



THE

FATIGUE

SUPER

CONFERENCE

EMF's and how to deal with them

Guest: Nicolas Pineault

Alex: Welcome to The Fatigue Super Conference. My guest for this conversation is Nicolas Pineault and this is going to be a really interesting conversation. I think it is one of those areas that people will have heard different opinions and perspectives around I think there is some mis-information and confusion on different perspectives of this argument and we are looking at Electro Magnetic Fields and pollution and toxicity from those and Nicolas has a very good book 'The Non-Tinfoil Guide to EMFs', which got me sucked in straight away. So that is a good resource that we will mention a few times.

But just to give you a bit about Nicolas's background. Nicolas Pineault is an investigative health journalist, educator and advocate for safe technologies. In 2017 he authored 'The Non-Tin Foil Guide to EMFs', an unconventional book endorsed by top health authorities such as Dr Mercola and which tackles the serious topic of electro-magnetic pollution with humour and common sense. He has since launched the Electro Smog RX online course with the goal of educating 100,000 health professionals on how to prevent, diagnose and treat EMF related illness. Nicolaus thanks very much for joining us.

Nicolas: Sure thanks for having me.

Alex: I am curious before we get into a bit more about what EMFs are and some of the background and research around this. What got you interested in this topic?

Nicolas: It was really one thing led to another. In 2015 I barely knew about the topic to be quite honest with you, I heard about dangers about cell phones, I was kind of a little bit prudent when using my cellphone, trying to hold it not next to my ear and in my mind it is radiation, I have heard of brain cancer and this information but I was really someone who was big into food research and the food industry at that point as an investigative health journalist so I really did not know better myself and I started reading one book after another. One of them is a book by Devra Davis called 'Disconnect'.

Devra Davies is a PG scientist who has been working for the US government for years on different issues of environmental toxicities such as Mercury, if I recall correctly, and she herself was digging into the topic and found it to be extremely concerning.

So her background and also reading multiple books from people with very credible backgrounds such as the late Marchant Blanc who was a physicist and a biologist who was a teacher at a prestigious university and I thought wow these people actually are credible and they talk about a topic that seems to be credible itself and one thing led to another and I found the topic to be very important to talk about and so much I decided to make it almost my life-long mission I guess, or at least for the next few decades. I have a lot of work ahead of me but I found it to be very daunting, very overwhelming and very complicated to understand because it took me about 2 years before I finally got my head around what these EMF things are and what we can do about it and make the topic understandable enough so that I can talk about it. So I thought well I probably need to write a simpler book compared to everything that is out there. That was really the epiphany moment that I had in 2017 and the rest is history, since then I have been solely focused on that topic.

Alex: Fantastic. And maybe this is a good point to go into a bit more about when we talk about EMFs what are we talking about. In the first chapter you have a really good kind of continuum really which shows different sorts of electro magnetic fields but maybe to just give people a bit of context we can talk about what kind of things we are referring to.

Nicolas: Sure. So EMFs refers to Electro Magnetic Fields, it is not the best scientific term to use but it is one that people can understand because in the end EMFs are everywhere and have always been everywhere. So the sun and its electro magnetic fields UV radiation, infra red radiation when you feel the heat and also colour so visible light is also an EMF so it gets a little bit tricky but the type of EMFs that I am interested into when it comes to my research is Wi-Fi, cellphones, blue tooth and even household electricity or all the sources of man-made EMFs that have never been around before the electrification of our society, which is fairly recent in human history and then very recently the wireless signals that we have rolled out to everything and everyone and we can say the last 20 years but really it is the last 10 that have been extremely key with the advance of the smart phone. So really the EMF is the communication signals that headphones use, such as your blue tooth headphones that you are using, if I am using my cellphone it is the same thing, it is communicating with a tower. The Wi-Fi signals that are covering your home and you pick it up on your devices it is also a type of EMF. So these are new signals that have never been seen before in nature, in my research, and my question and why I

am on this Fatigue Super conference is the effect. What is the effect that these signals, these new EMFs have on your energy levels and on your fatigue levels.

Alex: So it is also one of the things that helped land this topic for me and I should say this is something that I feel like I have a basic level of understanding to the point that I have made some minor changes in my life, but as I said to you before we started recording, it's one of those ones that I recognise there is further I could go. So, for example, you notice I am wearing my air pods, I really like these for recording because there are no cables as I try and move around and something pulls them out of my ear but I have another, for example, a set of headphones that I tend to use for the rest of my life. I don't use my mobile phone to my ear, I tend to use it on speakerphone, so there are these minor kind of pieces but I recognise there is more that is possible.

