EMF Effects on Men’s Health and Fertility Transcript

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Hey everybody, Dr. Rob Silverman here, Proven Health Alternatives. I've got somebody that you want to hear a whole bunch about, Arthur Callenge, I got everything correct to start.

Arthur, how are you? It's a pleasure to have you on the podcast. Robin, happy to be here. Thanks for having me. Outstanding. We were going over you. You lived in Manhattan for a while.

I love it. A fellow New Yorker, outstanding. New york was the city of my heart for many years. But I'm not a Californian. And I got to say the weather part was definitely won me over.

What I found amazing is you are Forbes 30 under 30 entrepreneur, you have multiple degrees. your empowerment to take control of their long-term vitality.

So we brought John because we wanted to talk about a specific fabric and we want to to about male fertility. We've given a lot of conversation to a lotta things.

This will be the first time that we covered male fatality. Let's just jump right in. How is EMF, the conversation piece, affecting testosterone, fertility, and hormone balance?

Wow, we're literally jumping in with both feet. Maybe we should start by defining EMF for the people listening. EMS stands for electromagnetic fields, and they are invisible radiation that are being emitted by your everyday devices that aren't connected either to the internet, to a cell phone tower, or to each other.

So think about your cell-phone, think your computer, your Wi-Fi router, anything that is Bluetooth connected, so wearables, car, and even smart homes, appliances and information.

All of these are going to communicate with one another by sending this information invisibly through the years in packets that are electromagnetic frequencies.

EMF basics and fertility impact

For the last 20 years, the number of studies on electromagnetic frequency has increased dramatically, and there is to date over 2,200 peer-reviewed studies that link EMF with adverse health effect, ranging from long term effects such as cancer, neurological disorders and cardiovascular disease, as well as short term effect.

Fertility being the number one studied effect but also fatigue, brain fog and headaches. And so getting into reproductive health, there's been It's probably been the effect that is the most well researched on the impact of EMF today, because male fertility in particular, at least in vitro, is very easy to study, contrary to women fertility.

We can essentially get different samples, expose them to different agents or different environmental exposure. And even in vivo, which is meaning like studying by taking the sample directly and testing it immediately, it's a little easier than women fertility or anything else.

Spermato get genesis is a three month cycle, so we're getting faster answers. I'm rattling on, but essentially in 2021, a meta study examined the top 18 studies in terms of quality, which contain overall 4200 plus sperm samples and found that EMF exposure negatively affected sperm count, sperm motility, and sperm viability and concentration.

So all across the spectrum. Interestingly enough, I've been talking to a lot of fertility doctors. For a LOT of them, one of the first questions they ask you as a guy if you're trying to conceive is, well actually I'll give you the few that they always ask, which is Do you smoke?

Do your drink? do you use a sauna on a regular basis? And do have your cell phone in your pocket or do work with your computer on your labs? This last question was added recently, but it is definitely now from a scientific perspective, very much clear that EMF exposure from your cellphone in you pocket mostly can significantly impact your fertility.

So to reiterate what you're saying, EMF exposure can negatively affect testosterone levels fertility and, you know, leading to overall hormone imbalance, I'll say.

EMT disrupts the HPA axis, fertility because the decreased sperm quality, reduced motility, DNA damage and EMF may also lead to exposure, extra exposure which will increase reactive oxygen species and more free radicals.

So I think everybody knows not to fry their stuff by putting their cell phone in their pocket. But you said sauna. Now is that all saunas? Is that infrared sawnas, is there a temperature in the sauna?

Can you differentiate that? That's mostly from the temperature increase of the sauna. I'm obviously not going to be an expert on the field, but what I do know is our genitals are essentially Most productive at a certain temperature, if you heat them up, you essentially impact sperm metastasis, which is the process of creating sperm.

And one of the ways of actually practicing safer sex from a conception perspective is actually to keep your testicles higher. against your body, which will heat them up and impact sperm creation.

There are devices out there that can help you hold those testicles up at night, for instance, and that is as efficient as taking a pill or using a condom.

Similarly, using it can create heat, which in turn can impact fertility. But when it comes to EMF exposure, you mentioned it before, the key culprit here is the production of reactive oxygen species or free radicals, if you have an imbalance of free-radicals and antioxidants, or entering a state of oxidative stress, which in turn can damage both the DNA in the sperm but also the molecule itself and creating sperm defects.

