Podcast Introduction and Guest Background

Your genes hold the answers to your family's overall health. I'm Dr. Paula Kruppstadt and on the Get to the Root with Hope for Healing podcast, I sit down with experts in genetics, functional medicine, and family care to explore what's really going on beneath the surface so you can stop guessing and start healing.

From personalized insights to practical tools, we bring you whole family wellness that starts at the root. Welcome to the Get to The Root podcast. I'm your host, Dr.

Paula Kruppstadt, and joining me today is a friend and an amazing pediatric dentist, Doctor Amy Ludeman. Amy, thank you so much for joining today. Thank you for inviting me.

Now, I don't want to botch this up, but Amy's credentials are really incredible. And I think one of the first things that just impressed me so much was back, gosh, 2017, 2018, we spoke for the 1st time and you had founded an incredibly successful pediatric dentistry practice in the Katy, Texas area.

I know I sent several of my kiddos over there and even as an adult, one of my adult children, my husband and I even went out and saw you later on, but a multidisciplinary clinic that had chiropractic care, a lactation consultant, an osteopathic physician that optimized airway function for infants and babies.

And you took a deep dive into tongue ties, lip ties. We're going to talk about that in a separate podcast. But you've also developed some patented type devices to help with airways.

I'm so grateful to be able to have you on. Now, what we're gonna do, we are going do two different types of podcasts.

When Children Should First See the Dentist

The first one is hearing from a pediatric dentist what so many parents who lean toward holistic functional medicine care want to hear about dentistry through that lens.

And we're going to here the good, the bad, and the ugly, because there's a place for all of these things. Let's just start there. Does that sound okay with you?

Great. Yes, absolutely. Okay, good. Well, I'd like you to unpack for us right now what the dental, the standard of dental care is as far as when a child should see the dentist and what those visits should entail.

Okay. Well, I guess I would start again. I'm just, thank you so much for this opportunity, Paula. Really appreciate it. So the, the towing the line kind of what the American Dental Association, AAPD and all that says is that children, you know, should come by six months after the first tooth erupts or one year of life.

first dental visit. And you know, the thing about that is, is that when you're talking about these organizations, they're doing it more from a public health standpoint.

So they want children to come early because if there are going to be issues, it's great to find it early and kind of get on top of it really. In practicality, I did really like to see children early.

Obviously in my practice I'm seeing them soon after birth if they're having issues. But with kids without any issues, a year is a good time to them because you're able to.

My daughter, for example, when her teeth started coming in, they were missing some enamel. And if I hadn't known that, we would have been in a big situation a little bit later down the road.

So going in at six months to a year is a great idea. At that visit, really what we're just doing is looking at everything. We should be looking not only at the teeth, but the oral tissues.

And we are looking for restrictions that impact function as well as growth and development. But in my mind, Those visits are really about anticipatory guidance.

Obviously little children don't really need their teeth cleaned. In my practice and as children aged, my goal was to help the children have internal motivation to know what they're doing.

We would spend a significant amount of time like just in facilitated learning style, checking out how are they brushing their. Do they even know what floss is?

And have the parents close by so that they could see, you know, like, oh, I thought you knew how to brush his teeth, and they're kind of watching him.

So it's really about helping them to be empowered to take good care of their teeth. And then we would teach about nutrition and how that related to overall health and the teeth because my bachelor's in nutrition, so it got important to me too.

But at the end of the day, this is This would be controversial, I guess. I mean, we tell people to come into the dentist every six months, but children rarely have calculus or needs for dental cleaning.

So that's not based in any real science that we should go exactly at that amount of time. That's just kind of what we've done for a long time, so it really should be based on your child.

So if your child, you go to the dentist and the teeth look great, the enamel's great and you're eating healthy, they're growing well, there not having sleep issues, breathing issues.

You could probably stretch it out and just go in periodically and check it up. That's how I manage my daughter and my nieces and nephews and myself. And then, yeah, x-rays is probably something else people would ask about at those visits.

Yes. Yeah. So that's also another really controversial thing. I know it's really hard. For me as a mom and as someone who is also very holistic in my lifestyle, obviously x-rays, we only want to take them if we need them.

