Introduction and EMF Basics

Welcome back to the reverse Autoimmune Disease Summit series everybody. This is the healing your energy. The fifth version. And I'm delighted to be talking about deciphering EMF protection product claims with our Blanke, who is the CEO of Shield Your Body, whose mission it is to make technology safer, hundreds of thousands of customers in over 30 countries, and having been interviewed on platforms ranging from ABC television to Electric.

Since our is an internationally followed expert on issues of EMF health and safety, he was inspired to create a when he coauthored the bestselling book overpowered with his father, Doctor Martin Place, one of the world's leading EMF scientists.

He has degrees from Columbia University and UCLA and now hosts the new Healthier Tech podcast. That's a great podcast subject healthier tech. Welcome to the seminar series.

Hi. Thanks for having me. So, Electric Sense, of course, is my, co-host from the last summit that we did about the energy body and it's how I found your work that Lloyd Burrell and I would love to just start at the the ground here and say, what are EMF?

You know, for people that are still figuring this out? Sure. Yeah. Great question. Great starting point. Emfs are a form of energy that are, made from the combination of forces of electric, electricity and magnetism.

So they are effectively, almost entirely all invisible forces that are created in the world around us by anything that runs on electricity and anything that communicates wirelessly.

Now, there's some other forms of EMF as well. One that we all know is is visible light, right. So visible light, like we get from the sun, that is a form of EMF energy.

Now, there's certain forms of EMF with much more energy than visible light. And these are things like X-rays and gamma rays. And they have so much energy that they can knock electrons loose from our cells.

And, that's why we call them ionizing, because they can ionize our cells. And we all know, and it's universally accepted, 1,000% non-controversial, that those forces are, very harmful even in very, very, very small doses.

Which is why when you get a dental X-ray, right, they cover you in lead and leave the room. Right, because we all know this stuff is super harmful. So then they're forms of EMF with less energy than visible light, and they don't have the same amount of energy, right?

So they can't ionize our cells in the same ways. And that's why we call them non-ionizing. And it was long thought that these were inert forms of EMF, that they were effectively harmless, to us and all living things at, at levels where they don't cause us to heat up.

And these are the forms that are emitted by, power lines, electrical appliances, cell phones and Wi-Fi and so forth. Now, while it was long thought, that they were inert, biologically inert, it turned out and it has more recent decades of science have shown us that those assumptions were false and that they have biological effects even at very, very, very low doses, much lower than you would be exposed to.

For instance, by talking on a cell phone. So this is really important because we're surrounded now. Yeah. What, what are the sources? You know, because this leads us to the discussion about protection from, let's think about, you know, now that we know what emfs are, what are the sources?

Yeah. So, I mean, it's increasingly everywhere around us. I mean, even if someone, you know, like me thinks back

to when I was a kid, that the differences are staggering in terms of how much we're exposed to.

Common EMF Sources Around Us

But, you know, big ones tend to be cell phones because, and we can talk about this in a bit, but because of how close to our bodies we carry them. Right?

The power of EMF radiation diminishes exponentially with distance. So, even if the cell tower a mile away is much more powerful than the phone in our pocket, odds are we're getting exposed to much more powerful radiation from the phone in our pocket than the cell tower that's a mile away.

So. But it's everything that communicates wirelessly. So that's no longer just cell phones. And even just Wi-Fi. It's Bluetooth, it's smart thermostats, it's smart refrigerators.

It's, this entire wireless infrastructure that exists around us. Not increasingly. It's not even just from the planet, right? We have, orbiting satellites that are transmitting networks down to terrestrial level.

And so anything that I say that that communicates wirelessly, then we also have a separate set of exposures that come from anything that runs on power.

So that includes power lines, power transformers, electrical appliances in the home, even the wiring in our walls. Now, when you take all of this together, the amount of the world that has become electrified and the amount of the world that has become, wirelessly connected, we are talking about, an incredible number of exposures now.

The in the the more urban an area you live in, the more exposed you are going to be. And that just comes from the type of densification that that is a feature of urban life compared to, to rural living, where there's, fewer neighbors, less infrastructure, fewer, towers and so on and so forth.