We can get into the why EMF can increase oxidative stress and for articles if the audience is interested. Yeah, that's going to be a deep dive and I definitely want you to go into the deep side of the pool a little bit because it's a real interesting topic.

Obviously the testicles are on the outside of body because they are temperature sensitive. Really great point with the sauna. Let's go in to the idea of why the laptop, the cell phone really hurt our sperm count and how would you suggest we carry our laptop to avoid the problems?

Let's do a very quick deep dive. We talked about electromagnetic fields being emitted by those devices. An electromagnetic field is a field with two components, an electric field and a magnetic field.

The electric part of that field is thought to interfere with one of the main signaling mechanisms of our cells, which is electric-based. Our bodies are made of trillions of cells as most of you guys know, and those cells communicate with each other via chemical signals and electrical signals.

The electrical signal that scientific research has shown to be impacted by EMF are called voltage-gated calcium channels, which can be activated by the electrical field of EMT unwittingly which triggers an influx of calcium ion in the cell which in turn will create a cascade of reaction in mitochondria.

The result of those reactions is the production of reactive oxygen species, also known as free radicals. Free radical are little molecules that are missing an electron.

and they are imbalanced because of that electron missing. And they're going to steal an electron to a nearby molecule, damaging the molecule in the process, which in turn is going turn into a free radical, and you're gonna have this snowball effect of molecular cellular damage, damage to tissue as well as the proteins and the DNA of the cell in itself.

And going back to it, created for oxidative stress and impact sperm. Some of organs which have the most voltage gated calcium channels are the genitals, as was your brain and your heart.

And that is why those three are thought to be some of the most impacted organs by EMF exposure today. So now, when it comes to exposure, The amount of EMF we are exposed to is inversely proportional to the distance from the source.

The further away from source you are, the less exposure you're going to have. And the closer you get, more exponentially high your exposure is going be.

So when it comes to your cell phone in your pocket, this is probably or your phone against your head if you're making a phone call. This is the closest exposure type you are going to get.

If you use your laptop on your laps, as it's called a laptop, similarly you will be extremely close to the genitals when using your computer. So it's not as much caring, although most computers, even if you close them down, are still connected to the Internet and are communicating via Wi-Fi and Bluetooth.

How EMF affects the body and exposure reduction

But it is mostly about where are you using them, especially for people who work daily. with a laptop or with cell phone in that pocket and who are exposed to chronic EMF exposure and often cumulative chronic exposure from all the devices that they use plus all of the Wi-Fi's that are surrounding them plus the other devices from everyone else in the same room.

So I think this is where then the ambient EMF exposure becomes a problem, especially in dense city. We mentioned New York before. You cannot avoid EMT exposure in New york if you're living in any type of building due to just the density of signals you are going to find.

Well, you know, it's interesting where you're making a great conversation how tech meets anti-aging or as a term we use right now, the insightful conversation of longevity.

So clearly EMF is going to harbor a negative effect to lifespan, health, spend vitality, i.e. longevity, another really

wonderful point. It's a takeaway.

Everybody should write this down. If you are flying on a plane, don't put your laptop in your lap. You know, put it on, uh, right. Absolutely. I can't tell you how many people I see leave it right there on their lap.

Just like you said, men, women, it doesn't matter if they're 20, 40, 60 or 80. It's still not really a health promoting, but the really begs the question.

How can you tie in tech with longevity? I think the way I would phrase it, and I get this question all the time, especially, you know, being going on podcasts about EMF a lot, I may appear in what I'm saying as an anti-technology, which I am not.

I won't be linear. So I very much grew up with technology and my life would be very different if I didn't have it. And so the way I like to say it is think about when we invented the car.

Great invention. We get to go from point A to point B much faster than on a horse. However, also if we crash into one another or into a wall, we're way more likely to die than when were riding horses.

That's the downside of any technological advances. Usually there is a positive side and a negative side. And so what did we do with cars? We started implementing seat belts as well as airbags and other safety mechanisms so that we can keep using that wonderful technology while reducing our risk of our health being impacted by it.

