

#### EPISODE #204

## STIMULATE MITOCHONDRIA WITH NEAR INFRARED SAUNAS WITH BRIAN RICHARDS

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#### Wendy Myers:

Hello, welcome to the Live to 110 Podcast. My name is Wendy Myers. You can check out my website at Liveto110.com.

Today, we have Brian Richards of SaunaSpace on the podcast today. And he's going to be talking about one of the most compelling things that you can do to extend your life, to detox your body and live a medication- and disease-free life. And it's the use of a near infrared sauna.

We're going to be talking about all the benefits of near infrared saunas, how they promote and improve mitochondrial functioning, why you really want light and heat when you're using an infrared sauna, and comparing near infrared saunas to far infrared saunas or full spectrum saunas. We're going to answer all of your questions today on the show.

But before we begin the podcast, please keep in mind that this podcast is not intended to diagnose or treat any disease or health condition and is not a substitute for professional medical advice. The Live to 110 podcast is solely informational in nature. So please consult your healthcare practitioner before engaging in anything that we suggest today on the show.

My new book, Limitless Energy, is out on Amazon. I am so thrilled that there's been such a huge response to it. I'm just really, really touched. You can check it out, Limitless Energy: How to Detox Toxic Metals to End Exhaustion and Chronic Fatigue.

I know so many of you guys out there are exhausted. You wake up every morning feeling like you've been hit by a truck—and I've been there—resorting to stimulants and even illegal drugs,



anything to get energy and to feel good. It's unfortunate, but there are so many things working against energy production in our bodies.

And that's why I wanted to write this book and clue people in to some of the little known causes of why we have low energy production. The answers may surprise you.

So, I talk about the causes of low energy production in the book and some toxic metals that interfere in mitochondrial functioning (which your mitochondria make your body's energy). And I also talk about how to detox these metals.

There are very, very practical tips in the book. Go check it out on Amazon. It's called Limitless Energy.

## 02:47 ABOUT BRIAN RICHARDS & SAUNASPACE

Wendy Myers:Our guest today on this show is Brian Richards. He's the founder of SaunaSpace.com, and is the<br/>lead product developer. Brian fully healed his toxin-related acne, brain fog, adrenal fatigue and<br/>more with the power of near infrared lamp sauna's natural light and heat therapy.

His personal journey to optimal health inspired him to create SaunaSpace and the Pocket Sauna product line in order to help others discover the pathway to natural healing. You can learn more about Brian at SaunaSpace.com.

This is the infrared sauna that I use. I have one in my home. I use it several times a week. I've been using a near infrared sauna for years, for a little over five years now at this point. And I really credit them with me helping to recover my health and detox. I can't recommend them highly enough.

Brian, thank you so much for coming back on the show.

Brian Richards: Thanks for having me, Wendy.

Wendy Myers: So, why don't you tell the listeners a little bit about yourself and how you came to start manufacturing near infrared saunas?

Brian Richards: It starts out with my own healing story. I had some serious toxin-related issues. I had a lot of, first of all, acne on my torso, a lot of brain fog, and what I understand now is adrenal fatigue, and just just kind of fogginess and lethargy in general while I'm still young. I was very young then; it didn't



make sense to me.

So, I sought out a natural solution. I didn't want to take a prescription. I wanted to address the root of the problem which I came understand was toxicity, which now, really, just is so self-evident to me. But back then, I wanted a natural way to detoxify.

I came across the works of Dr. Lawrence Wilson and near infrared lamp sauna therapy. So I actually built my own. This was six years ago. I had such an incredible recovery that—I mean, it really changed my life. My insomnia—which was also one of my worst complaints, mind-racing insomnia—that went away within days of using this near infrared lamp sauna. And then, over like six or nine months, my skin issues and the fogginess slowly resolved. I realized things that I didn't even realize were wrong with me were improving and were getting better.

I'm thinking clear more clearly, and just more and more focused and more effective; and also, more positive. I wake up in the morning just feeling better.

So, long story short, I was really astonished that there was no nice consumer product, a near infrared lamp sauna product. And now, five years later, I understand—well, six years later now. It's been a flurry of product development. I've always never been satisfied with what we had. I'm always trying to make it better. And I think you can understand that. I sent you one of my early adopter versions of my Pocket Sauna. And now you have the current design which is also sexy. It's this traveling curtain.

Every single aspect of it needs to be, first of all, the right light technology. Incandescent lamp provides a full spectrum near infrared light emission just like the sun. It's the only man-made technology that incandescence like the sun. So we're getting a full spectrum emission. And this is the natural form of light and heat that we're designed to heal our cells with.

And so, number one is the right light technology that's most effective for natural cellular healing and reoptimisation and detoxing the cells. And the other part is the right space. And that's what we provide, sauna space.

It's very important that your materials are really hypoallergenic, so you're not dealing with chemical off-gassing. And you want something that's fun to use, easy to use, and user-friendly. And you want something that's durable.