But it is increasingly challenging, for people to find places on the planet where there are no exposures. That used to be easier. And now it is. It is it is just not that easy.

So we, you know, you have palm trees behind you. Is one is the area where you live something that's conscious for looking at that? Because I know we have a place on San Juan Island and that was one of our conscious decisions, was, trying to get into a more pristine atmosphere, so to speak. Yes.

I mean, for you for sure. To me, cities are for visiting. Not not for. They're not they're not fit for human life. Cities are a ton of fun. They provide a tremendous amount of benefit and resources for people economic opportunity, health care, infrastructure, cities are amazing, but increasingly they, are just very, very stressful.

And I don't mean that just in the the emotional way I'm talking about all the, physical and physiological stressors that we are being exposed to, effectively on a nonstop basis once you're in an urban environment.

As I've gotten older, I've, and of course, the amount of EMF in the atmosphere has in the environment has increased. I find it increasingly challenging to have a satisfying night of sleep.

In a city, compared to how I used to feel or how I feel here at home. Yeah, I agree, that's my experience too. So what is EMF protection then? So EMF protection is anything that, protects us from the harms resulting from exposure to EMF radiation.

So there's a whole if, if you or someone goes online, just searches for EMF protection, even just on page one of the search results, you'll see a lot of different kinds of options, right?

So EMF protection is not just one thing. It could be, for instance, products that block the EMF radiation that shield it, products that claim to make the EMF inert or harmless.

Products that boost our resilience against the harms that come from exposure to EMF radiation, and even some that claim to be able to reverse the damage, from EMF exposure.

So there are just a ton of different options, all of which kind of fall under this broad umbrella of of EMF protection. So I know that, you know, you just said you can go online and you can find a whole bunch.

And it's true, like you just put the search German EMF protection, you're going to come up with so many different things. And, you know, I mean, are these regulated? No.

So not at all. I mean, and so EMF protection is entirely unregulated. But I mean, that shouldn't be surprising to people when you actually think about how much of just EMF emissions are unregulated in our lives.

This is just largely an unregulated, area of life. There are certain exposures that are regulated, theoretically regulated, such as from cell phones.

Regulation Gaps and Risky Wearables

But, you know, depending on where you live in the world, there there are whole bunches of exposures that aren't regulated at all. And, you know, one that I tell people a lot because it's just everywhere is power line emissions.

Unless you are, a utility worker working in a power plant, if you're just a consumer living in your home or walking down the street, the amount of EMF that you're exposed to from that, any nearby power lines is un regulated.

Another unregulated area is, cars, at least as far as I can tell. And we've put some effort into trying to figure out what, what the regulations might even be.

But you can't find what the EMF emissions are for any car model that you might be interested in, which is obviously increasingly important, not just with the advent of hybrids and electric cars, but with the a massive incursion of wireless technology into these cars we're talking about, you know, from the from the batteries or from the inverters, from the radial tires running on the road.

To the, the, the Wi-Fi that you have running the lidar, checking the street in front of you, all of these different sources in this, vehicle where we all spend so much time and you can't even find out what the manufacturer claims is the EMF emission.

So the same is largely true for, EMF protection. And what that means is it sets it sets this landscape, where consumers are incredibly susceptible to misleading claims and false advertising.

And you'll see that a lot. Again, if you just search for EMF protection, you know, just that broad search term, you will see a lot of things that I would argue fall under under that category.

You know, you're just describing the car about last summer and I'm, I'm, I'm having a moment. Yeah. I was looking for all of the cool safety features.

Yeah. And now I'm having this little, Oh, no. So I have been very careful about not doing the, we had, Alexa in our house for a hot second, and then I said, oh, my gosh, no, like, this has to go, you know, and then, we got a new oven.

And I said, I don't want it to be smart. I don't want a smart refrigerator like some of those things. But I forgot about my car. Yeah, I'm sorry to have brought that up.

Luckily, I don't spend very much time in my car. You know, I'm in it maybe once or twice a week just to go to to the grocery store. So it's very I don't I don't commute for long distances.