EMF is very similar where there are incredible technological advances and I wear an OR ring on a daily basis. And I think this has been great in helping identify some patterns that allow me to sleep better and to overall significantly better my health and wellness and most likely longevity.

that wouldn't exist without the existence of technology. However, there is a downside to technology, which is the more technological advances we have, the More EMF is becoming a fact of life, where we haven't enough scientific evidence today to warrant a safety principle and to try and reduce our exposure.

And so, fortunately, a few things that people can do that are very easy to implement and that don't change habits too much besides Haven, that that, people, can use to to reduce their EMF exposure.

But I would say the very first step is being aware of the fact that EMf exposure can have an adverse biological effect. I think there is a lot, unfortunately, a wrong science being shared by the media in particular when it comes to EMF being ionizing versus non-ionizing or the safety exposure limits, which haven't been changed since the 90s.

And they were based on heating effect, not the nonthermal effects that we just discussed, et cetera. So the very first step is being aware of the potential adverse effect and then taking a few key steps that will significantly help in reducing daily exposure.

So really begs the question, my friends are all listening now, what steps should a man or a real man do to protect himself in this connected world? Yeah, I mean works for men and women to be honest.

The very first one I would do is when you get in the habit of taking your cell phone out of your pocket whenever you're at home, at the office, out a friend, wherever you are, if you not on the move, take your cellphone and put it on a table.

Again, I cannot stress enough how much of a difference in exposure it makes to have a device against your body or close to your buddy versus further away.

My cell phone right now is in front of me on the table. I'm getting so much less exposure in my genitals area than if it were in pocket right which is, there you go, love it.

Second step is that I would recommend is get an EMF meter, which has a little device that can help measure the

amount of EMf and actually make the unseen scene.

So as we said, like EM f exposure, actually here's a good parallel. EM F is categorized as a class to be human carcinogen. which is the same categorization as gasoline exhaust fumes.

Now, if you had a car running next to you right now in your room, Rob, you'd probably walk away before the end of that podcast because you could smell Well, because you're going to be able to smell it, you might be to see it.

With EMF, we don't have any ways of seeing that environmental danger. And so an EMFL meter can be a great first step to seeing the unseen and also auditing your home and especially your bedroom.

We're spending 30% of our lives effectively in bed. So this is one of the areas where you can cut out a lot of your exposure. by auditing how is your bedroom, like what devices in your bathroom are emitting EMF, ideally removing them from the bedroom.

And if you can, install a switch on your Wi-Fi to turn it off at night. You can have automated plugs or some routers or even programmable where you could shut them off between, say, 1am and 5am when you're sleeping.

And that already helps with one of the big sources of your math in your home. So between those steps, I think… Oh, and the last one is, Gary, most people hate when I give that step.

Do what you will, but switch out your… wireless earbuds or whatever for a wired headset. Nothing's worse than having two constantly connected earbuds in your ears all day, every day.

You know, you make a good point because I use the same one as you. I've got the Same headphones as You do and you see the people with the white in their ear.

You also see a guy on a TV show and FBI pressing the button and going right in and I'm like, it's a really good Point. The other point and it really it was a wild moment for me where you talked about the exhaust in the car.

I mean, if I close my garage door and stand in there with the exhaust in the car in about five minutes, I perish. You're equivocating it to the EMF. It's the same categorization in terms of how bad of a carcinogen it is by the World Health Organization today.

Amazing. That's the takeaway of the podcast so far. That that's fabulous. So let me segue with that theme into male fertility. We know that women have a duration of time where they can bear a child.

It usually ends at 50 or 55 and they typically try to do it before then. But guys think we can go forever and that may be the case but we do have a reproductive aging and believe it or not the reproductive ageing starts at forty.

When we talk a little bit about the reproduction aging in how the emf adversely affects that brings it on earlier. Yeah. Actually, I don't know if I'm going to have a really good answer to that question, Rob.

But I can talk about one other factor that I think is perhaps overlooked in fertility. Sure. On this, you might actually know things better. When it comes to male fertility, or actually fertility in general, I think even today, most people are still thinking about, is the woman fertile and able to get pregnant?

Where actually what fertility doctors will tell you is that in 50% of infertility cases, it is a man, and in 15% cases it's the women. So it is very much a shared responsibility when it comes to infertility today or difficulties conceiving.

