

Caspar (00:00):

In clinical tests on over 30,000 umbilical cords. Virtually every sample contain toxic forever, chemicals or pfas, which are linked to birth defects, cancer, kidney, and liver disease, among many other health issues, even before we're born. We're at a biological disadvantage. Today, we're speaking with naturopathic doctor whose protocol allows mothers and fathers to clear out toxins and optimize their biology before endeavoring to reproduce. This is the story of the Preconception cleanse with Dr. Mary Shackelton. Dr. Shackelton. So nice to have you on.

Dr. Mary Shackelton (00:36):

Thank you for that awesome intro.

Caspar (00:38):

Oh, no, it's, listen, I think this is incredibly important topic that gets so overlooked, this idea of infertility. Right now, so many people, I think the, the stats are that in the next 20 years or so, 50% of people who are looking to conceive will have to go through I V F, and we're becoming more and more kind of infertile for unknown reasons to many of conventional medical specialist. But I know that so much of this has to go, what, what's going on inside of us, our inner terrain, our milieu, correct, and the toxicity, how many toxins we're exposed to, and that a biological system simply won't replicate in such a dirty environment, in a sense. Mm-Hmm. <affirmative>. But tell us a little bit more about your work, how you became involved in this, and all the aspects of what you do to help counter that.

Dr. Mary Shackelton (01:29):

Yes. This is, this is one of my favorite things to talk about right now. Not because I am a fertility specialist mm-hmm. <Affirmative>, but because in clinical practice, I am seeing more and more adults with brain fog and neurologic disease. And so as a naturapathic physician, we're trained to always look upstream and to see why is this happening? And it's, it's not that you're 40 year old, years old. People won't think when they're 40, they're tired. And that's the explanation. I said, no, that's common, but not normal. So what the upstream cause of this is, is neuroinflammation. And neuroinflammation. Our brain is the most sensitive organ to toxins. We have a lot of mitochondria in our neurons. The mitochondria exquisitely sensitive to toxic exposure. And so there's something called vertical transmission. So when your grandmother is exposed to something, she passes it in utero to her daughter.

Dr. Mary Shackelton (02:17):

And then when that woman gives birth, she passes her total toxic load to the fetus. And we've been able to document this with cord samples cord samples of blood with infants at the time of birth. And there have been 287 chemicals identified in one study in all patients measured, which means that those chemicals crossed the placenta while the baby was in utero. Most of them have never been studied how they interact together. So 287 chemicals, they assume that 185 of those are carcinogenic. So we kind of come into this world. Women are always looking at the nursery, the cotton sheets, the cotton food, I mean the, the organic food. But they fail to look at this very important window of opportunity in the preconception time before you get pregnant to, to reduce their total toxic load for the better health outcome of that baby.

Dr. Mary Shackelton (03:10):

And so a lot of men have been saying to me, what about me? Yes, it's super important because there's a 40% decline in sperm rates. Sperm count has gone down for 40% since 1980. So this is where we're

getting some of these statistics about fertility. Fertility specialists are good at getting a bit an egg and a sperm to fertilize, but they're not gonna look upstream and say, why, why are you struggling with this? And, you know, the the reality is, even if you can conceive and have a baby, this problem is still there. So it's gonna show up for you later down the road with neurologic complications or numerous other things, immune dysfunction.

Caspar (03:45):

Yeah. It's really important to note that it's not just a female issue here. Mm-Hmm. <Affirmative>, this is a male issue. And I don't know, there was a, if you've seen a docu-series, not so pretty it's about the beauty industry and all the things they put in there that were impacting us. And one of them was on just fragrances and everyday products that contain PFAS and other chemicals and listed as a fragrance and don't have to actually say what's in it.

Dr. Mary Shackelton (04:09):

The F word.

Caspar (04:10):

Yeah. Yeah. And, and yes, one of the, the people on the show, they're trying to conceive, and it was actually the, the male had no sperm motility, no nothing. And it was kind of attributed to this where he cut out all the dove shampoos and everything fragrance he was using, and so much over time, they were able to conceive.

