But if you do get into trouble and accidents happen, right, that's the saying.

00;29;23;21 - 00;29;40;10

Dr. Scott Sicherer

Then you need to know how to recognize and treat. So the other half an hour of talking is about, you know, what are the symptoms and what do you do? And if it's just very mild symptoms, maybe you would take an antihistamine. Remember, like Benadryl or like a XR tech kind of thing. But if it's more than mild symptoms, that's where the epinephrine comes into play.

00;29;40;10 - 00;29;52;24

[Dr. Scott Sicherer](#)

And there are multiple different injection forms of this that you can carry with you and take. It's a very safe and effective medicine. It actually was the medicine that people would take for asthma, like, hey doc, my asthma. Okay, here's your injection. Thanks, doc. And that's.

00;29;52;24 - 00;29;54;00

[Dr. Monica Kraft](#)

All. That's all we had. Yeah.

00;29;54;01 - 00;30;13;26

[Dr. Scott Sicherer](#)

Oh, doc it's back. Here's another injection. But for food allergy, the benefit is that it not only helps any of the airway problems like it does for asthma, it helps so helps the heartbeat strong. It really helps to stop the reaction from progressing. And it gives you time to get to an emergency room for a bad reaction so that they can get more care at the emergency room.

00;30;13;29 - 00;30;18;05

[Leslie Schlacter](#)

So you do that and then just that's it. So typically I would, I.

00;30;18;05 - 00;30;33;03

[Dr. Scott Sicherer](#)

Would so I'm very careful not to say use your epinephrine and go to the hospital because people hear that and think, oh, the epinephrine must be dangerous, I have to go to the hospital if I use it. So I never say what you just said because that's what people take home. And then they're like, I'm afraid to use this.

00;30;33;06 - 00;30;53;16

[Dr. Scott Sicherer](#)

It's a safe medicine. Right? So, if you use it, it's going to make you feel better. But if you're having a bad allergic reaction, sometimes symptoms could come back and you don't have maybe more medicines that oxygen at your house. So you go to the emergency room. I could make a nuanced argument and say, well, you know, you gave it your all better.

00;30;53;17 - 00;31;05;04

[Dr. Scott Sicherer](#)

You're near an emergency room. All right. Don't go to the emergency room. But in a lot, of lot of individual cases, if someone is vomiting and has hives and is feeling sick, even if the epinephrine made them better, they're probably better off going to be.

00;31;05;04 - 00;31;13;25

[Dr. Monica Kraft](#)

It's like an asthma action plan. You have a bunch of steps that you do when the symptoms get worse, and then if they're controlled, then you're fine. But if they're not, then you need to go to the emergency department.

00;31;13;27 - 00;31;16;00

[Leslie Schlacter](#)

What's the difference between all the ones that you brought?

00;31;16;00 - 00;31;30;12

[Dr. Scott Sicherer](#)

So they all have the same medicine. They're just different forms for injection. And so this guy's shape the way it is and it talks actually it says what to do to use it. The other ones are more like magic marker size ones.

00;31;30;12 - 00;31;30;25

[Leslie Schlacter](#)

Yeah.

00;31;30;25 - 00;31;52;29

[Dr. Scott Sicherer](#)

But they all have slightly different. This is the most common one. It's the and it's a brand. It's called EpiPen. The cap comes off the back to unlock it. The other tip goes into the side of the leg into the thigh. You press count to three, you'll hear it click. I'll do that now. One, two, three. And then the needle you never see, but it goes in, gives the medicine and it goes into the leg.

00;31;53;01 - 00;31;56;11

[Dr. Scott Sicherer](#)

There's a new device that is a nasal epinephrine.

00;31;56;14 - 00;31;57;23

[Leslie Schlacter](#)

It looks like Narcan.

00;31;57;25 - 00;32;18;19

[Dr. Scott Sicherer](#)

Exactly. It's the same exact, delivery system as Narcan. And so it's a needle. It's version that just was approved. So our patients carry these with them because you never know if there's an accident. They, learn to use it if they're having more than mild symptoms. And if needed, they get to the emergency room for more care.

00;32;18;22 - 00;32;23;18

[Dr. Scott Sicherer](#)

You know, this is the emergency plan. Just like there's an asthma action plan. This is sort of the

anaphylaxis app, right.

00;32;23;23 - 00;32;28;15

Dr. Monica Kraft

And for one of our biologics, a Melissa Mab, we need to they carry an EpiPen as well.