So, what we make now is a lifetime warranty product that is easy to set up, fun to use and easy to get out of the way if you don't need it. But when it's set up, it's a full-fledged beautiful



#### experience.

That's another thing I'm very insistent on, making things beautiful. If you're going to sit in there for half an hour, detox and heal, you want it to have good things inside and be beautiful inside, and then also be beautiful outside in your home.

And so, that's what the Pocket Sauna is. And you can see it actually behind me. I have it here in my office. This is our main product, the Pocket Sauna.

And then, sort of the core or the heart of it is our full light panel—which we now have other options that you can get it in.

You can get a shower converter bundle that convert your standard bath tub/shower stall into a really sexy, awesome near infrared lamp sauna.

Many people who already have a far infrared cabinet sauna will just buy the light panel. It's just plug-and-play into their cabinet, upgrade to near infrared, get all the benefits of near infrared and keep the enclosure they already have.

So, these are the core products of our product line. And this is all we do here at Sauna Space, near infrared sauna. We found it to be just the most effective for everybody. And our design accommodates anybody. It's a wheelchair-accessible design. It's something anybody can set up. And our success is, in a big part, attributed to how well this works for everybody. This is such a gentle way to detox.

Most people know that we detox with saunas or saunas have some detoxification. And really, it's this idea of heat shock. Dr. Rhonda Patrick did a lot of work in this field to elucidate what's going on. You basically just raise your cell temperature somehow with any kind of heat source, and the cell begins to detoxify. It has heat shock proteins and other cell mechanism to detoxify.

So, that's half of the healing coin of the sun. The other half is this thing called mitochondrial activation which is more and more in the public consciousness. Everybody is talking about mitochondria, mitochondria, mitochondria. They're not just the little powerhouses of the cells. If we shine near infrared light on them, they turn into intelligent healers.

They repair epigenetics, they promote inflammatory mediation and cell regeneration, and all these things that, ancestrally, we get from the sun, light and heat together in the natural form—heat to detoxify the cells, and near infrared light for mitochondrial activation to re-optimize and make the cell younger and more perfect.



And so, together, we have the healing synergy of Sauna Space, of the near infrared lamp sauna. It's not just detoxing you like all sauna do (like even hot tubs do), it also has this re-optimization/ repair aspect that is coming from the light itself.

Light is a nutrient. Light is a fuel. It's the most important nutrient we could ever get. But it's very important to note that we need it in a natural form which is a full spectrum form—not an LED form, not in a far infrared only form, in a full spectrum form just like we've evolved to get it from the sun.

So, good ole' incandescent does the trick here very well. And it's coincidence that they used near infrared lamp sauna, for example, only in Hope for Cancer (a world-famous cancer treatment clinic in Cancun and Tijuana).

Last fall, there was the The Truth About Cancer Symposium. I know you are aware of that, Wendy. I'm sure many of your community were checking that out. They were talking about near infrared lamp sauna left and right. Many of the speakers were talking about it. It's just such a gentle, effective way to detoxify every cell of the body, and also re-optimize every cell of the body was light.

And I guess more than all of that, yes, that's the science, it's helpful, and we know in the cells that's what's going on, but the proof is in the pudding. That's why we give a 100-day trial. We allow people to try this out totally risk-free.

And everybody, really, becomes addicted to it. It's because it's energizing you. It's not a detox that's draining and choking and so forth. It's a rejuvenating detox. It makes you feel good. It boosts your cell metabolism. It makes you feel more centered and zen and positive.

And that's the part of the sun that's making you feel good and that keeps us happy, near infrared. And when we don't get near infrared in the winter, we get SAD, the Seasonal Affective Disorder).

So, people know about light, and they know that the sun is good and they know that the sun makes us feel good and it really nourishes all life on Earth. It's primarily the red and the near infrared wavelengths that are restorative or reparative.

And we know this even more now when we compare it to blue. So, LED lighting and iPhone and computers, it's all blue light. And we've removed the healing red near infrared component, the thermal component, for the sake of energy efficiency, but with terrible consequences to our health.



And so, we have all those blue light all day long. We're getting no red near infrared. So we have no restorative light.

This is a way to have the sun in your in your home basically at your convenience every day whenever you want it, regardless of whether it's cloudy outside or not.

And also, since it's incandescence just at a little bit lower temperature than the sun, there's no UV emitted. There's no blue or no UV. It doesn't tan you. It's non-mutagenic. It doesn't mess with your chronobiology like blue does. It's just all healing goodness, light and heat from the sun together.

# Wendy Myers: And this is the sauna I have in my living room. I use it several times a week. I recommend it to all of my clients. I think it's incredibly important. If you're doing any kind of detox program, you have to use an infrared sauna.

My clients that just maybe do supplements or take detox settlements, they don't have nearly as good results with their detoxification of metals than if they do a near infrared sauna.

