Podcast Introduction and Documentary Overview

not do a detox while you are pregnant. Yeah, so like I guess what I'm seeing like avoiding the exposure. So like, you know, if you're pregnant, we don't recommend detox and thank you for clarifying that.

Absolutely, because that wouldn't be safe. But you can avoid buying things in plastic. You can't avoid the fragrances. you Can avoid toxic personal care products.

There's a lot of things that can be done. there's always something that Your health is shaped by more than symptoms. Through real stories and expert insights, we explore how your genetics, environment, and daily choices affect your wellbeing.

We uncover root causes and share practical tools to help you find the healing you need. Welcome to the Forum Health Integrative Medicine Podcast. Today we're diving into a conversation that honestly doesn't get nearly enough attention.

And that's the connection between microplastics and unexplained infertility and overall health. There's a new documentary that just came out in 2026 on Netflix called The Plastic Detox.

It follows six couples who are struggling with unexpained fertility issues. Instead of more medications or procedures, they go through a three-month intervention focused on one thing, reducing their exposure to microplastics and everyday environmental toxins.

The documentary also highlights the work of Dr. Shauna Swan, who has spent decades researching how these chemicals impact human fertility and development.

And throughout this episode, we're going to break this down from our perspective. What's actually happening in the body, why so many cases are labeled unexplained, and most importantly, what you can start doing today to reduce your exposure without completely overhauling your life.

Because this isn't about plastics, it's about how modern life may be quietly impacting our ability to reproduce. Welcome back to the Forum Health Integrative Medicine podcast.

I'm your host, Amanda, and I am joined today by Dr. Peterson and Renata. Thank you so much for joining us today. i'm so excited to have you guys on and talk about microplastics and talking about this documentary.

It's something that I think we're all familiar with on this call. And I'm so excited that there is a documentary that really dives in. It's a 90-minute documentary, so much information in there.

And Renata, before we get started, do you want to remind our audience why you're on the call today? Because you are our expert. Sure. So I am a National Board Certified Health Coach.

I've been working at FORM here, servicing all our clinics and working remotely. But prior to that, in my former life, I'm a former fashion executive and I work in the clean beauty space for a long time.

Personal Stories and Herxheimer Reactions

So I am very familiar with products, consumer products and how to avoid exposure as much as we can. Awesome. Thanks for that introduction. Dr. Peterson, welcome back.

It's been a few weeks since you've been co-hosting with me, so I m excited to have you and your banter back on

the podcast. Great to be here. I love being here, and Renata didn't say it, but I'm going to say, look at her.

She's 52 years old. And that is what clean beauty looks like, ladies and gentlemen. That's what low toxin can achieve for you. I've been using organic cosmetics for the past 25 years.

So I'll tell you that it must work somewhat. I think it absolutely works. That's not the face of a 52 year old, maybe 32, but maybe 28. Oh yeah, absolutely.

Beat me. Thank you. And that's all the makeup you need. Yeah. Well, I can't wait to dive into this. Microplastics, environmental toxins, there's something that we talk about with our patients every single day.

This is a topic that all of our providers focus on at some point in our care plans with out patients because at this point, in out lives, it's unavoidable.

This documentary does focus on unexplained fertility and talking about how microplastics impact fertility for men and for women. However, we know in this space that it's not just unexpained, fertility, the toxins that were exposed to on a daily basis in fertility.

Thank you. The toxins that we're exposed to on a daily basis have an impact on our overall health. Their toxins, when we are exposed in the body, they don't discriminate against fertility or heart health or brain health, or anything like that.

It has an effect on the whole body. Renata, I'm curious, what got you interested in cosmetic side and in environmental toxins in first place? I'll tell you an anecdote.

So the first time that I've ever became conscious, it was a very intuitive thing. This was like a long time ago, I would say probably around the year 2000, where I was putting some hair product on my hair, like mask or something.

And when I smelled the product in my hand, I was like, whoa, this smells really strong. It was a very chemical, very strong smell. And I'm was, like whoa.

What's in this thing? And it was the first time I ever considered thinking about reading the label of what I putting on my body. That was huge awakening.

After that, it kind of got into the rabbit hole. You know, the Matrix, you take the red pill or the blue pill? And then I went in a rabbit hole that I never came out of.

And as I started learning, I was like, wow, why nobody's talking about this? And I, was very concerned about, and I already was trying to live a healthy lifestyle.

I didn't realize that. Having all these chemicals inside of my house and wonder what kind of impact that would be creating. That wasn't before anybody talked about anything.

Today we have so many alternatives. So many things that we can, there's more information. There was not even the internet at that point. It was a very new thing.

So that's kind of what got me into it. It's this awakening, intuitive awakening. But the more I learned about it, the I thought it was such an important public health issue that most people aren't aware of.

Absolutely. Yeah, it's sad how ignorant we are to this. I have, it's not even fair to call it a similar story, but I used to have a ski jacket. This was 15 years ago and it was old and started to smell really weird.

It's one of those like waterproof, like stretchy and just started getting old. Every time I would put it on, I'd get a headache. Like what is going on?

And the jacket itself started to smell like it was breaking down or something. And I was like, this is crazy. I love this coat, it moves with me, but something was wrong.

It dawned on me. When I'm breathing heavily and trying to be in the fresh air, I am wearing a toxin. So you're having a little Herkzheimer's reaction to your jacket.

Yeah, exactly. Exactly. My ski coat that I'd had for like 10 years. Quick question. Have you ever felt like your body just isn't responding anymore? You're eating better, trying to be consistent, but the weight won't move.

Your energy is low and the cravings feel impossible to control. That is not lack of discipline. It's a metabolism that needs a reset. That's exactly what GDRX Reset Program is designed to do.

This isn't just another cleanse or quick fix detox. GDX is a medically guided metabolic reset that helps rebalance blood sugar, reduce inflammation, and get your body working with you again.

And the difference? You're not doing it alone. With GDRx, you get expert support and coaching every step of the way. So you actually understand what your body needs and how to sustain results long-term.

It's structured, it's strategic, and it is designed to help you finally break through that plateau. If you're ready to stop guessing and start seeing real change, check out the GDRx Reset Program at shopforumhealth.com and take the first step towards feeling like yourself again.

That's so funny. Whenever, before I got into this medicine, so 15 plus years ago, similar experience, I was doing, you know what it was, was getting my hair done.