00;32;28;18 - 00;32;31;03

Dr. Scott Sicherer

So, Melissa Mab is the medication that I.

00;32;31;03 - 00;32;32;05

Leslie Schlacter

Was her first. Yeah.

00;32;32;06 - 00;32;32;12

Dr. Monica Kraft

Yeah.

00;32;32;12 - 00;33;02;05

Dr. Scott Sicherer

So the brand name is Solara. It's the medicine I was referring to before. That improves threshold for people who have food allergy. And so it's been around for asthma for more than 20 years. So has a really good safety record. And that's part of the reason why it was approved. Range one and up. The little story I gave you before about those antibody and ten other floating around going to the allergy cell and sitting there kind of like an A cup holder, they pop off, they pop back onto their cup holder and they're looking out for is that peanut coming my way as they're popped off.

00;33;02;09 - 00;33;12;26

Dr. Scott Sicherer

This medication kind of tackles them and and at least partially inactivates binds to it so that you don't if you have an exposure to the food, it's less likely that.

00;33;12;26 - 00;33;30;10

Leslie Schlacter

You would ride out the action. Yeah. So this is I mean it's got to be really stressful for not only adults obviously, but for children to grow up with this kind of chronic illness, this chronic disease. How do you guys see this affecting your your patients and their families? It's got to be pretty psychologically.

00;33;30;13 - 00;33;55;29

Dr. Monica Kraft

Yeah. Well, especially if there's frequent hospitalizations, emergency department visits and and

if there are multiple children, then if one has really bad asthma, then that child is going to get a lot of attention because of it. And sometimes the other kids aren't really so happy about that. And so it changes family dynamics a lot. And then some parents have a hard time, you know, as, as you can imagine, really stressful taking care of a child that has a severe disease, whatever it is.

00;33;56;01 - 00;34;18;06

Dr. Monica Kraft

And so there's how it affects one's quality of life overall and family life and that side. So there's, you know, a lot of I spend a lot of time because I see also younger as Maddox as well sometimes in the adolescent age and then above. And so we have those types of conversations. Especially there's exercise induced asthma where where, where sometimes the kids want to play sports and then they can't.

00;34;18;06 - 00;34;23;15

Dr. Monica Kraft

And so how do we help them get over that? So they can have a reasonable quality of life to and achieve what they want to achieve?

00;34;23;22 - 00;34;27;02

Leslie Schlacter

Do we offer like support groups or any social work support for families?

00;34;27;06 - 00;34;39;20

Dr. Monica Kraft

We do. We do, absolutely. And on the adult side, if you have especially severe asthma or COPD, there's definitely support group. There's a better breathers, which is through the American Lung Association that really offers that. It's been a very nice resource.

00;34;39;23 - 00;34;58;17

Leslie Schlacter

So one of the things that we learned during like Covid and then obviously every flu season is, those with underlying conditions are predisposed to having a more difficult course if they get sick. Is it the same? I know for asthma? That's true. Like asthma is a huge risk. What about allergy? Is that also a risk.

00;34;58;19 - 00;35;07;08

Dr. Scott Sicherer

For food allergy in general? It hasn't been a risk. Yeah. There was a lot of worry about that when Covid started, but we didn't see an increase or anything.

00;35;07;08 - 00;35;14;21

Dr. Monica Kraft

We've done some work in our in my own lab, which suggests that having certain kinds of inflammation actually can confer some protection against SARS-CoV-2.

00;35;14;26 - 00;35;16;00

Leslie Schlacter

How do you think how does that work?

00;35;16;02 - 00;35;36;24

Dr. Monica Kraft

The certain proteins that we make in in the allergic situation, actually down regulates the Ros, one of the receptors that the virus uses to enter the cells, Ace2. And so you see a lower expression. Now whether that the challenge is I think as as the asthma becomes more severe, it may that balance may not be there. But in the milder asthma and allergy there may be some protection.

00;35;36;26 - 00;35;49;11

Leslie Schlacter

Okay. What about kind of disparities socioeconomic. Can you talk a little bit about how treatment, getting the right help for these conditions might differ in different communities?

00;35;49;11 - 00;35;50;04

Dr. Monica Kraft

Oh my gosh. Yeah.

00;35;50;08 - 00;35;52;15

Leslie Schlacter

It's you might not have enough time for all of that, but.

00;35;52;15 - 00;36;10;17

Dr. Monica Kraft

It's a bit of course it's a big issue. Well, especially where we are here at Mount Sinai Hospital, we're juxtaposed between some of the wealthiest zip codes in the country and some of the the areas of largest disparity. So it's and so I feel like I see that every day in my own practice because I see patients from all walks of life.

