Speaker Introduction and Fertility Summit Welcome

Welcome back to the Super Fertility Summit. I am so excited to introduce to you our speaker, Dr. William Pawluk. He is a holistic doctor near Baltimore, Maryland.

He's held academic positions at Johns Hopkins University and the University of Maryland. And he's been trained in many different disciplines to really find solutions to difficult health challenges, including acupuncture, nutrition, herbal energy, medicine, homeopathy, hypnosis, body work, and multiple other therapies.

He's considered the foremost authority on the use of pulsed electromagnetic field PEMF therapy in North America. He's interested in holistic pain management and in new solutions to stubborn, chronic and frustrating health problems like fertility challenges and difficulty getting and or staying pregnant.

He works to resolve the cause of the problem and not to simply put a Band-Aid on it, which is something that has been a strong focus and throughline throughout the the Super Fertility Summit.

And he has worked with magnetic field therapies for 30 years and established an authoritative website on the topic at DrPawluk.com drpawluk.com He's authored two comprehensive books on healing with magnetic fields, one called Power Tools for health, which has 500 scientific references in it, and Supercharge Your Health with PEMF therapy, which is the manual for using this type of therapy.

I am so excited for you to hear this innovative conversation about the use of PEMF for fertility and specifically for the health of the uterus, for egg quality and for sperm quality, and also for facilitating the journey of the sperm to the egg.

We also are going to touch on how PEMF therapy may support IVF success, including via embryo transfer and healing.

Magnetic Therapy and Fertility Possibilities

Any inflammation happening in the uterus, uterus and in the uterine lining, which can interfere with both embryo transfer and natural pregnancy. I'm so excited for you to hear this discussion, which you have not heard anywhere else, and I'm very excited to now introduce you to and welcome Dr. Pawluk to the Super Fertility Summit.

Thank you so much for being here. Thank you for being here. I'm so excited to have this conversation today. Yes. And, you know, quite frankly, when I saw the summit, I talked to Brad about that, and I saw the, the list of summits that he's doing.

I thought infertility. Well, you know, I'm not sure magnetic field therapy could work. But then I started thinking about all kinds of stuff, and I said, wait a minute, that magnetic field here is what happens.

We'll talk about this. There was a study done in and I it's not really published, but there was a study done in Russia. Okay. About using PEMF therapy for endometriosis. Yes.

And you know what PEMF therapy the, the, the fertility rates were with PEMF therapy in endometriosis. Tell me 25%. Wow. The fertility or in. Yeah that's incredible.

Right. And when you talk about in vitro in vitro it is not even necessarily all that great either, right. Yes, but but PEMF therapy cost 25% fertility in these women.

Well, when you look at the success rates of in-vitro of IVF over different age groups, it's much lower than 25% on

average. So that's incredible. I don't know what the average age of the people involved in the PEMF study is, but I thought they.

Had well, yeah, they had endometriosis. So generally speaking, what is the age range for endometriosis? usually it's not going to be 55 year old women, right.

So you're going to and when it comes to pregnancy, yes, you're talking up to about 30, 35 maybe. Right. So they may have been a little bit younger than when we're looking at the IVF success rates going down.

But on average you have about a 20%, likelihood of success across age groups. So that's with no procedural intervention. Yeah, exactly. So so that's that's wonderful.

And then you know what's really interesting? So I have so one of the things I've surveyed our community and not surprisingly, they would really love something that could passively improve their fertility, something that they don't have to work so hard for.

So I've been playing around with this device I bought wholesale. What did. You buy? I have it, so can I show you, please? Okay. Hold on. This is the device.

Do you know this device? what's it called? What's the name on it? Oh, wait. Sorry, sorry. On my headphones. Forgive me. Hold on. I forgot to put my headphones on when I started talking to you.

Let's. Okay, here we go. This is the device. What's it called? The. The Leno. Oh, the Leno. oh. So what do you think? Okay, so I've been playing around with it to try to create some programs for fertility in pregnancy.

My kids, my concern about it is that I have never shared this with anyone, by the way, because I feel like this is, like, top secret. But, this idea is like, top secret.

But my my concern is the cost of this in order to, you know, have any profit margin, this is going to have to be sold for probably $3,000. What did you pay for it?

I think I paid either 1200 or 1800. I can't remember. So it's not that helpful. This is not that helpful. So so the problem. Is you have to pay for it.

You buy cheap, you get cheap. Okay. Right. So you so you're talking about we need the devices that you need to go into the clinics for. Exactly. And we'll have to explain that.

But no, no this is for home and clinic okay. Okay. okay. Well let's talk about that because I think, I mean, maybe we can collaborate on something together.

Absolutely. Because I think that if we could create a device like, you know, I really love, the Apollo neuro, you know, the sensei, these kinds of devices that you have access to at your fingertips, where when you mentally, emotionally, physically feel like you need them, you can apply that, right?

What I would love is to create an equivalent that people can use at home. They don't have to go into an office for that can passively improve their fertility.

Everybody wants to I'm going to I'm going to. You need to clean the slate. Okay. Clean the slate. Okay. Clean the slate. However you thought before was right.

Okay. Clean the slate. We're going to start all over again. Okay. Let's do that. And let's set another conversation for us to. Ask to work together. Yeah, I think because if we can crack the code on this, we we can really help a lot.

These people. You can't crack the code on that. No, no, not on this. I mean, on this on this, on this topic of being able to help people passively improve their fertility other than like, meditations, you know, visualizations, etc..

But there's a problem with that. And we need to get into this. There's a problem with that. Fertility is very complicated. It's incredibly complicated.

There is. No more. Taxes. There's no one single solution. Well, I understand that. I understand it in the most. Intimate, I know. Level of detail.

Rethinking Fertility, Stress, and Super Fertility

So that's why I so I understand that, for example, a fertility program, I'm not saying with this device, but needs to, address the brain, it needs to address the ovaries, it needs to address the thyroid. Do you see what I mean? The immune system.

So so that's what we would be looking at putting together. That's not good enough because that's not the problem. Well also the psychology. But we work on all those things. That's not the. Problem.

What's the problem. Inflammation. Well but that's but of course. But that's with the digestion. That doesn't that doesn't take care of inflammation. That can't help.

But is there any device that helps within that. That's okay. But but that's but that's what we need to do then that you know the devices I know that. Once I once I educate you we'll talk again.

Okay. Perfect. Okay. Let's do this. So wait, let me actually. Okay. Actually, let me just ask you a couple questions. I always like to know what's your intention for this conversation?

both kind of the through line that you want to communicate to people, but also the business intention for the conversation so that I can help to facilitate and support your intention throughout the conversation.

Sure. So the first thing is to educate people. There's a lot of mystical thinking, magical thinking. I love that. Will you say that? Sure. Okay. There's a lot of magical thinking, and the magical thinking is there's one solution and it's easy.

And I don't want to do anything just give it to me and I'm done. Yeah. That's the magical thinking. What the thinking does though is it does not understand physiology.

It does not understand pathophysiology and it does not have therapeutics and the value of therapeutics relative to the pathophysiology. That's the problem okay.

People want a very simple solution when they don't understand pathophysiology. And the complexity of the challenge. Why. Because they year the whole fertility thing is a bunch of systems.

It's not one system. It's a bunch of athletes. Exactly. Exactly. So that's why you need a clinician often to be able to interpret and diagnose and evaluate where the problem is coming from.

And this is where the whole endometriosis thing was very fascinating because. What percentage of the time do infertility doctors actually figure out what the problem is.

So 10% are considered unexplained infertility where they don't find they can't identify a physiological reason for the inability. Now, in addition to that, there are 30 approximately 30% of infertility is at the couple level.

And you see, usually what's happening at the couple level is that also each person on their own looks pretty okay. Maybe they have some conditions of some fertility, but nothing that stops most people from getting pregnant.

But somehow the way they come together, it creates conditions of some fertility. So in my mind, that ten plus 40% is where there's a lot of ambiguity about what's going on.