And I colored my head at the time. And I got so nauseous sitting in this seat and I didn't know what was going on. I was just like, Oh, I just must be getting sick.

Come to find out after getting into this medicine, reflecting back that I taking in so many toxins through my nose, through, my scalp, everything that my body and my liver couldn't handle it.

And so Dr. Peterson, do you mind explaining what is a Hirschheimer's reaction?

How Toxins Enter the Body and Where They Accumulate

What's happening in the body? That's a good question and hopefully this answer is satisfying. So typically, the classic term Herxheimer reaction comes from the German physician, Dr.

Herkheimer, who coined the term and said, hey, this happens. And I think it's being more broadly applied at this point. Classically, a Herckheimer Reaction occurs when you treat a chronic infection.

a chronic infection. In fact, they found patients that had syphilis. And when they treated chronic syophilus patients who were hospitalized in psychiatric institutions, the amount of die-off from the bacteria was so high that it created an immune response.

Now, I think that's the more specific and what's actually happening biologically is it's an immunoresponse. So, i think, that is really important to understand.

A lot of people, mischaracterize a Herxheimer reaction as there's a whole bunch of stuff being released as the bacteria die. That's true, but I that secondary to the immune dysfunction that happening or the Immune Activation is probably a better way to describe it.

What I think you're alluding to is when we have a whole bunch of toxin that our body is trying to move from wherever it's at to out of the body, that also can elicit a strong immune response because your immune system does not just identify foreign microbes.

Your immune systems identifies anything that's inside of you that is not you. So whether it's the scent from a candle or the sunscreen you put on or strep throat, your immune system sees any of those and says, this is not me and makes antibodies.

Well, that change in your cytokines, because that's what then happens. You make these antibodies and then cytakines are released. Interleukin 8 goes up, or interleucin 6 goes, up or TNF-alpha goes.

That's the symptom that you're like, oh, wow, now I'm achy, I have headaches, my joints hurt, and I can't think good. And I think that that's way that the term Herxheimer reaction is often used now.

How Dr. Herkheimer would feel about that I don't know, but I that is the question that she was asking. Yeah. So when I used to talk about the Herxheimer's reaction, and Renata, maybe you have a perspective from a coaching, how you talk to clients about Herkheimer reaction.

Because at Form Health, we do a lot of detoxes. One of the ways to eliminate or help the body expel some of these toxins that we have in storage. there is the potential for patients or clients who are going through a detox to have a Hirschheimer's reaction.

And the way I always looked at it or explained it to patients was your liver is backed up. Your liver has to process all of these toxins. When you're doing a detox or when you have high exposure to toxins, your body has do something with them.

If your lever is constantly backed-up, because we're always exposed to toxins, there's this blockage and there is backup going on. And so your blood is literally has all these toxins running around and it's causing you to feel like garbage.

So you've got to clear out the liver in order to process the toxins that are coming in. With some medically supervised detoxes, it helps open up your cells and helps release toxins from where they're being stored in the body.

If you're not helping the liver flush those out, you've just got a lot of toxins running through your bloodstream, making you feel like garbage. Yeah, I like to invite people to consider, think about like, you know, we're talking about a lifetime of exposure of these chemicals, right?

And we are going to try, attempt to eliminate them over the course of a few weeks, five weeks to reach our program. And often you get, when you start pushing those toxins and those supplements start working, and we have those supplement specific, the shakes and the capsules that are specifically designed to transform the toxins between being fat soluble into water soluable so the liver can easily eliminate it.

That's when we start seeing some reactions and I try to prepare people for them without scaring them. It's nothing to be scared about. I mean, some people might just do a light detoxification just because, you know, they just have so much to go through and they might not necessarily feel symptoms.

And so people might react differently. So we're all different. It's hard to predict, but regardless, I feel like I'm so passionate about coaching this program because we see such an improvement in symptoms in a short period of time.

I mean, even for the patients that are reluctant to do it after the second week, usually they're like starting to see some improving their energy levels in their sleep, in some of the joint pain.

I mean, you name it on the bowel movements and things like that. So there's a lot of short-term benefits. I think that's why it works, right? That's what I recommend to so many patients.

Absolutely. We'll definitely get into more strategies on one, how to reduce your overall toxic burden in your body. One of the great things about this Netflix documentary was that it really broke down the core concept that

microtoxins are everywhere.

Toxic exposure is everywhere, there's things that are in your control and there are definitely things out of your own control also. And so how microplastics actually getting into our bodies on a daily basis?

Where do people look for, how do we get them, where are microtoxins? I really don't like to create anxiety and panic, but they're everywhere. Not getting exposure, it's not an option anymore.

They're in the soil, they are in water, in customer products that we have around us. A little bit on medications as well. There's so many things that can be hidden.

So the good news is that we can take measures to avoid exposure, to minimize that exposure and also to detox from exposure. So it's something that should be aware of and we take some measures.

I think the message here, there's a lot more possibility that people might realize, although if you don't do anything about it, then it might have a serious impact on your health.

Totally agree. The way I like to look at it, Amanda, I'd like break it down into how things get into our body, right? And we drink things, we eat things.

We breathe things in and we absorb things through our skin, and as far as how most toxins get in to our bodies, We swallow them. Intentionally. Well, unintentionally, but we're eating something, like, oh I think I'll eat this hot dog.

or whatever it was, I'm going to eat microwave popcorn. Okay, well, you're eating corn covered with Teflon, right? And so, we eat a lot of microplastics.

We drink a lots of the micro plastics, We breathe in, this is probably the most underestimated risk, and then they absorb through our skin. This is I think where Renata's industry expertise has been so valuable to our patients at Forum Health, right?

Skincare. I've always tried to make the patients aware on how many toxins can we put in such a short period of time using personal care products. It's like a very, it's a big thing that people don't think about much.

Everybody wants to look good. Everyone wants use their scented, beautiful scents and beautiful products and bottles and like luxury products, and things like that.

And there's lot of toxins in them. Yeah. So, but the thing that we probably have the most impact on and we can control the, most is what we eat, right?

Well, also our, like the one we control least is the air. We can the control air the least, we could control what eat and what put on our skin the more, and instead of people being super worried about it and being like, oh we have to move to Alaska where there's not so many cars, Right.

