

## Infrared therapy for optimizing sleep

**Guest: Mark Givert**

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### **[00:00:10] Kirsty Cullen**

Hi, I'm Kirsty Cullen, CEO of the Optimum Health Clinic. We are a UK based clinic specializing in fatigue related illness. I am delighted to join you as cohost on the Sleep Super Conference today.

And to introduce you to Mark Givert. Mark is founder of Get Fit, a company specializing in far infrared light therapy and detoxification programs. The company was launched in 2004 in response to Mark's own health issues, including chronic fatigue.

Since then, Mark has had the privilege of working with many doctors, clinics, and healthcare professionals to provide support for their clients. Mark joins us today to share how infrared technology might be helpful with supporting sleep health. Mark, welcome.

### **Mark Givert**

Hi, Kirsty. Thank you very much for that wonderful introduction.

### **Kirsty Cullen**

You are so welcome. So let's start by diving in and I wonder if you could offer an explanation about what far infrared technology is for those that don't know.

### **Mark Givert**

I would love to do that. Thank you. Because there is such a lot of misunderstanding in the public domain and actually really misrepresentation of far infrared. So I'm very happy to do that.

So, number one, far infrared is light. Now, you may have heard of far infrared with heat and sauna, and you have to get very hot and that you have to sweat to get the benefits and to detoxify. And I'm really going to share with you today that actually none of that is necessarily applicable. Because it's light, it has a warming effect on the body for sure, but it doesn't heat the air.

And an explanation is that when you're out in the sun on a very cold winter's day, blue skies and sunshine, what will happen is when you're in the sun, you're warm, but the moment you step out of the sun, it's freezing cold. Now, the air temperature has not changed. The only thing that changes is that when you're in the sunlight, there's a portion of the sunlight that warms your body directly without heating the air.

**[00:02:32]**

And what that means is that it's possible to use, and I emphasize this, light therapy in a way that is comfortable without high temperatures, without needing to sweat, and without necessarily having even to do long treatments or saunas or anything like that. It's possible because you're using the power of light to even use far infrared for just a few minutes at a time. Very comfortable temperatures, fully clothed.

I often take my treatment at the end of the day while I'm in the office, I'm fully clothed and I'm not getting hot and sweaty. And you can still get all of the benefits of the far infrared. So, it's light. And how I explain it, and I hope this is helpful, think of it as an infusion, an infusion of light into the cells of your body. So what you're actually doing is you're sending photons, you're sending light, invisible light, by the way, you can't see it, but you do feel it. Because as the cells absorb the far infrared, it has a warming effect, a little bit like that Ready Brek flow.

It's warming you from within and you feel nice and warm and relaxed and comfortable. And the experience actually is that, number one, just like when you're in the sun, when you're on the beach, you actually feel relaxed when you're in the sun. That's the far infrared helping to relax you. You feel energized because of course the sun is charging you up. And again, the far infrared, literally, it's almost like putting your body on charge. I kid you not.

You're putting the purest form of energy into the cells of the body that the cells can use instantly without having to process or metabolize in any way, shape or form. So it's like putting your body on charge. And thirdly, how do we feel when we're in the sun? We feel good. There's a sense of wellbeing and the reason for that is because what happens is the far infrared triggers the production of endorphins in the body, serotonin, leaving you feeling well.

### **Kirsty Cullen**

So thank you for making those distinctions, Mark, because I think that's really helpful in clearing up some of the confusion around infrared. So let's talk about some of the key triggers for poor sleep patterns then, starting with stress and anxiety. So how might stress and anxiety impact on sleep and what is it that we can do about that?

### **Mark Givert**

That is, I would say, probably one of the most important things that you could ask me. And the reason being, we see really over the years, it's become absolutely clear that stress is one of the major drivers for disease and illness. And of course, the lifestyle today is such that we are constantly connected. In other words, we never really switch off. And interestingly, it is as basic as this. We are in survival mode all of the time and there are cues and triggers going on.

For example, having the phone on, constant messages coming through and alerts. So there is an expectation, there is a readiness for a potential alert from the phone. And all of these dynamics, certainly from the digital point of view, keep the body in a state of extreme alert. And that means basically that the nervous system is hyperactive just from the digital perspective. But not only that, the reality of life today is, of course, if you're raising a family, if you're working and not only that, more critically, ironically, if we are facing health challenges, it's stressful to be ill.

And if you've been unwell and facing a health challenge for an extended period of time, there's a disruption to our lives. And consequently, we may face even more challenges because, for example,

we may need to work, but maybe we're not able to work or we're not able to work quite as much. So the lifestyle that we're living, having to work, having to potentially address the health challenges that are affecting your health. And inevitably there's no question if you're not sleeping, then you're certainly going to be stressed. Number one, from not getting enough sleep and number two, from your illness as well.

**[00:07:30]**

The result is that the nervous system is going to be constantly active. Nervous system means the sympathetic nervous system is going to be active all of the time, which means that we're going to be in survival mode all of the time. The body is ready to fight or to run away. And consequently, of course, that means that the body, as you know, is producing all of the hormones that are going to enable you again to perform or to run or to fight. Lots of cortisol production, lots of adrenaline.