One of the things that landed this for me was that when I was reading your book looking at this kind of continuum and realising that there is no debate that things like, for example, X-Ray machines can be harmful, there is not a debate in society that is why people that operate those machines will be behind a protective kind of screen and it is not good to be X-rayed too frequently. So in a sense the question is not around whether these different kinds of electro magnetic fields have an impact really the question is at what level is that impact enough that it is potentially dangerous to the human body and I guess that is where this starts to get interesting because of course, as we'll come to I am sure in a bit, there are lots of vested interests in positions and outcomes of where this might be seen.

But maybe just before we come into this a bit more you also talk about four different types of EMF, like different kind of categories. It might be just a helpful way of people organizing their thinking a little bit more about this.

Nicolas: Sure. The number one type of EMF that a lot of people will be familiar with is what we call the radio frequency or the microwave radiation range and that's your cellphone tower, cellphones, bluetooth, Wi-Fi and this is the biggest increase that we have seen in the last 10 years is probably in this range. And just to give you a little bit of perspective and these are mind boggling numbers but the increase in this type of EMF between now and 100 years ago is quintillion fold. So quintillion is 1 and 15 zeros. That is a billion, billions.

Alex: That sounds like the kind of number one of my kids would come up with.

Nicolas: Well exactly, it doesn't even really exist right, it's tremendous. And it doesn't say anything about whether it is dangerous or not but the thing is for sure our bodies were never experiencing them and even 100 years ago we were barely experiencing them from because there are microwaves that are coming from space but it is a tiny fraction of the microwaves we expose ourselves too. That is the first type.

The second type is normal household electricity that produces electrical fields. I used to think that electricity stays in the wall but in fact it emits a low level electricity field that can be measured on the body but not felt, it is under your perception level but it might have an impact also. It doesn't mean electricity is dangerous but it may mean that if you reduce electricity, for example, by going camping in nature, where you don't get electricity around, you might get better sleep. These are important things to look at when we look at fatigue and sleep and recuperation.

The number three type of field is a magnetic field and that is a field that stays around big motors or source of electricity, so for example, it might be problematic if you sleep right next to your headboard and the other side of the wall you are not aware that your neighbour has lets say a household appliance such as a fridge. Well your head might be in a huge magnetic field and a lot of people realise that it impacts their sleep negatively. So these are the kind of things you could find in an EMF survey in your home, which again the goal of would be to reduce these fields to the minimum possible, closer to nature, to have a normal natural sleep.

The fourth type is called dirty electricity and these are referring to fluctuations in electricity caused by modern appliances. It is a little bit technical but for the sake of this conversation just understand EMFs and that these different types of field that have been classified by a profession called the Building Biology Profession, professionals that do surveys in homes. It is important to say that these four types of fields we never experience them in nature and they can have an impact on your energy levels and sleep quality in that there are things you can do to lower them to the minimal possible.

Alex: Yes and before we come to some of the things we can do about this it is worth exploring a bit more some of the research and some of the work that has been done around this. If one was to believe what is put out in perhaps the evidence that gets attractions is that it has all been proven safe, there is nothing to worry about, it is all kind of pseudo science kind of stuff.

So maybe say a bit about some of the research and evidence that might be to the contrary of that.

Nicolas: It is a very controversial topic but so were X-rays or smoking at one point. At one point X-rays were used to irradiate children's feet in shoe stores simply to see if 2 was the right fit, I think up until the 50's and then the practice was banned because the scientific community agreed oh my god x-rays are actually, they damage your DNA and they do something. At the moment the meme and the scientific consensus and I put it in quotes here if you are just hearing the audio because there's really no such thing as a consensus. It's always evolving, science is evolving, there are controversies at the moment these EMFs are they really a problem? Are safety standards insufficient or are they not? So that's really the unclear question and then there are scientific opinions on the matter.