## 13:35 DETOXING CHEMICALS

Wendy Myers:	And I think what people also need to realize is the chemical aspect. You start detoxing chemicals and you're sweating out all of the chemicals that we have.
	The CDC, the Centers for Disease Control says we have 700 chemicals in our body.
	Dr. Dietrich Klinghardt who's a world-renowned detox expert, he thinks we have 10,000 to even 20,000 chemicals in our body.
	Obviously, these are not causing health or promoting health. And one of the best ways to get them out of body is to sweat them out using a near infrared sauna.
	Can you talk a little about that?
Brian Richards:	Yeah. We're obviously under this modern toxic onslaught. And every day, it seems like, in spite of our wealth, we're getting sicker and sicker. It's clearly the toxins. It's all around us.
	But then the question is: "Well, how do we detox?" There's an array of products out there that you can detox (or purportedly so).
	This is the way nature has designed animal cells to detox, with heat—and actually, to do so



#### passively.

So, when you're in the gym running on the treadmill, you're sweating, of course, through your skin. But you're not detoxing anything. Your nervous system is in sympathetic dominance. All of your energy resources at the cell and the systemic and the tissue levels is going to locomotion. It's going to the heart and lungs and muscles.

You have to relax the nervous system into a parasympathetic—what's called a rest-and-digest state for the bodies to have the energy and resources and to be basically geared to detoxify.

So, this has actually been studied. It's very interesting that the toxin concentration in sweat when you're vigorously exercising is very minimal, only a few percent. Whereas, when you measure the sweat of people who passively sweat—so, in sauna therapy, they're just sitting there sweating passively—the toxin concentration in the sweat can exceed 20% or more.

And there's a study where they did the Hubble Sauna Protocol, the L. Ron Hubbard Sauna Protocol, on 9/11 workers that were exposed to terrible toxins from all the building materials, terrible levels of solvents and toluene and all these petrochemicals. Through a couple of months of doing heat therapy, sauna, therapy, they had between anywhere from 80% to 95% reduction in the petrochemical levels in their tissues and in their blood. And that was all coming out in the sweat.

And so, absolutely, if you're going to detoxify, you need to sweat. But you also need to sweat passively, not at the gym.

And what we say here is, "Well, if you're going to sit down and sweat for 20 or 30 minutes to detox and detoxify the cells and leverage the skin as a detox organ (it's the most powerful one), you ought to be activating your mitochondria as well.

So, you get that near infrared in there, and there's clearly a synergy between the two. If you're going to do heat therapy, you might as well do light therapy as well.

And I think that synergy leads to, again, being more gentle, being more effective, but also more of a groovy detoxification. Especially people with infirmities, from my experience with the thousands of customers that I have, most people with infirmities and severe ones, they can't handle regular sauna at all. This is the only type of sauna that they can even withstand.

And there is actually, for example, a heat-sensitive or tachycardia protocol where instead of doing the full 20- or 30-minute sessions, having the full body sweat go on, you can just leave the



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	curtain open or you can pre-heat for 10 minutes (so you can not pre-heat, and leave the curtain partially or fully open), and you can do just five minutes. And you slowly build up to a point—
	Even these people who are heat-sensitive like tachycardia or MS or things like that, they come around. They have the same cell systems that you and I have. They can reactivate their systems. And this is how we do it, with light.
Wendy Myers:	Yeah.
	18:01 HEAT AND LIGHT
Wendy Myers:	So, talk about what is the evolutionary precedent for biological light and heat shock systems. What is the alliance between light and heat? You don't get that in a typical far infrared sauna.
Brian Richards:	Right! It's absolutely the two sides of the healing coin of the sun. The sun emits a full spectrum light. It's basically a bell-shaped curve in the visible rate region. It has a long tail going as infrared. So you get all these wavelengths in the natural power distribution.
	That is what full spectrum light is. It's technically called a thermal light source. So, we have the visible light, the red light, and we also have the thermal light that we don't see. So that's near infrared.
	What we see in our cells—so everybody's made of cells, all animals are made of these animal cells—even though we look different, and every though each person has different diseases, different problems, has different complaints, we have the same cellular systems that are literally the same in every cell, and they're designed to fix themselves.
	So, the heat shock in the cell is basically coming from the heat shock proteins. When you raise cell temperature by three or four minutes, the nucleus begins to produce heat shock proteins. They are the primary cell detoxifier. They help make cell detoxification more efficient.
	And they also go around and repair mis-folded proteins, proteins that are malformed and not made right because the epigenetics of the cell is degraded and the cell is not making its parts right. Instead of the cell having to throw those out and destroy them, the heat shock proteins go in and repair.
	And these heat shock proteins are completely dormant at a resting body temperature. So right now, they're inactive. It takes a sustained heat shock to activate them.



So, that's built into every cell of the body of every tissue type—neurons, bones, skin, liver. Everything has this system, more or less, in it.

And every cell of the body also has this light system. What we call "light therapy" is when we use light to activate biological systems. That's primarily the mitochondria.

So, we have what's called the cytochrome-C. It's a light receptor protein in the mitochondria.

