

Episode 29: Clean(er) Toxin-Free Living with Dr. Samantha Radford

Christy Keating

Hi, friends and welcome to The Heartful Parent Podcast. I'm your host, Christy Keating. In this podcast, we talk about it all, our parenting, our partnering and our professional lives, because they are all a part of us. And we were never meant to do this alone.

Christy Keating

Hey there Heartful Parent Podcast listeners, we are back for another episode of the pod. And I'm excited about this one. It's a little bit of a different angle than we've taken in previous episodes, because it's not so much about parenting itself, but as some of the things that we do as parents. Let me explain.

The guest today is this really interesting woman named Dr. Samantha Radford. And Samantha is a chemistry professor turned blogger who focuses on non-toxic living and breastfeeding. She's obsessed with combining science and wellness to help moms and kids thrive at her site, Evidence-based Mommy. Samantha also hosts Breastfeeding Beyond Babyhood, which is an annual online event designed to support and celebrate those who choose to nurse beyond the first year.

In this conversation, we dig into some of the really big categories of things, or places in our lives where our kids and us might be exposed to toxic chemicals. And she explains why toxins or chemicals are more dangerous in kids. And she gives some really practical advice about how we can shift some of those things around, even if you are on a budget. And she also really shares and sort of promotes the idea that look, you do what you can and you let the rest go, which I so appreciate about this conversation.

So we dig into all of this. And she's got some great information. And then at the end, stay tuned for the final question that I asked her. Because it struck me as we were chatting, that a lot of parents out there might have questions about how to encourage their daughters in STEM, right, science, technology, engineering, and math. And because she's got a PhD in chemistry, which is a STEM field, I asked her for some advice for those who are raising daughters, and might want to empower and encourage them in that stem arena. So stay tuned for that. I think you're gonna get a lot out of this conversation. And I'm really interested to hear what you all think about it.

So without further ado, Dr. Samantha Radford.

Welcome, Samantha, I am so happy to have you here on The Heartful Parent Podcast.

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Dr. Samantha Radford

Hi, Christy, thank you so much for having me. I'm really excited.

Christy Keating

You know, when you reached out when we connected through a class that we were actually both taking. And when you emailed me and said, Hey, we should talk about being on one another's podcasts, I was super excited, because there aren't very many people out there talking about chemicals and toxicity with our kids. And I love that this is your focus. So can you share just a little bit about how you got interested in this kind of, you know, I read your bio, but talk a little bit about why this How did you land here?

Dr. Samantha Radford

Yeah, it's interesting, you know, how feels like things every just worked out, even though you didn't have any plan at the time. You know, that's kind of how it was. So I mean, I majored in chemistry in college, someone, a professor mentioned that, you know, they'll, if you're doing hard sciences, like chemistry, or physics or things like that, they actually pay you a stipend to go to graduate school, instead of you having to pay them. So I was like, Okay, I'll go to grad school. And so I did that.

And I ended up focusing on exposure science. And the idea with exposure science is like, what all chemicals are out there, you know, in the environment and in your home, which of course, is part of your environment. And how do those chemicals affects you? And at the time, so I'm an only child. At the time, I had no interest in children, like, you know, when your early late teens or early 20s. People just assumed that you want to hold babies because they're cute. Like people would try to hand me babies and I'd be like, What do I do with this and it was start crying and I was not familiar with children. I wasn't like a huge fan of them. But the thing is, and we'll get into this more later, I'm sure these pesticides and things that I focused on tend to have the biggest impact on children.

So a lot of what I focused on, I looked at pesticides and fruit juice, which, you know, kids, maybe not as much now, because we tell people, you know, so much sugar, but kids like fruit juice if they can get ahold of it, or baby foods or things like that. And so I would spend a lot of time thinking about, you know, how children were exposed to pesticides, and then by extension, how moms are exposed to chemicals. And then, you know, once a mother becomes pregnant, or breastfeeding or whatever, how that would affect them. So I was also looking at, you know, young women being exposed to chemicals, because, of course, as they're pregnant or us or breastfeeding, those chemicals, you know, can be passed on to their child.