So that's good. Yeah. That's good. So I'm like, okay, well it's probably not the worst thing. And and I also don't do

the earbuds, you know, that you just tuck in that are wireless.

So those seem like they're that's not a good idea. So I totally agree that. Yeah, because I am I'm one of I don't go around telling people not to use technology.

I advocate for a more mindful use of technology, and at least being aware of some of the costs. But when it comes to AirPods and other Bluetooth headsets, I am, I am, very I advocate strongly against their use.

It's another example that I use to to explain to people not only that this stuff is barely regulated, but it's released into the public without any long or even medium term testing into what the health effects, are or will be.

We don't know what the increased rates of cancers, for example, are going to be from air pods because cancers take five, ten, 15, 20 years to form and the air pods are not that old.

Right. And, and then, of course, you know, children are using these products and, and it's, it's just it's very it's it's very disconcerting. I, I'm, I advocate generally quite strongly against the use of any wearable, wireless technology because when it, as I mentioned earlier, right, the, the increasing distance is, is a, it's a big factor in how strong your exposure is going to be.

And with wearable technology, there is absolutely no way to increase the distance. So you're always going to be getting a full dose of the radiation that these devices emit.

I have the same thing about the watches and rings that are tracking your every health move. You know, people are are using them for health monitoring information.

But at the same time I'm like, you can't sleep with this stuff, please. You know, and so, well, there are some that and I generally I mean, if I'm asked about specific brands that I happen to know about, I'll talk about them.

But I'm just speaking in broad terms. There are some that effectively have an airplane mode. And so they'll be tracking you all the time, but they won't be transmitting all the time.

And so those are obviously the better options when it comes to, to those, wearable trackers and is airplane mode, does that fully shield you or is it.

Yeah, almost. I mean, it it cuts so much of the EMF that for all intents and purposes, I say it it eliminates the EMF. But anytime you have some type of electrical signal, traveling on a circuit, you're going to get a little bit of EMF, but it cuts out so much of the EMF that I generally just tell people it eliminates it.

Okay, well that's good. I do have, a shielding device that my keyboard sits on. So it's we're going to talk about this now, okay. Like the science part of it.

So there, there there isn't a lot going into the study of these protection EMF protection and shielding devices. Right. Yeah. So you can, What? When? Well, depends which type of stepping back.

It depends which type of device you're talking about. So when you're talking about, for instance, EMF shielding products, which is the kind that I make, and sell you can do, laboratory testing, but you commission it.

How EMF Protection and Shielding Work

It's not like published in a peer reviewed journal. You know, it's like someone like me going to a lab saying, can you perform a test and see how much radiation this blocks?

And so you can have that type of testing done when it comes to the type of, you know, scientific journal research? No, that is not very well studied. There are, is there are there are there is one study I'm aware of that actually shows that a device similar to the one you're using, except it was a, oh, no, that in that.

Sorry. And that's what it was. It was, it was a parallel, but using EMF shielded apparel can, reverse, well, reduce or reverse autoimmune disease, which I thought was very, interesting.

And, and there was another study into, a product similar to the one that you're using there, except designed to go underneath the laptop. And that one showed, improvements in male fertility.

So just by using a product like that, you can, you can, reduce the, the, the amount of damage that results to sperm as a result of, of the EMF exposure.

So when it comes to the scientific benefits of reducing your EMF exposure, a lot of that is just, the logical conclusion. Right? So if a certain amount of EMF exposure, leads to an increased risk of forming X, then logically reducing that exposure would reduce your risk of forming X.

Right. And so what you're looking for is, confidence and data to support that using a product will actually reduce your exposure. Right. So that's where the types of testing that I was talking about just a minute ago, that's where those come in.

And those are called attenuation tests. And they show how much radiation is attenuated or blocked. When you are using a given type of product. Okay. All right.

So so what's the first thing someone a consumer should do when really evaluating these potential EMF protection products. So yeah, the first thing I recommend that people do is actually see what the product is claiming to do.