When children are probably around four or five, that is when their jaws are changing and from assuming they're growing well, they have spaces between all their teeth when they are little, so you don't need any x rays.

You can see everything beautifully. But the first time for some children to get cavities is right in that age bracket when the six-year molars are getting ready to come in behind the baby teeth and pushing everything tight together.

And a child who's never had cavites and now they have closed contacts, it's much more common to give those type of cavités even if they've never have them before.

Infant Feeding, Jaw Development, and Chewing

So those first little bite ring x-rays are kind of nice to have at that time, you know, somewhere after the teeth are closed contact. You can see. Again, the enamel is beautiful.

The anatomy is You don't necessarily need them all the time. The ADA and all of the different people are going to say you need it this time and this and time, but practically speaking, you really don' t need unless there's indications.

Yeah. So does that help to start and kind of just off the cuff? Yes, that really helps to star. I'd like to go back to infancy and talk about chewing and mistakes that have been forced upon society using pouches.

Yes. And so I'd like you to talk about the development of the jaw and the mouth and palette, the way it's supposed to be. And I had this conversation with some parents yesterday because I applauded them.

They said, we use real food and we didn't go down that pouch route. And I said, you guys are just making me so happy at this point in time. So I'd like you to opine on that a little bit because that is going to be conceptually probably the first time some parents that are listening to this have heard that pouches aren't the best idea.

I'm really glad you asked that question because it's really important. Maybe 500 years ago-ish, we did not need braces. We rarely had cavities. And so what's changed, of course, now we don't fit our wisdom teeth.

You don' really have spaces. we have smaller jaws and smaller airways. When I explained to parents what the air ways are, if you think about it, your airway size is the width here.

Your air way is a space in front of your spine, behind your face, and your jaws. So, when we're not growing forward and wide as we used to from chewing real food and hard food, and from extended breastfeeding, we have smaller jaws, smaller airway, more crowding, less space, all this stuff.

As far as food goes, I'm not a fan of pouches, purees puffs, melts, gummies, any of it. And I know because, you know, in my interdisciplinary clinic, my best friends are like speech-language pathologists, osteopaths.

having these conversations. But yeah, when we're born, obviously we are meant to nurse if we can. And I'm also really mindful that it doesn't work for everybody.

We're talking about normal. When a mother is breastfeeding, there's like 30 muscles that are being recruited in the infant. and it's creating an entire dynamic to allow the jaw and the upper jaw, especially, to open and widen and come forward.

The lower jaw as well, when we're nursing, it is moving back and forth and that's created growth for the lower jaws because most babies nowadays are born and they're like, oh my God, they don't even have a lower job.

What happened, you know? It's so retronabic. And that is a whole other topic about airway and things like that, but with the mom, But anyway, so when we're nursing, the baby is so much more is happening with muscle recruitment, with growth and development, allowing the jaw to move forward.

When we have a bottle, it's kind of flat and that lower jaw doesn't really get that same movement and we are creating more force. There's very little muscle recruit of the whole baby involved and were creating forces that collapse the palate even more around that nipple.

But fortunately, there's a lot of things we can do to help when that's what's needed. And then as we move into when the teeth are erupting and the baby's able to have some core stability, hold their head up, that's the sign they're ready to eat.

And if we give them pouches and purees, and puffs, melts, they are still using the suck reflex. They're actually not learning the next stage of development for chewing and that sort of stuff.

Then the actual force of chewing appropriate foods. I'm not an expert. My daughter's first food was an apple. But when they are not getting the opportunity to chew the foods, it's also creating less muscle development and form follows function.

So when you actually use your muscles to to the way you're meant to and the hardness of the food that you were meant chew from a young age, you are actually developing muscles of your jaw, which is developing more density of jaw and creating more growth of jaws.

So not having puffs, you know, melts and purees and all that stuff, which keeps that suck reflex going, gives kids more chance for forward tongue thrust and altered swallow patterns as they grow.

There are just so many different things. We also, when we first, our babies and we don't have any teeth, that's one pattern. When the front teeth come in, it creates the first stop and it's a neurological change as well.