Well, good luck. But how about you just stay right where you're at and start paying attention to the sorts of things you are eating and the things that you put on your skin.

It's about what's in your control. Yeah. I think it surprisingly is very controllable. Don't eat your food in plastic dishes. Right? I would go so far as to say never use a microwave.

Me too. Right you can put something in a pan and heat it on a gas range in three minutes where in the microwave it would have taken you 90 seconds the difference is An air fryer, you know, which is anyway, there's ways to heat up your food besides a microwave But for sure if you use a micro have just don't use plastic that's easy.

Yeah, right. You could drink water Don't a plastic water bottle. That's right filter your water. Not that hard most people's refrigerator has a filter and So I think these things are, but when people are like, no, could it possibly have

that much impact?

Oh, yeah. Yes, it can. So this was an interesting part too, is that they found obviously microplastics are everywhere. Before 1930, the Netflix documentary goes into this, so I'll just give a really brief.

before 1930 plastics were made of organic plant compounds, maybe not organic, but it was made a plant compound. After 1930 it, was petroleum that was created and all of our plastic converted from coming from plants.

to petroleum and since 1930, we have created over 110,000 chemicals, none of which have been tested and we're using. So all the plastics that are around us, plastics, this is leather, but like if you have pleather or like your clothes, the containers you put your food in, what you on your body, you what put in your mouth, all of those things can have some sort of exposure to you.

And so it's a weird. What was that? That was my ski jacket, right? Like you don't wear a ski-jacket made of cotton, and you wear one made out of silk.

You could wear on made-of-wool, but most people don' right. They've all got a little bit of spandex or polyester to make them waterproof, those things break down.

And then I wasn't eating my skijacket, I was breathing it in. I think this is important, while the air is the thing we have the least control over, you eat a few pounds of food a day, if you weighed all your food, a You breathe 30 pounds of air a day.

Okay, so even if there's not that much plastic in the air, you're breathing in 30 pounds a day. Where you spend your most time, this is something you can have some influence on.

Put a HEPA air filter in your bedroom, right? The amount of plastic and indoor air is probably 10 to 20 times the amount to plastic an outdoor air unless you happen to live next to a refinery.

Right? But so spend more time outside and put a help of air filters in you bedroom. Open the windows when the weather is nice. And then if you have synthetic fragrances or candles, throw them away.

Endocrine Disruption, Fertility, and Regulation

But scent is such a hard one for people because there's like there is the emotional memory connected to sense that they grew up using and they remember, you know, that there are ways to do that, but they are not super like a little simmer pot on the stove with some cranberries and oranges and some, a few pine twigs.

And, my wife loves to that. I think it's great. It's not nearly as convenient plugging in the Glade plugin. Right. But she has finally learned that if she buys one, she won't see it.

Like she buy them, She plugs them in. I throw them away. She buys them. Blade is not losing any money, but after about 10 years, he's finally stopped buying them on the candles.

They emit more toxins than you would get from secondhand smoke from a cigarette. If you light a candle for an hour, you get more toxic exposure than being exposed to secondhand smoke from cigarettes.

I wonder how different that is for like, soy candles. If they're much, much better in terms of like air quality, I'm not sure. Yeah. But I mean, at the end of the day, a small oil, simmer pots.

So you're not persuading me. Well, I'm just saying, get rid of all of them because, but also there's, you know, it sounds and turn out his point. Like there are emotions tied to a lot of things.

You take one step at a time. you replace one thing at. And you find what works for you. It's probably the most important thing to get the happy air filter for your bedroom where you sleep.

Yeah. If you're doing a job eight hours. So there you've solved a big problem. Just do that. And maybe have a mattress that doesn't have too many chemicals on it too, if possible.

Or at least pillows, maybe. Yep. Replace your pillow periodically because if they're natural, they are better for you. But if their natural they'll get dust mites.

If they aren't natural then they will break down and you're going to be breathing in latex all night. So you got to pick your poison. Don't give up though.

Just one step at a time like Amanda says. Yeah, and the best choice that you can do for your budget and for a circumstance at that time, right? There's no right or wrong.

It's like, I feel like I want to encourage people that this is a north. This is the direction that we want encourage to go towards and one step at a time and maybe pick one area or one category to start.

Yeah. So I wanna ask you a question more fundamental, more basic to these microplastics. are they actually accumulating in our bodies? I want our listeners to understand where they accumulate because we talked already.

We sort of jumped to the end. Here's the thing that will happen as we're moving them. But where do they go? We breathe these in, we absorb them through our skin, and we eat them, where is it that our body sequesters them?

So, when your body cannot get rid of the toxins, they get stored in your fat cells. And your Fat cells live everywhere. They are, there's a protective layer of fat around your brain.

There are fat Cells in right there in Your tongue there, They surround fat cell surround your joints. It's not just like the middle, right? This isn't just the only area where they Get stored, but they protect all of your organs.

The reason that I think it's important for our listeners to understand this is because then they can understand, oh, that's why it is affecting these particular things.

The number one problem with these toxins is that they affect fertility. Well, I'm 52. I've already had six kids. So I don't want to have anymore. Should I not care anymore?

No, absolutely not because the number two thing is my metabolism, right? The number three thing, is just my endocrine system in general. The fourth thing in my immune system.

All of those are fatty tissues. And so then people connect the dots and say, wait a minute, so it's going in fat cells because that's a good storage vehicle.

What will that mean? Well for your children and your grandchildren, it means that you're The Grebo name will no longer live on, right? Because there are no kids happening, but it's bigger than that.

It's every one of these fatty tissues that's affected. And Dr. Pierce, so fatty tissues, fat is meant to be something that is protective for us. So if we're storing excess toxins, microplastics in fat cells, why are they having an impact on our fertility or our heart health or immune system?

Why isn't those fat cell protecting us from those, that overload of toxins that we have to store? So I like to describe things to patients in metaphors because it makes sense to them.

With respect to fat cells, if you buy a home, one of the things, and I'm the same way, but my wife is better about it, we're going to look and see, well, how much storage area is there?

What are the closets like? what's the garage like, right? And your fat cell are storage areas of your body. And I can promise you, if you live in a house with no closet, life is really inconvenient, right?

If you don't have an garage, all that stuff that you want in the house, but you do not want out in sun and the rain, Life is inconvenient. So we are supposed to have these storage areas, and primarily we think of them as storage area for fuel.