There are thousands of mitochondrion in every cell of the body, except red blood cells. So every cell has these—the nerves, the tissues, the bone, everything. And if we just stimulate the mitochondria with this very narrow band of light—about 600 to 1000 nanometers, so visible red light and about half of the near infrared band of light—these wavelengths of light activate what's called "mitochondrial functions."

So, immediately, you boost cell metabolism and release nitric oxide into the tissues—so that's vasodilation, more blood flow, more tissue oxygenation. And it also promotes production of the reactive oxygen species, but in a in a synergistic sense where these three things that are created by the mitochondria when we stimulate with near infrared light, they interact together and have just an amazing array of indirect effects.

And there are just so many of them. They promote growth factors and cell regeneration and vasodilation, tissue oxygenation. They also promote production of inflammatory mediators in the cells, reducing cell inflammation.

And most interestingly, these three act together to repair the DNA. So, when people say "epigenetic repair," that's anti-aging. That's where we're restoring, we're reversing the degradation of the cell.

This is the most fundamental cellular way that the body anti-ages. The mitochondria are not just powerhouses of the cell. When we shine near infrared light on them, they re-optimize and restore perfect functioning of the cell.

So, it's not enough to just do light therapy or heat therapy. If we get the toxins out like we do in a regular sauna, great! We repair the cellular damage due to toxins, but we still have degraded epigenetics. So the cell, it's just not as optimal. It's aged.

But if we stimulate the mitochondria with near infrared light and do light therapy, we can reoptimize those functions and make it work optimally and perfectly again.



And so, obviously, we need to do the two together. We need to re-optimize and we need to detox, and we need to do in every cell of our body. Clearly, we need to do both. And if you're going to do both (and if you're talking about evolutionary precedent), you're getting both from the sun.

So, of all manmade light technologies, there's only one in which you get both. And that's incandescent lamps. Specifically, to do a full body heat therapy and light therapy, we use three or four 250-watt incandescent lamps—a very high wattage, very hot—and the red glass, so there's no blue light coming from these lamps at all.

We align it with our torso very close, about two feet away, with our shirt off, so that the light can penetrate. And we sit in here and we sweat like any sauna. But while we do that, we're re-optimizing our cell functions.

And , the cell doesn't care what type of toxin it has. There are so many out there. I know you talk about that all the time, Wendy. There's just many. There's petrochemical, there's heavy metals (even good metals that are not bound that they're ionizing), electromagnetic pollution from magnetic fields and electric fields.

And just living in a stressful lifestyle and just being in sympathetic dominance all day long, we're not equipped to really deal with this toxic onslaught, other than to go to the fundamental cell level and fix things as nature intended, which is light and heat.

So, we're not outside with our shirts off in the sunshine from sunrise for many hours, not every day...

- Wendy Myers: Well, speak for yourself. I am! No, I'm joking.
- Brian Richards: Well, here it's been quite cloudy lately in Missouri. So...
- Wendy Myers: I'm in Southern California. There's a lot of sun. I need to go out more. But I'm so busy helping you guys that I don't get enough. But I try... But I get my sauna!
- Brian Richards: And it's good to get sun. And at least, out in the sun, when you're getting those blue and UV that's damaging you, you're getting red and near infrared, and it's regenerating you. It's making you feel good, and it's restoring you.

So, this is a way to get the light and the heat together in a very convenient fashion, just in the comfort of your home, and not have to go out to a gym to do so, and to then be able to take a shower in your own shower afterward.



And that's a big part of our design too. It's not just the right light technology. I insist on it being easy to use and lightweight and easy to set up, so you use it every day for your full-fledged daily near infrared light sauna therapy, but you can break it down still and store it in the closet very easily if you need it out of the way for a while.

And that's another part of the convenience of Sauna Space and our design. We're not some 400lb. cabinet that you're stuck with, that imposes itself and imposes its will on your life. We're more minimalist and modern in our design.

But the therapy itself is ancestral. So it's full spectrum light therapy. Light and heat together, that is the natural alliance. And that's how we are supposed to get it.

### 26:05 USING A SAUNA

Wendy Myers:And so, in having the light and the sauna, is there any caution with using it after sunset, like it<br/>might kind of stimulate you and keep you awake if you're in that light after sunset?

Brian Richards: Good question. No, it's actually the blue that keeps us up. Blue light suppresses melatonin production. And that tells us to stay awake.

And so, in the natural human experience, the sun sets and blue light stimulus ends, and our body begins to prepare for sleep. But if after sunset, you're looking at your computer or your phone or you're watching TV, then you're getting a lot of blue light which is telling your brain and your body to stay up, to stay awake, it's still light out.

So, thankfully, you don't get that from this lamp at all. What's the best time to use? It's the time that allows you to use it every day really I would say.

I personally have a lot of insomnia and mind-racing stuff, so a big part of that is being in sympathetic dominance. Like what I just said, if you're in sympathetic dominance, when you want to go to bed, you're not in the right nervous state to go to sleep. You don't rest well. You don't have good sleep. And that really affects your whole life and your day the next day—as it was mine.

