



# THE SPECTRUM OF HEALTH

— P O D C A S T —

## Podcast Session #2

### ***The Truth About EMFs and How To Protect Yourself***

With Nick Pineault

*Christine speaks with Nick Pineault about his new book, **The Non-Tinfoil Guide to EMFs: How to Fix Our Stupid Use of Technology**. Nick helps listeners understand what EMFs are, why they can hurt us, and what we can do about it.*

For more, visit <http://www.nickandgenhealthylife.com>

**Dr. Christine Schaffner:** Welcome to the Spectrum of Health Podcast. I'm Dr. Christine Schaffner, and today I'm speaking with Nick Pineault. Nicolas Pineault is an investigative health journalist who's been writing about health nutrition and how to live a happy healthy life for more than seven years. He and his wife have published more than 1500 online articles through a daily newsletter called Nick and Gen's Healthy Life. He's just authored the book called The Non-Tinfoil Guide to EMFs. It's an honest attempt to warn the public that wireless devices are not as safe as they claim to be, all the while coming up with easy down to earth solutions to fix our overuse of technology. I think this is a really important conversation. Nick and I talk a lot about what EMF is and why it affects us. This is a conversation that I have with many of my patients.

**00:54 CS:** Dr. Klinghardt, who I work closely with at the Sophia Health Institute, has been really ahead of his time, warning our patients and showing them how to heal and recover their nervous system by mitigating EMF in our home environments. Unfortunately, this problem is going to probably get worse before it gets better with the incoming 5G network and just all of the exposure that we're having. Nick really tries to give us practical solutions to help us not to be in a fear space. I do think, of course, technology has connected us, gives us tools like podcasts and the internet and all of these wireless technology to keep us connected, but it should be used still under the precautionary principle, as we're still learning what the long-term effect of these technologies are. I think especially we want to be mindful of when we are getting ready to conceive or when we have children, for the new and developing brain. I hope you enjoy this podcast, and stay in touch while we share more. Welcome, Nick, it's an honor to have you on the podcast today.

**02:04 Nick Pineault:** Thank you, Christine. I'm really honored to be here as well.

**02:08 CS:** Well, I know we're talking about a big topic. I had the privilege of meeting you at a recent conference this past summer, and I just loved your approach and all the depth of knowledge you had. I think a lot of our patients, especially with the work that Dr. Klinghardt does, know a lot about EMF, but still our awareness needs to continue to increase and practical strategies need to be discussed so people don't feel so overwhelmed. I know we have a lot to cover today, but before we dive in, how did this become such a passionate topic for you?

**02:49 NP:** There's actually no fancy story, this is one way I start my book, I say the unexciting story behind this book, this is actually my pre-chapter. But seriously, I'm a health journalist, I've been publishing online information about health and my findings just out of my own curiosity. I think when I learn something that goes against the grain, I just feel so compelled to tell everyone about it, but then I have to gather my thoughts so I put it in writing, and I've been doing that since 2010 from what I can remember. So it's been seven, almost eight years, writing a daily column called Nick and Gen's Healthy Life relating my story, my experiments, what I'm learning, different products that I'm using to stay healthy, and the cutting edge research I come across in health conferences and whatnot. I started diving in 2015, it's probably two years back, or a year and a half, at least, in electromagnetic fields after reading two or three very impactful books, one of them was Devra Davis's 'Disconnect.'

**03:53 NP:** Devra Davis is a PG researcher, she's looked at many different environmental issues where everyone was saying, "Oh, it's not a problem for the environment." And it turns out it was hell for the environment, and you know how these things go, you have to fight for a couple of decades and she did, until regulations were changed. I cannot remember what topic it was, but anyway, I read that, it was a revelation, but at the same time, it's just one book, so I wanted to go and verify what she said essentially as well, that cell phones are like smoking. I was a little bit shocked because I did look at my cell phone in a careful way in the past, because I don't know, I heard reports like everyone on the news, brain cancer and cell phones, is there a link? Oh, no, there's not. Oh, yes, there is. It's always conflicting. Every other day you hear conflicting info about these EMFs, electromagnetic fields. So I started reading more books and then I started doing my own research and I realized that the two camps were very opposite.