But that is only one of the five kinds of fat. The other is we're going to store stuff that we are not using right away but we might need in the future or we storing stuff because we couldn't get rid of it.

That's what's in most people's addicts is stuff they're not quite sure what to do with, they ought to throw it away, but they don't quite want to. right?

And so, your fat cells are a great place to store toxins and you can only efficiently get out so much toxin at any moment because your liver can work so fast.

So, instead of getting all the toxins out, you're getting out as much as you could and then you put the rest in fat cell. And then those fat-cells, one, they can't release their energy because now they became a closet filled with trash instead a of closet with useful things.

Now you are not going to lose weight. But your brain cells or fat in that same sort of milieu. And so, now your immune system doesn't work. Now you can't think good.

Your skin has – there's lots of lipid layers in your skin. now you've got all sorts of skin problems. You developed it because you were putting on a lotion to make your skincare look good and now, you're worse, right?

So, people – I guess I go into that little tangent because people are afraid of fat cells. They've been maligned. But fat cell are some of our most important cells in our body and they're actually A critically important part of what makes us healthy and beautiful is the right number of fat cells doing the the things.

Yeah, I agree. I asked that because I just, that is, like you said, it's protective. And the other reason is like, you had asked earlier, where are toxins?

I used to do a detox talk on fertility and I would focus on also like the umbilical cord. When you look at an umbalical chord in women, You can find over 900 neurotoxins that are going to the baby.

So this also has a generational impact. If you're not going do this for yourself, do it for the next generation. One of the factors that or one of that was discussed in the Netflix documentary is that our current toxic exposure has an impact, a generation impact not on our own fertility, but our future generations and they're saying three generations are impacted by what we are doing today.

It's not just my child, my first generation, it's also my grandchildren who are going to inherit what I have. And we are the first-generation living in this chemical soup.

It's an experiment that's happening in real time that none of us signed up for. Right, exactly. I would say that as far as like the tissues, fatty tissues where toxins go immediately that we know, I think this is a pretty good rank order.

The brain first, the placenta second, and either the testes or the ovaries third, right? So, my brain is being affected plus my children's brain as being effected.

That's how my, you know, child is going to eat while they're forming. And then the testes and the ovaries, that's why we can't have any kids because those three organs are critical for our survival as a species.

Yep. And there's three toxins. Well, there are more than three, but three that were really highlighted throughout the documentary, phthalates, BPAs, PFAs, parabens, fragrances, things like that.

But I thought it was really interesting also, because they did talk about some studies throughout this documentary that I really appreciated, and I wasn't aware of this syndrome, the phtalate syndrome.

I am aware how toxic exposure and toxins can affect development, But the phalates exposure, they looked at phallate exposure in pregnant women and the effects it had on the male fetus and development.

And there is this Phthalate syndrome. So women who had higher levels of phthalates had reduced testosterone signaling to the male fetus, which in turn created developmental changes in the mail reproductive system.

It's incredible how little we know, and yet there's over 110,000 of these chemicals that we are ingesting without knowing it or without awareness around it.

And the purpose of this documentary, this podcast, What We Do in Integrative and Functional Medicine is to bring awareness to people so that they can start controlling their toxic exposure and reducing their overall toxic burden because there is this bioaccumulation effect.

You accumulate these toxins over time as you're exposed to them and they have these impacts on all the areas of the body, right? I think it's important to highlight that in the US compared to Europe, only very few of those ingredients have been banned or tested.

Reducing Exposure Through Daily Routines

So Europe is a lot ahead of us in terms of. regulating that exposure for consumers, directly to consumers. And I also think the most sobering thing for me when I started learning about this topic was that the legislation that is still at play today is from 1937.

How outdated could that be in terms of like, that was before the second world war, which is when most of these chemical compounds started to really get, you know, wide distributed with the industry.

I want to say something about that because I'm largely a libertarian. I tend to be conservative in my thinking. Not the kind of guy that likes to self-flagellate with the US is bad.

We're doing a bad job. The regulation exists. It's just from 1937. I mean, come on, if we're going to have regulations, we might as well have good ones.

Because I think sometimes conservative people will hear, Europe regulates better and they're like, oh, thank goodness we have the freedom and we don't have regulation.

That's not accurate. We have regulations. It's just not working in our favor. Its working for the favor of industries who sell chemicals. And so if regulation right now favors Monsanto and not you individually, it doesn't mean we live in a more free country.

it means we are living in country that is benefiting the profit margins rather than health. But it's not that we live in a regulation-free environment.

Our regulation just sucks compared to Europe's. It does. Well, well said. I would say that, you know, as an update, there has been some attempts to update this regulation.

For sure. Yeah. And again, I don't want to be the guy that beats up the mountains because I really love it here. But we're doing a bad job protecting ourselves and we are doing good job of protecting our stockholders and Robert Barons.

We need to empower our patients to start advocating for themselves and learning when they have to look out for things. I wanted to start talking about this concept that I really liked in the documentary, routines equal routine exposure.

We are creatures of habit, we wake up, do our morning routine, go to work or do out daily thing, come home and we have our routine. In those routines, our products, our food and we have certain things that we go to.

And I wanted to talk about that because our routines are within our control, what we use. So when we look at our everyday exposure, this is where people can make the biggest impact.

It's swapping out the products and things we that have in our routine to reduce our overall exposure. Renata, when you're talking to clients about personal care products and their daily exposure, what kind of things do you ask them to look out for and why?

I think the biggest category is to look out for are the things that we use every day and are very close to our bodies, right? So like we said, so deodorant, it's a big one because conventional deodors, antiperspirants, deoderants contain aluminum.

So that's big. I would say body lotion, just because it covers a higher surface of the body. And since the skin is the largest organ, we're impacting about 60% in estimate of what we put in our skin and gets absorbed through our bloodstream.

So it's another thing that's important to consider. I would say that scented products is the number one thing. And for me, my personal pet peeve, I feel like we're exposed to scanted products and those phthalates everywhere.

We go to the mall to try to get something and you're walking in front of some of those stores that I'm not going to name here, but you know, you just got hit.

I think like, first of all, I lose a couple points until I walk in and find a store. Just when you walk by. Yeah, by yourself. Your experience, Dr. Peterson, with your jacket is the experience I have with Bed Bath, or not Bed, Bath and Beyond.