Dr. Mary Shackelton (04:29):

That's fascinating because men, mens are a fraction of what women use,

Caspar (04:33):

But they're using more and more. Ax bodies we're told almost to use more fragrance things than smell a certain way. And even, you know, the aluminum that we're using in, in all our anti purse sprays, all these things. But I wanna ask you, what are the main culprits when you're looking at those cord samples? Out of those 185 or so, are there a few that are more pronounced?

Dr. Mary Shackelton (04:56):

Well, I would say the plastics, the fragrances, and the phthalates. So plastics are, you know, like if you, if you look around, if you've been on a beach recently, there's so much plastic on the beach because there's so much plastic in the ocean. So, you know, the plastic is how we consume our food. It's how we store our food. It's how we do everything. And so if people can really take a good look at plastic exposure and minimize that, that's gonna be super helpful. Not only for us, but for the planet. And the planet is mm-hmm. <Affirmative>, like whatever's in the planet is in us. So you know, the plastic is a, an enormous problem. And you know I spend a lot of time in Costa Rican on the beach. There's these little suckers, the sucker sticks, they're plastic. Those are never gonna biodegrade.

Dr. Mary Shackelton (05:38):

Like don't, can't, somebody just enforced that you use paper. Mm-Hmm. <affirmative>, what's the difference? So there's, there's some regulatory issues. Fragrance is a really big one. Chanel the company, when they were trying to keep their scent proprietary, they passed, they got legislation passed that

allowed them, them to use fragrance to contain up to 300 chemicals. And so anything that has fragrance in it is a is working against you with reproductive health because it mimics hormones. So their endocrine disrupting hormones, it mimics the way estrogen sits on your cell surface, and it can actually exacerbate all kinds of menstrual issues, including fertility is just just one of many. So plastics, fragrance, and then phthalates are also softer PLA plastics and things that are in like pipes. Yep. Pvc's. So there's, there's chemicals everywhere, and we have control over a lot of it actually. We don't have control over some things that are in the environment, things that we're breathing, but the things that we bring into our house, the things that we consume, is completely within our control. And, and the gentleman, the example that you just used of the gentleman who just stopped using certain products and he was able to conceive, that's pretty remarkable. Yeah,

Caspar ([06:54](#)):

No, I think that's why it made the show, right. They're looking for those remarkable cases. But I do believe that all of us, if we were able to detox properly mm-hmm. <Affirmative> we put ourselves in a better chance of not just being healthier, but also conceiving child. Now, let's get into that, the, the, the, you know, preconception cleanse as you call it mm-hmm. <Affirmative> mm-hmm. <Affirmative>. What does that consist of when patients come to you and say, and in this book mm-hmm. What are we we doing? What actions are you advising we take?

Dr. Mary Shackelton ([07:22](#)):

So there's a couple things that are kind of important that I wanna, I, I kind of want this book to be a paradigm shifter so that women start to think about conception long before they conceive. Mm-Hmm. Because we have good prenatal care in this country, but when you're pregnant, it's too late to do any of this. So you, even though you can conceive, and that's a wonderful thing, you don't want to have the downstream possibility of a child on the autism spectrum or with a d d and focus on in massive immune challenges. We're seeing kids with massive allergies and autoimmunity at earlier and earlier ages. So usually what we do is if we, I love to have a year, a year prior to conception, so that's why this is an important paradigm shifter, because women think about getting pregnant and then they don't give themselves enough time.

Dr. Mary Shackelton ([08:03](#)):

So if you know you ever wanna have a baby, it's important to at least get some of this information and start thinking about it. Give yourself a year. So this is also, you know, there's a lot of behavioral change that needs to happen with buying organic food and being careful about what you use on your body. And so that takes time. And I always tell women, you know, just, and men just give yourself enough time so it doesn't feel unsustainable. So you wanna make these gradual changes over time. So we do blood work, we say, you know, most women don't have blood work done until after they're pregnant. But if you do it before you can, we can determine some genetic potential problems that we can address with food. So M t h FFR is one gene. I'm really looking at hypercoagulation right now.