But again, it was all just like, very academic, like, oh, that's neat, you know, it didn't really matter so much to me. And then pretty soon after I graduated with my PhD, I started teaching at the college level, and then I was pregnant. And all of a sudden, like, oh, man, this really matters, like these chemicals

that like I've thought about, you know, in a reading about them and doing research on them like in, in the lab. Now, this is actually something that can impact this child that's, you know, inside me, and then later that I'm nursing. And so it just naturally progressed, you know, my oldest daughter was born, I fell in love with nursing her, there's a big component about breastfeeding in the work that I do online. Now, I loved having her so much, I fell in love, like, I can remember falling in love with her, and feeling that just like wash over me. And then I loved having her and I ended up having three more. So.

Christy Keating

Oh goodness. So that's quite a shift from the person who was like, I don't really like babies, I don't know what to do with them.

Dr. Samantha Radford

It is it's incredible. So now there's four of them. So my oldest one just turned 10. Last week, my youngest one is three and a half. So it's been great. With all that said, as I was teaching chemistry, I wanted to be able to help people, you know, outside of the classroom, and to help moms like you're actually in it and looking at products, you know, what should I get in my home? What should I avoid? So I started my site, Evidence-based Mommy, from there, to be able to help them.

Christy Keating

I love it. And you know, I've looked through your site, and you talk about a whole bunch of different places that chemicals can come in and affect our kids, many of which, I'm just imagining that many folks out there like me, like, I think I'm fairly aware. And then there were things on your site that I thought, Wow, I've never even thought about that, like mattresses, for example. Now, I remember thinking about it actually, with a crib mattress. But you know, not after that. So can you maybe lay out for us? What are the big categories of places, you've mentioned food? You know, obviously, there's many other places that we get exposed to chemicals. So are there sort of big categories that, you know, from a bird's eye view, parents should be aware of, or at least have some knowledge about where kids can get exposed to things that really could harm them?

Dr. Samantha Radford

Yeah, and, you know, you mentioned so you mentioned mattresses, for example, I want to kind of start with this caveat of, I always, I struggle with what to choose to talk about, because on one hand, like it's helpful for people to have this information. But on the other hand, you know, maybe you can't afford like a top of the line mattress, or maybe like the best you can do is hammer down. So I don't want to stress parents, you know, who aren't in a position to get all these super crunchy organic products, you know, so I want you to be able to just kind of start where you are with what you have.

Christy Keating

So I just want to say I so so appreciate that, because being able to worry about some of this stuff really comes from a place of privilege.

Dr. Samantha Radford

Yeah, yeah. And, and with that said, you know, stress, you could consider stress to kind of harmful exposure to right. So that produces cortisol in your body, and your kids feed off of your stress. So with all this kind of do the best you can and then let it go. As much as you can.

Christy Keating

I love— Do the best you can and let it go as best you can. That's great advice. It's probably great advice in many different areas of parenting.

Dr. Samantha Radford

Oh my gosh, yes. Yes. So but we'll, we'll just stick with the the chemical thing. Maybe the biggest, like foundational thing I would say first is if you are in an older home, so one that was built before 1978. But especially as homes get older, you know, for example, when we first moved up here, I believe that the house that we were renting was built in like 1920 And even though again, I have this PhD and exposure science this wasn't something thing that I was thinking about, it just wasn't on my radar because I don't feel like we had homes as old like in the area of Georgia that I was in before this. But we lived in this house, we had two dogs, we had a toddler. And then we had a baby who was just starting to crawl. And I was teaching a class called analytical chemistry, which is all about basically how to figure out how much of a particular chemical is in something, you know, food, paint, dirt, like whatever you name it, like, that's the job of analytical chemistry.