Bath and body works. Thank you. But then also does each store usually have their own scent that gets developed for marketing, for like awareness for the olfactory memory.

And then we are sprayed with that as well. In the clothes we buy, you come home, and you have to wash your clothes because they're drenched in like some kind of scent already.

My new nightmare is now going to like a Boston, which I don't even know if Boston stores even open anymore, but going into Boston store and where the people would just like spray you with fragrances when you would walk by.

That's why I cannot go to the mall in general now because of that. I want to use an example of something that's more innocuous, that it's daily because you mentioned daily exposure, right?

These daily habits. Of course, one is water bottles. And I think we have moved towards metal water containers, which is good because they don't break like glass.

But that's been one of the things that people have thought about. One of things people haven't thought Low concern overall, but we get exposed to it twice a day and it's in our oral mucosa which is highly absorptive and that's our toothpaste, okay?

In our toothbrushes. Yeah, in toothpaste. That's right. You've got fluoride which has questionable because of the irritation that it causes to the gut.

The neurodevelopment concerns. It's a metal. It does do some good things like strengthen enamel and reduce cavities, but we're going to be exposed twice a day.

And then there's sodium lauryl sulfate, which causes the foaming, right? People like their toothpaste to really foam. Or your shampoo. That's also very common in shampoo or your hand soap that people are going be washing their hands all day long with that soap.

Then in the same toothpaste, you've got titanium dioxide, right? Now, that's been recently phased out. But these

are the things that we are like, oh, well, this is good for me.

And I think… But your dentist tells you that it's good. That's right. Those are things we have to pay attention to, in my opinion, a little bit more is the, are we naively doing something that is actually toxic, there used to be microbeads of plastic in toothpaste for whitening.

Those are mostly banned now, too. But what does the industry do? They say, oh, shoot, we can't use that. What can we use to make our toothpaste stand out?

How can make make toothpaste more whitening? And the coloring, there's no purpose to be there. I mean, why do we need to color toothpaste? And so, I don't use that because I want everybody to change their toothpaste.

I use the example because want us to think about the things we put in our bodies and on our body and then pay attention to what's in them and say, is this helping me?

Do I need this? Right? And you could go extreme and just say I'm going to use baking soda. Great. Use baking so. But did that change the equation, right?

To your point, you both said what about to toothbrush itself, I'm not advocating we start chewing on sticks again like people did in the jungle. Yeah, no, we don't have to.

There's alternatives. But there are alternatives and those are the type of daily exposures that we need to say, is this thing, am I mistaken? Is this actually good for me?

Yep. Totally agree. When you think about like the beginning of the day, a person like wakes up and say, okay, I'm going to wake up. I got to do my basic routine.

We're going take a shower possibly. So that you'll think You name it. And if a person does makeup, it's all for makeup. It's hair care. I mean, average person in the US uses about 12 products.

Women use more, many times. Men use, on average, seven products before they leave the house. Actually, I think it has increased, Amanda. There's recent research by the environmental working group, and now the crazy thing is men are catching up.

I'm trying to think now wrinkles will give away the fact that maybe I should use more products, but I use the same soap to wash my body and my hair. How many times are you using it though?

Well, every day, but I only wash my armpits and then my underwear area, right? Like I don't wash all my skin, there's no need to wash or remove the lipids.

I use soap on my groin of my arm pits and my hair. And then I used a natural toothpaste from a company called doTERRA and I us a coconut oil in my head.

Great, minimal as I thought it. I think you can limit, I can be a pretty low number of states. You're just low maintenance. I'm all about empowering the patients to like simplify their routines using things that you can have multi-purpose.

You don't have to buy specific moisturizer for each part of your body, like for example. And there are apps out there too, the Yucca app that can scan your products and see where they fall on the spectrum.

They give you swaps for that. The other thing is that We're starting on these products earlier and earlier. So there's actually also a correlation for girls who start using some of these beauty care products.

The earlier they start them, the earlier, they hit puberty. And why is that? That's because a lot of this care product that we're talking about have endocrine disruptors.

What is an endocrine disruptor? Dr. Peterson, do you want to take that. Sure. Your adrenal hormones and your sex hormones are in one pathway together.

You start out, there's these two glands that sit on top of your kidneys and from cholesterol which you made in your liver, you turn cholesterol into pregnenolone which then turn into progesterone.

You then turn it either into cortisol or into DHEA. At that point, it moves from your adrenals to your testes or your ovaries and you turn into testosterone and estrogen.

There's two forms of estrogen in most humans, estrone and estradiol. If a woman were to become pregnant, she'd make estriol, Well, after it becomes testosterone or estrogen, that's sort of the end of pathway, they still keep breaking down.

They still keeping changing. These are ring-shaped structures and as they change, think of like cutting a key. If you cut a Key that you got from Home Depot, each cut might make it open a different door, right?

It will no longer open the last door because you've cut it again, but it will open some other lock. Well, the key doesn't just disappear because you got it down to estrogen or testosterone.

You keep having to cut it away until it totally is gone. And that process, those are the estrogens, because they're mostly estrogen, testosterone is all turned into estrogen eventually.

Those are estrogen that are left over in our body. This happens a lot in women as they age when they are late 40s, early 50s, they have all these high estrogens.

Their estradiol itself isn't that high, but their estogens in general are. Now, plastics are what are called xenoestrogenes. They look like estrogen to the body, and that means they bind to same receptor sites that estrogen binds to.

Clothing, Home Products, and Practical Swaps

So, endocrine disruptors are chemicals that look like estrogens. They bind in our body to those same receptor sites that in an eight-year-old girl, she is not making enough estrogen to start ovulating and having babies.

Biologically, we are intended to start having periods and making children at age 15. Not trying to advocate child marriages. I'm just saying that's how it's always worked for thousands of years.

15 to 17 is when we started to be able to make humans. And now, because of these chemicals that look like estrogens, girls are starting to have periods at eight.

and I've seen girls as young as five having period. And the risk with that is earlier puberty has associated risk, with cancer later in life. Oh, it has associated risks with all sorts of things.

It has social risk with diabetes and strokes and heart attacks. You cannot become an adult at age five and then expect that your adulthood will not be riddled with the same adult diseases that people have at 50. At age 40, right?