Dr. Mary Shackelton ([08:40](#)):

Those things can impair you know, keeping a pregnancy through the first trimester, and that's all modifiable. And then we look at heavy metals, depending on what their exposure's, like vaccines, amalgams in your teeth, a lot of fish consumption. All those things can build up and we don't want want, and we don't want mercury and lead in anything other than, you know, there's very little that's considered safe. It's actually none, no exposure to those things is, is safe. So we do a lot of blood testing

and then a thorough history of their family history. So what's your family history? Who died of what, what's your maternal parent, grandparents, your great-grandparents? Where's they able they live? What were they exposed to? Because that gives me a real clue about what this person might be harboring as well. Mm-Hmm. So we talk a lot, we do a lot of labs.

Dr. Mary Shackelton ([09:21](#)):

And then for the detoxification portion, I really talked to 'em about the five pathways of elimination, liver, kidney, lymph, skin and bowel. Mm-Hmm. Making sure those are all open. Doing some drainage prior to, to detoxification, making sure you can excrete so when people don't sweat or they don't poop, we gotta open those doorways, otherwise you're gonna get sicker. So most people, there's a huge amount of denial around toxicity, which is kind of fascinating. So if you live on this earth and you breathe water, breathe there and drink water and eat food, you have toxicity. So you know, there's, there's a, a ton of denial around this. So that will shift too as we face the problem of infertility, which I believe we're looking at the tip of the iceberg right now. And I do think it's gonna be a huge problem coming up for the next generation of kids who wanna conceive.

Caspar ([10:06](#)):

Yeah. I completely concur. I actually wrote about this not long ago that I think one of the Beth biggest threats to our society is, you know, you could look at climate change, you could look at lots of different things, but I think the amount of toxins we are putting out within us that can cause a children of men type of, you know, scenario where people just can't conceive anymore. Mm-Hmm. <Affirmative> where it's gonna be a smaller and smaller portion to where it's a rare thing that we have children may be possible there.

Dr. Mary Shackelton ([10:36](#)):

Right.

Caspar ([10:36](#)):

Well, actions, you know, we're living in this sea of toxicity. We have to avoid it as much as possible. What actions are you prescribing or recommending? Are there, is it more going to, is it that sweating, going to the gym, being in nature sauna? What do you have in your arsenal?

Dr. Mary Shackelton ([10:53](#)):

I love the sauna. Sauna's probably one of the most amazing tools. So I'm seeing more and more saunas pop up in like, in fact, in fact in Boulder, Colorado here we have a sauna, a a far infrared sauna place where you can get a membership and go and just sweat mm-hmm. <Affirmative> mm-hmm. <Affirmative>. And so, you know, the finished the population of the finished people. Yeah. They have demonstrated the community sweat lodge as a, as a community activity. But I don't know if they realized at the time that this came to be how critical that is. Everything comes out in your sweat, pesticides, heavy metals, mycotoxins for mold, anything that we generate when we actually metabolize, we make toxins too, so we can get those things out through our skin. Our skin is the second biggest organ of elimination next to our liver. So sweating, if you can sweat and, and you know, if you can get a sauna in your own house, great.

Dr. Mary Shackelton ([11:41](#)):

If not, a gym would do. Just find the difference between a sauna that's a traditional sauna that's hot and dry. They go up to about 220 degrees. You don't have to sweat quite as long and it's actually quite depleting to be, be in there for a long period of time. But a far infrared sauna, you can get a good sweat at about 135 degrees for about 45 minutes. And truly what people will report to me on and on is that they didn't sweat for the first 25 minutes of the first couple sessions they did. So their sweating mechanism is weak, therefore one of their pathways is blocked and their toxicity is gonna build up. So it might take a while to remind your sweating mechanism to be effective at, you know, deodorants and anti curses. Sprints are different. Anti perrin prevents you from sweating.