And the reason that it's so damaging is because while we are stuck in this nervous system hyperactivity, because we're in survival mode, the body will not release resources for repair and healing. So the bottom line is that as long as we are in this hyperactive nervous mode, you cannot get the body to repair itself. Not possible. So what the far infrared does as we referenced earlier, how do you feel when you're in the sun? You just relax, you feel relaxed, you feel good, you feel energized.

And interestingly enough today, this may sound a little bit strange, we all know about nutritional deficiencies, but something that most people are not considering, we are the indoor generation, we are indoors 90% of the time. Now why am I mentioning that in the context of stress? Because it means we are deficient in light, and as I mentioned to you that light helps reset, calm and relax the nervous system. And we're not getting that.

We're just getting constant activation and more importantly, hyperactivation of the nervous system. Which means that we're not getting the calming effect of light to the degree that we've had to introduce technology so that, think of it like this, so that you can supplement with light and that in turn calms the nervous system and resets the nervous system.

### **Kirsty Cullen**

Superb explanation. So let's move from anxiety then to talk about inflammation, because that's another big major player that certainly we see in clinic all of the time. So from your perspective, how do you see inflammation impacting on sleep?

### **Mark Givert**

Inflammation is so interesting because that leads into a lot of different areas. But inflammation, the lifestyle, the nutrition, the diet, and often when the body is not functioning normally or properly, the body is tending to inflammation. For example, commonly, more often than not, a lot of the food that we're eating every single day, as you know, is a major driver for inflammation.

And the challenge is, certainly my experience was when I was ill, even if I took the healthiest food, the best, freshest food that I could possibly eat, my digestion was compromised, my digestion didn't work. I couldn't absorb or assimilate food. And even though I was eating good food, my food was not being digested, I didn't have any energy, I couldn't move. Consequently, that food was just basically accumulating and adding to my toxic load because I couldn't metabolize it.

## **[00:11:17]**

So even my point is that the everyday act of just consuming food and if your body's not working so well, as was my case, that just the act of eating is going to trigger systemic inflammation. And also a very important factor is lifestyle today, you know, sedentary lifestyle, a lot of the studies are showing us that we are sitting for between 8 to 12 hours or more daily. Now that alone is sufficient to drive systemic inflammation. Why?

Because if we're not moving, it means we're not utilizing our muscles and the muscles are the pump, the pumping system, to help us eliminate and flush out a lot of the metabolic wastes that we are generating just by virtue of being alive. So if we're sitting, we're accumulating just metabolic waste that is inflammatory and going to trigger inflammation. And certainly there's been some great studies demonstrating actually that the inflammatory substances are called cytokines.

And when the body produces these inflammatory substances, they activate the body and trigger a wakeful state. So if we are inflamed and there's so many additional reasons for inflammation, I've just touched on a couple of the key drivers, but when the body is producing these cytokines and the body is inflamed and normally that's going on systemically, that is going to disrupt sleep. And also the other thing that starts to come into that, that we'll discuss I'm sure a little bit later, is that toxicity, toxins will also drive inflammation. And unfortunately the toxins that drive the inflammation, that inflammation can then result in metabolic disruption as well.

## **Kirsty Cullen**

Exactly that. And it seems pertinent if we're talking about inflammation then to progress into talking about pain as a really common sleep disruptor. Can far infrared technology support a reduction in pain while you're sleeping? How does that work?

## **Mark Givert**

Well, again, that's a really great question and certainly there's two real scenarios with pain. A lot of our clients and certainly my experience was I had constant ongoing pain. It didn't let up. I had it throughout the day. So, number one, there's constant pain and sometimes people just have pain sporadically throughout the day. And what we've done historically, our journey has been that we've had people doing the far infrared treatment during the day.

And the impact of light therapy is that it's anti-inflammatory, number one. So it helps to reduce the inflammation. But also because you're using light, light will flow into the body and through the body a little bit like electricity flowing in a circuit. Now, why I'm mentioning that with reference to pain is that the challenge with pain and potentially cellular damage or tissue damage, is getting access to the areas of damage to promote healing.

You have to actually be able to stimulate and restore circulation to the areas of damage and potentially inflammation. And often those areas of the body, they're inaccessible. And that's why often people have ongoing pain for many years from some of the oldest injuries, because the blood supply to the area in question is very limited and we need blood to stimulate repair and healing. And why light is such a profound method to assist healing and repair is because the light will go into the body and it will flow through the body.

It will access the cells and the DNA, where normally it's very challenging to get access to the areas of damage. And the result, when those areas of damage absorb the light, heat is released, activating the

blood supply, repairing cells and reducing inflammation, which means what we've seen a lot of is no matter how old injuries are, commonly, you know, we have people with problems going back 10, 15 years and we begin to see some improvement. It's not that the body can't repair it. It's just, again, it's the issue of activating the blood supply in the area of damage.

### **[00:16:35] Kirsty Cullen**

Yeah. Superb. Essentially, the light is getting to where other professionals can't get to.