And I knew we were in an older home, and I knew sometimes like, oh, lead paint chips, you know, what would be fun is if I got some of like the paint chips off of our wall, or actually our windowsill because we'd had a dog. And I hadn't connected this at the time, but we'd had a dog who one night, she was stressed about something. And she chewed on the windowsill, and like, broke open to older layers of pain. And then, it wasn't too long after that, that she started having like, stomach upset and not acting right. And she ended up passing away. But again, I hadn't put these things together. So I had my students like, I brought in some paint chips, there was another chemistry professor who lived in a house that was leased out by the same person brought in some paint chips. And the amount of lead in that paint was just like, it was amazing, like, not good, amazing, it was terrifying. Like, in the percent, you know, so it was like a quarter lead or something like that by weight. And, yeah, I don't remember the exact number, but it was huge.

And so it wasn't long after that, that we move to a different place, you know, newer build. So if you're in an older home, and again, you know, sometimes you can't move, and I totally get that there are things you can do, you know, to try to protect your family from lead. So first of all, it's usually doorframes. And windowsills that are most likely to have lead paint. As I mentioned, it was a window frame, you know, that we got this from but because the lead that they use, it's really good for making things like nice and opaque and a good white. So that's why that's why.

Christy Keating

Because those are usually the goes on those spaces in our homes.

Dr. Samantha Radford

Yeah, exactly. So if you've got that, make sure, whatever you do, don't try to sand it off, because all that's going to do is put it all into the air, and you can breathe this lead stuff into and that's actually really, really bad. Like, it'll cause you know, irreversible damage,

Christy Keating

saying, I mean, I've always heard about ingesting it like, orally, I'd never heard of inhaling it before.

Dr. Samantha Radford

Yeah, so So what might happen is sometimes someone might realize, like, oh, my gosh, there's lead my home, and they freak out and try to sand it off. But now, you've got all this like dust of lead. And yeah, you can absolutely cause problems with that. So instead, it is possible to have a professional do lead remediation and get rid of all that paint. But again, super expensive. So often, the most affordable route that actually does pretty well is the fancy word for it is encapsulation. But really, it's just repainting over it. So get rid of any like big flakes, because lead paint tends to like, make those big chips. So get rid of those, and then from there, just like paint back over. And that will, you know, keep the lead tucked away in there.

Christy Keating

Can I ask you a question as you're talking about that. So you're talking about your dog chewing on the windowsill, and that ended up making them very ill? If there are just like led paint chips? And let's imagine adults living in a home or kids who are not eating it right, not putting it in their mouths? Is that in and of itself a danger? That should be remediated? Or is that not as big a deal? If no one's eating it or breathing? You know, breathing the dust?

Dr. Samantha Radford

That's a good question. So yeah, I mean, it's less of a big deal. But even so that paint will degrade over time. And so it'll flake, you know, we all have dust in our homes. So actually, that's one of the next recommendations I was going to say is that, you know, in our spare time that we all have, if you if you're in one of these older homes like that, that you think might have led like it's more important to make a point of dusting more frequently and vacuuming more frequently like with a HEPA filter to try to get the job. So one of the things that I know we kind of mentioned in passing, but we can definitely talk a lot more about is that babies and children are not only more likely, you know like they shove off are turning up in their mouth. So of course, they're right. And especially if they're like at the age where they're pulling up to stand, because that's right where my little girl was, she was like nine months or something. So that's just the perfect side, like to gnaw on, like winter sales, you know? Anyways, not only are they

more likely to get this stuff in them, because they shove everything in the mouth, they're like, always low to the ground, and all of that, but it has a bigger impact on them. Because it's, you know, it's like the butterfly effect, like a little change here, while their brain is still being wired. And all these systems are still undergoing just, you know, being put together is going to have much larger effects. And what on us where, you know, we're mostly everything's put together at this point.

Christy Keating

Right. And when you say, like, big significant effects, like what kinds of things when it comes to lead paint? Or lead in other? I mean, it's paint isn't the only place that lead can exist, I guess, but like, what kind of impact on on babies and children are we talking about?