And when comes male fertility, especially, there has been a global decline in male fatality that started in 1975, but that has significantly accelerated since the year 2000. Between now and the Year 2000, we've lost about 2.6% of male fertility every single year.

And that is compounding, right? So this year, on average, were 2,6%, less fertile than we were last year which

we're already 2% less than previous year and so if you continue up on that trend, we are sterile by 2060 as a species.

Now, is it just EMF? Probably not. There are multiple factors that can contribute to that. But a lot of the fertility doctors I talked to are pointing to EMFS being their number one suspect or number-one contributor to what we're seeing from a fertility point perspective.

And back in the 2000s, a study has been done on generations of mice. And I might be wrong on the generation itself, but I believe it is after five generation of exposure to EMF, the male mice were becoming irreversibly sterile.

the experiment would end there. So there is a real concern right now, which obviously is the slow decline, so it's never as concerning as an accelerated decline.

But there's a really concern around male fertility and our ability to continue having children as a species, and EMF is very much linked here. How did the CMF captivate your attention so much so that you made a company based on preventing the MF?

I think it's 99.7% you know, protecting of EMF.

Tech, longevity, and practical protection steps

I mean, what's the backstory to it all? And what is the name of the company? Give me a little detail. My backstory, I grew up with a very keen interest in longevity, seeing two grandparents battling cancer for all of their lives when I was born, which is the case of a lot of people that are probably listening as well.

So unfortunately, a fact of life today, But I ended up graduating with a master's degree in engineering and biology with the focus on human health and my very first job was studying the genomic patterns of prostate cancer.

And this is through this that I became exposed to the studies on the link between EMF and cancer And went down the rabbit hole. This is kind of like my engineering hat.

When I start getting interested in the subject, I go deep. So read a lot of the studies. And for me, the haha moment was the same as you, Rob. Well, there's World Health Organization categorization as a class two human carcinogen.

While we're increasing our exposure, I figured that, you know, we should be doing something that the world there is always a gap between scientific evidence to public awareness.

And I realized that we were very much in that gap where we had enough scientific evidence to warn the precaution principle and to reduce our exposure, but that we were going opposite as a society.

And that as the word would get out, people would have a rightful need to be protected so that they can keep using technology and keep reaping the benefits of that technology.

without impacting their long-term health. And so that is why I started Haven, which is the world's first EMF blocking clothing. Really the only way today that exists when it comes to having shielded protection, because as we mentioned before, The devices that we use need those EMF in order to communicate with one another.

So unfortunately, we can't do anything at a cell phone level, for instance, or the computer level without stopping their access to internet, text, calls, et cetera.

And so the only thing we could do is effectively shield prevent EMF from reaching the body. And that is what we've been working on for the best time. That's a great story.

You know, it's funny that again, I get to do several podcasts a week and I got to interview all interesting guests like

yourself. And in that, people who have turned towards alternatives, if you will, alternatives doesn't mean away from the medical, but alternative to be able to, you know, vector back in to the Medical, it's always something in their life or their family's life that turned them on.

So you have a fabric wave stopper in your haven. Could you go through that and why don't you tell everybody what type of clothes? Can I get underwear?

can I Get jeans? I can get a t-shirt. What do you got for me? You can wear a cap like you're wearing. Yeah. So when we set out with that mission to solve EMF exposure, as I mentioned, like the very first thing we looked at was can we shield the devices?

No, we cannot or they're not working. Well, then we have to shield the body. And we starting trying to understand how we could do that. Then we come across spacesuit technology.

Spacesuits have an inner layer that is blocking EMF radiation because an astronaut in space is exposed to a ton of radiation during the space journey.

And so we took the same physical principle called electromagnetic shielding and we brought it to a fabric that could be worn on a daily basis. And that fabric is wave stopper.

It blocks 99.7%, at least 99,7% of EMF from 450 MHz to 40 GHz, which covers the entire spectrum of EMF that your typical devices would emit. And we turn this fabric then into comfortable everyday clothing.

We started with underwear, specifically for all of the reasons that we just talked about, fertility, as well as testicular cancer. And then we moved into hats, protecting the brain, t-shirts, and we now have a wide range of products.

We recently added an EMF meter. This is not our technology. we've just sourced the best, most consumer-friendly EMM meter we could find at the right price so that people can audit their home.