You started 10 years early. If you started ten years earlier, you're going to get all the diseases 10 And in the meantime, there are brands that are now targeting girls, very young girls for like skincare products and things like that.

Not talking about the things they buy at like, you know, cheap. Oh, yeah. I've got four daughters and when they want to go to Sephora and we go there, I'm telling you there's not a girl in that store that's over 13 years old.

That is their target market. And there's plenty of girls that are nine and they're all buying all sorts of stuff to put on their face. Is this driven because of TikTok and we want to look beautiful and just totally sexualized our lives?

Probably. But if we want to be healthy, let's wait. Let's calm this down. Yeah, and I think it was even worse like when it comes like, you know, for the self-esteem of girls and think about they can only look pretty if they're using all those products, right?

It becomes this whole thing. And I'm so against it. I don't want sound gross, but when I was a kid growing up in the 1970s, we only took a bath on Saturday before we went to church, Right?

We didn't put anything on our body. We ran around covered in dirt. So, if you got Tuesday, I might tell you to take a bath on Wednesday or Thursday, but that was life in the 70s and 80s, right?

We weren't taking a bathe in all these chemicals. We were taking the bath at all. When you walk through those aisles in the supermarket or the drugstore, like full of those colored bottles that all the girls go crazy about.

In the ages 7 to 11, I lived in Alabama. There was no air conditioning. It was 94 degrees, right? Total humidity, so we really turned to the world. You had a real gut as a teenager.

That's right. It's funny. I don't know, this might not make the cut. You'll edit this out. Oh no, I'm certainly not editing any of this for sure. Back in the day, the talk that you would have like in fifth grade, sixth grade it had very little to do with having children and sexual reproduction.

It had a lot to with personal hygiene, right? Boy, they'd get all the fifth graders in a room and say, okay, now boys, you're going to start to smell bad and you need to take a bath.

You're gonna grow hair around your groin. And you were like, oh, is that what's happening? Is that why I'm smelling bad now? You know, we only took a bathroom once a week, so they had to tell us.

Yes. So one big thing that we can do is clean up our routines, take a look at the products that you're using, understand what they are and what you can swap them out with.

I want to just reiterate anything that says the word fragrance. throw it out the industry with the word fragrance they can hide over 120 chemicals in that one word they don't have to list out so a lot of times people are saying oh well just look at the back of the bottle and you know if you understand the ingredients great In this beauty industry, that word fragrance can hide hundreds of compounds and you just don't know.

So just… And they get away with because of the proprietary formulas that they set the product with. Yeah. They don' have to disclose on the label. There are apps that you can use, there are trusted beauty brands that can you use.

Do a little research and the swaps, they don''t have be life-changing, but start making those swabs. See what you do in your own life. There's a group of things called essential oils.

If you want some fragrance in your life, this is the way to do it because in order for it to be labeled an essential oil, it's an extract from a plant.

It's steamed, distilled, or it is cold pressed. They contain natural compounds that are generally good signaling molecules for our brain, for an endocrine system, right?

So you can use lavender oil in your house and a little diffuser. You could use peppermint oil. any number of essential oils if you want to have a fragrance in your home.

If you wanna have signature scent, go ahead and get one. Just pick one from an essential oil and not a fragrant because fragrance or parfum, P-A-R-F-U-M, is basically a chemical mixture.

And so I think if people understand that, they say, oh, good, there's an option. There's a choice. Yeah. It's the real thing I can use. The thing that God made, the thing the Mother Earth made.

Let me use that instead of the Yeah, and I agree. And I also agree on the most recommended resource. I would say it's like an environmental working group because they are the original NGO that really started this whole movement of researching consumer products and putting out lists of safer products, cleaner products.

They even now have like their own certification where they've added the products so it is awg.org. I think it's a great, great resource to recommend more patients to choose.

It's just a gray start just to have that. Here's the gray area on what I just described essential oil and fragrance. Sometimes you'll see the term essential fragrance don't trust it.

Okay, they just threw in that word essential to try and make you feel like oh, this one's probably good. Talk to your health coach about what you're using.

Bring a list of the products that you have and talk to a health. And see how they can help you make swaps. I used to do it with my clients all the time.

One more about fragrance. A lot of times products, they say fragrance free can also be scented. So just to put this out there, you still have to read the labels and see if there's written some kind of perfume scent in there.

There you go. Got to pay attention to our labels guys. I think the other big area that I just want to touch on too is the clothing industry. I thought they had a segment in the documentary about the clothes industry and I though that was wildly fascinating.

It followed a journey of a woman who was a fashion model and she was diagnosed with breast cancer, went through some treatments, had mastectomy and now has a clothing brand that is helping correct the cloak is trying to help correct the clothing industry because around the same time that all of these chemicals were created in the 1930s, they also started to get really creative with our clothing.

So we're not a hundred percent cotton anymore or linen or bamboo and things like that. Now we've got spandex. And what are some others? Synthetic fight fabric.

You got to my childhood here, Amanda. Yeah. My childhood polyester. The sin of the seventies was polyest. Yeah. Oh yeah. Well, but I think she does a beautiful work in this documentary.

And that is one of the reasons why I left the fashion industry for the lack of sustainability and unhealthy aspect of it, whether it's like both the consumer aspect unhealthy, you know, too much consumption, fast fashion, lots of chemicals.

The dyes in there have so many endocrine disruptors. I thought it was, if they think that 35% of the ocean microplastics are from the textile industry.

That's wild. And meanwhile, they keep producing multiple collections per year, each brand and no stop. Yeah. start checking out your clothes, try and prioritize linen, cotton, and things like that.

The nylon, the spandex, those are all synthetic fibers with dyes and materials and endocrine disruptors. Your skin is an organ, you absorb through your skin when you touch something within six seconds, it enters your bloodstream.

It is very quick absorbing. And so that's just one of those, as you're shopping moving forward, can you prioritize cotton, linen, silk, not synthetic fabrics?

The other big area- I'm going to have to ask my wife to get her to give those clothes off. Hey, take those off within six seconds. Yes. You're going have a good night.

And I'll say start with the things that touch you more. Like I started with underwear first of all, first and foremost. Oh

yeah, for women. Women wearing bras made of plastic.

Yeah. Think about where it's absorbing into your body. It's adsorbing into… Absorbed into our body tissue, right? Your man. Your fatty tissues, which are then going to develop culture.