Dr. Samantha Radford

I mean, it depends on how much but let is one of those few things that the CDC has said there's no safe exposure level for, you know, and a lot of this stuff that some of it you might see right now, some of it, it might be, you know, when they're 3040 50, there's more likely to be behavioral problems, behavioral difficulties, IQ, you know, it can lower IQ. And then with that said, if you're having behavioral difficulties in school, of course, you'll have, you know, a harder time like getting a good education. And what you know, just looks like difficult behavior when people are children can turn into like criminal behavior, like violent criminal behaviors, adults. So again, you know, it's kind of a whole systemic racial thing, because you've got people who have lower income in this kind of housing, but then on top of it, like they're getting put in situations that will still make you more likely to have low income. So it just.

Christy Keating

Itl becomes a real equity issue.

Dr. Samantha Radford

Oh, yeah, absolutely is huge, beyond like the mental health stuff, which is absolutely a possibility. There's high blood pressure. I don't remember. But it affects like lots of different body systems, like all sorts of different one.

Christy Keating

And of course, you already told the story of I mean, how ill it made your dog and, you know, if it can make a dog that sick, it can certainly make but a nine, month six, so Okay, so lead in old homes, and some of the risks that come with those older homes is a big category, what, what else are we talking about in terms of big categories of exposure?

Dr. Samantha Radford

Yeah, we can talk to them about food too, because that's one of those things that like, you can either, you know, you could buy everything all organic, and spend a bajillion dollars on your groceries, which, you know, nowadays, of course, you're spending a bajillion dollars regardless, because like grocery bills

definitely gone up. But there's ways to, you know, reduce the amount of pesticide that you're exposed to, and it not have to be so expensive.

So one of the easiest things to be aware of, is that there's something called the Environmental Working Group. And they put out a list every year, something called the Dirty Dozen. So the Dirty Dozen are 12 different types of produce that have the most pesticide in them. And they update that list each year. And like spinach is always at the top of the list. Strawberries is at the top of the list. I don't remember everything off the top of my head, but I do remember those two, I think like kale, but you, if you just Google Dirty Dozen, you'll find it really easily. And those are the things that if you're going to buy something organic, but you don't want to like spend all your money in organic groceries, those are the things you buy organic, so get organic spinach, you know, like swing for the organic strawberries. But the Environmental Working Group also has another list called the clean 15. So what's the other end of the spectrum the things that are least likely to have pesticide residues. So like onions are on those so, you know, don't kill yourself trying to buy like organic ions.

Christy Keating

Okay. And I've heard and I don't know if this is accurate, but that some things that have like thicker skins like avocado, bananas, those kinds of things are less likely to have harmful chemicals just because we don't eat the skin. Right, we take that off at least I hope people

Dr. Samantha Radford

Yeah, but you know, at the same time that it makes it harder for something like potatoes because that's also where like all the minerals and the fiber. So it's like, I keep the minerals and the fibers and also keep the pesticides or do I get rid of them like Yeah, yeah. Yeah, there's always caveats.

Christy Keating

Okay, so the as we were talking, I just looked it up on the internet because I thought this will be interesting to see. And it looks like as of right now strawberries is number one, spinach number two, kale number three. So those are the ones you mentioned. Yeah, no, nicely done, did it and then it's got peaches, pears, nectar. rains, apples, grapes, Bell and hot peppers, cherries, blueberries and green beans. Green beans is an interesting one.

Dr. Samantha Radford

Yeah, it is. Well, I mean, I guess you do eat the whole thing. But a lot of these are really sweet, right? Because bugs like sugar, just like we like sugar. So those are the things that tended need more pesticides to ground

Christy Keating

That I hadn't even thought about it from that standpoint that everybody's going for the sugar.

Dr. Samantha Radford

Exactly.

Christy Keating

And interestingly, like a lot of these things, at least, like apples and grapes are the source of fruit juice that many kids drink.

