

A sunburst graphic with numerous thin, light gray lines radiating from a central point behind the text.

Healthy Moms Podcast

BY **Wellness Mama**[®]
simple answers for healthier families

Episode 111: Biohacking for Moms – Lessons From
the Bulletproof Conference

Child: Welcome to my Mommy's podcast.

Katie: Hi, and welcome to the Healthy Moms Podcast. I'm Katie from wellnessmama.com

Heather: And, I'm Heather from mommypotamus.com.

Katie: And we are actually still in California. We just finished the Bulletproof Biohacking Conference.

Heather: Because we have awesome husbands who are with our little ones right now.

Katie: Yes, huge shout out to our husbands. They're amazing. And, we wanted to kind of give a recap of all the cool stuff we tried because they're definitely not things we would normally do on a normal day as moms, but it was fun. We got to try some really unique, cool treatments that have their place in medical treatments for a lot of different things, and we wanted to just go through a recap. But also, we're gonna wrap up with some things that you can do that are not expensive, and not really hard to do, and not logistically tough. So, let's go through a list of all the things we tried.

Heather: Okay. So, we're gonna do in order of...should we go from our bottom to the top and end with our favorite?

Katie: Oh, yeah. We could do that. Well, okay so to start off there were definitely some themes that we noticed, and some funny ones, too. But, there's a lot of emphasis on far infrared light and far infrared spectrum which is cool because that totally lines up with what we've both been saying and writing about, saunas.

Heather: I have to say like, you know, as much as I am sort of embarrassed to admit it, like over the years, I'm always looking for the thing that's gonna help me feel my best throughout the day. And so, I do have like a little graveyard in my closet of things that I tried and ended up not feeling like they were really worth my time. But, infrared has been definitely one of the ones that has stood the test of time. So, it doesn't surprise me that it was one of the strongest themes throughout the whole Biohacking Conference.

Katie: Yeah, that definitely we saw it and like in a lot of different implications and methods and it was really cool to see the way it's being implemented. Also, like different types of wave vibration, everything from like Dave's own kind of wave vibration platform that you stand on that's supposed to stimulate lymph flow which we both have talked about rebounders and trampolines and you can kind of do the same thing much less expensively if you're willing to jump.

Heather: Oh, yeah. Also, and dry brushing which is, you know, super affordable.

Katie: Yeah. Those are great ways to do it at home without needing this gigantic plate that weighs 500 pounds. And also, mushroom blends not like the kind you would cook with but there were a lot of different kinds of mushrooms like the ones that are getting popular right now like chaga and cordyceps and lion's mane. Those showed up in a lot of different booths. There were even some people wearing mushroom pants. We saw this. It was pretty spectacular.

Heather: There was a cramp and there was a slightly different theme and it was the "Where's Waldo" theme that you pointed out.

Katie: This is true. So, shout out to Ben Greenfield if you're listening you were not at this conference but you were at this conference. We took pictures of all these different booths that had a picture of Ben in their marketing and it was funny to see it. It was like a "Where's Waldo" of how many pictures we would find of Ben

Greenfield. So, that was fun. But yeah, it was really neat. There was a lot of new technologies, some that we had heard of, some that we hadn't. Definitely saunas. That would actually be higher up on our favorite list I think if we were going backwards.

Heather: Yes, of all time.

Katie: Of all time.

Heather: Like, all-time favorite it's definitely really high up there.

Katie: Yeah. That's one thing we both have made a priority in our houses as far as because they are an investment. That's not a thing you would necessarily like just find every day in a normal house or a lot of people have them in gyms but that's something we both have found seems to have a really noticeable impact. So, we were glad that there seems to be a really big awareness about saunas and the benefits there. That was great.

Also, red light is one that I've been researching a lot lately, I talked about, but there's a lot of cool benefits and there are both similarities and differences with the far infrared because they're both wavelengths and they're both certain areas of the spectrum.

So, you would do near infrared, sometimes used in red light. Far infrared is used in saunas. But, there's a lot of people using that. They had it for wound healing and for athletic recovery and anti-aging. And, that was a huge theme. Certainly, in with the red light anti-aging was big and reducing inflammation was a big theme. That was a lot of vendors. That was their first answer. We were like, "What does your product do?" "It reduces inflammation."

Heather: Oxidative stress, inflammation, sleep seemed to be big things.

Katie: Yes, exactly. So, let's see. So, let's start with counting down I guess the ones that we really, really loved.