The other big area within our control, our food and our home environment, we did talk about the air quality. We talked about food, but also the plastic packaging, the kitchenware, receipts, paper receips.

the couch, what you sit on, everything. It's all materials. These are all material that you can control. I'd say like, you know, start with one thing.

I mean, I would don't say you like go out there and go crazy, throw everything away, stuff from scratch, right? It's not reasonable or sustainable. That's no feasible.

If you're going to buy something new, if you can buy new whatever it is, it's like you going buy curtains for your bedroom. You're gonna buy a new couch, some products for you kitchen, kitchenware, personal care products.

Next product, next buy you make, try to make a healthier choice and start there. I think that's great advice. It's just whatever you get next, start there.

Don't throw everything away. Exactly. Unless you're independently wealthy, go ahead. But if you are a normal person, just start today. If you independent wealthy hit me up.

exactly. but if your a normally person the next thing you buy, buy a healthier version of it. Right. And slowly change your life. Simple too, don't accept receipts anymore.

Do not touch receips. Receips are so, no. Yeah, my son, he's funny. He's 17. And he knows about these sorts of things. he likes to make a big deal of it.

We're at the store and they want to hand us the receipt. No, I'm not taking that. I got to keep my testicles. But I don't know, maybe we're winding down, but I will share this.

So, when I was 37 years old, I'm an emergency room physician, family doctor in a small town, and I checked my testosterone for the first time and it was 190, right?

And I didn't any of the stuff that I know now. I knew I felt awful. I didn't know it was a problem. And my partner at the time, the physician that worked there with me started giving me testosterone and I started looking into things.

Detox Support, Coaching, and Safe Next Steps

The the bar soap that and it works fine, right? Well, it's easy because my hair is short But all these changes after about eight or nine years my testosterone runs 890 with no treatment, I don't take anything to keep it where it's at.

My testosterone was worse 15 years ago than it is today by a factor of four. And all I did was just take all these toxins out of my life. I get more sleep now and my is less stressful and that helps a bunch I'm sure.

But these things affect everybody. Even if you can have children, and I had children all through this, we have six children and it did not affect my fertility, but it sure affected my testosterone.

Yeah. Right. So it's affecting everybody. It's a question of how severely is it affecting you? Maybe you don't have headaches, but you might be three IQ points smarter if you got rid of all this trash.

Yep. We are kind of wrapping up, but there's a few things that I do want to hit on. This documentary was really great. It did follow six couples who had unexplained fertility issues.

To your point, Dr. Peterson, there are so many other symptoms and things to look out for that this affects. But this documentary in particular followed six couples for three months and the intervention was reducing their exposure to microplastics.

And they measured urine toxins, sperm quality, and over those three month by reducing. You'll see in the documentary what they did was not Sometimes it was a little extreme.

They did make some big changes like swapping out dishware and stuff like that. But what you'll find is that by reducing your exposure, they did see BPA levels decrease an awful.

often become non-detectable. And I think that's huge. When women are breastfeeding, the first place where BPA and some of those toxins are released from your body is through breast milk.

So if you can do things today to reduce your bodies toxic exposure, it's going to help in so many ways. Phthalates went down significantly. And five out of six men in that documentary improved their sperm quality.

And multiple pregnancies occurred when they had unexplained fertility. I think it wasn't a perfect study because there's not really control, but it is certainly very compelling to start making lifestyle changes.

There are more things that you can do. We can test for toxins and levels of exposure through our clinics. There are other ways that you can also start reducing your toxic exposure or at least eliminating toxins that are in storage.

We have a great program that's called GDRx. we have 10 day and a five week option. We certainly prefer people to do the five-week option because you're going to see a lot of movement, but that is helping the liver and helping reduce and remove those toxins that are stored in your fat cells.

We also have therapies like ozone and chelation that can help reduce overall toxic burden in the body. So there are definitely ways and strategies that you can use to reduce your body's toxic load.

And I think it's just really important that people need to know that, you could do things to help yourself. I'd love to hear Renata talk about that. Tell me, so we've talked most about these things are bad.

They're everywhere. Avoid them. But how do you coach people when they're saying, oh, I have a high load. I would like to get rid of this as quickly as possible.

Walk me through. Let's pretend that I… One thing that like do is to have the patients walk me though what a typical day. their typical day is. Just to kind of have an idea of what kind lifestyle, exposure, what kinds of places they usually go, where kind work they do, whether they spend most of their time.

So I kind like to get a picture. That's one of the things that I love doing. Because then you can learn a lot about a person's life and just depend and describe for five minutes what they that's what I like to kind of be like and play a little Sherlock and do a lot of investigative work to ask lots of questions to get an idea.

And then I usually can get more information about what to say, Hey, what's going on in that area? Tell me a bit more about that. That's how I get to, for example, I've had situations in which found out very much some very important dietary issues from things that necessarily the physician didn't have time to talk to them about.

So that's one of the things. That's kind of like what I go around. All right, but now you… So you just figured out why you suspect I have toxins, right?

With all that, with that investigative… Yes, exactly. It's kinda like I try to get to the bottom of life. You know I had these toxins. Tell me what you're going to like, give me the instruction of saying here, these are the things you are going do besides elimination.

What I want to understand is, are you going give binders? Are you gonna give glutathione? What are things that

you will say, hey, this will speed up movement of the toxins from your cells to your blood, from blood to liver, liver to bile, bile to intestine and out into the toilet.

Walk me through that. So I'll tell you this, it's not a scope of practice for us to be recommending supplements to health coach, okay? So just wanna clarify that for the audience.

So we're not gonna be not recommending unless our provider has made specific recommendations, we can walk them through what type of supplements they should be doing.

But having said that, in the context of coaching the GDX program, for example, which is a detox program. We have vetted supplements and we gonna work with each of those areas.

I like to ask them what kind of water they drink. What type of hydration they do, how much water they drink. That's one of the things. I like to make sure that each of them main detox pathways are covered.

So let me make the hydration so we can eliminate through urine. How I would like you to know about their bowel movements to see what's going on in the area.

Are they constipated? Are you having a bowel syndrome? What's goin on there? Sometimes there's a lot of constibation that happens that they don't start discussing.