So quite frankly, quite frankly, the number is very high. It's high. It's very, very hot. And that's not even including all the people walking around with what we call impaired fecundity, right, who haven't been diagnosed.

The country and infertility two different terms. Right. Well, because these people are also having trouble getting pregnant and being pregnant and carrying a baby and.

Having. Babies carrying a baby to term, but they haven't been diagnosed as the spectrum. Exactly. It's a spectrum. They're not they haven't been diagnosed as infertile.

But these people also have things going on that either haven't been identified or they haven't. They've gone to a doctor and the doctor hasn't identified them, or they haven't gone to a doctor to have the all of the about.

Yeah. So I you know how I define Ed. Tell me. Three things. Equipment. Opportunity okay. And interest. Okay. This is a really we haven't talked about this yet but I have something really important to loop into this conversation.

And so to talk to us about the, the three parts of the Ed definition. So the problem is that I think that most men, most couples and mostly men, think that the problem is equipment that's share now.

So within equipment you have not only sort of physiologic functions and having erections, maintaining erections, having ejaculations and all that. But there's also the, the there's also the issue of, basically being having enough testosterone.

So that's true. That's part of equipment. But unfortunately testosterone this is a Venn diagram. Testosterone also has an important part of interest. Yes it does.

And a fertility as well. But testosterone doesn't create better ejections ejaculations. Testosterone doesn't create create better two medicines. Testosterone is only the opportunity because the studies on testosterone, it does not increase the the functionality of the penis.

It just creates the desire to use higher. Yeah, exactly. Yeah. Yeah. It's neurological or other aspects of equipment. Right. And desire desire and interest.

So I call desire interest right. interest then is a huge aspect of this. Probably I would say the biggest problem with Ed is interest. The next biggest problem with Ed is opportunity.

And interest and opportunity have to go together. Yeah. That's true. Right. And the last and the least important part of this is equipment. Which is the thing that most people are focused on when they're when there's a problem.

And so when I have that discussion with people who call me and say I have a problem with Ed, can PEMFs help me? I said, well, let's let's start with this discussion about what Ed is.

As most doctors don't talk about because you go to a urologist, they don't care about function, they don't care about interest, they don't care about opportunity.

All they care about is equipment. That's right. Right. And even gynecologists unfortunately are very much in the same sort of, way of thinking. They're not thinking functionally.

So my my job, my role as a family physician historically is it has been always been very functional. A functional medicine doctor then looks at all three aspects.

They should really look at all three aspects. And unfortunately when somebody comes in for Eddie you have to derail them from their thought process about what Eddie is.

And then the men say pardon my expression. Then the men say oh fuck right. Right now because those other components are much more complex to resolve. Right. Right. Exactly.

And that's why they say oh because now they have work to do. Yes. Right. True. This is true. And what's really interesting. So a couple of things I want to point out in the erectile dysfunction discussion, which is we actually see a lot of the couples coming to us at the fertility and Pregnancy Institute to Prime Esther, which is the way that we address fertility challenges and how people make their super babies.

A lot of couples come having struggled to get pregnant and or stay pregnant for months, years, up to two decades. We've seen two. Decades, well. Up to two decades.

And after such prolonged difficulty where the intercourse and being intimate has become mechanical in service of trying to make this baby, and then it's become associated with failure over and over and over again.

A lot of the joy is lost and. Interest is. Gone. The and the and the interest is diminishing for sure, which I actually want to come back to that in just a second.

But what is something that ends up happening is a kind of performance anxiety on the part of the male male. Part of male? Yeah, the male partner especially because, if they have a male partner, because what happens is what are we?

So they the woman starts to explore how to identify her fertile days. And when she starts to think that she understands which days she's most fertile, she's like, stop what you're doing.

Come here right now. And and. And then all day long, you have to do this, act right. And. Well, no, not even that. Maybe. Maybe that's how it is. But I think for them it's like, oh my God, I have to stop what I'm doing.

And because it's this one critical fertile day or window, we've we've got to get it right. And then there's this performance anxiety that happens. So it's really interesting that this actually comes up a lot with fertility challenges.

There are there are some ways around this, but it's kind of sidestepping the problem altogether as opposed to addressing the root causes that you're talking about.

Absolutely. Now the other thing that's really interesting about this is that there's a an inflated perception of the effect of age on fertility outcomes.

Yeah. And here's what I mean. There there are a number of pathways through which age, the effect of age is inflated on the effect of age on fertility is inflated.

One of them is that. Women are often imperfect at preventing pregnancy at some point in their reproductive adult lives, of course. And the women who are super fertile to begin with will usually get pregnant unintentionally.

Yeah, the women who have been and I'm talking about the woman as opposed to the man because I'm talking about her getting pregnant. The and the women who keep being imperfect at preventing pregnancy, either with the same partner or with, you know, multiple partners exactly over time, if they make it through their 20s, their 30s, and now they're in their 40s and they still haven't had an oopsie, an unplanned pregnancy.

Now they're like, oh, I'm running out of time. We've got to get serious. We've got to really, try to have a baby now. They go to a doctor. The doctor says it's because you're in your 40s, but really, they've had weak fertility all along, which is why they never got back.

So that's that's one way. But here's the other way. That's. But also because they're not rabbits. Because they're not rabbits. Say more. What do you mean?

What do you think? What happens with rabbits? I don't know, but maybe this is related to what I was just about to say about the other piece of it. I'm not.

I'm not sure if I know, but the other piece of it. And I think this is maybe what you're referring to, is that as people

get older, into their 30s and 40s, they start having a lower sex drive on average.

Right. So there aren't as many opportunities here and less. Interest. And less interest. Right. And especially if the couple's been together for a long time and and they've been with that same person because then you have the effect of getting older on diminished interest and opportunity.

But you also have the variable of acclimation and kind of the lack of newness in the relationship that's often associated with a decline in interest and up and, opportunity as well.

So those two pathways also impact this inflated effect of age on fertility. And it's really important because nobody talks about these things. counselors do sex therapist do.

Okay, maybe. But fruit in the fertility space. Right. Know in infertility space. No, absolutely. I disagree with you. They're almost all procedural people, right?

They're technical people. They're they're really surgeons who are doing fertility work in many. Good way to put it. And surgeons doing fertility work are going to take their surgical mentality into their fertility work, which is all basic and procedural.

And it's objective and it's you're not sympathetic. That's a big thing. I want to come back to that. Right. So rabbits tell me about rabbits.

How PEMF Works and Why Intensity Matters

Did I understand what you meant. I did. Well I don't you understood. But I'm going to tell you about rabbits okay. Tell me rabbits ovulate on demand. Oh I didn't know that.

They ovulate on demand. Okay. So when they're having sex, it's usually very quick. There's very little time, right, to be able to sort of think about it.

To get engaged about it. So basically they're when they have sex they're their physiologic mechanism ovulate right now. That's amazing. So that means they're fertile every single day every time.

Oh my god. There are super fertile women who ovulate on demand. Really. So what happens is I think that the process of intercourse, they just get so excited about it.

You know how how many eggs we have at any given time in an ovary, right? How many of those eggs are superficial and how many of those eggs are ready to extrude now?

Yeah. I mean, the percentage of eggs that will ever be ovulated in a woman's lifetime compared to the the number she starts her life with. It's it's a teeny percent.

You start with millions and you may ovulate a thousand. I don't know how many studies have been done on old, old rabbits, but I mean, again, it's fertile rabbits there in the, in the, in the primary prime of fertility, they're more likely to do this.

And so young women are probably much more likely to have this, instantaneous ovulation, you know. Okay. So my, my scientist mind is like, how is this possible?

There's a menstrual cycle. There's a period that leads up to the, maturation and the release of the egg and all these things. And I'm wondering how this is possible. And.

It has. It has to do with, an infusion of blood into the, ovaries or into the pelvis. It has to do. What are the factors that cause the o the ovary to eject?

So in other words, I, my thinking is that those women are probably have many more eggs than most women. And those eggs are very superficial. So in other words for you to ejaculate, for you to ovulate at the time of intercourse, that egg has to be ready to do that.