And the swallow pattern changes. Then when the molars come that creates a boundary, the boundary for the back part of the tongue. and things should shift again.

So all of these parts are really important. And if we're not giving the children what they need at those different stages, there is going to be consequences that, you know, very significant in some kids and it's kind of normalized.

I mean, I know there's a lot of people walking around that don't really find their way into an SLP's office. But if you sat across from them when they're eating their meal, You might think that they would benefit from a little bit of help.

So can you tell our listening audience what an SLP is? Sorry, speech language pathologist. Yes, thank you. And like we were going to mention, there's speech-language pathologists and there are also some that are more trained in what's called myofunctional therapy.

And not all have that same training, but that's something I think we'll talk about more when we get to another topic. Yes. I just learned so much from you just breaking that down as far as the changes when the first teeth come in and then the boundary with the molars and what's happening neurologically.

I remember when you gave me an illustration just think about you know pioneers going across America in a stagecoach and they would give their child a piece of hard jerky to chew on and that that imprinted in my mind and I think all the falsehoods that were ingrained into my mind as a board-certified pediatrician and through the years, and then what is thrust upon society for convenience and so much appreciated.

Now, I would like you as pediatric dentist to tell me how bad Goldfish is. Oh my God. And me interested. I mean, do we even need to go there? This is a thing for me.

When I see families, I really like to meet them where they are. Because if I told you where I came from in life, a phobic dental patient, i don't even think I knew what floss was until I became a dental assistant at 18.

So I not knowing anything. And it was just beautiful people and mentors along the way that helped me. So when a family walks through the door, I don't, you know, their kid has cavities.

Okay, let's just figure it out. What's going on?

Goldfish, Sticky Snacks, and Cavity Risk

So with that, and from a dietary and nutrition standpoint, when I was in college studying that if someone was presented to you as a dietitian with heart problems and needed to change their diet, we didn't just hand them a die.

This is what you should eat. You ask them to tell you what you do on a regular basis. What's a couple of weekdays like? What a weekend day like. And that's how I like to approach my families because then we can take where they are and make enough little shifts.

It's going to be impactful, but still, you know, not like just throw everything out the window and they're going feel deprived or whatever. So with goldfish, my starting point is if your child's gonna have gold fish and juice for a snack, which is like what everybody's eating all over the place and all those you know, places where kids are.

You know of course it's processed foods, so both of those things are just a high sugar hit right off the bat. And those sugar and processed food, it is not just about, like goldfish aren't as sticky in some ways as some fruit stacks, but they do really stick to the teeth.

If you look at someone that's eaten that and look a little while later, that processed goldfish stuff sticks to the teeth for a long time. It's not just that sugar and processed food that affects directly the tooth, it impacts your immune

system for couple of hours.

And your system is an important part of cavity, fighting cavities. it's just not what's touching the tea. But as far as what touching teeth, when you eat or drink something, anything besides maybe a piece of meat that has no carbohydrate.

But pretty much when we eat or drink, our mouth is the place where digestion starts. And it starts by lowering the pH. In that lower pH state, minerals leach out of the teeth in that acidic environment.

That's just part of it. We're processing the food. Then after all the foods and the drink is off of your teeth, your pH goes back up. If you're healthy, you saliva has minerals in it and it remineralizes the So the trick is this, when you're eating goldfish and juice and gummies and things that stick on the teeth, your recovery time for the saliva to rebuild is diminished because sometimes it's an hour later and there's still some of that food stuck in there.

So, the pH all of the time is just pulling minerals out of teeth. So that comes with the grazing and sticky foods. That's, that's you know, they're just constantly, I usually draw a graph for parent.

Here's the line, you demineralization, cavity prone here, reminerealization repair here. So if you eat and it's a sticky food and you're down here for a long time, and finally, when you get up here it, it like I want another bite.

Well, you barely had any time to repair. You're down again for a long time. So this is where those types of foods come in, not to mention the food coloring, all the things that aren't really even food in them and what they do to us from an inflammation standpoint and all that.