Dr. Mary Shackelton ([12:24](#)):

We don't want women to not sweat out of their lymph, out of their armpits because that's where we have hundreds of lymph nodes. So we want those lymph nodes to be able to excrete what you've got coming out. Otherwise, guess where that goes? Right into memory tissue. Mm-Hmm. <Affirmative>. So I do, I do really believe that breast cancer is an environmental disease. It's not related to estrogen, it's not related to genetics. So, and this is one of the reasons, so sweating our culture is really, again, sweating and smelling bad. You know, all the kids are wearing this ax deodorant. In fact, in some schools it's banned cuz it triggers asthma for certain population of people that are sensitive. So, you know, sweating is something that we should be proud of and we should do as much as

Caspar ([12:59](#)):

Possible. I completely concur. I think we've gotten this point also, and I'm seeing this a ton where everything needs to smell a certain way. Yeah. But to me, it's so artificial. You go into these mm-hmm. <Affirmative>, whether it's a car, Uber or something, you smell it. Right. The worst. You go into the hotel lobbies and now all of 'em, they're pushing it so much that you just gotta keep, you know, little spray of something and it makes it smell good to me. It's just artificial. I wanna, it's

Dr. Mary Shackelton ([13:23](#)):

Terrible. Yeah. And I always report it to them like, you know, yeah. Some people that are really sensitive will get a migraine from that, and that'll be horrible. I feel really terrible for these people that suffer from migraines from exposure to, to synthetic fragrance. But yeah, the, the glad plugins, the all of that stuff is extremely dangerous. Those are all endocrine disrupting hormones that you're pumping into your environment, you're inhaling it all day long. And those kinds of things are absolutely response. I had a patient once that had extreme dementia. She was 50 years old, very young, and she was a cpa. She couldn't add four and four. So we did a urine test. We could see all of these chemicals. I said, this one's off the charts. What's happening? Do you use any Fabrice at your house? And her husband said, oh my gosh, her, she has a Fabrice diffuser in every room of the house. So that, that is how sensitive our brains are. And not until we go wrong, then we, then we start to look for medications to address what's happening with us cognitively, when it could just be your glad plugin.

Caspar ([14:18](#)):

Absolutely. So you're advising everyone that is looking to conceive, go through this kind of cleansing of their own environment, trying to make it mm-hmm. <Affirmative> as kind of, you know, non-scented, non chemicals possible. Now for someone that's already had a child and maybe possibly hasn't gone through this cleanse preconception, is there a post conception cleanse that you could do on yourself and the baby as well to help both sides after

Dr. Mary Shackelton ([14:45](#)):

Conceive? It's the same thing. So same thing. Simple. And, and I just wrote a book about this, so it's a real how to guide. Yeah. And so think about this information as it's definitely specific for conception, but it's also for life. You know, like, we're gonna have to learn how to adapt in different ways to how we behave because it's, we're starting to be extremely sick. So, you know, the, the United States is one of the worst mortality mm-hmm. <Affirmative> and morbidity rates in the world. And it's partly because of this unchecked use of chemicals. And when, you know, when a chemical goes into production or manufacturer in, in the Europe or the UK or, or some other country, they have to prove that it's safe before it's released in the United States. We don't have to prove anything as safe. No. There's no oversight on anything.

Dr. Mary Shackelton ([15:30](#)):

We only have to prove that it's harmful once it's here. And that's much more difficult. So, you know, they always, I always ask my patients to really think about what's the counterpart to this in nature? Is there a similar thing that exists in nature like this? If not, there will be a backlash mm-hmm. <Affirmative>. So for example, there's, you know, EMFs don't exist in nature. And now we have these in our environments that is not helping us neurologically. And there's, you know, so you have to look at and respect that whatever is on this planet naturally is probably very safe. And what is here that's we've put here is gonna have some type of repercussion down the line.

Caspar ([16:01](#)):

Yeah. And you know, even the food that we're feeding babies nowadays, I was reading that the, the f d a kind of limited, the num the amount of lead within baby food, you know, as, as if any lead is okay within baby food, heavy metal. What, because parents, and this is an organic baby food, this isn't all sorts of baby food. What can parents do? What is your advice for, you know, getting away from that altogether? Is it to make your own food? Is it to go a different route with trying to feed your child? What would be your advice?

Dr. Mary Shackelton ([16:33](#)):

Yeah, that's a really good question. And if you notice on most supplement bottles now there's a warning on it saying this product, there's Prop 65 in California where they, they ha have to mandate that there's a certain amount of lead in everything. It's coming from the atmosphere. So it co it's circling the world in this atmospheric brown cloud from products of combustion in another part of the world. It ends up in our soil, ends up in our food. Mm-Hmm. <affirmative>. So it's not that the company's doing anything wrong, it's that everything's got lead in it <laugh>. So I always believe making your own food, if you can, is great. But I do, I do believe that the heavy metal burden in the environment is something that's because it's atmospheric. Hmm.