But you probably have to have. So maybe it's just magic. Maybe it's just happens to be coincidental that you ovulate on demand, but maybe it's also a super fertility.

Naturally. Really? Is there a is there a concept of super fertility? Well, we're talking about super fertility here in the super fertility summit. But we have never thought of that as one aspect of the definition.

I'm sorry. I'm going to patent that copyright. This. We already have the super fertility term, but you are the first to say, is it possible that the ability to ovulate on on demand is, is, part of the definition of super fertility?

It's a really interesting concept. I'm sorry about that. No, don't be sorry about that. This is this is I. I actually didn't know about rabbits. I didn't know about animals ovulating on demand.

So that's a really interesting place for it, because I always look to the natural world and other animals to understand different things about the truth of fertility and in fertility in the natural world.

So this is something that I definitely am going to look into more. I have a joke about that. Tell me. So two rabbits were running around being chased by dogs and they're being chased and chased and chased.

And so the male rabbit turns to the female rabbit and and said, let's stop and outnumber them. Right now. Yeah. That's what's so funny about that. Is that really, in times of stress, think about it.

We have an evolutionary adaptation that if we're being chased by another animal, we evolution doesn't want us to just stop and have sex at that moment just to run.

Right? Right. And so we we talk a lot about how our stress response, which evolved to, to function in a world that's very different than the one that we live in today, can often be the thing that's hindering the ability to get pregnant and stay pregnant and carry a healthy baby.

That's a great. Question for you. Does stress cause a release of LDH or LH? I don't know the answer to that question. There's a question for you. Yeah.

So stress causes the release of many environments. But but does it cause an increased release of LH. I don't know. LH does it cause an increased release of prolactin.

That yeah that is possible. Yes. Right. And then whatever downstream side stream, whatever LH. in, in most cases I don't know about LH specifically. So I'm going to look at this up.

So let me make a note. Species that ovulate on demand. Plus the relationship between the an acute stressor and the immediate response of LH, but. What you're getting back to the concept of the acute stressor causing a release of eggs.

So I would guess that an acute stressor does not cause the release of eggs. Here, here, here's here's what? And not just guess. Hypothesize. Make an educated in.

Humans, in humans, but not necessarily all. In in that. That's true. It might be in humans on average. Let me tell you, I know this was what I was just about to say in terms of, I don't know about acute stress and immediate response of LH specifically, but what I know is that usually there's an inverse relationship between hormones and stress hormones.

So as stress hormones are going up, sex hormones are becoming depleted, especially if that's happening over time. During but during during an acute stress all kinds of things are flowing.

That's interesting I will look that up. I don't know the answer to that question but it's a really really interesting I mean if that were the case then it's possible.

So we use hermetic stress right. As a way to increase fertility. But we don't want the hermetic stress to be too close to conception. So we do it up until about 4 to 6 weeks prior to the projected conception date.

Right. But if we found that on average or for some portion of the human population, stress could actually induce ovulation, then that might actually be an avenue for for intervening.

Exactly. So that's a really intriguing question. And it's really counterintuitive. So what we know is that repeated chronic stress degrades fertility.

I would agree, we we do end and, and we know that acute stressors are dangerous for pregnancy. We have a lot of research on that, what we call. Pregnancy itself or. Pregnancy itself.

What we don't know is, is it possible that acute stressors could temporarily create a spike in fertile conditions? Okay. And my hypothesis is that that is a you have the ovary has to be ready.

Its timing. The ovary has to be ready for whatever that stressor is that causes all this stuff being released all of a sudden, pop. Well, so what you're saying is, if you are closer to ovulation and experience an acute stress, it might be that there's an an immediate response of higher fertility.

Correct. So okay, I gotta. Go back to super fertility and then going back to rabbits do. And so rabbits based on that concept or that idea that rabbits are super fertile when they're ovulating all the time, they're not related to their cycles.

Something else, some other aspect of their physiology is causing them to be operating all the time. And that's a species survival need. That's so interesting.

So then the question becomes what is the what's the comparability in humans. And if that's the case how can you induce it onto them. And safely. Okay.

We are you and I are going to explore this. Then we're going to start researching this question. Is that or this I mean, this is a really interesting hypothesis.

And I thought I thought of every hypothesis you could possibly think of related to fertility and pregnancy and intergenerational transmission of health.

And I haven't thought of this now. The one thing that okay, so the another thing that we know is that there's an, a bell shaped or inverted U-shaped relationship between stress and reproductive outcomes.

So when it comes when it comes to both fertility and pregnancy and the outcomes of the program, the epigenetic programing of children in utero, too little stressed and too much stress is associated with adverse outcomes.

You actually need a moderate amount of stress for your systems to be kept on their toes, working well, and you need a moderate amount of stress to program your future super baby's nervous system for being able to cope in the outside world.

So that moderate amount of stress is is beneficial. I don't know what that says about this acute stress question, but we know there's this nuanced and complex relationship of stress to reproductive outcomes in general.

Most people today are, Staying in school longer, focused on education right. You know, burning the candle is the the phrase burning the candle at both ends or whatever that, you know, pushing so hard and depleting their fertile power and ability that that we know, for the most part, the stressful conditions of modern life are damaging fertility.

And that's why we see rates of quote unquote, infertility, impaired fecundity, fertility challenges, adverse pregnancy outcomes, and unhealthy children growing at insane rates.

So that's the general picture. But it's really interesting to think about these these more nuanced pictures and how just like we use warm medic stress therapeutically to improve fertility, that there may be some other ways to therapeutically apply, apply and release stressors.

So, one other sort of thought for you, when I was a medical director for the Johns Hopkins Health plan. we were dealing with a lot of premature labors. Yes.

Which is a massive problem in the leading cause of infant mortality, by the way. Absolutely. Now, a lot of the way we were trying to develop programs to get women more engaged in the prenatal care process.

and these are young girls in, in those communities who should have been pregnant in the first place. Which have those rates of pregnancy have declined dramatically.

Largely because of birth control and various factors. But one of the I met along the way, I met a doctor, from Africa. Nice. so we were comparing our notes about premature births and so on.

And, the stress, the stress of urban life in the US. Because the same racial and ethnic groups in their native countries do not have that experience. Elevated rates of pre tobacco.

That's why when he's. Shocking me, when he was telling. Me that now even though they're very poor typically. Right. So that's why when you said that you met a doctor from Africa, I said, nice because I knew exactly where that was going.

I've done a ton of research on this topic. We see the same thing in the Latina populations. I mean, there really is a fertility, longevity and health advantage to not being in America if you are a woman of color.

Well, what I think I don't know whether I'm right or not, but I think there's again, it's multifactorial and difficult to nail down one cause I think the difference between Africa and the US in terms of poverty is American poverty is urban poverty layered on top of, horrible diets, horrible diets, lifetime horrible diets, prenatal, horrible diets in Africa, they're poor.

They're so poor they're not buying food from supermarkets. It's interesting because I grew up very poor, and that that was a part of my childhood that actually served me and my four siblings really well, which was our dad couldn't afford to buy all these convenience foods.

So even though we were really poor, we ate apples and we ate salad and we. You may have a small garden or whatever. Well, we did it. It was in America.

But what I mean is we ate real food, right? Not boxed foods because we couldn't afford it. And that ended up being great. So the same thing is happening in the more rural contexts outside of America.

And that's absolutely true. But the other thing is that there are unique social, political and economic and identity stressors about being a minority in the either in the United States versus being like everybody else, right?

In, in the native country. Because there's a lot there, lots of factors. As I said, it's multifactorial. Exactly 100%, 100%. I think nutrition has a a huge amount to do with it.

It has a it does play a really big role. Well, you know, something that's really interesting is that we have studies that show that, women of color and especially black and African American women who are of higher socioeconomic status or social class in America, have poor outcomes than women, their than their lower socioeconomic counterparts.