So, if you have those types of issues, I would say use it at night right before bed.

## Wendy Myers: Yeah, and you keep saying sympathetic dominance. So that's when our nervous system is kind of just on fire, and we're go, go, go, go, go, go, and we're not relaxing and taking some time. And a lot of people really get burned out.



## 27:41 CALMING THE NERVOUS SYSTEM

Wendy Myers: And infrared saunas, they help to calm your nervous system and activate your parasympathetic nervous system. Can you talk about that?

Brian Richards: Yeah, that's one of the indirect effects here of mitochondrial activation, in general, we're relaxing the body literally. We're relaxing the nervous system too. It not only puts you into this rest-and-digest state that you're designed to detoxify—again, passive sweating in a parasympathetic state is how we detoxify, that's how we heal—that light itself promotes that relaxation of the nerves.

So, if you're jittery person or you're anxious, this will force you to relax. And really, what's interesting is we don't meditate much in the west at all, not so much anyway. And so this kind of forces a meditative state, this near infrared light.

And you'll find, even if in the beginning, you want to get in there and bring your book in and do some reading, you'll find, after a time, that you have this desire to just put your book down and just be there. And that's light calming you, literally calming you.

So, you feel relaxed when you come out. You feel rejuvenated. I feel very centered when I come out, just clear-headed. Irritabilities and stuff, anxiousness, they just go away. And the light does that itself.

It's really impressive. The more we study near infrared light and how it's used in biological systems, the more we discover that the cells are using this in every way. And so it makes sense! Forty-five percent of the sunlight that reaches the earth that gets through the clouds in the atmosphere is near infrared. And so this fundamental healing system we have in every cell of the body, thousands of these little healers in every cell of the body, is activated with near infrared light.

And there's even other more deep, more esoteric stuff like the mitochondria talks to the nucleus with near infrared light wavelengths. So we're seeing intracellular communication with near infrared light. The cells are just using this near infrared light for so many things. It's just a magic wavelength. It's a magic light band. It's really fascinating!

## 30:10 EFFECTS OF MITOCHONDRIAL STIMULATION WITH NEAR INFRARED WAVELENGTHS



Wendy Myers: So, what are some of the direct and indirect effects of stimulating the cell's mitochondria with the near infrared wavelengths?

Brian Richards: It's a good question. I think I went through it really fast there, but I'll slow down.

There are direct effects. The most obvious one is it boosts cell metabolism. It increases ATP. So we're boosting cell metabolism. The cell has more energy for whatever it's doing.

So, if we're already in a sauna, relaxing and healing, then great, it's going to use all this extra energy to help detoxify, to help repair, to help fix the epigenetics. So, one effect is to boost cell metabolism.

The second direct effect is releasing the nitric oxide into the tissues. It releases it out of the cell. And that causes vasodilation and improve blood flow. It's very important for bringing in the nutrients and taking away the waste. The blood does all that.

And note that these are similar to what happens when you heat shock the cell. So when heat shock the cell with heat, you also increase blood circulation, increase tissue oxygenation. Again, going back to the synergy between the mitochondrial activation, the near infrared light, and then the heat therapy as well, they're working very well together.

So anyway, the third effect is the mitochondria promotes production of the reactive oxygen species.

Those are kind of technical three direct effects. I find what's more interesting are the indirect effects. So what we see indirectly through stimulating the mitochondria with infrared light, just from clinical observations, if nothing else, are accelerated wound and muscle healing, improved tissue repair, reduction neuropathy or reduction of tissue inflammation.

We see improved recovery from heart attack and stroke and traumatic brain injury with near infrared light. And we see that not just in cell cultures and animal studies, but we see that in human studies as well.

There's a very compelling study on veterans, and also, as another one, youth concussion victims both sufferers of TBI, traumatic brain injury. Just the effect of shining the near infrared light on the nerves, on the brain, on the eyes, on the neurons was incredibly impactful on reducing their TBI and recovering from it.

In fact, I have a customer named Cavin Balaster. He wrote a book called Adventures in Brain



Injury. He had a terrible TBI injury in 2013 that put him into a coma. He woke up from the coma nonverbal and non-functioning. And near infrared lamp sauna, honest to God, was one of the primary tools that he used to recover. And now he's back on stage playing guitar and all these other things.

And so, what you see is you see repair/restoration of every cell types. We have this in our skin, so it makes our skin look better. It makes our blood flow better. It makes our tissues work better. If it's in the neurons, it helps rebuild the neuronal structure and how the neurons work together.

I can't make medical claims. I don't need to. You can look at the stories of my customers and see that this near infrared sauna, this light and heat together rebuilding the cells from the bottom up, it's positively impacting everyone. It's restoring the health of everyone.

All it takes is disciplined use. If you can just use it three to four times a week, it's amazing.

And so, we're seeing increased use of it. You're seeing more near infrared out there. And as far as near infrared sauna goes, we are we are the product. Every single time I talk to a customer, I'm blown away by what it helped with them. I have customers that reported their shingles going away within one week. A lot of people who have MS, they have low body temperature, so they may only be like 96° or 95°, their resting body temperature, which is extraordinary. It's too low.