We also have laptop pads. We just talked about keeping your laptop away from your laps. Well, we also had a pad now which deflects the EMF and prevents them from reaching your genitals if you're using them on your lap, as well as blankets for home.

So again, if your wanting to use your cell phone or your laptops when you are lounging on the couch or something like this, this is an easy way to to protect yourself and we're constantly adding new products and innovating.

But really what we are trying to achieve with Haven is enabling people to keep using technology without changing their habits while removing the majority of EMF exposure from their lives.

And doing this with everyday great looking products. And yeah, hopefully, based on our reviews, we're doing a good job. Fabulous. So I can get a whole new ensemble.

You can, absolutely. All right. I got to give up my Lululemon for you. Actually, one of our first investors and someone who's been on a board of advisors since then is the former president of Lullulemen.

How funny. Essentially, he saw in Haven the next generation of companies who were working towards making our lives. healthier, longer, and happier. And it's really been pushing us towards getting to the same standard of quality and comfort and style, or at least elegance, I should say, than the top brands out there, including Lulule.

So that really has been a north star since we started the company. We keep improving the products on a almost daily basis, but we're working daily on it.

But we were at a point where a lot of people reach for their haven gear, not just because of the health benefits, I love what you said. You basically said it's easier for somebody to add than to break a habit.

And that really resonates with me because as a healthcare practitioner, one of the biggest problems is trying to inflict change, trying get that patient to make a change.

And I always tell everybody, I'm only as good as your compliance. And you proved it. So you said, instead of telling everybody don't put it on your, you know, your lap, let's have a protector.

and that really resonates. I didn't even realize that I went through, thought I would through everything that you had. That you have that protector, which brings me to my next topic I want to talk about.

You deal with a lot of elite athletes. A lot a high-performance names, if you will. How are they fighting Haven? how does Haven help them in performance?

And I'm not talking the bedroom performance, I am talking on the field. I never asked anyone about the bathroom performance. Although we do have, and I'll get to your question right after, but we have what we call here Haven babies, which are testimonials of people who were struggling to conceive and who sent us an email, who buy Haven underwear and then three, six, nine months later are able to reach out to us.

It's hard to make the exact correlation or say that this is specifically Haven, but they essentially reach and say they attribute being able be pregnant to making that switch.

Whenever we get those emails, The last one just said like it was a one-liner and the person had emailed us before saying it had been three years that they had being trying to get pregnant with no luck.

Their doctor said that it might be MF exposure recommended Haven made the switch and then he emailed a six months later and said update. We're expecting and so we We do have, actually, some better performance, as we said, that can be improved.

But from an athlete perspective, the most well-known athlete that wears our product today, publicly, is Rudy Gobert. He's the best defensive player of the NBA.

Four times. I'm a basketball guy, four times, and I know he's from your home country, I think even from the city, if I am correct. He is from my home country.

He played in the city where my grandparents are from. So he's actually now joined Haven as an investor and an ambassador, because he is a really big advocate for what we're doing and big fan of the mission that we are after.

But when it comes to athletes' performance, EMF by potentially increasing free radicals and oxidative stress can essentially trigger a state of fight or flight or parasympathetic nervous response.

That state is the opposite of the rest and digest state. So essentially our body has two main systems, the sympathetic nervous system and the parasympathetic nervous System.

When we're running away from a lion, our sympathetic nerves response is taking over.

Male fertility decline and the Haven backstory

when we are resting, it's our parasympatic nervous systems taking As an athlete, when you're not on the field, you want to be resting and digesting because that is how you are going to recover better.

That is a state where your body is not stressed and so you will be able to perform better when on field. We've found both via independent studies as well as internal Haven studies that EMF can impact that state and put your body in trigger a fight or flight response.

And we found that with Haven, we're able to mitigate this. The best way to measure this is by measuring heart rate variability, which is one of the best indicator or biomarkers of bodily stress.

And so an improved HRV, an increased HRD means more likelihood of being in a rest and digest state, and a lower HRB means, more likely than being a fight or flight state.

We found that for the majority of people wearing Haven, there is a about 19 to 20% increase in HRV meaning a significant change, significant improvement which indicates that your body is not fighting as much stress.