What I usually tell families, if you're going to have goldfish and juice, A simple thing that you can do is have your kids agree before these kinds of snacks that they're going to finish with a little bit of crisp fruits or vegetables and a quarter cup of water.

So three apple slices and little water, we do a fun experiment we did in my practice where we would dip a butter knife into icing. and let the kids do all sorts of different things with it.

Brush it with a dry brush to see how it smears it, brush it toothpaste to how toothpaste is an emulsifier and kind of cleans it a little bit. But ultimately we would cut the knife through an apple one time and it would come off super clean.

And that helped the kid to visually see eating cucumbers, apples, things like that, gets that sticky stuff like the icing, which is the plaque and the sticky food off of your teeth.

So finishing with that and then a little water to more quickly bounce you back up to that repair is a great idea. And then little by little, maybe switch the goldfish for something that's light gold fish, but we're first getting rid of the food colors and some of other ingredients in goldfish.

Yeah, that is kind of where I go with. Did I answer the question? Absolutely. So that, that is a great little lateral shift. I love what you said about meeting people where they are.

You know, we have good, better and best and none of us, these changes have to be made slowly. It's all about creating a sanctuary of healing in your home.

And it starts with mom and dad and the illustration that you gave about putting that sticky frosting coated knife through an apple. I think that's a brilliant thing that we're going to start incorporating into what we talk to parents about too, because I take care of so many special needs kids that they drink Well, they eat white bread, peanut butter and jelly, goldfish, hot dogs, macaroni and cheese, and the wider the bread the quicker you're dead.

It's so ultra-processed and all these things. And it's all about one thing at a time. So that's fantastic. I've learned that. Now, one of the other questions I had for you and this is where we'll take a little bit more of a deep dive when

we go into airway and breastfeeding.

What words of consolation would you give to a mom and a couple who have not been able to breastfeed and they're bottle feeding and It is what it is. I'm reflecting back on the one out of my four children that I did not breastfeed and I have these regrets, but I can't live there.

It's what happened and we learn as time goes by. But what do you say to parents if their child comes in at a year and a half? You can probably tell there's some things in the airway in their mouth and you find out that they've been bottle fed instead of breastfed.

What words of consolation do Yeah, I appreciate that. And you know, really I probably wouldn't say anything unless she wanted some words of consolation.

But a couple things. One is I was bottle fell and I'm okay. Yes, so was I. You know, I also, breastfeeding was really important to me in my journey with my daughter, who I had later in life.

Bottle Feeding, Breastfeeding, and Emotional Connection

And it was. Really painful and really hard. I have like all the best people around me, you know? Like my osteopath, Dr. Judy, come to my house, like when my baby was just barely there.

But it's still hard and so, yeah, be compassionate with yourself. You know, you have the intention to do it and you do what is in your, not everybody can even have an osteopath or a lactation consultant.

I've been in the habit of giving friends a Lactation visit when for their date you shower gift. So I went like, this is your present, no matter what do you think you needed or not.

But if you weren't able to, then that's just the way it is. If you aren't There are other things that are really important that I don't think moms know sometimes and this may be a little bit going off topic.

I mean, I guess what I would say is it's okay. Like especially in my hands and my practice, we can make that child grow just like they had the breastfeeding and the hard foods.

We can get back to where we needed to because everybody has everything they need inside of themselves from the time of conception to be their best self.

And as you and I, think both practice our role as a health care provider is to recognize and remove obstacles and to enrich the environment where they're lacking what was meant for them to have in the soil or whatever else.

So it's okay is what I would say. But also when you're bottle feeding and breastfeeding, another kind of like side topic is just that One of the things that we're meant to do as humans and parents that were not doing a very good job of in my mind is to help our babies learn to transition from one nervous system state to the next.

Breastfeeding is one of very first times we get that opportunity. So when the baby latches on, ideally all of these hormones are released in mom. Baby starts mobilized, sympathetic, crying, upset, they're unsympathetic.

And that leads mom to latch them on and they feed. And then once they latch on, then all of this stuff happens and hopefully mommy and baby go into this new state and maybe learns that transition.