Heather: Okay. So, let's start here.

Katie: Okay. So, I'll talk about one that was like it was super fun. It wasn't high on the list because it's not something that you could ever actually have in your own house and that could be like, if we're gonna do like our top five maybe that'll be like number five. But, it was called an ARX machine.

Basically, the idea is that it's a type of resistance machine and the way they explained it is that if you were gonna lift a weight it's much harder always to lift it up then to put it down. So, if you like were doing a curl which I don't think women usually do those but if you were gonna do a curl with a dumbbell like you would pick it up and eventually your arm would fatigue on the up but you would almost always be able to put it down.

And so, this machine challenges that and says, "Okay. So, we're gonna resist on the up and the down." And, it also is computerized and it has a motor that was like incredibly powerful and can match anybody's performance. So basically, they would measure your strength output and kind of like your median effort and then the machine would challenge you both up and down and you would only do four reps. So, like forget the four-hour body, this was the one minute workout. It was like literally 56 seconds and it was one of the hardest workouts I've ever done. It was crazy hard.

Heather: Yeah. I think the guy that we were talking with, he is a bodybuilder but he went from what, working out like two hours a day to 30 minutes a week because it's that intense.

Katie: Yeah. And we were in line to do it and we saw some guys who looked really, really in shape who needed help standing up after they tried it. So, we were like, "Oh, gosh. What are we doing?" But it really was hard.

And we're definitely sore after trying that. But it was really cool. It makes you think about a different way, a different concept of working out and something I had never considered. So, that was just fun. That was a fun one to try.

Heather: Another fun one we tried was stopping by the oxygen bar and the hydrogen bar. And, the oxygen bar was infused with essential oils which is really cool, some lavender, some grapefruit, and lemon. No, was it orange and lemon? Anyway, it was great. And, I really like that. But, the hydrogen was actually my favorite of those two. So, the principle behind the hydrogen is that the hydrogen goes into your body, your breathing it as a gas and it is helping to what, pair with is it reactive oxygen species like at that point? I'm kind of...

Katie: I think that's what they said. Yeah.

Heather: Okay. So, it's pairing with it and basically reducing inflammation by reducing your oxidative stress. So, I actually noticed a little bit, I felt a little bit more clear minded. And, I went into all of these not expecting to notice anything because you're not really there to try them out at a therapeutic level you're just sort of getting to play with them for a few minutes. But, I really enjoyed it and felt like it did make me feel a little more clear minded. How about you, did you notice that one?

Katie: Yeah. I think like it definitely was...and it could be placebo which is always hard to tell especially when you're stacking biohacks on each other but it did seem to really help with mental clarity a lot and that was really cool. They didn't like offer this as a service as a vendor but there was a lot of emphasis on different stem cell therapies and there's a podcast episode coming about this soon but the important thing to realize is that these are adult stem cells. So, they are coming from your own body which is really cool because they're the most effective if they come from you.

And, there seemed to be a lot of debate. There were like three distinct camps. There were the camps that they should come from your bone marrow. There was the camp of they should come from your fat cells which a lot of people probably would love that idea because they actually get rid of your fat cells when they do that. And then, there was the idea that they should come from your blood.

But all of those seemed to be appearing as a trend both things that like the biohackers themselves were doing but also like there were clinics for this, they were products for this. It seems to be especially really beneficial for injury recovery. There was some research that it might replace ACL recovery and orthopedic uses that instead of surgery they could just inject stem cells in certain cases and the body would repair itself. There's also a lot in the anti-aging world. They're really delving into this or traumatic brain injuries. What else were people using this year?

Heather: Yeah. The traumatic brain injury was the thing I think I heard the most which was amazing because yeah, they seem to have noticed some significant improvement after that.

Katie: Yeah. And, I have to give a shout out to my dentist because he's a personal friend too but he was actually the very first person I heard about this from, way before the biohackers were doing it. And, what he was doing... So, to understand the difference they can draw out blood, fat cells or marrow and they basically spin it to get the plasma and that's called platelet rich plasma.

And, if they can do a further process to actually pull out stem cells apparently which is what they're using in these treatments. But, he has been using platelet rich plasma and a congealed version called platelet rich fiber for a long time as a dentist. And, what he found is that like if you have to do an extraction for wisdom teeth or for a child who loses a tooth if he could get platelet rich fiber and pack it into the hole and then sew it up there would be no dry sockets. The body would recover in like half the time. People would not experience pain. Like, he would see people a couple of days after having a tooth pulled and be like, "Hey, how's your mouth feeling?" And they'd be like, "It's good. No pain. Nothing. I mean, it's healed."