Caspar ([17:11](#)):

So therefore you're saying the detoxification pathways have to be really primed because you're not gonna get away from it. You could minimize that and taking control of, let's say cooking, doing things yourself, trying to, you know, bring the great, the best starting ingredients in. But what are some of the best ways you would say for a child to start to detoxify from heavy metals?

Dr. Mary Shackelton ([17:31](#)):

Well, I think the safest thing is sweating. Yeah. And, you know, kids don't sweat with exercise like adults do. So again, like a sauna people have been hesitant about putting kids in saunas. I actually found it to be completely effective, especially at the onset of an illness. You put your kid in the sauna by the next day, they feel great. So sweating, sweating is great. But also another really important thing is really high dose of antioxidants. So again, diet is medicine. And so if people are eating, you know, a carrot for a snack, there's a lot of vitamin A and that's protective against any kind of damage that lead can do. And also fiber will help chelate some of those heavy metals out. So yeah, it's like parent awareness and choosing organic foods and doing the best you can. And then knowing that the body is extremely resilient and it wants to heal from anything it gets exposed to, as long as the pathways are set up for excretion, it'll happen.

Caspar ([18:19](#)):

Let's talk about, you know, after child is born, we have these rates of a D H D, autism skyrocketing. What's really to blame here? Which, which chemicals are we looking at? Is there a genetic component to it? You know, if you're going to look at and say, here's, here's, here's what we should be looking at as the reason for this, what would you say?

Dr. Mary Shackelton ([18:40](#)):

Well, I, I definitely do not agree that a, d d and autism is skyrocketing because we have better detection. I think it's truly an, an absolute increase in expression of neuroinflammation and the mm-hmm. <Affirmative>, again, the brain is the most sensitive organ of toxicity. And the the exposure to everything, all of it is dangerous for our brain. So, and it's the, the synergistic combination of chemicals fragrances that we've been talking about, pfas, all the flame retardants, all of the heavy metals. And for all of those things, plastics combined to multiple insults, low dose chronic exposures are far worse. Like I was telling someone the other day, you know, this vinyl chloride spill in Ohio yeah, this is a public health disaster and we're watching it very carefully. The Flint, Michigan led problem with pediatric patients. Very, very serious, heavy heavy metal exposure.

Dr. Mary Shackelton ([19:33](#)):

But the, the reality is the low dose chronic exposures are worse. Mm-Hmm. So the everyday exposure to these things are a cumulative, I think about, you know, 52 weeks out of the year, these exposures your whole life and you've got a pretty big toxic burden. Some people genetically set up to detoxify, well, they no never feel it. They don't have any symptoms. But for those who don't do that very well or who are just overburdened, you know, their bathtub is full and they're having symptoms, and it could show up like an autoimmune condition. It could show up as allergies or eczema or, you know, I, I, I actually love it when things come out on the skin. People always wanna put a cortisone cream <affirmative>. I'm like, no, no, no. That's actually really beneficial. You're lucky that's happening on your skin. It wants to come out. That's beautiful.

Caspar ([20:14](#)):

<Laugh>. Yeah. That's a sign. The detox pathways are a little block, but your skin's taken over. Mm-Hmm. <affirmative>. So that's, that's showing you, you know, exactly. Let's get the rest of that detox going and everything. And, and what you brought up before, it's, it's death by paper cuts. Right. It's, it's the little accumulation daily of things that by itself probably isn't that big of a deal, but over time Right. The toxic load builds and builds. What's the one thing you tell patients that surprises them when, when

you're talking about this preconception cleanse, is there something that you're asking 'em to take out that suddenly I never thought of that. Well,

Dr. Mary Shackelton ([20:45](#)):

I would say fragrance, you know? Yeah, that's right. And I have two, two teenage daughters, you know, and my daughter comes upstairs in this cloud of perfume every day and I roll my eyes and, you know but yeah, I would say fragrance is probably one of the most dangerous things because it's not just one chemical. It could be up to 300 per product. Mm-Hmm. <affirmative>. And that's a, that's a big heavy dose. I do wanna share with people, I found this new app that I absolutely love. I don't have any affiliation with it whatsoever, but this is a fun way to approach this with your kids. It's called Yucca, y u K a and you can scan a barcode and it'll rate the product for you. And not only will it rate the product for you, but it will it'll give you a comparable product that's clean.