Right? Because, you know, makes EMF safe or, you know, makes your life better. Those those aren't those aren't product claims, but if you look at a lot of these websites, you'll see that's actually what what their message boils down to.

That's what they are trying to sell you. And then there's other what does, does it claim to block EMF? Does it claim to neutralize the EMF? Does it claim to repair damage from EMF?

These are all different things. They're all different types of they they may all call themselves the same EMF protection phrase, but they're all different things.

And so you want to figure out what type of EMF protection you're actually evaluating, what is the product claiming to do and how is this product claiming to help me?

A lot of the time, as I was saying before, you know, if you actually look at it, you'll see they're not making any real product claims at all. And so those are the first set of EMF protection products that that I recommend, kind of just walking away from.

You have to see if, if they're actually making a claim or just a sales pitch, then you'll want to see if the claim is actually backed or backup all or demonstrable.

Through science. Right. Is are they making any claims that are measurable, that are quantifiable or not? And is there any way that you can verify that the product is because EMF it's it's as you well know, right.

It's invisible. It's odorless. You can't see, touch, smell, taste it. Then you know, when you actually read about it, there are all these long, confusing words, right?

It's just very easy to obfuscate, ideas when you're talking about EMF. And so you want to see if there's some way that you can know if the product is working.

So those are the first two things. Is, is the product actually making a claim. And if so, what is it. And then if they are is is that is that claim backed by science.

Is there some way that I can actually know that the product is doing what it is claiming to do? So you mentioned earlier, you know, we've talked about EMF protection and then shielding and, you know, your company shield your body.

So what what is it that we're talking about is the difference between EMF shielding and, the. Yeah. Well, so EMF shielding is a type of EMF protection.

It is. So it was it's the technology itself is, almost 200 years old ever since, British scientist named Michael Faraday invented what became later known as the Faraday cage.

And what he showed was that if you weave certain conductive metals into certain patterns, you can block and deflect EMF radiation in the opposite direction in much the same way that a window shade can block and deflect sunlight.

Now, since I believe it was 1836 and the almost 200 years since then, we've gotten a lot better about making those those conductive metals into really, really small fibers.

Right? So I mean, like in my baby blanket, they're thinner than the width of a human hair. There's the silver fibers that go in there so you can weave these, very, very thin metallic fibers into fabrics and you can create these shields that block and deflect, radiation in the other direction.

And so that is, what EMF shielding is, and that is how, we at swab use it in, all of our products, that to reduce your exposure to EMF radiation all of the way.

Because, like I said, it blocks and deflects. It's testable. Right? It's testable in a lab. It's testable by you at home because you can take a meter and and see, is this actually working to reduce the amount of EMF that's getting through?

So talk about some of the products like, you know what what is a product that, someone, when they go into your store will be able to find? Because I was amazed at just how creative this is.

You know, I was like, oh my gosh, this is amazing, right? So Mike, thank you. My, so some of my favorites, there's one called the Phone Pouch, which has been my best seller since I launched it.

And that was at the end of 2015. And the phone pouch. Sorry, I should have had this handy, but it's. There we go. The phone pouch is a pouch for your phone, and it has a belt loop on the back.

Evaluating Products and Practical Tips

And so you put your phone in the pouch, and then you put the pouch either on your belt or in your pocket. And it makes it safer to carry your phone because the back of the pouch is radiation shielded and the front isn't.

And that's to allow the phone to continue communicating. You don't want to fully shield your devices, because if you do, a, you won't if it's working, you won't actually be able to send and receive calls.

And so if that's or messages or whatever types of wireless notifications. Right. And if that's what you're looking for, then just put your phone into airplane mode.

But beyond that, if you fully shield your phone and it's actually working, the shielding, I mean, that means your phone because the way they're they're designed to work, it will compensate for the interference by boosting the power of the emissions.

And so it can overheat. It will rapidly drain the battery and reduce the age of the battery life. So you don't want to fully shield your your electronics, which is why this is how all of my electronics accessories I found heat up so hot before.

Yeah, and they're not supposed to. Okay. Yeah. For for. Yeah. No for that. Because that gets into something. Because the entire basis for cell phone radiation regulations, in the United States is so that they don't emit so much EMF that they actually heat you, your tissue, heat your body.