**04:55 NP:** Some scientists and doctors in the medical community and the FCC, who is responsible for regulating these signals said, "Well, the signals do nothing to human beings, they do nothing to yourselves, nothing to your gut microbiome. You don't experience any symptom, it's impossible." So I was like, well, it's bizarre that we have a PG-level researcher on one hand and hundreds, if not thousands of doctors and scientists who say it's a big issue, and then very credible people as well saying it's not. So as always, I get obsessed with topics and I started diving even more deep because I wanted to know, "Okay, well, why do they say it's not a problem? Why do they say it is a problem?" And it turns out that what I discovered essentially is that our safety limits are based on a wrong idea. And this wrong idea is that the only way that EMFs can affect you is by heating your tissue, this is called the heat-

ing effect, but what biologists have discovered is that even if, let's say a signal is so low that it cannot possibly cause your brain to heat, there's also a biological effect that disrupts your body on a mitochondrial level and on a cellular level.

**06:15 NP:** Researcher Magda Havas, from Trent University in Toronto, I like what she talks about. She talks about the rapid aging syndrome, and she's one of the only ones using that term, but I love it because this is basically what EMFs do to you, right? It ages you faster, it stresses every single cell in your body that's exposed to it pretty much like an external toxin in the air, like air pollution or even toxins in your water, it just adds to the entire load. So I'll stop talking now because it's the end of the story.

**06:49 CS:** Love it, love it. And Magda has been a key influencer on educating us, and I think that she has a lot of really great tips and research to really bring this topic to light. Nick, let's just bring it down to the basics right now because I don't want to assume that everyone knows what we're talking about. When we're talking about EMF, what are we essentially talking about and what should we be concerned about?

**07:21 NP:** Sure. So EMF is electromagnetic field, if you take your cell phone and it's connected to the Internet, it is transmitting and receiving wirelessly. This is a signal, right? This is one type of electromagnetic field. Another type of electromagnetic field that can be natural is, for example, UV radiation from the sun. So UV radiation, it brings both benefits, so for example, if you go have some UV in the sun, you will get a tan and have vitamin D, and this is great for the immune system. It's actually essential for your biology, but if you stay too much then UV radiation can burn you. I think the same can be said

with EMFs, but the problem is that the cell phone EMFs, which are in a certain frequency that has never been seen before in nature, they're foreign to your biology, and so the reason you should worry about that is that EMFs that are produced, for example, by cell phones, or let's say a Bluetooth earpiece is another type that emits the same frequency.

**08:28 NP:** Another type could be a WiFi, a WiFi in a cafe, WiFi when you walk in the street, or WiFi on your own home, or even smart thermostat or smart toaster. I mean, everything is getting smart these days. So all these sources are contributing to what I can call in very simple way, body confusion. It's a signal that is sent towards yourselves, towards your body, and your body doesn't know what to do about it, and it can create for a lot of people, it seems, if you listen to research, especially people that suffer from chronic illness or have a low immune function or that are older or very young, they seem to be very affected by these signals and can experience a slew of different symptoms, if they live in this kind of thick electrosmog, if you will.

**09:21 CS:** Absolutely. We've talked about cell phones and Bluetooth and WiFi, and I know you mentioned in your book also this concept of dirty electricity. Can you share, educate our audience on what dirty electricity is?

**09:38 NP:** Sure. Normally, I mainly focus on the cell phones and whatnot because it's a concept that's easier to understand, but if you go a little bit deeper, dirty electricity is that normally the electricity in your home is 60 Hz, that's a frequency, it means that 60 times per second it oscillates. Basically, that's what hertz means, it's cycles per second. The short version is that normally the electricity in your wires runs smoothly in a smooth wave, but when

you have certain things plugged in, that cuts the signal in and out. For example, let's say you have one of these curly light bulbs, the CFLs that they call. The way they work to save electricity is that they will switch on and off thousands of times per second. So in between, when it's off, you don't see it with your bare eye, it actually saves electricity just a little bit, but all this causes disruption in the wires of your entire home. So it can actually make the electricity dirty.

**10:48 NP:** So imagine a smooth wave of electricity and then it becomes erratic, there are spikes everywhere, and this kind of electricity is actually emanating from, pulsing from the wires in your home, so it means that when you're near electricity normally it is a little stress to your body, but when you're near dirty electricity, it can actually act and be as stressful to your body as cell phone radiation, so that's another type of EMF you should worry about when it comes to creating a healthy home where you can heal and sleep properly.