And so for the average person, that means potentially more recovery and overall like less fatigue. But for an athlete, that can make a significant difference.

And so we have a number of Olympians. We have athletes in every major league that are wearing our products as part of their recovery regimen outside of training.

And especially when they're flying, if you take someone like Rudy, for instance, they have what 250 games a year, something like this, right. They're always flying.

It's actually crazy. Most of the time they are flying right after a game to the next game. So Rudy always wears Haven when he's in the plane because you're exposed to a significantly higher amount of radiation when in a plane due to the avionics and just the structure of the plane in itself.

And so that is increasingly becoming part of athletes wardrobe for when not on the field. They are not wearing a haven when they're playing whatever sport it is they are practicing.

Yeah, I'm big on Vegas nerve stimulation, which is captain of parasympathetic nervous system. So you're really speaking to the choir when you said that.

That would be an interesting thing to take your clothing, do the techniques that I do and see the difference between I use a laser to stimulate the vagus nerve.

and to get that homostasis between, as you said, the autonomic nervous system, and the sympathetic and parasympathetic. It's quite exciting. So it'd be interesting to see what I get with the laser and then the lazer with someone, let's say, wearing a haven cloth or whatever it may be.

That would be super interesting. I think that's a real poignant point about flying, because I fly almost every week to lecture. And I noticed that when I got down, you know, my waist goes up about an inch.

I'm like, what the heck is going on? You know, when you reach my age, you always think that's it, no more abs. But you're right about the aerodynamics, the aeronautics, all that going and being 35,000 feet with connecting flights.

I mean, it really makes you want to protect yourself. And that is something that I would really want add into my toolbox, if you will. Now, flicking the switch a little bit, The military is doing a lot of studying and a lotta work with EMF.

What's going on there? Yeah, there is a number of instructions, DOD instructions with regards to protecting microbes from EMf exposure. There are a numbers of people who buy Virtue of their job are more exposed to EMF than others.

Healthcare workers, military, telecommunication workers etc. And so we were awarded a contract by the US Air Force to use Wavestopper in order to help protect our service members from EMT exposure and the associated effects.

So we're extremely happy to be able to work on protecting all the people who protect us. So protecting our heroes and making a little bit of a difference here.

But as I mentioned, they're just the tip of the iceberg when it comes to people, who are working in an environment where they are exposed to significantly more EMF than the average population.

And Rob, if you're working in a hospital setting ever, hospitals are running a very high level of ambient EMF radiation due to all the tools that are now being used to connect with the patients and monitor patient's health, be it during an ICU or ER, as well as all the tools to communicate between doctors or healthcare practitioners.

This is another area where people are exposed to really high levels of EMF, pilots and airline crews.

Haven products, athletes, and military use

We just talked about it being one of the areas where you're exposed to the most EMF as a normal person, while they're flying all the time, and then take communication workers that are working around technology and antennas a bunch and working on data centers, etc.

So what's your number one seller? Is it underwear? is it pants? It's a pretty good split. Most people start with the hat. It is probably the easiest switch to make.

We do sell a lot of underwear as well. I started personally with with hats and the underwear because of the obvious. But what we're finding when we are doing HRV testing is that really the more you're shielding the essential organs, which includes thyroid, your gut, heart, your brain and your genitals, the more of an impact on HRV we're seeing.

And so when it comes to looking at health in a holistic way, some organs are going to be more reactive than others, most likely. But generally speaking, trying to shield and protect as many of the organs that are reactive to you is likely a good thing.

Why am I using like, instead of being definitive around this is because unfortunately, this Is the field that we're still studying and when it comes to how much EMF is too much, no one has that answer.

And when comes To is it best to protect your brain or best To protect Your genitals. No one Has that And we actually don't even know What are the long-term consequences in terms of percentage increase of the current levels of exposure that we have because technology is evolving faster than the science?

If you think about the last big scientific study that really made a lot of noise was done by the National Institute of Health, NIH. They have a subsection called the National Toxicology Program, and they ran a 10-year study on EMF and DNA damage.