And an interesting and what's what's interesting about that is it shows it's not prenatal care, it's not just access to nutrition. It really is that those those social components and the stressors, because those higher educated, higher SES women of color are operating in spaces where they're often the only minority, you know, 1 to 1 of the only as, as opposed to maybe someone who's working, like a lower skilled job and maybe there are there are other peers. And.

There with them. Right. So we we really know we have we've been able to isolate that. There's a very, large effect of, of, socioeconomics. I don't know whether that's true in other countries like Canada or the UK, where the, the minority know they're minorities, but they're not, they're not the same.

So I think a lot of those outcomes. I believe I believe the outcomes are same. I believe the outcomes are similar. It's worse in the United States of America because we have the worst maternal child health outcomes of any developed.

Country. Nation. But there there are parallels just to a, I think a lesser degree in those countries. what I, what I don't think is parallel is in maybe the native countries and seeing the big socioeconomic differences there.

Yeah, they may or may not be there. I'm not 100% sure of that. Right. Yeah. I would expect that the again, the economics would be more important there than the socio part of that.

But I think and we were way off topic. Well, not really, because having having your super baby isn't just about getting pregnant, it's also about staying pregnant and being able to carry your baby to term, to have a healthy birth, to have a healthy postpartum period.

So this is this is a part of it. This is part of the spectrum abs. Absolutely, absolutely. And we were talking specifically about social class race and ethnicity.

But this same group of considerations apply for age. There are the stereotypes. There is ageism. You know there I remember. So I had all three of my super babies in my late 30s and 40s and I had this I had great health insurance through the University of Southern California, where I was a professor before I retired, and the health insurance company used to call me constantly with my first pregnancy to get me into some program prenatal program for special support for advanced maternal age.

And I was I was just like, I would always ignore the calls in one day. And finally, my husband answered and he was like, she is not high risk. You don't need to call here anymore.

She's high maintenance, but she's not high risk. And then they didn't call me any more in the second and third pregnancies. But you know I did. Is your husband a medical professional to.

Know he's okay? No he's. Not. That's why you're high maintenance. It was most it was mostly a joke. But I mean. I think any I could see that you're high maintenance.

You can see that I'm hiring Tony. Tony? Same. Same law. Totally. Not totally. You're too smart. Yeah. So any questions? Yes. That's true. I'm. I'm always the person who's up there raising my hand, asking all the questions. It's you. I've always been that way.

But of course, that's what allows us to that curiosity and that questioning is what allows us to make the incredible discoveries that we've made. So, you know, it's it serves the world, even if it's always individual.

Have to start thinking about rabbits. Yes, I'm going to. Okay. So tell us about PEMF. To to have your audience understand. Right. so all of this is the background and a sense of where I come from.

And so I understand the topic pretty comprehensively, perhaps compared to most family physicians and certainly most physicians in general. And because of the curiosity factor I call myself an unhappy doctor.

I'm not happy until I can solve your problem. I agree. And that means I have to go out and do some work to figure out how to solve your problem. I don't just take it for granted, I just don't take it.

But everybody else does this and therefore this is what you do. No mindless. Yes, I. Know, I know that there are solutions. We just have to find them and I have to spend the effort.

You're not going to spend the effort. I have to spend the effort to figure it out. But one of those solutions along the way became magnetic field therapy.

And I started you you may ask this question but I'll start it anyway. The answer is why. Why did I start with magnetic field therapy. So I'm at that point I'm a family doctor.

been a medical director of groups. I've started a big family medicine group on the East coast, 14 family doctors. So I've done medical management, I've done population management.

you know, I've done that. And then I said, okay, I need to start helping people. And I had a couple people who who almost died from ibuprofen, gastric bleeding with ibuprofen.

Wow. Okay. And I said, wait a minute. This is bad medicine. Treating every person as if nobody's going to have a reaction. Right. Ibuprofen became you know the pill that you basically pushed on everybody.

You to everybody. Yes. Right. And so okay wait a minute. So I said okay we have to find a different solution. So I started studying acupuncture. To learn how to do provide a different pain solution other than I did profit or narcotics.

This is back in the 80s when narcotics were not being dispensed like candy. Yes. Okay. We were very reticent to prescribe actually opioids at that time.

So what we resorted to is the things that we had that were theoretically not as harmful. anyway, when I finished studying acupuncture and that was in 1990, I wanted to begin using it in the practice.

And then people said, no, stay away from me with those needles. Right. I'm not going. To have needles. That's so funny. It doesn't even hurt. Oh, I know, but that they didn't understand that it's not the regular needles that hurt a lot.

It's tiny little hair, thin needles. But that doesn't matter. So I couldn't do acupuncture. So I looked for another solution. I discovered that in the Orient, people were using magnets on acupuncture points.

So I started experimenting with magnets and it evolved from there. And I became curious about why magnets were doing what they did. What is this phenomenon of magnets on acupuncture points of meridians?

But the more I dug into it, the more intrigued I got because I began to do see, I get to see that magnets were doing other things that acupuncture didn't do.

Like what? Tell me what an a perfect example is. I had I was going to be reading on my, on my patio and I looked down and I discovered a bite on my leg and it looked very classical, like a spider bite.

But I never felt it. So here was this big red area with a nice little top on it where, you know, the puncture happened. And yes. All right, you've you've seen it.

I know what you mean. And you know there's going to take a week or two weeks for it to go away. So I put a big magnet on it. Big magnet just took it on right over the over the top.

And then I went and sat down on the patio and started reading 2 or 3 hours later and looked down, gone. Really gone. That's incredible. So what is going on here?

So again, digging, ask you the questions why is this happening? What's happening in this process? It turns out a lot of things are happening. And so when I discovered that magnets could do more than acupuncture. Wow.

Right. And in fact, actually what I found is that magnets do acupuncture. But they do more than acupuncture. Every time you're doing magnetic therapy you're also doing acupuncture.

It's coincidental. Right. But you're getting the additional benefit. And so magnets I discovered we're doing, we're actually healing the tissue okay. They are working directly at the cellular level.

Acupuncture works in a more indirect fashion through the whole meridian system. But it supports the body's energetics in general. Talk about homedics.

It it works on the whole body system in general. So I said okay, well I'm interested in healing. I mentioned I'm doing acupuncture too. But this is more, this is a bigger phenomenon.

Than what acupuncture can do. And so that work I continue to work with magnetic therapy, did a lot of studies and I couldn't find research on it because most of that research was hidden either in China or Korea or Japan or in the Eastern European countries.

And there they were hidden behind the Iron Curtain. Right. They were in small, journals that were written primarily in Cyrillic, or they had abstract, small abstracts only.

So you can all get the abstract. You can get the details along the way. I met an MD PhD from the Czech Republic, doctor Arabic, who said I had just finished reviewing all this literature in Eastern Europe.

Wow. Not available to us. Wow. He gave me the manuscript and I rewrote the manuscript. I published a book called Magnetic Therapy in Eastern Europe, a review of 30 years of research.

Incredible. Highly summarized. So this is not your normal layperson digestible stuff. but that laid the groundwork for mechanisms for actions and why this is working.

So as I continue to work with magnetic field therapy, I scour the literature and got more and more and more literature. And eventually and I also got access to a database of about 25,000 abstracts on the effects of, emfs PEMFs on the body.

And then, so then I said oh, oh, oh, oh, and this is not available to the West. For the most part, they were scattered in strange journals. Okay. How do you get access to the database?

I can't reveal my secrets. Okay. And the company that I was, got access from is no longer in business, and I was able to download most of their references, so.

And unfortunately, most of those were also abstract, but still lay the foundation for the information that that then became available. And and obviously the database is huge.

I have 30,000 abstracts on top of everything else. I already had. Okay. So my knowledge kept growing and growing and growing. And finally I produced a book called Power Tools for health and Power Tools for health.

I what my objective in that book is to provide a book that had some of the basic information on why and how. and so I discovered that through the reading, through the research, through the evaluations, I discovered that magnetic fields had about 25 different actions in the body, and I provided references to those different actions.

So some of those actions would be, for example, increasing circulation, accelerating wound healing, increasing, stem cells, stem cell production, the acupuncture system, as I mentioned, and the list went on.