So if you ask a lot of credible scientists in the US, that are completely independent, they would tell you, and one of them is Dr Anthony Miller, one of the world's most prestigious epidemiologists, he recently said EMFs should be a class 1 carcinogen and that's next to smoking and asbestos. He is not the only one saying that, a lot of scientists are saying that. Other scientists would say that is nonsense, EMFs are perfectly safe, we have safety standards and there is nothing happening. So the truth is probably somewhere in the middle or one of these two groups is completely out of their mind. It's bizarre to me but this is how science works. In the same time you have scientific, very high level scientific scientists that think completely opposite ideas and then our goal as consumers, and lets say the government and agencies is to set standards and to try to decipher what is true from what is not.

Now as a journalist I want to look at this evidence, how strong it is and how it is interpreted by governments and by countries. And some say well that is not a scientific argument, well it is for me as a consumer who wants to protect myself. So the US, for example, and Canada have very, very high limits. So what they say well our limits are super high and what you are exposed to is super low so everything is fine. Other countries take a different approach for example France, or even China, even Russia, multiple other countries that lets say have also scientists that review the science that is available at the moment they say well we don't feel comfortable with that because it seems that the evidence is pointing towards that people get effects whether it's a high long term cancer risk or a loss of fertility, for example in men when they have a cell phone in their pocket or even from overall exposure. The Germans are looking, a lot of German research around living near cell phone towers and how certain people have more risks for cancer or other aspects of their health are diminished so worldwide there are different opinions and if you look at other countries they are taking a way more cautious approach to the question. And this is why, for example, France has decided to ban all cell phones last September 2018 from schools. It was sure a distraction but it was also because of the possible effects of radiation on the kids. So that is one thing.

They banned Wi-Fi from kindergartens and nurseries. Israel has done the same and their standards are multiple, multiple folds under our safety standards here in Canada or even where we might be in the US or Australia and other countries that are interpreting the science differently.

When you look at the bias in EMFs science it looks like it is strong and it looks like it is a safe statement to say it is the same thing we have seen with big tobacco, we are seeing where there is vested interest and there is a lot of research that is financed by the industry. When we look at independent databases over and over most studies show an effect and most studies that don't show an effect have been financed by the industry, by the military or by people who somehow have a vested interest. So that is one thing. Some people who are listening to this will say well okay this is a conspiracy theory. No this is business. There is a lot of money to be made in wireless, in technology and if I we're selling cell phones I would not want to finance a study that says these things are not healthy. It is just business and at the moment it is coming out, just since I wrote my book in the last 2 years, is just more and more and more studies re-inforcing the ideas that we should reduce our EMF exposure and not increase it.

Alex: One of the examples you gave in the book, which I thought was really interesting, you were talking about how do they deal with the research to see if, for example, mobile phones are having an impact on people. You were describing one of the studies that had been done where they had a character they called SAM, which I think was specific anthropomorphic mannequin. Maybe talk about that but some of the details of that was quite impactful.

Nicolas: It is a little bit insightful. So SAMs, standard anthropomorphic mannequin, is basically a big mannequin head they use to test cell phones with. There are multiple problems with this type of testing. First it is not the size of the average head. I am 5ft 4" maybe, it doesn't show but I'm a small guy, so this head is the size of a 6ft 2" 220lb military person, so this is how when they launched the descender, I think it might have been in 1989, it is very old and deprecative this way of testing. They blast the head with radiation and they look at temperature increase in the brain. It is not allowed to go over 1 celsius in temperature increase because then you get problems, you might get fever like effect or even tissue damage to some extent.

So these are the safety standards that have been updated last time in 1996, based on science that was from the late 80s. So needless to say our situation has changed now and these standards are completely deprecated and we don't even have safety testing that's reflective of children using cellphones. So I'm 5ft 4" but my son Elliot is 2ft or something and he might use a cell phone if I allowed him to just to play or just to talk on a cell phone with granddaddy or

grandmummy, well it is a reality that people of all ages use cell phones so we need to test these things as they are used.

Even worse than that, they are used at a distance in the safety testing of 5-15 mm. I don't know exactly how they came up with is it to imitate the ear. What happened is that the French government in 2016/2017 looked at okay what happens when you remove this distance? Well the radiation increases tremendously and there is a scandal going on right now in France and internationally, that we barely hear about called, the phonegate and it has been launched by a French physician Marc Arazi and I talked to Mark,, you can tell French is my first language, and what they found is that 90% of all cell phones fail the 1996 safety testing so the phones and different gadgets don't even follow the rules because the rules have been so lax. So it is about time that we looked at society, not to eliminate technology, but revise these safety standards that are completely deprecated now.