**11:27 CS:** I think you just made a really great point because I'm sure as people are listening to this, they're thinking about, Okay, when am I not exposed to any of the things that we just talked about? And I think that that's what's so hard with the advent of all of this technology. The iPhone is only 10 years old, right? And now we're into this whole development of the Internet of Things, and as you said, our toaster being hooked up or our light bulbs being hooked up, our washing machine, and we really can't escape it, and so this can become a very overwhelming topic I think for a lot of people. And so where we start often, and I know you do too, is like, how can we control what we can control and really, our home environment is somewhere where we start. Because most of us spend a lot of time, not only at home but at work. Especially

our sleep is so critical to allow our body to heal and repair and to just maintain our health, so we need to create a safe sleeping environment. Step one is really assessment, so how do you recommend measuring all these different types of EMF in your home?

**12:48 NP:** Sure. For someone that is sensitive or suffers from chronic illness, I really recommend investing in an EMF meter. The one that I use personally, and that I used throughout my book, to give examples, is called the Cornet, and the model is 88T. The Cornet is very useful for two main types of fields: Magnetic fields and then microwave radiation, also called radio frequency, and this is the cell phone and WiFi and Bluetooth signals. And the reason you want to have that is to be able to quantify how much radiation is actually in your home, because you might be surprised. So for example, of course, there are your own sources that belong to you, your WiFi router, smart thermostat, or lack thereof, hopefully; cordless phones, your own cell phone, your teenager's cell phones, maybe they have two or three each these days, everyone has so many devices. So this is all contributing, but on top of that, there might be outside sources, or even your neighbor's WiFi might be on the other side of your bedroom wall, and you're not aware of it.

**14:02 NP:** So, removing your own sources is step one, but then, if you have a meter, you can look at the numbers I talk about in my book basically to assess, "Okay, what number should I aim for in my environment?" So one unit of measurement that I use is called volts per meter, and this is the amount of radiation in the air, if you will, or the highest radiation you'll have at any given time. Most people that study environmental medicine, for people that are very, very at risk for chronic disease or trying to recover, they recommend 0.06 or even less, at night, and this is hard to achieve. So this means that

you'll have to give up WiFi during the night, which anyway, you shouldn't be using at 2:00 AM. If you can manage it, do not use WiFi at all, and wire your computer and every apparatus that needs to be connected to the internet in your home through an ethernet cable, and that's feasible if you own the place, you can have an electrician come over and do that. This is my number one recommendation, especially if you're recovering from chronic illness, I mentioned that UV radiation is natural. Well, microwave radiation from your cell phone, or even from just a simple WiFi router, it's never been seen in nature before. So, the levels of nature are basically one quadrillion times lower than the average city right now.

**15:41 NP:** So it means that our bodies are not accustomed to even a little dose of radiation, even if the levels are so low that technically, you're okay-- you're even better off if there's no levels, no signals. Your sleep will feel more like in the middle of the forest, or when you go camping, and this is where you'll be in the healing zone where you'll have, "normal sleep." Let's face it...15 years ago, no one had WiFi, so it's fairly recent that now this is there to disrupt your environment. This is what I would do with the Cornet, I would go around your environment and look at the levels, and then try to achieve as low as possible. And if they're very high from an external source, for example, that can happen, let's say you're in Manhattan, and you have cell phone towers right in front of your apartment building, on the next building rooftop, and it's blasting towards your window, and you realize the levels are off the charts inside your apartment. Well, now you have two choices, and you won't like the answer. One, is moving out because the environment is making you sick, so it's pretty much like trying to recover when you have mold growing in your walls, it's very hard to do.

**17:00 NP:** It's like trying to recover when binging on McDonalds, it's very hard to do, or almost impossible for some people. So it means that if you have to move out, you're going to move out, but another thing would be blocking the window with a special shielding apparatus that can actually be bought on a lot of different websites, one of them is [lessemf.com](http://lessemf.com). If you're suffering from chronic illness, I would recommend hiring a professional, and that would not be me because I'm not a building biologist, but building biologists, if you just Google them in your area, you should be able to find one that can at least advise you by Skype, and if not, preferably go to your home and look at the levels. They would be able to come up with real solutions. For example, even painting the wall with a special EMF blocking paint is a solution. So you can create a very, very low EMF environment at home, pretty much anywhere you live, but it will require a little bit more investment and time, if you live, let's say, in the middle of New York City.

**18:07 CS:** Absolutely. I think you have a lot of great points in that if this is a real issue, especially if you're chronically ill, you can't expect to recover in this type of environment. We talk a lot about mold with our patients as well, and interestingly just a side note, if you're in a high EMF environment, that will actually drive the growth of mold in your home as well, if you've had mold. It's all interrelated, right?