Caspar ([21:26](#)):

Amazing.

Dr. Mary Shackelton ([21:27](#)):

So it gives some empowerment for choice and it helps kid. Like my, my kid grabbed my phone when I was playing with this and she grabbed my phone and went down to her bathroom. And so we were both surprised that some of the products we thought were really clean, were not, and some of the products were really bad, were not as bad as we thought. Hmm. So, you know, it's a, it's a process of you know, one acknowledging that it is a problem, increasing awareness, education, and then having some options that don't feel punishing. Like Yeah. I don't think my kid's ever gonna put essential oils on in the morning.

Caspar ([21:55](#)):

<Laugh>. That's the thing. You gotta find a balance, right? Yeah. You're not gonna strip every child of everything, take away their phone, all fragrance. Now that's, that's not realistic, but you could limit it. You could mm-hmm. <Affirmative> increase the detox outside of that also. Mm-Hmm. <affirmative>. So there, there's a way to find all this balance, right? Your book, the Preconception Cleanse, where can people find that?

Dr. Mary Shackelton ([22:15](#)):

That's on Amazon under the Preconception Cleanse with my name Mary Shackelton. That'll come up on Amazon. And then I also have a website, mary shackelton.com. I do have a preconception course where you can be walked through. It's kind of a, a good mirror for the book, but it's a great compliment to having people really understand the presentation of what's happening. So it's also a how to, it's four modules, and you can find that on my website, mary shackelton.com.

Caspar ([22:43](#)):

Wonderful. And again, this is so important. I feel like so many people that are trying to have children overlook this mm-hmm. <Affirmative>, they go straight to the ivf, they go straight to almost a blame game. Who's the blame here? Is it me, him, you know when in reality if you both did this detox and, and took this on, I, I believe we would see a lot more ease in having children.

Dr. Mary Shackelton ([23:05](#)):



Yeah. And the A D H D thing really is kind of was the impetus on some level for this, because it's not the rate that we're seeing. This is not normal and it's not okay. And now kids are, pharmaceutical companies are gearing all of their new research to attention focused drugs. Yeah. Ver and and anxiety. And so those are all manifestations of neuro inflammation. Mm-Hmm. <Affirmative>. And so the brain is responsive. If you, you know, if, if you watch your kid early on and you notice something's not right with either how they're behaving socially or academically there is a lot that you can do about that. Yeah. And so, you know, that again comes to nutrients and diet and exposure, watching exposure. Yeah.

Caspar ([23:45](#)):

No, learning all this and being aware gives you power. It's empowering and then you can make the changes rather than saying, I have no choice. Let's just take a drug and put a child on

Dr. Mary Shackelton ([23:54](#)):

This power. My kid has a d d Yeah. Yeah. Like, yeah, maybe to some degree that will always be there, but there are there are ways to mitigate this and, and that's not off often offered to people either. So I just wanna encourage people with families already that this information could help their families stay stronger. Cuz I mean, we're gonna be on this planet for decades. So the stronger and more resilient you are, the less it disease and disability you'll experience.

Caspar ([24:22](#)):

Absolutely. The healthier we'll all be as a society in a world. Mm-Hmm. Dr. Shackelton, thank you so much for your work, for coming on and for this book. You're welcome.

Dr. Mary Shackelton ([24:31](#)):

Thank you for having me. This is fun.

Caspar ([24:33](#)):

Yeah, absolutely. Come back on with your next book hopefully soon. Yeah.

Dr. Mary Shackelton ([24:37](#)):

I think it'll be about sperm health. I'm working on that right now.

Caspar ([24:39](#)):

Ooh, okay. Yes. You'll definitely come back on for that. <Laugh>. As you heard here, it's true that an ounce of prevention is worth a pound of cure, but never more so when bringing new life into the world. Be sure to check out Dr. Shackelton's book, the Preconception Cleanse. And until next time, keep writing your own healing story.