Alex: So maybe this is a good point to broaden this a little bit to the link between EMFs and fatigue. So for people who are experiencing fatigue and many of the different iterations that they might experience what are some of the ways that potentially EMF radiation could be having an impact on that?

Nicolas: The mechanisms are not that different from x-rays in fact. So what happens on a cellular level is a loss of cellular energy and for some people I am sure in this conference you will talk about mitochondria, which are the little power plants of the cell. Overall it's a loss of mitochondrial function and the best researcher looking at this, two of the best researchers looking at this I can name, are Dr Martin Pall from the Washington State University, who has shown that in your cells you have calcium channels and when you have foreign electricity it activates a voltage sensor. So imagine you have a garage door outside or in your garage and the sensor acts when the electricity is on it opens. It is the same thing with these calcium channels, so electricity is in the air, which is Wi-Fi signal, for example, and it opens mistakenly. Normally in nature it would have opened for a couple of mili seconds now it stays open for up to hours and what happens is that these calcium channels let a lot of calcium flow into the cell and that is an unnatural thing to have so much calcium inside the cell, normally you would have a lot outside the cell between cells and then just a little bit, just enough, inside the cell. Now you have calcium overflow and this creates oxidative damage and down the road it will lead to that cell, let's say that cell is fatigued in reality because all the parts of the cell, including mitochondria will work less efficiently.

And this has also been shown on a mitochondrial standpoint that when you expose mitochondria to these fields you also have a loss of efficiency of how efficient can we create energy. And that is Dr Paul Heroux from the University

of McGill here in Montreal, a fellow French Canadian, and he has shown that, without a shadow of a doubt, that this is happening at very, very low levels of EMF. So we don't know what extent, we don't know what our safe levels of EMF but what is clear right now is that we should all try to reduce our exposure as best we can.

Just like you are reducing your exposure to pesticides if you eat organic you are reducing your exposure to smog if you decide to clean up your air. I was in Asia a few weeks back, I had a mask because the air was so polluted, so we do our best to avoid what makes us fatigued in the first place. I think that this conversation is not about being overwhelmed and thinking oh my god there is radiation everywhere, there is radiation everywhere folks, I am in Montreal and there are cell phone towers.

So if I focus on that I am a little bit lost but if I focus on what can I do to minimize my exposure that is the key. Because just like you cannot eliminate pesticides, maybe if you eat just from your garden but then you have the raindrops, so you cannot eliminate everything that might make you more fatigued or every bit of toxicity, in our modern world it is impossible. A practical approach is how can I minimize it while not spending too much time and money.

Alex: Absolutely. I would love to come a bit more in a bit. Just while we are on the relationship with fatigue something that popped into my mind is I was talking with one of the other interviews as part of the conference, with Dr Rafael Kellman whose an expert in microbiome function, and he was saying that with the microbiome that it is starting to be discovered that gut bacteria communicate using low level EMFs and so also EMF radiation could actually be having an impact on the microbiome. I don't know if that is something you have come across.

Nicolas: There is not a lot of research published on that and I am more concerned by the fact that there is not a lot of research, right. When it comes to EMFs it is what we don't know is the most concerning because we need more studies, sure, but at the same time the industry will say at the same time we need more studies so lets wait until these studies come out. Well my question for them is who is financing these studies and in reality, and something that will shock a lot of people that are US based, at the moment I am not aware of a single study that is being done in the US about EMF radiation. Not even about these new technologies called the 5g network that are being rolled out.

So people are waiting on more studies and at the same time there are no studies that are done in the country or even in North America that I am aware

of. There was a major study, the NTP study, that came out several months back that said well EMFs are a clear carcinogen in rats. And you know what happened? Well the FDA who mandated the national toxicology program to create this study back in the 90s, it came out in 2018, well the FDA said well we don't know exactly how these cancers in rats could be correlated to the human population. So they took the study and they said it is probably irrelevant even if we spent 20 years studying the question and 25 million dollars of taxpayer's money, so now we're just left with wait for more studies, like who has the money? And it is not going to be the industry that wants to find effects obviously no one in their sane mind would do that if they own a cell phone company.

So we don't know about the microbiome, long story short, and we don't know exactly how it is impacting. There are some studies that show that certain pathogens grow faster under the influence of Wi-Fi for example. Very concerning research from a research group from the researcher Taheri in 2016 but it is so early that we cannot conclude that Wi-Fi equals bad bugs or any of these things it is just concerning early findings with so little financing to verify what the heck are we doing to ourselves.