So I had 25 different actions supported by references. Can I ask you a question? What? Tell me the difference

between the actions of Emfs and PEMFs? Because obviously today there are a lot of concerns about the negative consequences of emfs for fertility, for the health of children, etc.

so can you distinguish between the two? That's the elephant in the room. Okay, let's talk about it. So emfs have been designed for other purposes. They have been designed to for communication primarily.

So emfs are broadcast into the environment. It's what I call open loop. They go out into the environment and most of the time they're microwaves. Most of the time they're very short wavelength stimuli or frequencies or waves.

It's actually being broadcast in the mouth just like television waves are Am radio or FM radio, all of that's broadcast in the environment. And basically it's 360. Right.

So because they're short wavelengths, they get absorbed okay. Because they get absorbed, they heat and because they heat they create damage. So this is the whole idea, the principle behind a microwave oven.

Yes. Right. It's designed to heat using microwaves to be absorbed by the whatever whatever you put in the microwave oven it, it's absorbing all of these microwaves and getting heated.

So emfs most of the time we're talking about emps that are essentially, microwaves. Now, we do have emfs from power lines. And so people can be exposed to EMS for extended periods of time, which could potentially create risks with the wrong kinds of people.

But it's amazing how much MPs have not been actually found to create much harm. And it is interesting because I, I it's been a while since I did a deep dive into the literature, but when I did, there wasn't a lot of information session.

But more and more it's becoming a topic of concern. And we do, but we do. 5G and it's the 5G and the ten G. So that is microwaves okay. All right. So power lines are different.

Power lines create frequencies magnetic fields around the power lines I've actually done this. I've actually gone under a power line with a light bulb, a fluorescent light bulb.

And it lit up. Okay. Okay. So that's the magnetic fields coming from the power lines that are lighting up the light bulb. they dissipate extraordinarily rapidly.

Okay. Right. So they unless you're really living under the power line or you're living very close to a power line and you're in that room all the time.

Right. That could create some potential risk. It's rare that magnetic fields of the kind that we're talking about create exposure for extended periods of time.

Our exposure rates are very low to them. Okay. And on top of that you have the factor of intensity of the, of the, radiation. But say it's not ionizing radiation, but it's you know, electromagnetic radiation.

So intensity matters. The distance matters. That time, the dose of exposure, the time of exposure matters, with emfs of the kind that we're talking about, 5G in particular, we're talking about microwaves.

Okay. That is a risk because we know it does harm. Or the again the dose of exposure becomes very important.

Using PEMF for Fertility, Inflammation, and Pregnancy

The dose by itself. How intense is that dose then what is the dose factor with the exposure factor. Right. And if you're passing by a microwave tower and you're driving 60 miles an hour you're going to get very little exposure.

Exactly right. If you're have a 5G tower right next to your room you're going to get more exposure. If you have a, if you have a, transmitter on your house with the smart, smart meters, that's Wi-Fi.

Right. So that's Wi-Fi exposure. That's, very short microwave exposures. That's not good for you. If you're getting a lot of exposure. Yeah. but again environmentally it's not that much.

But if you add the environmental stuff that you coincidentally get along with the exposures that you get more frequently and more commonly, and that's where risk does begin to.

Happen, starts to accumulate. Absolutely right. And then what we know is, you know, carrying your phone in your pocket is definitely harming sperm for men and is yeah, harming fertility across genders etcetera.

Yes, absolutely. And you should not be using your cell phone to your ears. Yeah. Because we use a cell phone to your ears. You take the cell phone off, you can see your ears read, it's hot.

It's hot. Yes. And what you are doing is cooking your ear. Yeah. That's scary. And if you look at the opposite ear, it's gotten redder too. It's just not as much.

Oh, so it's gone. It's gone through from one side to the other. No, because the microwaves drop off extraordinarily rapidly. But it's reflex changes. So you start to release all kinds of basal active, hormones and peptides and so on in the bloodstream, which obviously continues to circulate through the whole body.

I did this experiment with a static magnet, put a static magnet on somebody's palm, and the palm turned redder. I looked in the opposite palm. It also got slightly redder.

Is that so? That's a reflex change in the body. okay. So nitric oxide is being released in the vessels the blood vessels in your hand when you're exposing to high intensity local magnetic therapy.

Where do those nitric oxide molecules go. Everywhere into the bloodstream. And into the bloodstream. Everywhere. So they're going to have distal effects as well.

They're gonna have the most effect locally, but then they'll have digital effects as well. So there's minimal minimal risk you know away from the stimulation okay.

There is some now PEMFs are a completely different animal. they are closed loop. So the other forms of stimulation are open loop pumps are closed loop okay.

That means what happens is that my thumb is the is the wire that's carrying the current. And every time you carry current in a wire you get a magnetic field developed that's developed perpendicularly.

Every current flowing in a wire produces a magnetic field around it. Yes. It's laws of physics. Okay. This is called the right hand rule. So the magnetic field is perpendicular to the flow of the current.

And when the current flows is flowing in waves essentially it pulses right in the power lines flowing in the pulses in the lights. The power cords to your lamps and so on.

But what that means is this going like this every time the current pulses, the magnetic field pulses, pulses like I feel pulses, but the magnetic field collapses back on itself.

So it's closed. It opens and it closes. Okay. It opens and it closes. So the action of opening up the magnetic field, the production of the magnetic field perpendicularly then goes into space, but it goes into a body as if the body wasn't even there.

Magnetic fields are not obstructed by anything except maybe lead. Okay. Or aluminum or some or certain metals. And the magnetic field is not blocked by it, it's not absorbed by it but actually passes around it. Okay.

All right. So it's actually the body is completely transparent to a magnetic field okay. The key here's the key. And this is what differentiates magnetic field therapy from almost any other therapies.

It doesn't stay in the body. It passes through. The analogy is the wind blowing in the trees. The tree gets in the way. But what does the wind do through the tree.

It passes through. It does not say the tree. It keeps on going. So the magnetic field from PEMFs is the same. It just keeps on going and it goes out into a body and it comes back into the body and out into the body and comes back into the line.

Power line. So that pulsing action is key then to how PEMFs work. And what they're doing is based on Faraday's law. Faraday's law says that a pulsing magnetic field or an alternating magnetic field or time varied magnetic field time varied means it's not steady.

Steady. So it's the policy that makes the movement in motion. It can't be static. So a permanent magnet on a fridge is static. It's just never moving.

The body is moving but the magnet is not moving. Got it. In our case with opposing fields the magnets moving and the body's moving. Things in the body are constantly in motion.

So that magnetic field that goes out causes reactions in the body. It's induced charge. So the body then produces the charge by virtue of the magnetic field stimulating the ions in the body.

All the charge carriers, all molecules in the body carry charge. And because they carry charge some charges are fixed and some charges are in motion. Ions are in motion.

So what percentage of our body is electrolyte. I don't know I mean water 70% of the body is water. No no it's not. Oh did I get that wrong. That's 70.

No you did. That's correct. It is water. But it's not water. It's electrolytes. Electrolytes. Okay. That's what I was going to say. Are they one in the same. Okay.

That's they're not really because they're all those water molecules are affected by the solutes, the solutions that they are in. Yes okay. Right. So it's hard to extract them.

We say it's water because I can I could pull it out and say tested and separate it and say here's water. But we say that it's 75% water but it's not a 75% electrolyte soup okay.

Electrolytes. Okay. And as we know electrolyte soup is charges. That's what batteries are made from. So the magnetic field is interacting. It's shaking those ions.

And when it shakes the ions then basically it's creating charge that the body then now has more energy. To do what. To do all of it's. Do. Whatever it wants.

Cellular processes. All of its function. Yeah. Exactly. Okay. So those 25 actions that identify the magnetic fields are not done by the magnetic field.

They're done by the body in reaction to the magnetic field. So the body's producing whatever it needs to produce to do what it wants to do with that extra energy.

I love that including reproduction which is exactly, exactly what we want. So the 25 actions that the body does respond does in response to the electromagnetic field is in response to the closed loop, not the open loop.