**18:40 NP:** Yes.

**18:40 CS:** There are things that you can do if you choose to live in an urban environment, and there are absolutely a lot of tools, there are more and more mitigation tools out there and I think this could be a good time just to create

some more education tools. I know that you're really passionate about sharing about the 5G network and how that's going to increase our exposure yet again. And so I think it's an important time to realize this, because even if we think we're in a perfect environment and, "Oh, this is not our issue." Unfortunately, we're in a time in our society...I'm an optimist but I will say, I do think it is going to become worse before it gets better. I think the more people who understand what we're up against and all the exposures that we are going to continue to have, the better, not only for us to take action in the way that we can, but also to realize mitigation strategies are going to be a reality for all of us. Can you share, Nick, about the 5G network that is coming?

**19:49 NP:** Sure. So the 5G networks, if you look at your cell phone right now, and hopefully it's in airplane mode. But let's say if you remove the airplane mode, you'll see the 4G or LTE in probably at the top left or top right corner. This is the network it's connected to. 4G stands for four generation and LTE is similar, it stands for Long Term Evolution. And both of these are the fourth generation of signals or of cellular networks that we have access to. It's around four times more speed that we can achieve with the 4G compared to 3G that is older technology that was installed, I think, in 2007 and 4G, 2012. Now, they're looking at the next generation of signals because the user demand is so high for, let's say, streaming HD videos and downloading content at the speed of light that what they're trying to figure out, okay, how can we push the technology even further?

**20:52 NP:** The main problem is that when you increase the speed, you increase the signals. You increase the EMFs that need to be emitted. It's pretty much a given and it's very hard to avoid. But right now, because authorities and most of the medical community isn't even aware that 4G is a problem,

they're perfectly fine pushing 5G because it's exciting, let's face it, on a technological standpoint. So we're talking about 10 to up to 1000 times the speed of 4G. So it's a leap forward in a big way. It means for example, you'd be able to download a full HD movie in a couple of seconds, maybe 6 seconds instead of a couple of minutes right now on your cell phone. You could stream holograms and stuff that right now we cannot achieve because we don't have the data for it. But what it means to you is that unfortunately, 5G is going to require a huge amount of small cell antennas that are going to be installed, especially in large cities at every block.

**21:57 NP:** And in residential areas, the goal is to have one antenna in front of every 3rd to 12th home. So it means that the electrosmog is going to get thicker for sure. I talked to a 5G or actually an EMF engineer, Alasdair Philips from the UK, he's an expert in EMF radiation. He actually designed several EMF meters and he's also an expert in electro-sensitivity. What he told me is that he thinks the number of people that are sensitive to these signals and that will react strongly will go up in a tremendous way once 5G rolls out. I would advise not participating in this kind of madness that most people will unknowingly encourage. So it means, let's say you have a phone, you make sure it's not 5G enabled. If you have a WiFi router at home, make sure not to use 5G. So do not purchase the latest technology.

**23:00 NP:** I know it will be hard because I'm telling you that now. I'm an entrepreneur, I'm an author, and I'm always connected so I'll be tempted to go with the newest phone as well. It will be hard to stay with the older technology. But before these signals get smarter and get biocompatible in some way, 5G is going to mean a huge increase in symptoms, I would think so. So it means the external environment in a city is going to be way more stressful.

And inside your home, hopefully it will not penetrate because 5G is a very high power, very short distance, and it will mainly affect surfaces. So let's say you're outside, you might see more effects on the eyes, dehydration of the skin, or even maybe the heart could be affected as well. There's a lot of studies.

**24:00 NP:** There's barely any studies about the effects of what these new signals are doing. I talked about a cell phone being a microwave signal in the microwave range. Well, 5G is the millimeter wave so it's higher. Let's say a cell phone signal right now is around 2.4 gigahertz. This 5G signal will start at 3 gigahertz but go up to 60 gigahertz. At the airport, a lot of people avoid the scanner because they're like, "Oh, my god, there's no way you'll be zapping me. I'd prefer the pat down." Well, the scanner is basically a non-issue once 5G rolls out because the scanner is a very low dose of millimeter waves. And 5G will mean that every device will be connected and emitting millimeter waves but at levels I'd say at least 100 if not several thousand times the scanner every second.

**25:00 NP:** So right now, the millimeter wave, yes, I'd still avoid it but it's very low power and I would worry more about a WiFi hotspot than the scanner, to be perfectly honest. This is something people don't understand because they don't know how to compare both technologies. But the scanner is actually extremely low powered. I was so surprised when I looked into it and I realized, "Oh, my god, I've been avoiding that along but I still use WiFi on my cell phone. So who am I kidding here?" It's kind of a catch-22. It's bizarre, but this is what 5G essentially will do. And another thing that will happen with 5G is that a signal in nature is smooth. So remember when I talked about dirty electricity being erratic, well, a 4G signal is already erratic, but it's going to get

even worse with 5G, because the way you can put more data into a signal is by having certain types of pulsing several times per second or chopping the signal or modulation, which means the signal will go way up and then way down and then way up, in certain patterns that can encode the signal.