And I have a customer I just talked to last week. She said that she's back to 98.6 ° after being down at 96° resting body temperature for like ten years. One month of using our sauna, and she's back to what you would call an optimal resting body temperature.

So, that's just another example of all these indirect effects. They're all about healing. And they're affecting every cell of the body. And they'll affect you too if you just give it a chance.

### 35:22 HEAT SHOCK THERAPY

- Wendy Myers:You have talked about heat shock therapy. Heat shocked proteins are a component of our immune<br/>system. And so let's talk about some of the known effects of the heat shock therapy that you<br/>experience when you use a near infrared sauna.
- Brian Richards: Great! Yeah, we've been talking a lot about near infrared light, trying to explain to people the mitochondria. But let's not forget the other half of the healing coin here of the sun, what we're getting from near infrared lamp sauna too, and that's heat, heat shock.



So, we shock the cell—that just means we increase the cell temperature—by two or three degrees for a period of minutes. And we get all these cellular responses that are effects of the heat shock.

The number one most interesting one is the heat shock protein. I mentioned it before. I'll mention it again. It's so important. They're inactive at resting body state. When we heat shock the cell for a few minutes, the cell begins to produce these specialized proteins that make cell detoxification more efficient. They basically act as chaperons for the immune bodies. So they're helping cell detoxification. But they're also repairing proteins.

So they can repair mis-folded proteins and basically fix things that are broken in the cell. Proteins are one of the primary cellular bodies in the cell. And it's going around and repairing all that. And it's never doing it, and this is never happening, at resting body temperature. It's only happening when we heat shock the body.

So, that's like the most interesting aspect of heat shocking the cells and heat shocking our bodies. But there are obviously other important things that happen as well.

You increase blood circulation. You increase tissue oxygenation. So even though there is increased blood flow, you have vasodilation that's occurring, so it's not increasing your blood pressure. It's just bringing more blood to the tissues.

It also has other interesting effects that are from the heat. So we see that in the neurons, heat shock promotes the production of BDNF, brain-derived neurotropic factor. So, this is like Miracle Grower basically for your brain and for your nerves. The heat alone will do that.

And so what we see in studies over time when we look at heat shock therapy is we see improved cognitive functioning—which makes sense if you think about promoting this miracle grow in all of the nerves over and over again. Eventually, our brains work better.

And so we see performance enhancement effects as well that is not just improved cognitive functioning, but also like heat tempering the body. So you have improved endurance under hot conditions in athletic contexts.

The most famous sauna study out there now is the 20-year study on Finnish males where the guys there are doing sauna five to seven days a week. They were living much longer with drastically reduced heart attack and heart disease rates than the control group who were not doing saunas. And so that's just heat shock.

And so, what we see is when we detoxify the cells, you give the cells a chance to live longer



and live healthier. We see people living longer, healthier lives with detoxification. And the most fundamental way that nature detoxifies our bodies is with heat. It's not with juice cleanses or chelation or anything else. It's primarily heat that does that.

And so, it's not just important to heat shock the body—and again, like I keep mentioning, near infrared light for mitochondrial repair—it's important to also recognize the skin. The skin is the primary detox organ. You started out with that. We don't use our skin to sweat any more. We're inside air-conditioning environments or when we're sweating, we're at the gym and we're working out really hard. We're not sweating to detox.

But this is actually the primary way we detox. I think it's like 60% or 70% of all toxins that are in our bodies can be detoxed through the sweat. And so it's important to not just do a little bit of light therapy and do a little bit of heat therapy, but to do it in a full-body fashion, to really get in the sauna and sweat passively profusely—like really profuse sweating.

That's when our nervous system is relaxed, when we're profusely sweating in our torso and all of our pores. That's when we're maximally detoxing and when we're maximally healing every cell of the body.

So, it's so important nowadays to recognize that the heat does things, very important things. The heat basically detoxes. The near infrared light basically re-optimizes. And we need both of them in every cell of our body.

We get the synergy of the natural form. We get all of the wavelengths, the 400 nanometer wide

## 40:23 DIFFERENT TYPES OF SAUNAS

Wendy Myers: And so, there's a lot of saunas on the mark today that claim to be full spectrum, they have far, mid and near infrared. There's also near infrared LED systems, and that also have the far infrared emitters in them. Can you talk a little about those and maybe some of the problems with those? Compare those to yours.
Brian Richards: Yeah! So, when we talk about full spectrum sauna, the real full spectrum sauna is right here. It's the incandescent lamp saunas. The near infrared lamp sauna. The near infrared lamp is the only manmade light technology that is incandescent, and therefore producing a full spectrum emission just like the sun. The only difference is the sun's full spectrum is hotter, so it peaks in the visible range. The cooler tungsten lamp peaks in the near infrared. So we don't get any hue, UV or blue light, but we get a ton of near infrared. And we don't just get one wavelength or two wavelengths.



band that stimulates the mitochondria, visible red light, and near infrared. And we also get the thermal infrared that heats us.