00;36;10;19 - 00;36;45;26

Dr. Monica Kraft

And I think in addition to the the access to care, there's access to care, there's also being able to pay for medications, because the way our health care system works with co-pays and such, that can be a barrier. Then there's also what's associated with where you may live. And so we've been getting very interested in geospatial mapping and trying to understand what other exposures patients have in their home life, whether it be the indoor allergen, things like the cockroach, versus if they live near a freeway, it could be oil, it could be some kind of electrical

plant or other places where there's exposures that can also affect the airway on top of allergens.

00;36;45;28 - 00;36;55;19

[Dr. Monica Kraft](#)

So I do think that there's a lot to be concerned about when it comes to disparities. It's not all we not all patients can access to care equally.

00;36;55;21 - 00;37;30;19

[Dr. Scott Sicherer](#)

In the world of food allergies, we do see a higher rate in more disadvantaged groups. And the diagnosed diagnostics are not as up to par. And actually participation in research, is not equal to the community that's affected by food allergy. So we're actually doing studies now to try to address that, to learn more about it. The studies that resulted in the FDA approval, are mostly, you know, richer, and wider communities that were involved in the studies.

00;37;30;20 - 00;37;38;29

[Leslie Schlacter](#)

So unfortunate because, like, to participate in research generally, you don't, you know, it's not going through insurance. Right? Right. You can just participate. I feel so backwards. Yeah.

00;37;39;02 - 00;37;44;10

[Dr. Scott Sicherer](#)

So so we specifically are trying to find ways to combat that and really make sure that this more.

00;37;44;12 - 00;38;05;04

[Dr. Monica Kraft](#)

Flexibility to hear that, because I think in our world, we actually really see a lot of folks from from all, all walks of life who want to come and do our studies. So from disadvantaged and not so disadvantaged. So we feel like at least that allows access to care because they'll often get their medications taking care of their background medications, especially for testing a new intervention.

00;38;05;07 - 00;38;08;17

[Dr. Monica Kraft](#)

So then they sort of become our patients too, which is nice, lovely.

00;38;08;19 - 00;38;19;26

[Leslie Schlacter](#)

In a perfect world, that would all make sense. But that goes back to like trusting the medical community. And then so here we are. We want to get patients and that need our help. They might not have insurance, but here come do this research.

00;38;19;26 - 00;38;20;22

Dr. Monica Kraft

That still.

00;38;20;22 - 00;38;22;22

Leslie Schlacter

Sound fishy, but it really isn't.

00;38;22;22 - 00;38;44;07

Dr. Monica Kraft

Exactly. So I think we've learned a lot about about recruiting in the in the New York community through a study that I'm involved with called All of Us, which is a genetic study where pretty much just it's not difficult to be part of. But you get your genome sequence, you get your results back, and then the information goes into a big, very much a de-identified repository that has genetic results, electronic health record.

00;38;44;11 - 00;38;53;06

Dr. Monica Kraft

So scientists can use that. Scientists from all over the country to really understand genetic origins of disease. So that part's great. But but gaining the trust of the community.

00;38;53;07 - 00;38;53;28

Leslie Schlacter

You're going to use my.

00;38;53;28 - 00;38;55;20

Dr. Monica Kraft

Information to come in. Exactly.

00;38;55;20 - 00;38;56;18

Leslie Schlacter

So to the government.

00;38;56;23 - 00;39;10;12

Dr. Monica Kraft

So we have some amazing community researchers here at Mount Sinai who have very established relationships and have community boards, and they actually guide us. And it was really through all of us. I got a lot of exposure to this. It's been amazing.

00;39;10;18 - 00;39;13;08

Leslie Schlacter

How many participants are there in that so far.

00;39;13;11 - 00;39;31;06

Dr. Monica Kraft

Overall in the whole country there's about 800,000. Wow. Because the idea is to get 2 million, but almost 900 and there and it mount and I'm really proud of Mount Sinai, cause we've been some of the best recruiters of all the sites. So really proud of the team. They've been amazing. And part of that is because of these wonderful community relationships that we have.

00;39;31;08 - 00;39;35;14

Leslie Schlacter

Yeah, that seems to be the key, like getting into the community building trust. Absolutely.

00;39;35;16 - 00;39;37;00

Dr. Monica Kraft

And that takes well, it takes a while.