Dr. Samantha Radford

Yes, that's exactly it. And a lot of times it's concentrated down. And even now, a lot of times, if you see products that say no added sugar, but they also don't have like artificial sugars, what they'll do is they'll use like apple juice concentrate to sweetened things.

Christy Keating

So that doesn't qualify as sugar under the FDA, yep. Okay. Interesting.

Dr. Samantha Radford

Which means perhaps they're concentrating pesticide residue.

Christy Keating

Interesting. Okay, so, for those fit, you know, again, this is we're talking about this, you know, toxins that are in food. And as you said, you can spend a bajillion dollars and get everything organic. But that is another place where you're coming from a place of privilege if you're able to do that, you know, and I think, frankly, in our country, there are a lot of families who don't ever get fresh produce. That's, you know, just beyond their, their budget, you know, what they're able to get with assistance. But if possible, what I hear you saying is that at least looking at these, you know, Dirty Dozen, these really highly these types of foods where it can be really highly concentrated. That's a good first place to start.

Dr. Samantha Radford

Yeah, and even if you know, fresh produce isn't usually in the budget. When you get it in season, it tends to be cheaper, and you tend to have lower pesticide residues, because it's basically not as hard you know, you're not having to fight stuff off as much. So that might be one way to be able to get to fresh produce is get it when it's in season. Plus, there's nothing like you know, tomato that the vine ripe tomatoes in

Christy Keating

December, not anything to write home about. No. Okay. So this actually raises a question for me, because I know, when things aren't in season, strawberries, for example, a lot of families might get those frozen, right, like a frozen bag of strawberries.

Dr. Samantha Radford

Yeah, get frozen foods, right.

Christy Keating

Is there anything? Maybe this is a dumb question, but I'm not I don't have the PhD in chemistry. Is there anything about the freezing process that can diminish or decrease the danger of the pesticides? Or the toxins in food? Or is that just they're just preserving it the same way that it's preserving the food?

Dr. Samantha Radford

I mean, maybe a little, probably not a lot. But the big thing with that, also is they're going to be getting it in season whenever they freeze it. So it's going to be stuff that was grown with less pesticide hopefully, anyways. Okay. But yeah, getting frozen produce is a great way to get produce on a budget, you know, and still get the nutrition that you need, can can work to as long as it doesn't have a ton of salt. So yeah, there's

Christy Keating

Okay, so we've got our homes, which one focusing on those older homes, we've got our foods, are there other spaces for those families who might be able to look a little bit deeper that that we should be looking at. And one thing that's coming up for me a lot right now, because it's summer, is sunscreen, which I'm lathering my kids up with. And, you know, we try to use like zinc based sunscreen. But we were recently on a trip in Mexico, we forgot our sunscreen, and the options were very limited. So talk to me a little bit about sunscreen.

Dr. Samantha Radford

Yeah, actually, that's I just did a podcast episode all about sunscreens. And I've have an article

Christy Keating

I love that we will link to that podcast episode in the show notes for this so that people can check that out but give us the CliffsNotes.

Dr. Samantha Radford

Sure. Okay, so you mentioned using zinc, this is good. There are two major categories of like the chemicals that they use in sunscreens. There's what they call physical sunscreens or mineral sunscreens. And then there's what they call chemical or organic sunscreens. And that's kind of confusing because you're you're thinking like organic food is good, right? But organic sunscreen means like an organic chemical, so it's not good in this case. So anyways, the mineral sunscreens are either like the zinc oxide that you mentioned or titanium dioxide I that's pretty much the to. And the way that works is basically those, the tiny, tiny particles of zinc oxide or titanium dioxide, act like tiny mirrors on your skin. So if you've ever noticed that you put on sunscreen, and I'm already pretty pale, so I look like exceptionally pale. White. Yes, just like a beam of whiteness. That's because it's basically it's doing its

job and it's reflecting the sun away from your skin. So that is what is safer, the chemical sunscreens, a lot of them start with oxy or something like that. And those work by actually like whenever the sun's energy hits them, it degrades the little molecule. And so that way, it's doing that to the sunscreen instead of to your skin, which is good. But also those can get into your body. They can get, they can get to if you're pregnant, they can get to the fetus, they can only by a few days, but it can they can have an effect on like, how long like gestation and that kind of thing, they've definitely shown that it can have effects on children, okay. And the environment there are a lot of those are really bad for coral reefs, which is a huge problem that we won't even go Yeah, I was gonna say,