Correct. Okay. Right. Is the field going out in the body and then coming back going out into the body and then coming back. So what are the key aspects relative to fertility to go back to the topic.

The most important there are others. And depending on the condition of the person and what they're dealing with you can say what's more important. But from my perspective one of the most important actions in magnetic field

therapy that can help everybody.

Everybody not everybody. Yeah. Everybody got it. Everybody too. Right. Yes I understand. Yeah. And that's inflammation of course. All right. And so we've discovered scientists discovered that there's an optimum magnetic field intensity that you need.

The strength of the magnetic field, the power of the magnetic field. The optimum power of the magnetic field is 15 Gauss one five. And Gauss is just okay.

Gauss. So if you generate 15 gauss then you're going to have the maximum impact on inflammation through the adenosine receptor on neutrophils. This is very important because the most common reproductive health conditions have an inflammatory route, as does the accelerated wear and tear that leads to more rapid biological aging which is what we are always working to slow and reverse in the Prime Minister protocol so that people can have healthier eggs, healthier sperm, get pregnant, stay pregnant, have their super baby so this is really critical.

Okay. So say that one more time please. Of magnetic field therapy. Decreases inflammation everywhere in the body. Nothing in the body stops the magnetic field.

That means it can work anywhere in the body. Now we talked before about the fact that infertility is a spectrum. And infertility includes the partner.

The spouse. Of course. So here's an interesting fact. You probably know this. What is the speed of sperm. so what I know I don't, I don't know the actual speed of sperm.

I'm very excited to hear it. But what I know is that the sperm traveling to the egg is the equivalent of traveling to another continent, and yet they do it in a matter of seconds.

All right. So. Or at least, or at least the healthiest ones do it in a matter of seconds. So sperm travel, basically four miles an hour. Oh. Well, then.

I'm sorry you got a sperm going from the from the vagina. The entrance of the vagina. Okay, okay. To the, uterus. Does that travel? Does that that, trip within four hours.

Okay. So these little sperm, they have a flagella motor. So, is the tail of the sperm right. And it's the flagella. It's sort of like the analogy that I use.

It's like the boatmen in Venice. It's true. They use paddles. Yeah. That's right. Well this is what the sperm are doing. They're using a little flagellum, their tails to project them forward.

And the sperm are doing that by electrical static basically electromagnetic forces PEMFs increase and that takes ATP, mitochondrial ATP, the sperm. And the motor and PEMFs dramatically increase ATP production and sperm.

So sperm motility is significantly impacted by PEMF therapy. Never mind the causes of the problems with the sperm. Other than what you're going to do is you're going to make sperm if they're even if they have lower counts of sperm, they're going to be more active.

If you take regular counts of sperm, they're going to be more active. They're going to make that trip that they have to make from the vagina into the cervix and through the uterus much faster.

And if they have more energy, they're going to be able to deal with all the resistances that they're going to have along the way. That's right. And especially if there are physical obstructions or other things because of endometriosis or fibroids.

Or inflammation in the. Cervix or inflammation. In the uterus or inflammation in the vagina. So magnetic field therapy is not only increasing the ability of the sperm to get there, but it's also decreasing the barriers.

Now that doesn't happen immediately right. You have to be doing magnetic field therapy on a regular basis for a while to decrease the total amount of inflammation. So then the sperm can do their job.

What's the therapeutic dose of PMS in order to reduce inflammation enough to see a reduction in biological age and a significant improvement in sperm.

So and and by the way, there's a parallel process in egg quality because the mitochondria are the source of of healthy eggs as well. So it's the ovarian environment as well.

You have an ovarian environment that's inflamed or is is aged. It's not optimized as well in terms of its energy. In other words ATP. so there's again many different things going on with PMS at the same time.

So all the different 15 or 20 actions or 25 actions of PMS are all there at the same time. The body decides which ones it's going to use to do whatever it needs to do at the moment.

And the goal of magnetic therapy, what the body's job is, is to maintain balance. That's right. Maintain homeostasis. That's right. Working very hard to maintain homeostasis.

So it's going to use whatever energy it has to be able to maintain or get that homeostasis. And inflammation is one of the problems that the body has to deal with on a chronic basis.

That's right. Right. That's that's inhibiting natural homeostasis. if you can decrease inflammation, then the other homeostatic mechanisms begin to function and begin to work better.

So and Dimitrios is, is one of the big things that because of the amount of inflammation caused by endometriosis, PEMF therapy is a major factor in increasing fertility because it decreases inflammation caused by the Dimitrios and it decreases.

So with inflammation what do you get? You get edema. That way you get swelling of tissues. And the swelling of tissues that don't they don't function normally.

They cause obstructions. So swollen fallopian tubes right. Cannot propel the sperm adequately. So if you decrease the inflammation in the sperm you decrease the swamp and they fill up in to decrease the edema in the fallopian tubes that now it also depends on all the different factors that are going on in fallopian tubes at that time.

But so PID is a major cause of That's right. Agility. So maybe know therapy can be amazing for PID, not only for decreasing inflammation but actually helping the body to fight infections.

PEMFs have been well proven to help the body fight infection. Let me ask you a question about that. So first for anybody listening who doesn't know what is pelvic inflammatory disease which is really common.

But also we know that inflammation is one of the mechanisms underlying preterm labor. And preterm birth is MF safe to use during pregnancy to reduce inflammation in order to protect against pre-term birth and other adverse outcomes.

So what does what are the pharmaceutical companies do to prove that it's safe in pregnancy clinical trials? So what percentage of the drugs that are, out there are proven safe in pregnancy?

Very few, because it's too risky to do the clinical trials in humans in the first place. So most of the time. Like income as well as a cost problem. Category C, you know, pregnancy category C where there's not enough data to know if it is safe, basically.

So magnetic field therapy is in that same boat. We have no reason to believe magnetic therapy is a problem in pregnancy. Science does not say that there's risk.

But we can't say that it's safe. I can tell you from experience women use magnetic field therapy. They didn't know they were pregnant. They kept using their magnetic therapy machines throughout their pregnancies.

They breezed through labor. They breezed through the third trimester. They don't have as much pain. They don't have as much discomfort. Their bowels are moving better, their incontinence.

Well, this is a pressure problem in pregnancy. So it's not a functional problem. That's a pressure problem. so basically we seen that PEMF therapy during pregnancy in many cases is safe.

Can we say it's 100% safe. We don't know. Breathing is not 100% safe right. That's true. Well let me ask a couple of questions. Is there any. I'm sorry I want to make one more point about that.

Please do. And that is that the women who work in MRI units. Have not been shown to have major risks or problems during pregnancy. That's interesting.

Right. And they're exposed to very high intensity magnetic fields. And they're also exposed to radiofrequency magnetic fields which are like microwave type fields, not very high frequency.

And the big static magnetic fields in MRI. So even even they are in safe. Is the MRI, exposure? Is it the closed loop or the open loop or. It's a combination that's closed.

It's closed. Okay. And so, I want to ask one more thing about pregnancy, and then I want to go back to the therapeutic levels so that we can really make this concrete for people.

So is there anything about the PMS therapy that could cause the uterus to contract, could cause the energy to move down in any way, any anything of that nature?

We know that acupuncture is safe during pregnancy, but certain points have to be avoided. For example. Right. Well, certain points that are likely to be where you're likely to penetrate into a uterus, that's clearly a no no.

That's that's part of it. But it's even if it's even more than that, there. Are there are other points as well. Yes. so there are some kinds of cautions relative to acupuncture would apply to magnetic field therapy because magnetic field therapy stimulates the acupuncture points.

Okay. There are there are magnetic devices that are high intensity that are sufficient to cause muscle contractions. There are EMF devices that are approved to deal with incontinence.

And it's incontinence in the pelvis. So basically the pelvic muscles are stimulated to contract by these PEMFs to be able to like he goes exercise is passive.

Got it. Yes. Those I would not recommend. Absolutely not. That's right. Yeah. So there are high intensity magnetic fields that would cause muscle contractions in the gluteal muscles or in the hip muscles.