00;39;37;05 - 00;39;54;00

Leslie Schlacter

Yeah, it sure does. So we talked a little bit about your allergies and exposures and responses can be different based on where you live like on a farm versus in a city. Can you just go a little bit deeper into that? And how our bodies react to that? Maybe for better or for worse? Sure.

00;39;54;02 - 00;40;11;08

Dr. Monica Kraft

I think that the whole the whole presentation is a combination of your own genetics and then your environmental exposure. So it's a real gene by environment interaction. And I want to tell you about one study that I think is is fascinating. And it kind of epitomizes that because we'd always felt like the farm exposure was critical early in life.

00;40;11;10 - 00;40;32;02

Dr. Monica Kraft

And that can really train the immune system as we talked about. But there's also the genetic predisposition as well. So there's are two populations in Pennsylvania called the Amish and the Hutterites, and they are actually very similar genetically. But then the Amish use very low tech approaches to farming with oxen and such, and the Hutterites use very high tech approaches.

00;40;32;04 - 00;40;55;08

Dr. Monica Kraft

And the prevalence of asthma is incredibly low in the Amish community, much higher in the Hutterites. So again, a testing that this farm life is is valuable regardless of your genetics. But then the, the investigative team, they're out of, Arizona and Chicago, University of Arizona, University of Chicago have gone a little farther and collected the dust from the Amish homes and trying to find what is it in the dust.

00;40;55;08 - 00;41;16;19

Dr. Monica Kraft

And it turns out it's a certain protein that's associated with a much lower rate of asthma. And so the question is, can you actually extract that protein and turn it into a treatment, which that's something down the road, but they're getting much closer to identifying. What is it about that population that really allows for much less asthma and allergy to that matter?

00;41;16;21 - 00;41;19;22

Dr. Monica Kraft

So I think we're getting closer to trying to understand that relationship.

00;41;19;24 - 00;41;28;25

Leslie Schlacter

So what I just learned is instead of us all buying like air purifiers, we should be buying like air protein dispersions with like, cow dander. Right?

00;41;28;27 - 00;41;35;21

Dr. Monica Kraft

So that might make it hard to live in your apartment, but, but I like the good. That's the right.

00;41;35;21 - 00;41;52;09

Leslie Schlacter

Because that's kind of the concept that I learned today is like, the opposite of what we all. You know, I don't live in your world of allergy and asthma, and everyone wants to, like, clean hands. Don't eat food off of this. Protect yourself against everything. But instead it's exposure to the thing and to the food that's actually going to.

00;41;52;13 - 00;41;52;25

Dr. Monica Kraft

Dirt is.

00;41;52;25 - 00;41;56;14

Dr. Scott Sicherer

Good. If you can't get a cow in your apartment, you at least can get maybe a dog.

00;41;56;16 - 00;41;56;20

Dr. Monica Kraft

Yeah.

00;41;56;25 - 00;41;58;10

Dr. Scott Sicherer

And if you're not, if you're not already.

00;41;58;12 - 00;42;17;11

Leslie Schlacter

Allergic, get a dog. Yeah, yeah. Which is like the opposite. I can't have a dog because. Yeah it's so backwards. Exactly. If you guys can both just kind of think about your patient and someone that is a situation in which everything that you've learned and over the years with research and trials that like really helped someone.

00;42;17;13 - 00;42;38;26

Dr. Scott Sicherer

So the Jaffe Food Allergy Institute here at Mount Sinai, we've been doing studies for therapeutics for food allergy. We're looking at like a patch, like a nicotine patch, but for food, we're looking at doing small amounts of the food and dosing and or under the tongue or different types of vaccines that we've been looking at, different biologics that we've been looking at and, and combinations.

00;42;38;29 - 00;42;58;22

Dr. Scott Sicherer

But one of the things that was a little bit ignored is that not everybody is super allergic to the tiniest amount. And so, for example, with peanut, the average person with the peanut allergy can already eat one peanut or more before they start to have an allergic reaction. And while they're bite safe, like from a really small amount, they still have to avoid the food.

00;42;58;24 - 00;43;20;06

Dr. Scott Sicherer

So we took that concept and said, what if we did? Feeding with regular supermarket measured peanut like peanut butter and gradually had them increase the amounts if they already sort of were bumped up to begin with. And about half of the peanut allergic population is like that. So we're talking about like hundreds of ideas of thousands of people.