So, the problem with LED's is they're monochromatic. It's a digitized, kind of truncated light spectrum. It's kind of like the difference between an orange, an orange juice and a synthetic vitamin C supplement. You're taking one wavelength, and you're fractionating that out of the natural form, and then you're increasing the power of that dramatically, and you're telling the person and the body, "This is all you need. You need this one wavelength and no other."

And we find that in pretty much all things in terms of biology, in terms of our health, that the natural form of things is the best. It's both the most effective and the least risky. It's the safest and again the most effective because it is in the most natural form.

And so you address this a lot, Wendy, with the way you approach nutritional balancing, your mineral program. You don't heal with pharmaceutical drugs. You heal with nutrients, with the natural form of things that are in nature.

So, LED's, first of all, are only giving you one or a few wavelengths per LED. And these typical LED saunas out there, they have a few wavelengths of near infrared or red. And that's the number one problem, they're giving only a small fraction of what you're designed to get, this wide full spectrum light from the sun and from the incandescent lamp.

There are other problems with LED's too. There are manufacturing issues with LED's. People don't know about this. The incandescent lamp, it's either on or it's off. It's a black body radiator. It's incandescent. So it's either on and emitting light exactly as we say or the filament breaks and it's off and you replace the lamp.

LEDs have decay over their lifespan. So, after a while, they start dimming, and they don't get the power that they're purported to give. And if they're not Energy Star-rated, they're not delivering the wavelength they're purported to deliver because it's not an incandescent light source. It's basically producing light via a chemical reaction. So the color temperature on an LED is not one-to-one the same as the heat as the actual temperature of the material like you get from the sun or an incandescent lamp.

So, a big problem with LED's, and particularly in saunas, is that LED'S degrade really rapidly when they're subject to heat. And you can read about this on the Energy Star website. These LED'S that are supposed to last 50,000 hours may last a few months or so of use because they're in these little casings and the LED'S themselves are getting too hot.



So, imagine what's going on in the sauna. You have this far infrared sauna that has this bank of red LED's and near infra LED's that's giving you mitochondrial activation supposedly, but it's in a sauna environment that's over 100°. It s obviously being subjected to, hey, the exact problem here that we have. It's going to degrade over time.

And then, the question becomes, "Well, when is it degraded? When is it not performing as it's supposed to?" And if you don't have a spectrophotometer device, an expensive measuring device, you don't know exactly, so you don't know when to replace it.

Whereas, again, incandescent tungsten lamps are just on or off—very simple, very reliable. And the LED's are not.

I would say, finally, as a design issue more than a technology issue, is these full spectrum saunas where they say they have near, mid and far and they're actually a far infrared emitter for heat, and then near infrared and red LED'S for mitochondrial activation, they're kind of a small bank of LED's this big. They're sometimes in the ceiling or sometimes in the side of the sauna. But it's a very pathetic dosage, let's call it, of mitochondrial activation.

In a near infrared lamp sauna, it's four lamps aligned with your torso. You are bathing every cell of your body in this mitochondrial activating light in the full spectrum wide band form that you're designed to get it. It's not this piecemeal, localized effect.

And if it's in the ceiling, that's a very bad design because hair blocks light. So you really want to be as close as you can be. And you want to hit every cell of the body.

So, these are many reasons to forego the use of LED's in saunas and go with a reliable light technology that is the only full spectrum light technology that is the incandescent lamp. It's a very old technology. It's very well understood now.

What SaunaSpace has done, really, our cutting-edge aspect is our design. We bring this into your home in a convenient and safe fashion that's hypoallergenic that's lifetime warrantied. But recognize that, absolutely, it's the full spectrum, natural form that we're designed to get. And LED'S currently do not give you that. And more than that, they don't give you the heat. So these companies that are offering these full spectrum saunas are giving you this array of inferior technologies to mimic the full spectrum of the sun that you already get from an incandescent lamp. It doesn't make a lot of sense to go that way if you want to do light therapy in the full body and if you want to do heat (you might as well do them together).



And that's not to mention that your typical far infrared sauna, particularly if it's a carbon emitter (far infrared carbon emitter style), if it's not shielded, it tends to be high EMF. And that's another source of pollution of toxin, strong magnetic field. It's certainly not something we would want in our sauna.

So, another awesome advantage of the incandescent lamp is it's very low your EMF. And our light panels, and all of our light panel products, come with an shielded power cord as well [...] for those people who just have to have everything about that too.

Wendy Myers: I think I think a lot of people don't realize that EMF's are a huge toxin affecting our health. Anything you plug in is going to have a little bit of EMF. But some saunas are shockingly high in EMF's. So you have to be really careful. These cheap saunas you see on Amazon that are made in China, you want to be really, really careful about those. You can't completely eliminate it, but it can be very, very low, so that it doesn't harm your health.