They should be you should stay away from those during pregnancy because it's too close. And you could cause a uterine contraction potentially, especially if the uterus is irritated.

If there's inflammation. If there's inflammation. Okay. So if you're already having if you're already having, pre-eclampsia and pre-eclampsia, during pregnancy, what does that call that, blocking.

like placenta previa or there's problems with the cervix. is that is that what you're talking about? Are leaking of the placenta, blood bleeding during pregnancy?

Yes. Right. Then you absolutely should avoid that. Perhaps anytime that you're actively bleeding, you have to be very careful with PMA therapy because PEMF therapy, decreases platelet adhesion added.

It increases fiber analisis. So you're inhibiting adhesion platelet and adhesion, which means that you're going to bleed more because platelet adhesion is important to prevent bleeding or decreased bleeding while you're actively bleeding.

And fiber and lysis decreases the ability of the body to plot. if you have a wound, then you don't want to be, stimulating a wound, while it's actively bleeding.

Because, again, you can, slow down the body's ability to stop that bleeding. So is is PM PMS not recommended recommended during menstruation then as well.

I would say that so there are actually interesting studies done, occupational studies done in women who are working on assembly lines, with magnetic devices on the assembly line.

And so basically they were working at pelvic level with these devices. And they began to report more bleeding than usual. And that's interesting. Okay.

one, one really interesting applicator session that I'm thinking about for this is when there are issues with the uterine lining that are preventing, either the transfer of embryos in the IVF process or the allowing of the fertilized egg to implant in the uterine lining.

So I think this could be a really interesting application. Tell us about what's needed in terms of therapy levels. How long, how frequently? what what strength or frequency, just on average is needed to make that significant reduction in system wide inflammation that could really improve uterine quality, egg quality, sperm quality, the immune system, the gut lining, all of these things that go into the full fertility and pregnancy system.

So the primary limiting factor that I work with is inflammation. so that when we have the most data to basically say this is the level of intensity you need.

Okay, increase. Inflammation. That's a good start. Great starting place for the fertility and pregnancy system as well. but in the semester. So in that period of time leading up to conception, I'm not saying that this should be used during pregnancy.

So I'm asking about, leading up to conception for improving fertility. Okay. So what we're talking about is 15 gauss at the target tissue. Key fact about magnetic fields like light and sound and heat and cold.

These are all radiation phenomena, right. They're not ionizing radiation. Not burning radiation. Not like from the sun or radiation therapy. These are radiation because they're spreading out into the environment.

Right. So this kind of radiation, non-ionizing radiation drops off extraordinarily rapidly according to various laws of physics and the laws of physics that I use primarily is the inverse square law.

The other laws that are used are actually worse. That was that, that I would show that you would need even more magnetic field power than you do with the inverse square law.

So I use as a basic because we use it in medicine all the time. The inverse square law is used in radiation therapy okay. You have to calculate the dose.

You have to deliver x amount of garys or the intensity of the radiation into the body. If you're treating as a skin, but you're gonna need to go into the uterus, then you have to calculate the distance from the skin to the uterus.

And so they'll do MRIs or CT scans to figure out what that distance is. And then do the calculation of the dose you have to deliver, because you're going to drop off that dose as it goes into that tissue.

Natural. The body's not using it up. This is a natural phenomenon of any kind of radiation. So magnetic field therapy does the same thing. So if you're starting off with a thousand gauss or Gauss is the intensity of the

magnetic field.

Think about it this way. The Earth's magnetic field is a half a goes, oh wow, MRI's or 20,000 gauss or 30,000. Wow. So 3A3 Tesla magnetic field, a test, an MRI, 3003 Tesla magnetic field.

Sorry, three Tesla MRI. It's 30,000 gauss. Okay. The Earth's magnetic field is half a gauss. And what we need at the target tissue for inflammation is 15.

Okay. All right. So if you're going to treat in the pelvis how pelvises are a lot smaller typically. Right. And there's a less there's less variation in the pelvic size AP from front to back.

That's right. Then there is in the skin. Front of the back. Right. That's true. So what is what is the average distance of a pelvis from front to back, from pubic bone to it, from the pubic bone to sacrum.

So let's say it's eight inches ten inches. Out of you agree with that? I really have no idea. Why you have another project. That's right, I think I think we can find those data pretty easily.

Very easily. You can you can actually find it on ChatGPT. Yes, but let's assume it's eight inches front to back. Okay. So an eight inch distance. So you have to treat at the skin.

And you want to get your 15 gauss at the back of the uterus. Yeah. Or the back of the vaginal canal or the back of the cervix. Right. So then eight inches into the body from the back you need a 6000 gauss magnetic field to deliver 15 gauss.

How. I'm sure, I'm sure it's obvious how you did that math. But tell me how you did that math. Well it's basically based on the inverse square law. So okay.

Because the magnetic field drops off has the inverse square. Got it. Okay. You just have to do. That calculation. Okay. Got it. So on my on my website I have a blog about adenosine inflammation and pain.

And that blog gives you the tables okay. It shows you the formula for you. If you're geeky you don't want the formula, you have the formula. But if you just want the table, here's the table that says here's what you need at a distance.

Okay. Table includes this 6000 gauss at eight inches. Okay, great. What's your what's that URL. So people can take a. Look if you go to drpawluk.com. So Drpawluk.com okay.

And then in the search box type in adenosine ATP unless in adenosine and it'll pull up that block. You okay. Multiple multiple. so links that give you but pull up the adenosine pain and inflammation.

Okay. Great. Now tell me, Dr. Pawluk, so that we can give people a pathway forward from this incredible information. And I you and I talked about this before we started recording.

Well, actually, we've been recording the whole time. So it's it's there in the beginning, but we talked about how we've surveyed the Fertility and Pregnancy Institute village, as we say, because it takes a village to make and raise our super babies and us as, as parents.

And one of the things that it has emerged in people's desire is something that can improve fertility passively. So it doesn't take as much work. And that makes a lot of sense, because we live in a world today where people want a quick fix, a pill, and and I'm not saying that team is a quick fix, but it does provide a possible avenue.

And as you know, I've been investigating this possibility. I just don't know how to make it cost effective yet. You and I are going to tackle this project together, but one possible avenue for this more passive approach to improving fertility is to use PEMF. PEMF.

But it is. How can people do this for themselves, kids or something they can do at home? What? What's the next step that's critical? So first you have to understand if you talk to anybody about PEMF therapy or fertility or any other health issues, because, you know, quite frankly, most people have fertility, you have other problems too.

Oh, there's almost always a root cause that that are other co-morbidities. And there might be other problems, arthritis or old injury or whatever. So people have other issues.

So magnetic field therapy is not limited to infertility. It's for the body. And when I tell people when you buy a magnetic therapy system, you don't own it.

The house owns it. Including the, the the cat, the dog and the plants. That's right. Right. So everybody gets a chance to use it. So you have a tool that's unambiguous and you can use it for almost anything.

And if you read my, my information on that Polycom, there's a whole host of uses. I have like 89 blogs on all the effects of PEMFs. I've been really interested in it for, training recovery as well.

So I love that. Okay, so the key is the intensity. If you don't have the right intensity you ain't going nowhere. Okay. So what happens is people buy based on price.

That means you buy cheap. You get cheap. You get what you pay for. You get what you pay for. So if you have to deliver 15 cows deep into the body you need the right magnetic field attention.

As I mentioned eight inches into the body. You need 6000 cows. Most of the people who are selling PEMF therapy don't want to talk about the intensity of their equipment.

Would you go to a car dealership and buy a car? If the dealer? If the dealer or the salesperson wouldn't tell you the horsepower? No. Duh. Right. Intensity matters.

So you need to know the intensity of the magnetic field so that you can do that calculation of how much intensity do you need or where you're trying to treat.

So that's number one. And on on my website drpawluk.com. And on that blog the identity blog, we actually have the table that shows you the intensity that you need at different distances into the body.

so you need to get the right piece of equipment, then you have to use it the right way. we do for people who are serious about this, who are not willing, who don't want to just spend $25 to solve their problems.