But nowadays, you know, sometimes moms are on Facebook or, and you're angry and frustrated, they're detached and doing something else. They're maybe working because they need to work from home at the same time.

There's all these, and so mom's not transitioning, so baby's, not learning transitioning that can end up with, we think our baby has reflux or we, think or baby, has all, these other issues, but they're eating in sympathetic and they are not, learning these transition states.

So the reason I bring that up is that even if you're bottle feeding or whatever you are needing to do, like remembering that, I need to be connected with my baby during this time, you know, paying attention to what's happening inside of me because your baby is just this little tiny mirror of you at that stage, so neurologically immature.

And so I think there's still so much you can do to help your Baby grow healthy, to Be healthy and for yourself by, even if you're not breastfeeding, To really honor what is happening in that space and they're going to Okay, is what I would ultimately say.

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That's the premier and proprietary genetic panel that Fogran has allowed us to create. I really like where you went with that because for a mom to realize that this is her opportunity to move, like you said, from sympathetic overdrive, a hungry, starving baby, to parasympathetic, rest and digest.

Take that time to look at your baby. Talk to them while they're latched on. And I remember, what was that? The bottle. Yes, yes, exactly. Yes. And just make the best of it and whatever situation that you're in and there's grace there.

Now, the two things I wanted to ask before we wrap up, just routine dental things to explore. The first thing I want to What are your thoughts on toothpaste and the types, depending upon whether or not a child has adequate enamel versus not adequate enamel?

And then we'll talk about fluoride. Well, I mean, just again, kind of mentioned it earlier, toothpaste is an emulsifier. And if you think about when you make a baked spaghetti dish and then you need to clean it, if just try with hot water and a sponge, it's going to be a really laborious situation.

So having dish soap is emulcifier, breaks up the fats and the stuff that's stuck onto the pan. Likewise, our biofilm and germs and bacteria that we're trying to wash off, is it needs an emotional to come off.

If you're using, we're talking about brushing your teeth, but also apples and other things, if you just take time to notice after you eat an apple, how clean your cheeks feel.

So anyway, so toothpaste is an emulsifier. I think if your child is swallowing toothpaste, then you should definitely not be giving them something. that has things we should be swallowing like fluorite.

And yeah, just pick whatever flavor they like. It doesn't really matter. I mean, I know the ADA puts their stamps on some, but at the end of the day, as long as it has safe ingredients and the child likes the flavor and it's safe for them to swallow.

My daughter and I, we use a hydroxyapatite toothpaste because hydroxylapatites is what your enamel is made out of, so it can't be bad.

Toothpaste Choices and Fluoride Use

Yep. Yeah. Right here, my desk drawer. It's just getting something in there. Again, I just can't emphasize enough. I can. We think of fluoride and we think that tooth brushing and flossing is super important to fight dental disease.

But the truth is, if there is a hierarchy, diet is here. What you put in your mouth And eat is like right here as far as preventing cavities, gum disease, helping with growth and development.

When you're talking about brushing and flossing and what toothpaste you choose, it's like way down here. And you can do an experiment, like go ahead and eat some crackers and whatever things that you know you shouldn't but

you like to.

Feel how your teeth feel afterwards in the next hour, a couple of hours. You can like lick them, drink water, whatever, feel that. And then eat fresh fruit, crisp raw fruit or vegetables and feel how clean it feels afterwards and kind of compare that to tooth brushing.

So, you know, toothbrushing is something that we do to help mitigate the effects of eating stuff we should not be eating in the first place. Yeah. I like that idea.

Go ahead. I don't really say this a lot, but when Evelyn, my daughter, was young, we nursed until her fifth birthday. That's a long time. And I never planned on it.

It's just kind of what happened. But she's so, so healthy. but I rarely brushed her teeth early on. She did not have sugar or processed foods until she was three.

So I'd look at her and I get in there to get her used to the idea, But there just wasn't plaque on her And so another thing that we didn't mention is breastfeeding at nighttime gets a lot of like, oh, you're going to cause cavities.

Breast milk by itself doesn't cause capities, it's not until you introduce processed foods and capes begin that the breast milk can feed into the already forming cavites.