And as everyone I know can attest, that doesn't always work right, because the phone can get hot. You can feel it. If you hold it up to your ear, you can feel it on your ear, or if it's in your pocket, you can feel it on your thigh.

And at that level that's actually causing immediate term damage. That's called the thermal effect. And so you definitely if your phone is so warm that you can feel it, you definitely want it to be further away from your body.

So this is it in my pocket. And then again, that's the number one tip that I tell people who are looking just to get started. They want to make a difference in their EMF.

It is to not carry your phone in your pocket or in your bra, or anywhere up. Yeah. Or anywhere immediately adjacent to your body. Because when you're doing that, you're getting the full dose.

And in fact, it surprises a lot of people to know that if you read, for instance, the iPhone manual, they tell you not to carry it in your pocket or hold it up against your head.

But it's in the small print in the manual. So a lot of people don't realize it's to me that's very frustrating because that's literally how they design the product.

To be used, right, is to hold it up against your head. And then in the small print they're like, don't use it this way. Now I have a surgeons general warning on it.

Yeah, they've they've done that. They've tried that. I think it was overturned that. So they did that in in Berkeley. It wasn't Surgeon General but it was a, it was a mandatory warning label on the, on cell phones.

But I think the wireless industry was able to overturn that through lawsuits. But any anything because. Right. It's one thing for me to stand here or sit here, as the case may be, and tell you, don't carry your phone in your pocket because that is such an important thing for people to, to, to do if they're if they're looking to cut their EMF exposure.

But phones have become really, really important and a lot of people don't have options were to carry it. Right. So that's why creating products, like my phone pouch and, I have, a sling bag which is made for phones, plus some bigger things.

And I have some more bags on the way. That's why those products I believe in so much. Because I really feel like, it, you know, because as we talked about earlier, right?

The amount of EMF in the environment is, is tremendous and growing. And it can become disheartening when either you look at your living in a city, you look out the window and you see eight cell towers, and you look on Wi-Fi and you see 25 different networks that you could join, and you start to think, how could I? What?

Why bother? I'm not. But even when that is the world around you, it is how you relate to the technology that is closest to you that is so important. Because, you know, thinking about this, this thing, it's designed to communicate over miles, right?

Because that that's the nearest cell tower could be miles away. So this has to be powerful enough to do that. But then it's not just that because it also has Wi-Fi and it also has Bluetooth.

And it also the newer phones also have NFC or near field communication, which is what's used for Apple Pay and Google Pay and those technologies. And so a phone isn't just a single high powered phone wireless card, it's multiple wireless cards all operating at once, none of which were designed to be operated while they're directly up against your body.

But people are walking around all the time with this, and it's extended periods of time. You don't tend to walk around with the phone in your pocket for two minutes.

You tend to walk around for hours. And so I really believe strongly in making products that make that a safer thing to do. My dogs are barking in the background.

I want to share my screen for a minute. Okay, so this is Shield Your Body shop. And I just wanted to show like here's here's the air tube headset. Here's a beanie a baby blanket.

You know, the a canopy that you can put around your bed. Bandana like underwear. Right. This is this. There's so much flexibility here. So many different kinds of things that you can do.

And when I look at something like shield your body, neck gaiter, you know, I'm automatically thinking about people with Hashimoto's thyroiditis. You know, I'm thinking, that's such a good idea.

You know, and, you know, to prevent Hashimoto's and to also make it so that it's not another tender place that can be attacked. So, anyway, I this is the kind of I wanted people to get an idea, like, here's the sleeping bag, here's the tablet pad, and, you can just go through and slowly, slowly, you know, begin to shift things so that, you know, you have, like, look, there's a wristband.

If you do want to wear a wearable device, you can you can seal that, right? Yeah. That's fantastic. So I wanted to give people a glimpse in here. It's shield your body.com shot dot shield your body.com.

And you'll get an idea of what what's here. Yeah. Thank you. Yeah. Yeah. And and we also on the website have a just a ton of information. We have I mean literally hundreds of articles, videos, ebooks, webinar archives.