We do offer consultations at drpawluk.com Okay? You have to be willing to spend whatever you need to spend to get the right equipment for yourself. Okay, I'm I'm confident that this equipment is pricey.

Absolutely. Okay, so the machines produce 6000 gauss eight inches away. It's going to cost you at a minimum of, about, $8,000. Okay. All right. But again, it's not a one horse shape.

Is that just going to do one thing for you? You're going to when you use it every time you use the magnetic field, you are getting actions in your body that you are not even aware that you needed, is there?

a time limit? It does. Does the device lasts for forever. A long time. The warranties are three years and they last way beyond that. Okay. So the recommended treatment times typically are 30 minutes twice a day for general health and for the, say, pregnancy for infertility.

Then I would recommend doing a higher intensity. Every one of these systems has a whole body pad. I guess a general health benefits. And then you get a much more intense, a much stronger local applicator that you would then treat your pelvis.

Okay. That would be on tubes. It would get the vaginal tract, it would get the cervix, it would get the vagina, it would

get the uterus. It would get the fallopian tubes.

It would get everything. So you want a magnetic field is going to do like do that. And then underneath the pelvis. I love that. And can that also be applied for testicles.

Exactly. Yeah yeah yeah okay okay. All right okay. And so you would do that more than twice a day for. So I recommend for the whole body of health I recommend a half hour twice a day okay.

Do whatever you want. So I tell people that you have five 100 trillion cells in your body, and there's a million biochemical processes per second in every cell.

So incredible, I know. So how much treatment should you do there? You can't do too much treatment basically. Well that's the problem. So the problem is going to be the time that you have available to you.

My recommendation is at least 30 minutes twice a day. Once you get start seeing a lot of the benefits that you're looking for, you may well start, start to start cutting back.

And you come back and you notice that you're losing ground. Then don't come back, okay? You can try it again later on. Two months, three months later, come back again.

If you're losing ground, you're not ready yet because you haven't healed the problem. Magnetic field therapy can help the function of the problem and the function of physiology.

The goal ultimately, is to heal. Yes. Right. If you heal it, don't come back. That's right. So if if you're doing it for fertility, would you do it three times a day?

No, I don't think you again what you what you may have depending on the problem and the more severe the problem at the beginning, you may have to do it three times a day.

In order to be at that PID down, in order to get the fallopian tubes, to stay out of spasm, in order to have the inflammation around the uterus. So, basically, inflammation of the uterus itself was like oh oh, oh oh varieties.

if you get that settle down, it takes a while for inflammation to settle down. It doesn't happen immediately. It could take a week, two weeks or three weeks.

You'll see changes very quickly. But to resolve it more or less completely, and especially because you may have an infection as well. Yes. Absolutely is.

And will will it help to improve infection as well? It does through the immune system, right? It does. It marshals the body's. This is where adenosine comes in again.

It marshals the body's inflamed anti-inflammatory response. It actually increases what we call legal taxes. So it increases the migration of what white blood cells into the areas of inflammation.

it takes time. And if you have infection what ideally what we want to do in medicine is we want to reduce the infection and then work on reducing the inflammation that's caused by the infection.

But when you're treating infection with anti-inflammatories and antibiotics at the same time, it's going to work better, faster. Because what happens then is that if you decrease the inflammation and the edema that's caused by the inflammation, that circulation improves, that means you get the antibiotics into the infection better.

So they work together very well. The synergy okay. Okay. This is this has been so interesting and a very, very unique avenue for people who are looking for something that can help to improve fertility and overall health and well-being.

That's a bit more passive. so I just want to thank you. This conversation has really been interesting and innovative, and I know that people are going to enjoy this so much.

I know they will and they'll learn a lot. So if you, watch these videos, you're going to have to probably watch them 2 or 3 times. Yes. And so that that's a really good reason to, not just partake, partake in the, the free summit, but to, to purchase the summit so that you can go back as many times as you like.

And before we close today, I would love if you could. I think I think that we have touched on this a little bit already, but if you could tell me two things.

First, if someone could only do one thing to take care of their fertility and the health of their future babies, what would that one thing be? And then tell us, what does super fertility mean to you?

What does it look like? What does it feel like? What is it to you? Oh, tough questions. well, you again, I have my tool. I know what it does. the problem is with that first question is, I don't think one thing will do anything.

I don't think one thing alone will do enough. You can't. So you can't repair a house, right? Without having bricks and mortar? You have to have the supplies.

Then you have to have the tools, and you have to have the energy. So you need all of these things working together to get the best results. Magnetic field therapy by itself can do a tremendous amount.

But if you don't have the nutrients that you need to repair the tissue, right, it's going to be slow, slow going, you're going to push a body to do something that it can't do right.

So you need the nutrition. You need all the other good things for a lifestyle to be able to have the magnetic fields work better and faster. Thank you for that.

I think that is very, an important acknowledgment, I think. I think we all we all understand that. And that's very clear in the conversations that we're having that fertility is multivariate.

It's multiple determined. It's a multi-level multi-system, picture. And it's it's hard to identify any one thing. And I also really like to encourage people to start where they are and to start with what they're capable of starting with.

So if you can only start with one thing, then, you know, later you might add in the next thing and the next thing and the next thing. So thank you so much for for that very, very practical, very real answer.

While you don't really want to necessarily delay using magnetic therapy, the problem is that you're going to get better results if you're already at a place with the body in terms of nutrition and lifestyle that your body is going to be relatively, receptive and, reactive in a way that's going to work faster, better.

Well, it sounds like we need the Prime Minister protocol, which is everything you could possibly need. Our super baby nutraceuticals, which are the exact nutrients and the right, the exact forms, the exact dosages that you need and then we need the PEMF on top of that so that.

If you're getting the results you want with the other therapies, then that's fine. Just do that. If you have the resources and have the interest, then you could add the magnetic field therapy any time.

That's great okay. Because it's not only good for you, it's good for everybody else in the house. It really is. Yes. And not only that, it's also good for you for the rest of your life.

That's right. You'll keep using it. Absolutely. So tell us, what is super fertility mean to you? What does it feel like? What does it look like? Well, you and I guess we're talking about this earlier.

Super fertility. well, I get I suppose super fertility is a woman getting pregnant as quickly as she wants every time

she has intercourse. And that's. All. Maybe.

Or maybe sometimes when she doesn't want to have a have a baby. Now that could be a problem with super fertility. So super fertility is basically, you know, having had of course, once and getting pregnant.

So for, for human beings, you're cycling all the time. You don't want to be pregnant when you don't want to be pregnant. That's right. So that's super fertility too.

But it's unwanted fertility at this. Well. I think that I, I feel I always say that the uterus is one of the most valuable and precious resources on the planet, and that the owner of that uterus should get to use it the way they want to, not have children when they're not ready.

And to have all the super babies, their heart's desire when they are ready. So absolutely, I love that that. Well, I'm going to disagree with you. Disagree with me.

Okay. Go for it. It's not the uterus. Or let me just say it's not just the uterus. No that's right. Right. It's the pelvis, baby. The ovaries, the eggs, the follicles, not all of it.

Absolutely. so we're in agreement. We're in agreement. I love that this is this has been really, really an interesting and innovative discussion. I've enjoyed talking with you so much, and I'm looking forward to a lot of, of conversations, off, off the record so that we can build something really incredible together.

I look forward to it as well. And I know we can help a lot of people. Yeah, the women who are really struggling with their fertility. Really struggling and really struggling with making the the time and the space to do everything they feel like they need to do and everything that they're hearing in, you know, in this Google search and, and that Google search.

Right. So, Dr. Pawluk, I think it's just incredible for us to have all in one central place, all of the pieces of the answer together. So thank you so much.

I really have enjoyed this conversation and thank you. I look forward to talking again soon. And thank you to you, mama, Dada, parents of all in any gender here with us.

I hope you have been blessed by this conversation and I'll see you in the next session.