**26:12 NP:** That's all technical jargon that even I have a hard time putting my head around, but one thing I know is that in studies, the more you play around with these variables and put pulsing and erratic dirty signals into the 5G, the more your body will react. And unfortunately, another thing that will be added to 5G is that every bit of data will be even more stressful to our biology, if we believe the direction the studies are going in. So, it will get worse, and I guess it's very bad news, but at the same time, it just shows you that you've got to focus even more on what you can do about it at home. Everything we talked about so far will become essential for even the layperson.

**26:57 CS:** You brought a lot of great points up, Nick. And one thing that you shared is this whole idea of electric or electro-hypersensitivity syndrome. In our patient population, a small percentage are what we call EMF sensitive, so they actually get physical symptoms from EMF exposure. I always say EMF isn't really great for any of us, but some of us feel it more in our bodies than others, and so, do you have any insights as far as why some people are more electro-sensitive than others?

**27:38 NP:** Sure. It's still very unclear. You've got a couple of people looking at this, like for example, there's Dr. Dominique Belpomme from France, who has something called the EHS and MCS, Research and Treatment European Group, and EHS is electro-hypersensitivity, and it looks like the symptomology in everything related to the research and mechanisms is very close to

multiple chemical sensitivity, so people that are very sensitive to chemicals most of the time will also show symptoms of electro-hypersensitivity. So, if you know personally that you have a lot of exposures to chemicals, or let's say you had exposure to mold, most people that have mold symptoms will also seem like they are more sensitive to these signals. Another thing is magnesium deficiency--that is seen in most people that are electro-sensitive, because one way that your cells will have symptoms from WiFi exposure, for example, is that it will wreak havoc on a basically hydration standpoint in your cell. For example, it will create too much calcium to flow into the cell, and then if you add magnesium back and it can be absorbed into your cell, it will re-establish a more normal balance. So if you're already deficient in magnesium, it looks like you're way more likely to get exposed to these signals and feel something.

**29:15 NP:** And another thing is actually, if you have your body filled with heavy metal, so one of them that Dominique Belpomme has looked at is people that have dental fillings that are mercury-based. So when you have this metal in your mouth, at least one or two studies I could find found that just WiFi exposure in a room can actually cause kind of an antenna effect with the metal in your mouth. So, believe it or not, your teeth are picking up the signal, so to speak, and they're actually leaching more heavy metals into your bloodstream, which is going straight to your brain, or in your blood unfortunately. So the more heavy metals that you have, it looks like the more you'll be, again, electro-sensitive. So one step, if you do have dental amalgams, I'm trying to find the information on Dr. Belpomme's website, but one of them is, he found that 50% of everyone who came to see him, I think it was several hundred patients, 50% of them had at least one dental filling and up to 12, I think. So all of them have this in common.

**30:35 NP:** Another thing actually was that most of them were very deficient in vitamin D. And vitamin D, I mean, it has so many roles in the body, it cannot be just attributed to immunity, I think it's every single process in the body almost that is affected, so if you're electro-sensitive, getting in the sun and having sufficient vitamin D levels and sufficient magnesium can also help. So this is also something you want to look at.

**31:03 CS:** Those are great points, and we see this whole heavy metal-amalgam connection as well. One of the first things that we do with all of our patients who still have amalgam fillings is we support them in safely removing them, and I do see a lot of symptoms clear up once people remove them. Of course, that's just step one. There's a lot of heavy metal detoxification that has to happen after the removal, and so we do see when people have a high heavy metal load, that they can be more electro-sensitive. And you know, Dr. Klinghardt also talks about some people have what we call titanium implants, and so we recommend zirconium implants, if you have a dental extraction, as titanium actually can concentrate EMF in the body, so that can not only be in the mouth, but that can also be by other implants as well.

**32:06 NP:** Yes, like my wife has this wire holding her bottom teeth, and I think it's tin-based. This is all contributing to your metal load that really shouldn't be there, or that are now in excess in your body. I guess one way to look at it is that, if you have a doctor or physician following you closely to recover from chronic disease, you've got to make sure to have your mineral levels checked and also your vitamin D levels checked, and once you get these up, I think that you'll see symptoms going away a little bit.