Alex: It is a fascinating one when dismissing research on rats when research on rats is normally the starting point for developing pharmaceuticals and everything else.

Nicolas: Exactly. Without going into details you are exactly right. And that is something a lot of people, if you hear these arguments, which says rats are not humans, it looks like a sane thing to do, it looks like Oh yeah, you just debunked the study. Well no, we don't study people for cancer, well we do study people that have died of cancer, that is called Epidemiology, that is one side of science. The other one is toxicology studies on rats. Why do we study rats because we can extrapolate what rats are seeing in a short time span because their life expectancy is so low.

In the human population and everything that has been proven to be a carcinogen in rats so far in research has been proven to be a carcinogen in humans later. So it is the golden standard and the NTP study is supposed to be the definitive answer but of course with the politics involved it looks like we still have to do more studies. So that is really the state of the science.

Alex: Before we come into how we come into how we reduce EMF exposure maybe just what are the worst sources of EMF like if you were to look at the biggest, what appears to be based on the data we have at the moment. The things that we should be more concerned about.

Nicolas: The worst sources are the ones that are very close to your body. So if we talk about the cell phone it would be the cell phone that you put to your ear or even the cell phone you would put near to your body if you are carrying it. Or if you carry it, you talk on headphones or speakerphone it is still on right. So unless it is in airplane mode even if you have a phone or even a tablet that you put right next to your body, or a laptop that you put on your lap, these would be the strongest sources because radiation drops off with the square root of the distance. So in other words if you put your cell phone at just 1ft you drop the radiation by 80% and 2ft its 90%. So it is tremendous what distance can do and a lot of people, I don't know if Devra Davis who said that in the book, I don't want to steal everyone's quote, but distance is your friend. These people who have been looking into EMFs way longer than I did have really come up with this phrase and I think it is key. So whenever you have a source of EMFs, the second one I can talk about is the Wi-Fi router.

Something I heard from multiple people is that my Wi-Fi router is right next to my computer or my Wi-Fi router happens to be under the bed. That's one thing I saw in a hotel room of all places, in a high-end hotel room, they put the Wi-Fi router under the bed and why did they do that? It was probably just a practical thing to do, they didn't think twice, but it's something that can be very disruptive for people's sleep. So creating distance from this Wi-Fi router if you have it at home, its putting as much distance as you can manage from living areas and especially your bedroom at night and that Wi-Fi router and then we'll go into solutions but it's also eliminating these sources if you can help it.

So personal devices and then I would say second thing would be the Wi-Fi router. When it comes to exposure at home and also at work and other places. If you happen to be at work and the Wi-Fi router is at your desk you can ask your boss to move it. So distance is really key for those sources.

Alex: Okay so let's come to some of the ways people can reduce exposure. What are some of the relatively simple things that people can do without having to invest lots of kind of time and money in doing so.

Nicolas: Its really better habits. You have really different habits now if you are listening to this I am sure you have invested towards your health. You have probably changed your habits I remember back in the days I used to be eating what can be considered as standard American diet really the sad diet. Well even as a health journalist at first that is what I knew, right, when you know better you do better. It is the same thing when it comes to cell phones so it is a matter of habits and the way you use it so that's my cell phone it is on airplane mode. People now are contacting me and they know I have different times I am at the computer. My computer is wired in with an Internet cable, I don't use Wi-Fi. So that is one thing, eliminating sources by

opting to not talking on a cellphone so much and reducing your time of exposure is one thing. If you need to be on the cellphone all the time well creating distance in that case is very important so you can use types of ear buds, that are called the air tube headsets that really reduce the radiation that would go through the wire to your head. That is a little bit technical but it's a good pair of headsets of ear buds to invest in.

So creating distance whether you are using any device, creating distance between the device and your body is the right thing to do. And this includes, it is not practical because a lot of people like to use the laptop on their laps, but using it in front of you on a desk, just like computers are intended to be, well it creates this distance. When it comes to your computer having this internet cable and taking the cable and plugging into the computer the old way is boring but if you do that most people report feeling less fatigued at the end of their work day.