Christy Keating

I think a lot of sunscreens now are declaring that they are reef safe. And it's those zinc oxide and titanium dioxide ones. And in fact, when we were on our trip, everyone was told please only bring reef safe sunscreen. And I don't know if people actually paid it. It's not like they were checking your sunscreen at the door. But it was at least a recommendation to try to do that. So yeah, that's an interesting point, though. And you're right, we could probably dig in for hours into what it's doing to coral reefs. But you know, as a side note, just recognizing that this isn't just harming our own bodies, but the planet in a much more dramatic way than these than these other products.

Dr. Samantha Radford

Yes, yeah. All a lot of this stuff that we're talking about, has effects on. Yeah, the whole the whole earth, not just I just tend to focus on human exposure. That's where my expertise is. But yeah, absolutely. Yeah. No, I

Christy Keating

appreciate that. Okay, so homes, food sunscreens, if you can say to a parent who has? Well, I mean, you've got four children under the age of 10. So let's focus on kind of that age range, you know, anywhere from a breastfeeding baby, or bottle fed baby all the way up to, you know, end of elementary school. What Are there any other sort of top risks that if you could wave a magic wand and have everyone have enough resources to change? What would be would there be anything else on that list that you would want to change for those for those kids.

Dr. Samantha Radford

The other big thing I would focus on you mentioned at the beginning would be mattresses, so crib mattresses, and then you know, as they get older their mattress so first of all with babies, you mentioned tiny babies, you know, they sleep, what like 12 to newborns can sleep even 20 hours a day. And a lot of that time will be on their mattress. And the other thing you think about you know, you're whenever you are your baby, you're whoever's laying on the mattress, obviously, like your head is right above the mattress and the pillow, this goes for the pillow too. And so your breathing space is just right there. So any chemicals that are volatilizing up out of that mattress or out of that pillow is like right there in your breathing space, so you're getting a good concentrated dose of that. And there can be lots of

different chemicals, a lot of them will be flame retardants would probably be the biggest thing. So most mattresses including, like memory foam, are made with polyurethane foam, which does a great job of as far as being nice and cozy and cushiony. But the problem is that they're very flammable and you don't want people sleeping on something super flammable. So they put flame retardants in them, you know, to avoid that. But then now we're finding out these flame retardants have lots of different health effects that are far reaching a long lasting, all sorts of stuff. So if you could swing for an organic mattress, that would be amazing. If not, so if you look at the tag, so like I have two chairs over there that are upholstered. If you looked at the bottom of that there would be a tag and it would say that it's for California prop 65, which is basically even though like I'm all the way on the East Coast, a lot of what California does the rest of the nation as far as this kind of regulation stuff follows. In this tag would have some stuff and it would have two things that it either says you know, this product is treated with chemical flame retardants or this product is not treated with chemical flame retardants, I'm going to have to have an x by one of those things. So if you could find something that is not treated with flame retardants, that would be great. And I think it was a might be like 2012 2013, but I'm not sure yet that California started requiring that. So if you have something that's older that doesn't have that tag, it probably has flame retardants, you know. So if you can get something newer than that, where it says,

Christy Keating

Well, and it strikes me, you know, as I said, when I when we bought a crib mattress, and I believe we use the same crib mattress for both of my girls, we did get an organic crib mattress. And then I never thought about it again. And because, you know, we bought the mattresses for their beds, my my husband and I have a Sleep Number bed that we've had, because those lasts longer. So we've had that for our you know, our entire marriage, like 17 years. And I'm thinking I'm never even occurred to me to think about the chemicals in that bed. But we are going to need a new bed in the next couple of years. sooner if you ask me later if you ask my husband, because they're not cheap, right? They're very expensive. But at some point, right, we're going to need another one. And I'm thinking, well, maybe this is something we should think about for us too.