00;43;20;09 - 00;43;47;20

Dr. Scott Sicherer

And so we did that study. We randomized people to either continue avoiding like they were to have this treatment. And essentially everyone who was in the treated side was able to progress without much side effect at all. Was able to get up to like, peanut butter sandwich amounts, was able to start to eat it like a regular food in the diet, was able to take breaks from eating it as not so like not a medicine all the time and just eat it periodically.

00;43;47;20 - 00;44;06;26

Dr. Scott Sicherer

And they were still able to ingest the full amount of peanut. And so we have these families where the children who were, you know, not able to eat the things of the birthday parties, and we're asking a million questions. The restaurant are now very comfortable. Exactly. Now totally comfortable and eating the food. I wouldn't call it exactly a cure because, you know, we still do tell them.

00;44;06;26 - 00;44;12;05

Dr. Scott Sicherer

They try to keep it in the diet periodically, but they're really living a normal life with this now.

00;44;12;07 - 00;44;15;23

Leslie Schlacter

It's amazing. Wow. What about you?

00;44;15;25 - 00;44;33;12

Dr. Monica Kraft

So I see patients at the Respiratory Institute, and we have a whole asthma and allergy sort of center for adults. And and work with several people. We have a full service set up. And I have to say, I've always really, loved I as you asked me about a patient, I had to think back. So I have I have a lot of them.

00;44;33;15 - 00;44;54;25

Dr. Monica Kraft

But there's one in particular since I've come to Mount Sinai that stands out. And so very, very severe asthma, multiple trips to the emergency department and hospitalization and was using inhalers, but, sometimes would forget to use them and finally got to me. And because, because a lot of times I have to I get referrals as a pulmonologist.

00;44;54;28 - 00;45;12;20

Dr. Monica Kraft

And so we sort of I sort of sat down with them and really kind of explained the whole nature of, of asthma. And why is it important to take the inhalers regularly and, and, you know, not smoke or inhale other things. And so we, we developed this relationship over time. And then eventually, he needed a biologic and he was very scared of needles.

00;45;12;20 - 00;45;33;11

Dr. Monica Kraft

Didn't because a lot of the all the biologics are injectable and and you inject them at home. And so we we teach you in clinic and then you take it home. And he just didn't want to do that. So I actually brought him into the infusion center every couple weeks to get the injection. And just through building that trust and having him try it, he has done so well.

00;45;33;18 - 00;45;51;13

Dr. Monica Kraft

He's been out of the emergency department. I would get as I give him, I give my patients my cell phones so that when they get sick, they can contact me quickly. I, you know, I only see him at appointments now, I don't we don't talk in emergency situations because he's done so well. And I got the sweetest note from him about just thanking me.

00;45;51;13 - 00;45;55;24

Dr. Monica Kraft

And so. But I feel like that's my job. I enjoy it, but it's the wonderful part of.

00;45;55;25 - 00;45;57;15

Leslie Schlacter

Yeah, but you need them to participate.

00;45;57;18 - 00;46;12;24

Dr. Monica Kraft

Exactly. So he was willing to partner with me because I say because I always tell my patient it's a partnership. So I can give you the tools, but then I want you to meet me halfway. Right. And if you're willing to do that, we can do some great things. And so it was just really gratifying to see how well he's done.

00;46;12;26 - 00;46;20;12

Leslie Schlacter

Awesome. So you talked a little bit before about exposure to bacteria and virus. Do you think that bacteria gets a bad rap?

00;46;20;15 - 00;46;46;16

Dr. Monica Kraft

I sometimes think it does. I think it's context dependent. Right. Because clearly if you've got an underlying severe disease, I'm going to say lung disease because that's that's my area that yes, exposure to certain bacteria wouldn't be in your best interest when it's an already established disease. So then you want to be protective however early in life and throughout your life, if you're if you have issues that aren't as severe, bacteria can actually be your friend, right.

00;46;46;16 - 00;46;52;24

Dr. Monica Kraft

And so I think understanding those different scenarios is important. It's not all they're not all bad. Right?

00;46;52;26 - 00;46;58;15

Leslie Schlacter

Yeah. Is there any new information or new thing that you want to share with clinical trials that are happening here at Mount Sinai?

00;46;58;18 - 00;47;22;05

Dr. Monica Kraft

I'm glad you asked. Yes, I would love to. We have a lot of trials going on in all disciplines, and you heard about a lot today in the allergy space and asthma and food allergy. But I wanted to

also make sure that our listeners heard about all the changes that we're making to clinical trials, infrastructure so that we can really offer them across our health system, because we feel like it's really important for patients to have access to new therapies to care.