And that is something I have seen in people who have a workstation, whether it is their home office or even a workstation at their job, most people are still working on Wi-Fi. Well my question for you is do you plan to move round your computer, if not, you don't need Wi-Fi. You might as well, maybe it will require the job of an electrician, but you can wire in the internet cable and then you reduce tremendously your exposure during the day because if that computer in front of me was on Wi-Fi I would be exposed and that would be the equivalent of talking several hours on the cell phone a day, without being able to compare the two sources, but it is a tremendous exposure that I am removing from my life because of the proximity to this device.

When it comes to Wi-Fi, or any device, the key is to just turn it on when you need to use it. So if it is in the middle of the night why do you need to have it on? People don't think twice they keep it 24/7. It is like keeping your toaster plugged in, why would you unplug it, you don't think twice. Well you can put it on a Christmas light timer, you can purchase it from Amazon for a couple of dollars, from a hardware store, and you plug in your Wi-Fi router and setting maybe 10 pm until 6 am is going to turn off and automatically you reduce EMFs throughout your home. Most people that I told that to, even those who are skeptics, even those who tell me Nic okay you are full of it, I don't believe anything about EMFs, they told me wow I sleep better. So if you do that with your cell phone and with your different devices inside the bedroom and then turn off the Wi-Fi and make sure everything is turned off, one thing you might experience is more energy.

It is very important that you test these ideas for yourself. One thing I might add, if you don't feel the effects. If you say okay Nic well I did it for three nights and I feel the exact same well it does not mean it is not affecting you. It

is like saying well I have reduced the pesticides in my diet and I don't feel better so instead I am going to continue eating pesticides. I don't follow that line of thought really. It is minimizing all sources, whether you feel a direct effect or not. But generally speaking people feel better doing that.

Alex: And I guess that all sounds very practicable and doable and I think it's also things like, often when I am on my mobile phone these days I will just use it on speaker phone and just hold it at a distance, which seems to work just as well, in a sense. So it seems to be that there's, as you were saying at the start of this section, there's relatively simple things that people can do and I guess part of what it also comes down to is, given that there's this kind of greyish, is it grey area it sounds like there is some fairly compelling evidence that there are some, at least for some people who are more sensitive if not for everyone, there are some impacts here.

One of the ways that often we would look at the fatigue population is a little bit like the canaries in the coalmine so back in the day you would go down to the coalmine and have a canary in the cage and when the canary dropped over it was like, okay there is an issue here. So often people with fatigue can have sensitivities to chemicals that the rest of the population might not or to certain foods, for example. But it makes sense that if a system is more sensitive it maybe more sensitive to some of these factors.

And I guess the danger is if someone gets into the mindset of thinking I have to have, like you said earlier which I think is a really very valuable point, I need to have no EMFs in my life, it's like saying all the air I have to breathe has to be perfectly pure, all the food I want to eat is going to be perfect. Well you're a bit screwed on that because the soil itself is not what it was 50 years ago. But it's trying to have a measured perspective in terms of what is possible.

Nicolas: Sure. When it comes to people who are listening to this and say well I already know that I am sensitive because people who have chronic fatigue, autoimmune disorders or are even nearly bedridden, often times they know, they won't even touch a cell phone. So if you know you are sensitive or if you do the three night's test and turn off your Wi-Fi and turn off your devices and you feel tremendously better well it's probably time you take this into you and go deeper with your EMF removal.

The second part of my work, that's what happened 2017 I wrote my book, 2018 and this year I created a course for health professionals in collaboration with doctors, because I realised that the top doctors that are treating chronic fatigue and auto-immune disorders, and Parkinson's and Alzheimer's and

trying to manage these conditions if not reverse them in some regards, like Dr Dietrich Klinghardt from Sophia Health Institute.

Alex: He is one of our guests on the conference.

Nicolas: Well he will talk about EMFs I am sure. Dr Klinghardt is a collaborator on the course we have created and he told me what every other practitioner is missing because the average patient he has seen has seen more than 20 other practitioners before him. So these are people that are not getting better even with the best functional medicine because they are hyper sensitive to everything, so it makes it a very complicated portrait of chronic illness. And if you fall into this category you say oh my god that's me I have been to 40 doctors, well listen to this, he said Nic the number one factor that everyone else is missing is not diet it is not another supplement it is removal of these EMFs. What he has realised through trial and error is that if you cannot heal sometimes it is because your body is in this high EMF environment and that maybe it is keeping your nervous system activated.