So anyway, side note, but that's… The beautiful protective effects of the perfect food that God made for feeding our babies and our children is breast milk and all the beautiful things in there and closing up a leaky gut.

All right, you know, the other thing is I'm just going to bring this up is that here One of the things that we frame a lot of things with is looking at precision genetics, and that's actually who sponsors our podcast.

And we identify children who have profound inflammatory risk, but diet trumps so much. The families that put quality, beautiful phytonutrients, colors of a rainbow into their child's mouth, They are at so much less risk for dysfunction and illness, especially environmentally, too, if they're living in a really clean home, also, where their immune system isn't being attacked all the time.

And what are your thoughts on fluoride in general as compared to the American Dental Association? Yeah. I assume everybody knows what, again, the America Dentist Association and the Academy of Pediatric Dentistry Also remember that comes from public health.

So they're looking at the whole population and trying to make recommendations. But as an individual provider, you get to sit with your patients and see what their risk is.

And what I would tell families when they are asking me about fluoride, because we have established trust and they want to know if they should have it for their kids.

this is me personally speaking, I think of fluoride as like excedrin. I don't really take medicine, but if I had like a massive headache, because in the past, you know, i would have some sometimes, and I took exedrin, it was gone.

Even though I know now it wipes out my glutathione, It's like the terrible thing for me. But it's, like, if i had to work, You know it, s like it is a drug.

i'm going to take it. It is going take care of it and i'll manage the effects. So fluoride for me is like that. If I have a child coming in and they have mouthful of cavities and their very high risk, I want to keep them out of the OR.

I wanna get them back to a baseline because my research in residency was about zero to five year olds and all the different effects when they had cavity.

lower ideal body weight, cognitive, all these other things. So I might use fluoride like I would, et cetera. Let's just try

right now to put the fire out.

And then once we have the Fire out and we're leaning them back, we kind of patching things up with things that don't require a lot of isolation or technical difficulty and get this kid stabilized.

Those frequent little short visits doing things like that helps the kid to have trust and So for me, fluoride in a situation like that, I would use. But I tell because it's important to know the topical application of fluorite actually makes the outer layer of the enamel fluoroapatite, which has a tighter crystal structure, so it can have a lower acid attack for a longer period of time before it dissolves.

So topically speaking, in the situation where they're eating goldfish, and they're drinking juice. It's kind of like, where do I start? Well, I want to start with putting the fire out and talking about what's going on.

Let me fluoride you as much as possible and use a strong fluorite toothpaste at home. Just keep fluoriding you to death because that's not going to make a difference if we don't talk about the goldfish and the juice So we might use it in that interim situation to get things stable, to keep the kid comfortable while we're addressing this other thing.

Because my goal is that you don't need meat ultimate. And as far as home fluoride, you know, in my personal home, like we don t use fluorine. We filter it out of our water and we use free toothpaste.

I think that that needs to be a decision that family and your dentist and based on your risk factor and what's going on in your life. But yeah, that's kind of how I see it.

Closing Thoughts on Diet and Dental Health

That's not the, you know, toeing the line of what the ADA could say though. Correct. And how you framed it when we think of public health and what the motivation was when these standards were put forth.

But then as time has gone by, we've learned how, you know, it's a neurotoxin. an element that it can replace iodine in the thyroid and then you can develop all kinds of other issues.

So I really appreciate the balanced perspective and meeting people where they are. All right. Well, Dr. Amy Ludeman, thank you so much. As a pediatric dentist with a holistic and functional twist explaining for the listening audience, the somewhat altered anticipatory guidance and dental care and that you've offered to our listening audience.

But I especially appreciate hearing about eating that apple or that cucumber after you have eaten something sticky and gooey and how if you can take the acidity out of the mouth so that the teeth can remineralize.

It just goes to show that our bodies are meant to live in this beautiful pH range. And if we're too acidic, we die. If we are too alkaline, And there's ways to color within the lines that are healthy in our food and our diet.

Food is medicine. And as you said, your degree was initially undergrad nutrition and then how that benefits the pediatric dentistry. All right. Well, thank you so much.

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