**32:47 CS:** Absolutely. So many great points. I know that you go in this more deeply in your book, but what do you feel are a few really great pearls of looking at the science of how EMF affects our health? I know you talk about fertility and detoxification, and all of these things, but what are some scientific studies that you felt passionate about sharing just because of the health impact that we're seeing right now?

**33:27 NP:** Sure. The worst impact is on fertility. I wouldn't say it's the worst, it's just the most researched impact that I just cannot wrap my head around the fact that you can still have a phone in your pocket that no one is required to tell you not to put it there. So just keeping a phone in your pocket or let's say having a laptop connected via WiFi on your lap, where most people use it, let's face it, it's called a laptop, so people use it on the sofa or any time and it's connected straight on the lap, and it's essentially sending all this WiFi radiation towards your reproductive organs and then through your guts, so that's another problem. When it comes to fertility, I could find in the last 10 years alone, 201 studies that each concluded that EMFs will dramatically reduce all markers of fertility in men, so sperm count, motility, and quality overall will go down. In just four hours of laptop use, he was in a very small trial still, but it reduced sperm motility by 25% in men. In four hours, so it means that the damage is acute, it's happening right now, it's happening very quickly.

**34:41 NP:** So one way to not have that happen is simply you do not put your phone there or make sure it's on airplane mode if you carry it in your pocket. And when you look at several other studies, I mean, melatonin disruption is also very, very clear in the research where even if you talk a few minutes during the day on a cell phone, you will see a drop of melatonin at night, and I think one thing that researchers think is happening is that your pineal gland

that is responsible for your sleep-wake cycle and for creating this hormone melatonin that puts you to sleep in the evening, it's kind of confusing EMFs from your cell phone against artificial light, it kind of mimics a light signal because light is actually one of the few visible kinds of EMFs that we can see, so it's as if the signal is telling your body to wake up in some sense. We see in research, it's actually, 75% of teenagers in one survey that I could read, that sleep with their cell phone under the pillow, so it's no one wonder that 50% of all teenagers in the US, according to another survey, feel like they have insomnia or sleep issues. I mean, it's kind of normal.

**36:02 NP:** So these two wings are very strong in research, and then if you go in even more concerning things, is the link with the blood-brain barrier, or even the gut-brain barrier, or let's say the testis-blood barrier, and these different barriers actually, they get little tiny holes formed in them when you expose to signals over time, and this is still a controversial link, but there's a lot of good research about that that has been published about how after just a few minutes on talking on a phone, your blood-brain barrier, this is the envelope that is normally responsible for letting just the good nutrients get into your brain and then letting the bad stuff out, it gets opened a little bit and then the bad stuff can come in and the good stuff can come out, and you see neurotransmitters leaching, for example--it's one of the mechanisms that explain that cell phone use is linked with depression, anxiety, and even in certain studies, suicidal thoughts in heavy users, so I guess it's just making you a little bit less happy everyday, the more you talk on a phone because it's so close to your head.

**37:18 NP:** So the blood-brain barrier thing is very concerning to me. And on top of that, when you talk about dental amalgams, they're leaching towards

your brain and then your brain is more susceptible to having them enter and the heavy metals go into your brain. So it's a perfect storm, in other words. Another link that I'm very concerned about, and that actually, Dr. Klinghardt is one of the world's expert at, is gut disruption from EMFs. And the main thing that I would worry about is actually two-fold. First, it seems to slow down the growth of bacteria. When you expose beneficial bacteria to these EMFs, and the main way bacteria, that is all your gut microbiome, it's called the second brain, it's so important to your entire body. You cannot live without it and you can't have a strong immunity if your bugs are not in good shape and in good ratio from the "good bugs" and the bad bugs.

**38:16 NP:** Well, the good bugs will grow more slowly if they're exposed to signals, so it means, let's say you're using your cell phone and I see everyone on the subway station, they're waiting for the train and they're basically zapping away their gut, because it's literally on their navel, right there. So all the signals is very close to their gut microbiome, so that's one thing. And then it looks like you mentioned mold, mold actually gets stronger in a WiFi environment. Well, the bad bacteria in your gut can actually get stronger and more antibiotic resistant once they're exposed to signals. So it's as if these bacteria feel threatened by the signal, they don't know what to do so they mutate and they become a little bit stronger every time they reproduce and this is what is seen in nature. If you put pesticides or even antibiotics on top of bacteria, eventually they become super bugs.