Maybe it is preventing you from sleeping soundly so you can have tissue repair, and repairing your brain and lower inflammation. But whatever the reason it just looks like it's keeping the stress bucket so full, that they need to either change environment, which is a huge decision for people, kind of getting away from the City and living in nature for a while until they can recover. Some people go to mountain retreats and all of these things, but there are costs associated with it.

And some other people choose, okay I am going to hire a building biologist and another type of EMF consultant called the Geo Vital Certification and you can Google it you can find practitioners in your state or country. These professionals can survey your home and find the sources and help you come up with shielding solutions.

So what can happen in some situations yes you turn off your own Wi-Fi, you don't use your cell phone but you've become so sensitive to literally everything that you need to address EMFs to a point that if right there next to the window there is a cell phone tower, well you cannot really turn it off so in that case you could have shielding solutions and sleep under a bed canopy or these advanced solutions that look a little bit crazy but Dr Klinghardt and other doctors that are at the top of their field have found tremendous value in doing that.

On a personal standpoint I don't need more evidence because it is only logical to me that we will sleep better in an environment that has clean air and clean EMFs that is closer to nature. It is just our bodies the way they work, without

being able to quantify it, it is only logical that people sleep better in an environment that is closer to nature. You understand what I am saying but it's only going back to ancestral levels of radiation and having this just calmness to it and what people realised is that they sleep better and if they sleep better they recuperate better. So this is how it fits in treating the advanced fatigue some people listening to this might be experiencing.

Alex: Fantastic. I am mindful we are running out of time. But just before we come to people finding out a bit more about your book and your work maybe just touch on briefly how do EMFs affect children differently to adults because obviously their bodies and their brains are much less developed and I would be curious to your thoughts on that.

Nicolas: There are multiple people that are extremely concerned about the effects that EMFs might have on children and one of these concerns is well our safety standards are on adults so how does it affect children differently and pound for pound children will absorb twice the radiation compared to adults. In their spinal chord it is up to 10 times when engineers looked at how the body is behaving and that is because they have a higher water content and these microwave radiation signals tend to be absorbed by water.

So it is very concerning we don't know a lot but one of these scientists that is very high level is Dr Hugh Taylor from the Yale University and he is at the top of his field from one of the top Universities in the US so that's not someone who believes in crazy conspiracy theories. He says well when I look at the available data there is a cause and effect between EMFs and behaviour change like ADHD, over excitation and behavioural problems and at the same time we do have this epidemic of ADHD and different behavioural problems in our children so in his mind it is part of the reason we are seeing children these days acting up so much and having all of these issues. We don't know again what is the percentage, is it one of the factors, is it the cause, I cannot tell, but one thing is sure if it is affecting adults and if you believe anything we have said in this conversation and test it out for yourself and impact your sleep imagine how much is impacting the sleep of your kids.

So in that case the same thing applies to your kids and even more and it means that if you are handing an iPad to a kid make sure to pre-download the content on there and not keep it connected while the children are on devices. And that's very, very important because they are simply not tested on children, not intended as a toy, and our safety standards I think in the future will change and I really doubt that we will keep handing these hot potatoes that are called cell phones or iPads to children. So it's really is in the meantime up to you to change these habits and have your kids minimize screen time overall, that's another topic but something I really advocate but it

is very prudent to not give a device that is not connected to children and making sure to pre-down load the games, pre-download the movies, whatever you want to give them I'm OK with it, but make sure that the it is on airplane mode in that case.

Alex: It is funny you say that my wife is militant about the kids having their iPads on airplane mode. This has been fascinating we've mentioned your book, 'The Non Tinfoil Guide to EMFs', which people can get from Amazon and I am sure other places. Say a bit more about where people can find out a bit more, mention your website and your course.

Nicolas: 'The Non Tinfoil Guide to EMFs' is on kindle and hard copy at amazon.com, amazon.ca, in the UK, Germany, Japan, worldwide. You can find it just type EMFs in Google or in Amazon and you will find it. My website is being developed but it will be at the EMFguy.com where you can find my YouTube channel and everything that I'm publishing and new information and new video tutorials about EMFs also I am doing on YouTube.

Finally my course which is a little bit more advanced but it is both for individuals who feel concerned and also for health professionals because it is a little bit more in depth but it is open to everyone, we did not want to restrict it to just health professionals. It can be found at electoralsmogrx.com.

Alex: Fantastic. Nicolas thank you so much for your time it has been a really helpful conversation and I really appreciate it.

Nicolas: Thanks for having me.