If you're embarrassed to discuss, we kind of like get into that. And then I make to do something to sweat. Sometimes if they're sedentary, don't feel like, okay, so can you go maybe to a sauna?

Can we figure out like an access to sauna, can we figured out a way to do a little bit of movement? Even if it's going around the block for a walk or take a hot bath with some epsilon salts.

I try to make sure they are supported, understanding what they need to in terms of supporting the detoxification pathways. That's very important. So once we have that going and they understand that and we can walk through their specific goals that they want to set, should we improve that?

Somebody might be drinking five cups of water a day only, and we might get them to drink half our body weight in ounces. It's a big gap. So we got to work with them.

Okay, what's reasonable? What goal would you like to set for yourself this week to improve your hydration? And we prompt them come up with strategies.

I help. If a person is absolutely clueless and absolutely don't have any, they really don' know what to do, I may ask for permission to share a couple of tips, but it's about self-efficacy.

It's encouraging them to figure out what can they do. Or maybe there's something they have tried in the past and they can bring back as we do that habit.

So that's kind of what coaching is around. It's not so much about what to do because you don't want to be one more provider to tell them what they already have the physician.

They already had the nutritionist. This they might have other chiropractors, they may have different people they work with. And as a coach, I think it's a very interesting way to put everything, help them put anything together and see what's going to fit when and where, and how can we make it work for their lifestyle?

Are they going have time to it? Is it reasonable? is it feasible? are they gonna be able to some meal prepping? And they're going be to take those snacks on the road.

You know, so we got to figure out what works. you All right, so I love that because then there's practical things that they can do. So I'll say, because I'm allowed to give people advice.

Now, I am sure I have to couch this with, this is not medical advice for you, right? That's the disclaimer. You have talk to your own doctor. But how do we get toxins out of our body?

Well, we first have move it from the cells into the lymphatics. And that's things like phospholipids and primrose and things, these lipid rafts that move trash from cell out to the lymphatics, then how we do get from lymphatic to blood?

Well, we can do the sauna thing and just sweat it directly out, or we could walk around the block and that will move it to the blood, right? We have lymphatic drainers, things like parsley and pinella and berber, those will help the lymphic drainage.

Then how do we get it from the liver to blood? Well you've got to have the circulation, but the livers itself is this conjugation thing that Amanda was talking about earlier.

The liver gets a lot of the attention because it's It's a detoxifier, but it's just in the middle of these five steps. It is the one in middle where you, okay, now the toxins in blood.

Now get it to the liver. You got to have phase one and phase two conjugation and that's where glutathione comes in and N-acetylcysteine comes and if a patient wants to go to, you know, health food store and buy N acetyylcystine based on listening to this, knock yourself out but that is not medical advice.

That is just you choosing to do it. but we've got to get those toxins from the liver then to the bile. And the Bile is this fluid that we make so that, we can digest fats, but that bile is full of trash, right?

So you gotta have your bile flowing, and there are bitter herbs for that. That's what they do is they cause your Bial gallbladder to contract or you to dump out bile, Right?

And then now you got all these toxins in your intestine Well, that has not, you haven't done one bit of good yet until those things are out of the body in the toilet.

And so that's where binders came into play like charcoal or colostiramine or modified citrus pectin, right? So those are all the steps I want our listeners to be able to say, wow, That's complicated.

Unless I better go see one of them, form health providers to walk through this. It's not impossible. The reality is most of these things, You don't have to have a prescription for, but it's good to Have some help on it.

If you'll do those thing, then you're going to be able to reduce this burden of toxins that you have dramatically, fairly quickly. Now, I'll also caution our listeners, how fragile you are.

If you a lot of immune dysfunction now, because you've got Lyme or you got mold toxicity or Epstein-Barr, whatever. the quicker you detoxify, the more it will rock your immune system.

So though in that case you have to be even more cautious of doing this without medical guidance. You want to have a doctor involved in this, you want a health coach involved, and you avoid all those things we talked about, but then please be proactive.

Don't just wait around for your body to get healthy. It needs your help. I think some of the big takeaways for me was Microplastics are everywhere. Environmental exposure is largely unavoidable, but small changes can meaningfully reduce your exposure.

To your point, Dr. Peterson, detoxification is a daily process. Support your body's natural detox capacity, and that can also be extremely helpful. and find a local form health provider by visiting formhealth.com.

We love detox. We love getting rid of toxins in the body. Find a health coach. But overall, this was such a powerful documentary. This was a such powerful conversation for people.

There are so many takeaways. So many things that you can start doing today. Choose one and just start it. That's the biggest takeaway that I can have for everybody is find one thing that can swap out today to reduce your microplastic and your toxic exposure.

And if you liked this episode, if this episodes resonated with you, don't forget to like, comment, share with somebody because this information should be available to everyone.

Everybody should have this. Information at their fingertips. So don' forget like comment share. And Renata, Dr. Peterson, do you guys have any final words of wisdom for our audience today?

I'll just say one thing, we have telehealth so you don't have to live that close to us. You can have a tele-health visit with a form health provider even if you're 10 hours away from them.

Love it. Renata, your takeaway? I do want to address, if somebody's listening to this and they're struggling with infertility at the moment, to feel hopeful and to understand that sometimes, I've seen when I used to have work in the clean beauty industry, a lot of times the first time that the women would get worried about these issues when they were I got pregnant and I can no longer dye my hair because it's not safe for me.

And I feel that it is a little too late. I would invite people to think about that before. If we could prep and detox and prepare your body to go through this beautiful process of being of maturity, I think that's the best And if you're already pregnant, hey, it's even more important to just start reducing that exposure right now, right?

So you can have a healthy delivery. Do not do a detox while you are pregnant. Yeah, so like I guess, but I'm seeing like avoiding the exposure. So like, you know, when you're pregnant, we don't recommend detoxing.

Thank you for clarifying that, absolutely, because that wouldn't be safe. But you can avoid buying things in plastic. You can't avoid the fragrances. you Can avoid toxic personal care products.

And so there's a lot of things that can be done. There's always something that could be down. I think the big message about this documentary that really touched me.

That's very hopeful. Go check out this documentary. It was super informational, lots of great takeaways. If you're looking for support, if you are struggling, don't forget to look at forumhealth.com.

See if there's a provider near you and check us out. We're here to help. we want you to be healthy. Tune in next week for our episode. Thanks for joining us today.

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