We, we go, we put a lot of investment in, creating information that helps people better understand EMF, what it can do to them and how best to reduce their exposure to it.

Well, I should have taken you on a tour of the website.

Shield Your Body Products and Resources

Everybody know that you go there, shield your body.com. You'll see there's a whole section on resources. There's a section, you know. So, it's definitely an amazing resource for you to start digging through this, because I know that people get really overwhelmed.

You know, like if you if you read about I mean, we kind of like, covered a little bit of the where your exposure is coming from. Right. And you know what what you can do.

And is there a lot of options for that now. And so I, I appreciate that you're part of the solution and said that we just have to talk about the problem.

You know, I tend to not write about, talk about or educate people about something where there's no solution to it, you know? Yeah. So it it becomes quite discouraging. Right.

Totally agreed. Yeah. And I like it whenever I have the chance to talk to people, I like them coming away with a, an appreciation for that. This is a serious issue.

But B there's a lot of stuff that you can do, without changing your life around and literally without even buying anything. In fact, sometimes a lot of the time increasingly, buying fewer things, is actually helpful to reducing your exposure.

So an early adopter of everything. Yeah, a logical gadget, right? Yeah. Not everything needs to be smart. Not I mean, I I've yet to hear one person explain to me, value that a smart fridge adds to their their lives.

Right. I know, yeah, it's getting increasingly more difficult to find. Yeah. You know, technology that's on the showroom floor, as your options, you know.

Yeah. So, and I again, I hadn't thought about it with cars. I liked the idea that my car could reach the road. And I'm sorry to have. I just think of a different example for next time.

Yeah. No, it's perfect because it gets you thinking like, oh, that's right. You know, you have been kind of focused on some of these other things, but yeah, your car.

So yeah, whatever you can invent for the car I would appreciate it. Yeah. So that so without without going on to a whole tangent there, that's a, a set of exposures that are very hard to because it's not just the car.

It's, it's, it's it's all around you. Right. And the same thing is true if you're out walking down the street and you want to reduce your exposure to ambient EMF, it's all around you.

And so as great as you know, my phone pouch is, that's not going to reduce your exposure to to those types of. So at that point it is really just apparel.

And you mentioned the neck gaiter. And I'm so glad you did because I had it here too. It's my favorite piece of our apparel. But it's apparel that will will give you that type of protection out in the real world.

And it's really the only way to get that type of protection out in the real world, keeping in mind that it only protects the part of your body that it actually covers.

So wearing a neck gaiter is great for your neck and thyroid, or if you wrap it around your head, your brain as well, but it doesn't protect the whole rest of your body, right?

So that's because men's underwear in your shop and yes, notice there's not like a nice sports bra for women in there. So not yet I would I would ask for that okay.

Yes I think your your request is noted for me. Yes I can confirm that that request is noted. Okay. Because one of the things that I encourage women to do is not wear bras, you know, because there's a lymphatic constriction and, your risk for breast issues, including cancer and that, you know, if you could shield them at the same time, that's that's fantastic.

But I don't want like an underwire bra. I want something that like is a camisole. That would be nice. Okay. Yeah. I'll have to bring you on as a product development.

I think that you ought to. Yeah. A lot of opinions about this. I really, really appreciate the work you're doing. And, I can't wait to wear my gaiter.

You know, as the as the weather is changing here in the fall because, like, when I take my dogs out for a walk. What you're saying, you know, I can. I can buy one for each one of them.

Yeah. Yeah. And then I can draw it up over my head, you know? And I think that's an amazing and amazing, solution for this, so. Yeah. Thank you. Yeah.

And thank you for the opportunity to participate. And in this event it's really fantastic event with getting the word out on, reversing autoimmune disease.

As a sponsor, I really appreciate it. So yeah. All right everybody. So again it shields your bodycon, amazing products and resources for you to read about.

And this of course has there is so much scientific evidence about this with autoimmune flares. So this is really important discussion topic. Thank you. Thank you so much.

All right everybody until next time. You. Well.