**39:10 NP:** And this is one of the reason that hospitals now are rolling back on the use of antibiotic cleaners everywhere because they're realizing it's back-firing. It's actually making matters worse. So the same thing can be said for your gut microbiota. And then coming back to the blood-brain barrier, well, we

know that leaky gut, having your intestinal permeability is such a big issue in the development of, for example, chronic diseases, inflammatory diseases, immune problems or autoimmune diseases or even food allergies, it's all linked, and it's actually very strong in research right now. Well, if it's making your blood-brain barrier open after a couple of minutes, I'm really wondering what it's doing to your gut and the research on that is not clear. And there's barely any financing available for people to research that. So it's very not an easy, clear-cut answer.

**40:11 NP:** But I know Dr. Klinghardt, in a recent interview, he talked about the fact that he thinks the number one cause of gut problems these days is EMFs. Let's say you with a patient, you say, "Okay, I'm going to put you on glutamine and colostrum and this super food, and then you chew 50 times before your meals and take enzymes." You do everything right to heal your gut and close down this barrier and make sure that you're drinking your probiotics. But on the other end, you leave the doctor's office, you take your supplements and then you blast your gut with all these signals. So I'm really wondering how much it's backfiring and again, you cannot heal possibly in the wrong environment and I think you're creating the wrong environment for your bacteria if you're using your cell phone so close to your gut. Even just working on the laptop will be exposing you to very high levels of EMFs towards the abdomen if it's on WiFi. So that's another reason to go wired, especially if you're trying to heal your gut. I just don't see why you would keep WiFi-ing your good bacteria. It's definitely not something that will serve you.

**41:25 CS:** So many great points, and a lot of great research is exposing the effects. I feel like it's, again, important to remain positive in the face of all of this. A big part of our goal today is to really share practical tips and solutions.

But on all the things that you were just saying, I agree. I see so many of our patients who do everything right. They're doing a great job with their diet, and they're doing a great job with their protocol and all of these things, and they're still struggling. And it just makes me humbled by the cumulative effects of the stressors in our environment, from EMF to heavy metals to herbicides and pesticides. I really feel like EMF is a big one of these factors, but it's this increasingly toxic environment that is really having a detrimental effect on our health. And we see that of course with the fertility rates. When our human species as a whole is having a hard time reproducing, it's such a horrible thing that families struggle with, and it's more and more common, we have to really take a step back and look at what's going on. So Nick, I don't even think we mentioned the name of your book yet. It's The Non-Tinfoil Guide to EMFs, correct?

**43:08 NP:** Yes.

**43:09 CS:** And where can people find your book?

**43:12 NP:** Sure, they can find it on [emfbook.com](http://emfbook.com), and you'll have a link to the different Amazon version. It's on Amazon in hard copy all around the world. And then there's also an ebook version if you're international and don't want to purchase something in the UK for it to ship to India or something. Anyway, it's available everywhere in the world and Kindle is coming soon too so we're excited about that.

**43:35 CS:** Great. I think you put a lot of great information together. I really enjoyed reading your book and I've shared that with patients as well. So, as we wrap up our conversation Nick, I would love to hear from you, what are some

personal strategies that you employ to keep yourself healthy and your family healthy with EMF exposure? You made it very clear that your work is connecting with people using technology. So I just want to paint a picture of what it looks like in reality for people who value technology to use it safely?

**44:19 NP:** Sure. Well, I had a problem because I wrote my book and I published it and I was still using WiFi at the office, at the home office, and I didn't feel good about it. And then also, a double problem, it was super choppy and the signal strength was terrible, and I had no reason to keep doing it. So I purchased this wire because we don't own the apartment that we live in, we rent, so it's not like we can have major works of electricians coming in and wiring the whole place with ethernet cables. So I purchased a 75-foot ethernet cable and I'm running it through the entire apartment, and it does the job. It's not ideal, it's not pretty. But once I'm done with my workday, I have this role with my wife, of course, of rolling it up and hiding it in the closet because it will make a mess. But that's one way to do it.

**45:11 NP:** I went to a friend of mine, Anthony de Clemente's house, and he has two of these because his girlfriend, Jen, also works with him, and they both have their wire, and then at the end of the work day, they just hide it in a closet and they're done. And it's feasible, it just looks a little bit silly at first. I mean, why go back, right? It feels like we're kind of going back to something more, a stupid technology, I mean, who wants a wire, but at the same time, it makes a whole difference. So for me, I feel my mind is really more clear when I work in my office now, because I was essentially exposing myself to WiFi eight to 10 hours a day. And at the same time, while I'm doing that, I'm telling people to not expose themselves, so I didn't feel good about this double standard and about hurting my health so much.