They found at the end of that 10 year study that EMS had definitive proof of significant DNA However, that study was done on the type of EMF that our phones were emitting back in 2010. So back when we did not have 3G, and essentially they were like normal cell phone signals, we've now moved into a number of generation of phones and types of exposure, which are faster and more powerful EMS that likely have a bigger impact on our biology.

as well as just having more connectivity from Bluetooth devices that were constantly wearing on us or home connectivity, et cetera. But again, that NIH study took 10 years to get concluded.

And so by the time we know what is the impact of our current generation and current levels of exposure, we're going to be 10 in the future, and we are going be exposed to, most likely, even more.

Yeah, the information will be a little antiquated. We were talking about that concept before. For the listeners, if you were to give them three takeaways about EMF, what would it be?

Very first takeaway is where I would start for anyone is to get an EMF meter, which allows you to, if you have the means, get the EMM meter that will allow you see the unseen and audit your home and actually realize what devices emit radiation which don't and what device emit a lot of radiation versus little radiation.

I think that's a really, really solid first step in order to be more informed. The second one is it is an industry that is, unfortunately, when we started and I started looking for, before building the solution, I looked for an existing

solution.

There are unfortunately a lot of scammy products on the market that claim to be purifying, field trading, harmonizing, lots of different words, EMF around you.

And they're usually either stickers on a phone, pendants you wear, stickers, on your devices or little device that you put in your room that supposedly filter EMF out of the room.

There is no such thing as filtering or harmonizing or whatever words it is that they use when it comes to EMf. It is not like water. And if the only physical, scientifically proven way to block EMs is to physically create a a thermodynamic shield or a ferritic cage.

And so if any of those devices are effective, they would prevent your devices from working. I'm very passionate and adamant about this because There is nothing worse than being lulled into a fake sense of security and to start now changing your habits because you believe you're protected.

If you put a sticker on your cell phone, you are not protected from EMF and you should not go and put your phone under your pillow now at night because it's a better alarm system because its filtrating EMS.

It's not. So be really mindful in the types of devices that you're wearing. And if you cannot see the difference with an EMF meter, that product is not working.

But you can forget about all the stickers, pendants, and anything that is sitting on the table. Then the last advice I would give is, I think as I mentioned, there is a There are still a lot of people who are not aware of the impact of EMF on health.

And just like with science, like we've evolved from in the 1990s, we thought that the only effect that EMS could have was a terminal effect. We're now finding that there are significant non-terminal effects.

EMF are sometimes referred to as non-ionizing radiation, which is true. And ionizing radiations are radiation that's powerful enough to knock out an electron directly from the DNA.

But it's not, we've already covered it. The mechanism of harm of EMf from a cell phone is different from mechanism harm ionization radiation. They still can damage DNA and impact our cells.

There is a lot of misinformation that is circulating out there. And it's an inconvenient truth. There's a great article about this by The Guardian called The Inconvenient Truth Between Cellphone Radiation and Cancer.

Key takeaways and closing advice

It's great read for anyone who wants to go a little deeper on this. But the point I'm trying to make here is people like Rob, who are trying to shed light a little bit on what the existing science is and are really helping get the word out.

And so I would encourage anyone to share that episode or share what you've learned with your loved ones, especially when it comes to long-term health, it's a matter of compounding good habits, and EMF protection is one of them.

There are many, many other ones, but it is part of reducing our environmental exposure to harmful toxins. I am going to push the envelope. My buddy always says, give me one thing on Monday to do differently than I did on Sunday night.

Here's your chance, opening the question. What should they do I mean, honestly, the easiest one that really everyone should do is get a switch for your Wi-Fi.

It's so freaking easy. Or at the very least, look at where your WiFi router is and do the opposite of what your Wifi

provider is going to tell you. they're going to tell you put it as central location as possible and closest to where you're spending a lot of time so that you have maximum power.

I'm going say the opposite, which is put is as far away from the areas of home where your spending your most time. So don't put in the bedroom. Don't it in your office.

don' put next to the couch. Wherever it is that your are spending time, put your wife or daughter as fast as you can. You're gonna have a lots less exposure from it.

And there you it, outstanding. Arthur Callenge from Haven. who is now gonna give me a whole new outfit. I'm gonna wear it on an upcoming podcast. And we're just gonna look great and have all that protection from EMF.

You were great. Thanks so much for your time. Let's run it again and tell Rudy Gobert I am a strong Nick fan. So we'll see you in the finals this year.