Heather: That's amazing.

Katie: So, a huge shout out to him if he's listening because that was amazing that I heard about it from him first and now all these brilliant minds are very much on the same page. So, that was pretty cool. And it's really cool that now they're finding ways to use stem cells hopefully in medical settings in ways that are gonna prevent surgeries or things that are causing lifelong problems. Someone I interviewed recently said if a child gets an ACL or MCL tear and has to have surgery they have, I think he said an 80% chance of getting arthritis in that joint.

Heather: Wow.

Katie: Yeah. So, it's really cool that people are exploring those kind of alternative treatments.

Heather: The next one that we had that was really cool and I was very excited we had to kind of jostle for a slot here because there were so many people wanting to try it was hyperbaric oxygen therapy. And, this one is used a lot for traumatic brain injury as well, burn healing, and it has a lot of therapeutic applications. Basically, the idea is that when you put the body in a pressurized environment that it increases the ability of the blood to transfer oxygen to damaged tissues. So, it accelerates healing all throughout the body and just allows for improved oxygen delivery. So, we tried that. What did you think about it when you were actually in there?

Katie: At first, I was worried because I was afraid I was gonna be super claustrophobic in there. And, there's a lot of different ones that you could probably explain the differences better than I could but this one looked like a gigantic pill shape. Like it was huge but it was...

Heather: I thought it looked like a submarine.

Katie: Yeah, like a submarine. But it's only like a few feet wide and you get zipped into this thing and then they're putting air in. They're not sucking it out. But you're like stuck in this thing and it's pressurized. And, you just can't get out. So, I was a little bit worried about that because sometimes even elevators have bothered me in the past but it was totally fine. It wasn't that claustrophobic at all. What did you think of it?

Heather: I loved it. I think you have more experience with pressurized environments because you scuba dive. So, for me, like there was a little bit of adjustment as I was going under pressure. Like my ears were doing all kinds of funny things and I didn't quite know how to manage it at first. But, once I got like a little comfortable, it was extremely relaxing, like so peaceful. I felt like I was in there for maybe 5, 10 minutes and it was actually like half an hour, maybe 35 minutes. So, time just sort of stood still and it was an incredible experience.

Katie: Yeah. And, they're using this in a lot of medical treatments. And so, the ones we were in were the soft sided, right? There's like several different kinds.

Heather: Right. So, like on the low side of pressure like 1.2 or 1.3 atmospheric...

Katie: Which means like two or three times the atmosphere you feel normally on Earth.

Heather: Right. And, it can go up to around 2.5 for the harder chambers which are used in hospitals and environments like that, right?

Katie: Yup. And, it made me wonder too because you mentioned diving. Like, I really do wonder because when you're diving especially beyond 60 feet like your body is at a tremendous amount of pressure, and you do have to equalize. I wasn't expecting that with hyperbaric oxygen but it makes sense. As they're adjusting the pressure, you kind of had to equalize your ears to get them used to it, or kind of it can hurt your ears which you also do in scuba diving, but it made me wonder. Like, with diving, you're breathing from an oxygen tank. You're at pressure somewhat down there. I know we had to be really careful with like the bends or nitrous problems

down at depth because they use nitrous in the oxygen as well, but I wonder if there's any beneficial effect to scuba diving?

Heather: So, you feel like you got that same because it was so peaceful. Is it the same like that when you dive?

Katie: Yeah. It's so calm below the ocean. And also, there's like a really cool sensory deprivation aspect when you're under the water because everything is muffled. It's like having a filter on the light because everything is kind of blue, and you move slowly because you're fighting the water but it's very peaceful. And, to me, like almost meditative. I've never been good at just sitting and trying to think of nothing.

So, scuba diving is more like meditative for me after...a full disclosure, after I get down there, the first few minutes of having to breathe through only your mouth and like... Because it is harder to breathe when you're diving because you're under all that pressure and you have to kind of, like, work to expand your lungs. But, after that adjustment, it really is peaceful. So, I wonder, if anybody listening knows, I'd love to know if there's any similarities with scuba diving.

And then, there was a definite theme with like brain training which makes sense because it was a Bulletproof Conference and Dave Asprey is very big on cognitive training. But, there were several different booths for that and we like talked, I think we talked to all of them and we tried a couple of them. And, I want you to talk about it because you got to try like what's considered the cream of the crop brain training.