**46:04 NP:** So this is one huge thing, one huge step that I did, and then I also got rid of my wireless mouse and my wireless keyboard. I had the perfect storm, so now it's a wired keyboard that I have externally to my computer because I prefer having it on a stand a little bit higher for my posture. My mouse now is wired the old school way, and it works just fine. I've just changed things gradually, and this is one way I would recommend to go, is to gradually replace the different sources in your home. Let's say you have a cordless phone, well, for starters, don't put it in your bedroom, and then try to get rid of it and have a wired phone instead, a good old school phone if you want someone to call you in case of an emergency, and if these still exist, it still works, and it's going to cost you a couple of bucks per month, but it will really make a huge difference.

**46:58 NP:** One thing you mentioned before the call is actually something you recommend to your patients at the Sophia Health Institute, it's turning off the circuit breaker for your bedroom at night if you have dirty electricity or even just normal electricity in your home can also be disruptive to your sleep, even just standard electricity. And behind the headboard of your bed, you don't know how many different circuits there are, or if there are a lot of major wires going there and it might be very disruptive to your sleep, so one thing you can do that is free and it takes five seconds at night, is simply to turn off the breakers and then it will also become not tempting for you, you won't be able to charge your phone at night.

**47:46 NP:** Charging your phone next to your head is also another source. For example, it will create electrical fields and magnetic fields, and it's not ideal at all for your sleep, so you can charge it in another room or charge it during the

day or before going to sleep, but when you sleep, you don't have electricity in the room. Honestly, most people that I tell this extra step to, they end up doing it night after night because they feel so good. So it's really turning off the circuit breaker to your own room, to your children bedrooms, and it will make everyone healthier as a result.

**48:19 NP:** And finally, the other thing I mentioned, CFL light bulbs, these curly things, well, get rid of those. Except some people are forced these days to use those, I think, because of some green program and they're energy saving, but they're not health saving, unfortunately. So it's kind of a catch-22 there, but I would recommend replacing them with something old school, like incandescent light bulbs. They emit a more natural light that's less stressful to your body, and then they also do not create this dirty electricity, so those curly light bulbs, you can go to a green center where you can bring them back because they're a heavy metal hazard on top of that. Don't put them into the trash, please. But get rid of them and it will remove the dirty electricity load on your home.

**49:11 NP:** I think that's pretty much it. I have a little bit more advanced step in the book, but in the end, if you have a very particular situation, if you live near a cell phone tower, if you use solar electricity at home, for example, it can be a huge source of dirty electricity in those special cases that I mentioned in the book. I recommend having a professional come to your home, it will cost a few hundred dollars, I won't lie, but it is an investment, just like visiting a holistic dentist, visiting the doctor every year, it is an investment towards the long-term health of your entire family. I think it is worth every penny.

**49:53 NP:** And a lot of people, I tell to do that before they buy a home or to come at their current home, they feel relieved or they take action on certain steps that they just didn't know what's happening. Some situations can be found, for example, I don't know, your neighbor decided to reorganize their kitchen and now the fridge is on the other side of the wall where you sleep. Well, it is a problem at night if the transformer kicks in, it can create a magnetic field and it can actually make you wake up every couple of hours and you won't know what is happening unless you have a meter or you have a professional look at your environment. And it's hard to do by yourself because this stuff is invisible, but it's also possible if you have the Cornet, I think you can get the gist of it. It's just a little bit of work.

**50:43 CS:** Those are great really practical tips, and I feel like some of these are huge lifestyle changes. Yes, you have to get into a new routine, but it's like you're reducing, with each one of them, your cumulative exposure, which makes all the difference, so that's really, really great information today, Nick. I just am so grateful for your time and your passion for sharing this really, really important topic. I think it's really one of the most important topics that we need to educate people on, so we can reverse a lot of the chronic illnesses that we're seeing and the increase in neuro degeneration and infertility and all the things that we don't want humans to go through. I think this is not just a small issue, but a big one, so I really appreciate all your time and your wisdom today.

**51:37 NP:** No worries. My pleasure, Christine. I had a blast.

**51:40 CS:** Thank you for listening to the Spectrum of Health Podcast. I really hope that you enjoyed this conversation, and if you want to learn more about

Nick's book, you can go to [nontinfoilemf.com](http://nontinfoilemf.com). If you liked the show today, please share with your friends, your family, and please feel free to write us on iTunes. A review is greatly appreciated. Thank you.