00;47;22;11 - 00;47;39;06

[Dr. Monica Kraft](#)

And so we're we're really looking at all aspects of what it takes to get trials up and running from things early on in contracts with with sponsors, whether it be from industry or NIH, all the way to space, and making sure that patients can easily access trials wherever they live in New York.

00;47;39;09 - 00;47;43;08

[Leslie Schlacter](#)

So what does this mean for what might or may not happen in the government with related to?

00;47;43;10 - 00;48;00;16

[Dr. Monica Kraft](#)

It's agnostic in that we do trials funded by NIH, but we do a lot with with pharmaceutical companies as well. And so if anything, we want to partner with a lot of these companies and strengthen our portfolio. So we really are we really are going both ways. So this has relevance to both.

00;48;00;16 - 00;48;12;04

[Leslie Schlacter](#)

Awesome. Great. Thank you. What would you say are the top three things that you want the listeners from today to take home from what we talked about like the three like public service announcement, you should know these three things.

00;48;12;11 - 00;48;36;06

[Dr. Scott Sicherer](#)

So in the food allergy world some things to to remember. So one of the questions you asked before was about the impact on day to day quality of life and food allergy is a little odd because the child or adult just looks perfectly fine every moment of the day. And yet every meal, every snack, every social event involves food.

00;48;36;06 - 00;48;59;28

[Dr. Scott Sicherer](#)

And so this anxiety is there. And a lot of times, just like you were mentioning about asthma, the myth of asthma, it can be really bad. And it's not a little thing. A lot of times the public ends up looking at it like, oh, you're just making things up, or this is not such a big deal. And that can translate to bullying, which we've seen children experience.

00;49;00;02 - 00;49;22;29

[Dr. Scott Sicherer](#)

It could translate to maybe someone in a restaurant not taking something seriously and ending up with a problem, or even maybe some friends or relatives who are not making the right connection and keeping the individual safe and cared for and felt like this is really is a problem. So understanding that it really is a significant problem is really important.

00;49;23;01 - 00;49;46;19

Dr. Scott Sicherer

And then probably the two biggest other things is that there are treatments now. And so talk to your doctor about that. And I think a lot of people self-diagnose food allergy or they're confused about allergy versus intolerance. And that might mean that you're avoiding something you don't need to avoid. Or it might mean that you're not avoiding something that you should be avoiding because you thought you were allergic to one thing, and it turned out to be something else.

00;49;46;21 - 00;49;53;26

Dr. Scott Sicherer

So it's really important to see an allergist and to get the right diagnosis and to get the right advice.

00;49;53;28 - 00;49;54;29

Leslie Schlacter

Right. Awesome.

00;49;55;01 - 00;50;33;26

Dr. Monica Kraft

So I would say sort of along similar lines that don't discount allergies or asthma. It's not all mild, and it can really affect quality of life and your ability to to really, really achieve all the goals you want to achieve. So don't discount it. To get help, talk to you if you have a primary care physician, which I hope you do, talk to that physician and get referrals and make sure that they understand how it's impacting you and get to an allergist or a pulmonologist who can really take a deep dive into these issues because there are so many amazing therapies, that if they can be life changing and don't lose out on

00;50;33;26 - 00;50;50;20

Dr. Monica Kraft

those opportunities and so, so and be assertive about it, it's okay, because sometimes allergies and asthma are discounted. Is not that important. There's so many other things to think about. Hypertension corner not that they aren't important, but let's focus on the fact that you can get really great help. And don't be shy.

00;50;50;27 - 00;50;53;26

Leslie Schlacter

Awesome, awesome. Thank you guys so much for being here.

00;50;53;29 - 00;50;55;20

Dr. Monica Kraft

Thank you. Thank you for having us.

00;50;55;22 - 00;51;15;23

Leslie Schlacter

That's all for this episode of The Vitals, I'm your host, Leslie Schachter, a neurosurgery physician assistant here at the Mount Sinai Hospital. Don't forget to subscribe to the Vitals and Mount Sinai's other video programming on YouTube, Apple Podcasts and Spotify, or wherever you get your podcasts. Share this episode with anyone that you know that's navigating allergies. Anyone you know.

00;51;15;24 - 00;51;34;19

Leslie Schlacter

Period. To learn more about the Elliott and Roslyn Jaffe Food Allergy Institute, or to get you or your child enrolled in an allergy test or clinical trial. Scan the QR code on your screen. To learn more about clinical trials relating to asthma and allergy. Click the link in the description below. For the Mount Sinai National Jewish Health Respiratory Institute.