Heather: Yeah. 40 years of Zen that's Dave Asprey's I guess child, not child but like one of his favorite hacks. And, I loved it. So, basically, 40 Years of Zen is they put you inside a pod that's sort of like not sensory deprivation because you're hearing sound but they put some electrodes on your head and they tell you to just achieve alpha and like when you do you'll you hear like this soft pleasant gong sound.

And, there's some white noise in there and then they tell you to raise the level of white noise. They give you no instructions about how to go about this so you just go in there like I have no idea how to play this game or win this game. And, there's gonna be somebody on the outside looking at my brain while I'm doing this. It's kind of crazy. But, as soon as you go in it's so neat because your brain will naturally just start going through different patterns and you'll hear that gong and it'll just start to learn. It's adaptive.

And, it's really kind of an amazing way to experience how flexible we all are, like how adaptive we all are, and how much our brains can quickly figure things out when we don't necessarily even fully understand what it is that needs to be done. It's sort of I guess life-affirming in some way just how adaptive we are.

But, the other thing I really loved about it was, for me personally, in order to find the alpha waves I ended up really pulling back memories of some of the most beautiful points in my life. That was the thing that would drive my alpha waves to bring that gong sound. And, the cool thing was, it was like a personal lie detector test because I pulled up some memories that I felt like should have that effect because they were supposedly the highlights of my life and it was like dead silence inside the pod.

And then, I pulled up ones that were just really mundane ones maybe to everyone else. They are definitely not what you would consider the highlight reel. Things like sitting next to my husband and the smell of my newborn son. Okay, that one is actually probably a highlight reel for most people. But just like sort of mundane things like changing a diaper and laughing with the baby, you know, those kinds of things and it would just go ding, ding, ding all over again.

So, it was such a neat experience to see that like our brains are so adaptive and then also to have the opportunity to kind of like get in touch with actually at the core what really matters to me. And have that biological affirmation of, you know, like just at the highlight reel that you would expect other people to be impressed by is not the thing that actually matters to us in the end.

Katie: Yeah. And, it was a cool concept because from what I read of it this was something that really helped Dave Asprey personally. Like, he credits a lot of what he's been able to accomplish with this but the idea of creating alpha waves is kind of like some people would refer to that as the flow state. And so, like athletes at the peak of their performance would feel this or like anyone who is good at any particular thing when you get really involved in it it's like almost like that timelessness like when time seems to standstill and like your super creative and things just kind of flow out of you and you like know what you're doing. That's kind of what they were trying to harness.

And, from what I read, they were studying monks to kind of figure out how to do this because they would realize that monks after a certain amount of years of meditation had sort of like figured out how to create these pathways in their brain that most people didn't have and they wanted to figure out how to do it in less time. So, it's really cool that you actually get to experience it like in a day instead of 40 years. Like that's the name.

Heather: Like the idea, right.

Katie: 40 years of meditation. But also, I think important to know like it's a by-product over the long term still of not just meditation but just being like a conscious awareness of your thoughts and that kind of thing. So, while all of us can't...it's so cool to be able to try it, but all of us can't go sit in a pod or go do these kinds of training but it's a good reminder that it's important to pay attention to our thoughts. And, even the things we can't all have like the lie detector on a daily basis but to think of the things that are truly important.

Heather: Yeah. And like I think the big thing with alpha waves is silencing the inner critic because we all have one. And so, not silencing but just like dialing that down so that we can just be more present in our lives. And, one of the things that I found and I think this is probably true is that gratitude is one of the best ways to do that. Like even as I was in there it confirmed that the things that I'm grateful for are the very small things. And, you know, I keep a gratitude journal and so, that's a daily practice that you can do that's totally free that is still getting you into that flow state of being present and practicing gratitude and that making it easier to dial back that inner critic and just be more present in your life.

Katie: Yeah. And, we do that too. It's like a fun thing to do either at breakfast or right before bed with kids too. It's like, "What are you grateful for?" And, just have them think of like three or five things that they're grateful for just because you're getting them to ask that question of themselves. And, I think that's a good thing for any of us but especially great to learn at a young age to think what am I grateful for and to reframe even the hard things in life as far as what we're grateful for because objectively any of us listening to this podcast are in the top 1% of the world as far as things that we have access to in a daily life.