## 48:52 THE MOST PRESSING HEALTH ISSUE IN THE WORLD TODAY

Wendy Myers: I have a question I like to ask all of my guests. What do you think is the most pressing health issue in the world?

Brian Richards: Today, I think that it's toxicity. All people care about is, "How is this going to improve me? How is it going to make me feel better? How does this help me?" And every person has a different disease, it seems like nowadays, and they've got a different name for different diseases every day. Everybody has all these problems nowadays and have a special name for each one.

I like to step back and say, you know, there is no disease, per se. There's basically a biochemical and bio-luminescent system, our bodies, that degrades over time. The cells, as they degrade, they don't make their parts as well. They don't work as well. They don't convert energy as well. But they still kind of work okay. So that's when we're not quite diseased and dying, but we're not optimally functioning anymore.

And then, slowly, but surely, the genes and epigenetics in the cell becomes degraded enough and the proteins become so malformed that they just don't work anymore. And then, the cell becomes diseased and the tissues become diseased, and we get what conventional medicine would call a disease.



It's not something that we're born with. It's not something that we're stuck with. It's actually something we get out of. So even though it's really scary nowadays that everybody has so many diseases and we're all so toxic and sick, there's a way out of this.

And it's looking back at an ancestral human environment, an ancestral human life style, which is full spectrum light every day, lots of a passive sweating, and natural human diet. My product doesn't address nutrition and lifestyle changes. That's you, Wendy. I just like to build things. I like to manufacture things. And this is the only thing that I do, near infrared lamp saunas.

So, I provide you with, really, the most powerful healing tool you could ever own and with a beauty and a quality and a durability that will last you forever. And then, you need to look at your own life and look at the areas that are negatively impacting—electromagnetic, bad nutrition, bad lifestyle choices.

But it's kind of, again, a positive outlook here. You don't need to live in a bubble. You can go out there and have dinner with your friends and you can kind of expose yourself to toxins, so to speak, if you're daily regenerating and daily anti-aging and daily detoxing with your near infrared lamp sauna.

I try not to focus on what one problem is or what the other problem is. It's absolutely toxicity. That is the only thing that's affecting all of our health. It's all forms of toxicity, as we've discussed here, and it's living a toxic lifestyle as well, making bad lifestyle choices and not recognizing what's affecting your health natively.

Wendy Myers: Now, that's very, very well said. I completely agree with you. I really think that toxic metals and chemicals are one of the major drivers and underlying root causes of disease today.

Dr. Jo Pizzorno, he just came up with the book, The Toxin Solution. He says the exact same thing in it. Dr. Dietrich Klinghardt says the same thing. All of the big thinkers of our time really are saying the same thing. We have diseases we've never seen before, and it's because of all the toxins and chemicals. And it's just getting worse.

You have to do something to protect yourself with detoxification. Have a lifelong detox strategy. Detox is a lifestyle. It is not something that you do for 30 days or you do a 10-day cleanse or juice fast. It's a start, but you have to really start thinking of detox as a lifestyle if you want to be truly healthy and live disease-free a very, very long time.



## 53:05 MEMORIAL DAY SAUNA SALE

Wendy Myers:	So, tell the listeners a little bit more about where they can find you. You also have a Memorial Day sale that's coming up. I'm going to be in San Diego with my daughter. I'm spending some time with her and have some fun in the sun and getting some natural near infrared from the sun on the beach.
Brian Richards:	Lucky you!
Wendy Myers:	Yeah. So tell us about your Memorial Day sale.
Brian Richards:	So, everything is going to be on sale, everything on the shop, for Memorial Day weekend, starting the Friday before and basically right until the end of the month. And that will be all of our products.
	So, come check us out the weekend of Memorial Day. And you'll see a very special savings. You won't see this kind of discount every day at SaunaSpace. Memorial Day Weekend Sale, <u>SaunaSpace.com</u> .
Wendy Myers:	Yes! And so, the sale is going to start on May 26 <sup>th</sup> —I just want to be super, super clear-and it will run through I believe May 31 <sup>st</sup> just so everybody knows. I definitely encourage you guys to take advantage of that. I can't recommend Sauna Space saunas highly enough. They're the ones that I use a few days a week. They're so pleasurable and so enjoyable. It's one of the best things that you can do to improve your health.
	Brian, thanks so much for coming on the show.
Brian Richards:	Thanks for having me, Wendy.
Wendy Myers:	If you guys want to learn more about me, you can go to <u>Liveto110.com</u> . And check out my healing and detox program at <u>MineralPower.com</u> .
	Thank you guys so much for listening. I love waking up and thinking of new ways to educate you guys and get you excited about detoxification. I truly love what I do and your response to what I'm doing. Just all the e-mails and Facebook comments and things that I get every day talking about how I've inspired you guys to start detoxing and what-have-you, I just really love what I'm doing. I just hope you guys can change your life with detoxification.
	Thank you so much for listening to the Live to 110 Podcast.



EPISODE #204

STIMULATE MITOCHIONDRIA WITH NEAR INFRARED SAUNAS