Dr. Samantha Radford

Yeah. And again, it's one of those things where it matters more for younger children than it does for us. But I mean, it still still matters, you know, so it's just kind of, like, how much is it worth right to you? You know what I mean? And how much do you have the possibility to do that. So a lot of times, if you just go into like a mattress store, in most places, like especially more rural places, they probably won't have like the really nice organic mattress, like they just won't carry, um, you can get one with what they call sort of pure foam. So that's basically a polyurethane that they're saying definitely doesn't have flame retardants. But that particular certification only covers like the foam in it. So if there's like a vinyl cover on top of that, like, it kind of doesn't matter, because the vinyls got all sorts of stuff and off gas.

Christy Keating

Excellent. Okay. So, I mean, at least this is food for thought for folks. And, and I think just being aware that there really are a lot of chemicals, in all the products that we bring into our homes, or in most of them that we bring into our homes that, you know, can have an impact, especially collectively, right? When you build it all together that thinking about some of these bigger categories, you know, as you said, the home the actual structure of the home, that we're living in the food that we're putting in our bodies, the things that we're spreading on our bodies, like the sunscreen, and then the place that we're sleeping, those are some really good places to start. And I want to sort of take listeners back to what you said at the beginning of this conversation, which is, you do the best you can and then you let the rest go. Because the stress and anxiety and panic from all of this isn't healthy either.

Dr. Samantha Radford

Right? That's actually exactly where I was going. So I'm glad you said,

Christy Keating

Yeah. So we have that, I want to ask you another question that I'm going to confess is unrelated to the toxicity. Okay. But as we're talking and I'm, you know, speaking with someone who's clearly, you know, passionate about the work that you do, you are a woman in STEM, right, you're a woman that went and got your PhD in a profession in a, in a subject that is still predominantly male dominated. And I have a daughter that is interested in science. And I know there are many other listeners out there who really want to foster that idea in for those who are raising daughters, who really want to foster the idea in their girls that they can do you know, any of these professions including chemistry, biology, mathematics, you know, and those STEM types of professions. Do you have any advice for parents who are raising girls to help encourage and empower them to follow their dreams or, or dive into those STEM fields when they probably get a lot of messaging that they don't belong there?

Dr. Samantha Radford

You know, it's interesting. So I actually am first generation college graduate. So I mean, I didn't, you know, I came from like, my dad would work third shift at the carpet mill and that kind of thing which speaking combined. But, I mean, they just encouraged me and are like, yeah, go, you know, go to this college and yeah, grad school. Sounds great. And I really appreciate that. One of the things I would say is I don't express, like being afraid of math, even if you are, like, it's just another subject. You know, I remember, I think at the beginning of the school year, last year, we were meeting teachers and we walked by, and we met the art teacher. And she she said something about like, oh, no, I wouldn't want to teach math. And I'm like, dude, like, it's math for up to 12 year olds, like, and it's just not necessary. Like, just, it's another subject, you know. So don't treat it like, like, don't give it that stigma, I guess is what I'm trying

Christy Keating

As the parent you mean, or as the adult? Yeah.

Dr. Samantha Radford

Yeah, yeah. So it can be fun to. And then I don't know, I mean, I guess just like, give them those opportunities, you know, if that's something that they're interested in, and kind of find out what's around you, you know, people host science camps and all of that, that can be a lot of fun. But yeah, absolutely. You, you do meet with that. So, actually, when I was teaching, I had gotten a grant to get some instrumentation at the university I was working at, and there was like a dinner, you know, to give out these grants. And, frankly, it was mostly a bunch of old white men. They're like, that's just, you know, who were part of this group. And I took my husband with me, you know, because we're like, we get to go out to a nice dinner with the kids for once. And multiple times, someone would stop us. And they would, they would talk to him and ask him, you know, Oh, what, what did you get the grant for? And he's like, actually, it was her. And they're like, Oh, so you got one of the high school teacher grants. Oh, wow. Which God bless high school teachers, like they're great. But you know, the assumption was, I certainly couldn't have been, like the professor think is