And, simple things like food and water and shelter and clothing and things that we take for granted that so many people have. So, just being aware of that and going back to gratitude for all the great things that we have in our lives. It's a great sentiment reminder to not... Because the inner critic is there and it's, there for a reason and that helps us in many situations but it's not the best for stress. So, it's a great point just focus on the gratitude.

Heather: Yeah. Absolutely.

Katie: And, I think that's a great segue too because that's a super easy free one that anybody can implement. It doesn't really take any time or even much effort. And, all of these things are kind of something we noticed was they're awesome at like speeding up things that you can do already or things that especially exist in nature in some way or like you don't have to have all this crazy equipment or hook yourself up to all this crazy technology to be able to get the benefit. So, like gratitude probably tops the list. That's a great thing. But also sleep, like there were so many things there that were designed to improve sleep or let you even sleep less with better sleep. A lot of things were involving sleep but it just highlighted the importance of, the very basic concept of getting enough sleep.

Heather: And, making it a priority which is sometimes really hard to do.

Katie: Especially as a mom. Like, we certainly understand that there's times when it just doesn't work. Like, there's no way you're gonna get enough sleep when you have a newborn and that's okay and you have hormones then. But, when your kids are sleeping and it can be a priority that's a great thing to make a focus because I've heard pretty much every doctor I've ever talked to and especially mine is very big on this like if you aren't sleeping enough it really does not matter what you're eating or how many supplements you're taking like that truly is a key because it affects your hormones on such a deep level.

Heather: And, repair mode. I mean, that's when your body is doing most of that important work.

Katie: Yeah. And that one doesn't cost anything. It's just you have to make the time. So, that's a huge one. And then, how many do you think there were? I mean I think at least 10 that had to do with either far infrared, near infrared, light of some kind, light therapy, like light therapy on the eyes but that all highlights the importance of light.

Heather: Right. Like, we don't often go...sometimes it's just as simple as going outside and doing that and maybe it's not always easy but if you can make time for it is like absolutely great and does very much the same thing.

Katie: Yeah. And we've both written about that both from the like try to protect your light at night because your body needs like a lower light environment to create the right melatonin patterns to sleep well but the converse is go outside during the day and get bright light which also trains your circadian rhythm correctly and that doesn't cost anything.

And, that doesn't even have to mean that you're out at the beach in bright sunlight. It just means you got sunshine which even on a cloudy day the light outside is many times brighter than the inside light. It doesn't feel like that because the inside light is designed to just be illuminating spectrums that like let us see better. But, there so many different wavelengths of light outside that we don't get inside that are good for the brain. And, that's another free one.

Heather: I think too, some of the things we tried, like even the hydrogen therapy like I think a huge reason that it was so beneficial was because I was taking a minute to breathe deep because I was trying to get the most benefit from it. But, I think breathing alone, I mean, itself is one of the best free things we can do to balance our autonomous nervous system, to get oxygen into our bodies. So, you could speak maybe more to that but I think yeah there's like complicated ways to do it but just taking deep breaths and doing it mindfully is one of the best biohacks ever.

Katie: Yeah. And, there's a lot of like, I mean, any type of meditation that people do it always involves a breath component. Or like when people are upset or stressed like they hyperventilate and then they have to work to calm their breathing. Like breathing is so related to so many bodily functions. Obviously, like it's one of the most important things we do.

So, even if that just means going outside again like while you're getting the bright light and just taking slow, deliberate breaths or there's all these different breathing exercises you can do to, like, help your breathing patterns. And, I know one that I've talked about before is the, like, 4-7-8 breathing before going to bed, so you would breathe in for a four-count, hold for a seven-count, and then breathe out for an eight-count, and that particular type of breathing helps the body get ready for sleep. But there's other ones for focus or for different things, but at the end of the day, they're all about getting enough oxygen in your body. And, things like hyperbarric make that much easier because they increase pressure in the way that you can't by just breathing. But, at the end of the day, just like with the sleep, you just have to breathe, too.

Heather: Yeah.

Katie: Yeah. And I feel like we should also end again by thanking our husbands, because while we got to go try all these like crazy fun therapies, they were home with our kids, reading bedtime stories, and feeding them, and it's super awesome. Because as moms, like we know it's very hard to get away or to ever have a minute to breathe. So, we're really grateful we got to have a girl's weekend and try all these crazy biohacks.

Heather: Yes. Thank you, husbands.

Katie: Thank you, husbands and thanks to all of you guys for listening. We love to hear your feedback if any of you guys have tried any of these, or on any future topics you want us to talk about, and I will see you next time on the Healthy Moms Podcast.

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