Christy Keating

So interesting. The assumption that it was the man and that if it was you, it had to be at a at a lower level of education. Yeah, yes. So yeah, totally, it totally exists. And, you know, I used to be in the law profession and exists there, too. Despite the fact that there are more women in law school graduating at this point than there are men, it's still very much in many ways, a good old boys club, you know, that the people at the top are still the men. So I really appreciate the advice that you said, though, to not stigmatize math. Because I have tried to not do that as a parent, because I never I didn't hate math. Okay. I didn't love it at the college level. But I didn't mind it before that. And right, I did fine at it. But it's not my passion. And my husband loves math, like, he's a computer programmer who will, like pick up a math textbook and get excited and think it's fun. And he like desperate to help my daughter with her homework. And I'm like, big weirdo. I love him dearly. But we're a little different in that way. And so my daughter has definitely heard this messaging that like, Well, if you've got questions about your math homework, go to your dad. Right? Because he is more...

Dr. Samantha Radford

Gifted at it. Yeah, he's the individual with right. But it definitely,

Christy Keating

I think, has created some messaging for her around her own skill in math, and something that I'm working real hard with her to reverse. But I appreciate that advice. Samantha, there's so many other things that we could talk about, you know, women in STEM, toxic chemicals, breastfeeding, we might have to have you back to talk more at some point.

Dr. Samantha Radford

I know. I'm like, let's talk about everything. But yeah, we say that later.

Christy Keating

But in the meantime, for those parents who are interested in learning more about your work, what is the best place for people to track you down?

Dr. Samantha Radford

So my website is Evidence-based Mommy, I'll make sure to definitely give you the link to that. I also, we very briefly touched on breastfeeding a lot of my one of the biggest things that I like doing is supporting and celebrating people who are nursing past the first year because I feel like the support kind of drops off at that point. So I host an event every year called Breastfeeding Beyond Babyhood. That won't be till April next year, but I can keep you in the loop after that. So and I've got a podcast to which you already said you'll link to a particular episode.

Christy Keating

Well, I will you also have a fabulous download that people can get. Tell us what it's called. And we'll put the link in the show notes for people.

Dr. Samantha Radford

Yeah, so it's called a love and simple swaps for a healthier home. So some of the stuff we've already covered, but actually, I'm looking at this list and I'm like, oh, man, I didn't tell him about XYZ. So there's things about food there's things about cleaners, which we didn't even touch, you know, personal hygiene products like shampoo, conditioner, like all of it. Just brief ideas for ways that you can avoid some of those like, big categories.

Christy Keating

Fantastic. I have no doubt that listeners are gonna want to get their hands on that. So we will definitely only dropped the link to that in the show notes along with your website and your podcast. Samantha, thank you for the work that you were doing in the world. You know, and from going from a woman who wanted nothing to do with babies, to a woman with four of them trying to keep babies around the world safe babies and kids and all of us. I'm so grateful for the work you're doing. Thank you for being here.

Dr. Samantha Radford

Thank you so much. Oh, thank you

Christy Keating

Heartful Parents Podcast, folks out there. I'm so grateful to you for joining me on another week of the podcast. We are trucking along as we head into the fall, sort of wrapping up summer here. And I'm thrilled that you join me for this conversation with Dr. Radford. I hope that you got a lot out of it. I know that I did, sort of opened my eyes to thinking about a few things that I hadn't been thinking about before. And I hope that it did that for you as well.

If I can ever support you in The Heartful Parent Academy or through private coaching, I work with parents in many, many different ways. Please reach out let's have a conversation about how I might be able to support you.

In the meantime, have a great week, and I'll see you next week on the Heartful Parent Podcast.
Cheers.