### **Mark Givert**

It's very challenging to access those inaccessible areas. How do you do that? That's why we use light. And I think what's revolutionary for us is that we've developed is this sleep technology that enables, because there's nothing worse than being in pain all of the time and certainly if you're in pain when you go to bed, you're not going to sleep, or if you do, it's going to be uninterrupted and not good quality sleep. So something that we developed, actually, particularly for people in pain, was we have a system that can be used while you're sleeping in the bed.

And we've seen very, very good results. We've got a lot of case studies where we found that in a relatively short period of time, people have started to see improvements and reductions in their level of pain and improvements in their sleep, of course, as well.

### **Kirsty Cullen**

Superb. So let's cycle back to the topic of metabolic waste and toxins. So why it is that effective detoxification is so important for healthy sleep, but how infrared technology specifically would support detoxification.

### **Mark Givert**

Again, that's a really critical question. And one of the reasons that far infrared is being used more and more now, particularly for detoxification, is as follows. Now, today we're facing, I would say, really an unprecedented challenge in terms of there are a variety of metals, chemicals and pesticides that we are exposed to. And the challenge is it's all invisible. You do not see any of it.

So you don't know that these things, number one, you don't even know you're exposed. And number two, you don't even know that these are being ingested regularly on a daily basis. Of course, we know from all the test results that we see, we see all of these substances showing up in the cells, in the DNA, in the mitochondria, all of these things that are appearing. But unfortunately, the challenge that most people have is you don't know until you have some health challenge.

And perhaps you may get tested for various toxins and they may then appear in your test results, but otherwise, you have no clue until something goes wrong. And why it's so crucial is certainly now, the World Health Organization has published some information about a particular category of toxins known as endocrine disruptors. Now, why I'm focusing on this is because that is particularly relevant for sleep. Why is it relevant for sleep?

For a number of reasons. These chemicals, as I said, they are absorbed by the body and endocrine disruptor, what does that mean? It means that these chemicals literally disrupt the functioning of your hormone, your hormonal system, the whole system. The other challenge is, which is a little bit mind blowing, this type of chemical appears to the body as a hormone.

**[00:20:05]**

So not only are the chemicals literally disrupting the function of your hormone system, the body can see many of these chemicals as hormones, which is why your body won't produce hormones normally anymore. So we've been very fortunate to work with, I would say, 95% of our clients suffer from endocrine system disruption, hormonal disruption. Now, we don't look at diagnosis particularly because historically, what we've seen is that when we start to clean the system and literally flush out these chemicals, we tend to find that the hormonal disruption subsides.

And I would say it's very, very important to note that these chemicals are not just disrupting the hormonal system, they are physically damaging the nervous system as well. And this is something that has recently been acknowledged, that these endocrine disrupting chemicals also, all of them, there's 177 of them listed, they all damage the nervous system as well. And more research has been demonstrating not only do they damage the nervous system, they also disrupt the immune system, which then leads to a further disruption of the metabolism.

So why is detox so critical? Because I'm only highlighting one category of chemicals, but I've chosen, should we say, the most damaging and the most disrupting. And not only do these chemicals disrupt the systems I've just mentioned, they disrupt, as I said, the nervous system, the autonomic nervous system, which again, can result in the body being stuck in this fight or flight mode. Body can't regulate itself. And if we do not clear this load of chemicals from the system, it's very simple, your hormonal system, your nervous system and your metabolism simply cannot function properly.

### **Kirsty Cullen**

Absolutely. We see it again and again in clinic, that relationship between improved detoxification and improved health.

### **Mark Givert**

So why detox is so essential is, and why we use light and why light is such a powerful tool is, as I mentioned, light will flow into the cells of the body. Into the fatty deposits where many of the toxins are stored. With light, we can access the DNA where, again, tests have revealed that many of these chemicals and toxins, they've actually attached to the DNA, interfering with the function of the DNA. So we're talking about disruption, you know, really in the most fundamental way. They're in the cells, they're in the DNA, they're stored in fatty deposits and it's very challenging to access them.

The mechanism, again, is very simple. When we send light into, we infuse the cells of the body with light, any of the metals, chemicals, pesticides or toxins that are in the cells or attached to the DNA, they absorb the light. And when this type of light is absorbed, heat is released into the chemicals, into the toxins. And when that happens, for want of a better phrase, the molecules are heated from within. And what that does is that causes excitation of all these molecules, all these bigger molecules of toxins.

And what happens is you start to get the chemical bonds in the toxic substances breaking down and that is enabling the body to release toxins into circulation, so we're mobilizing them. The body often will store them to keep the body safe from being damaged by the poisons and the toxins. And the detox process is the reverse of that, it's where we basically break them down so your body can now release them into the circulation for elimination and for clearing out through your major organs of elimination, which are your liver and kidneys.

**[00:24:56]**

And I emphasize that because there is this misconception, oh, you have to sweat to detoxify and that is the best way to detoxify. And I have to say that is not so. Of course, yes, you may use the skin while the liver and kidneys are not functioning properly. However, even if you successfully eliminate toxins through the skin, it's only a small percentage of the toxic load that even gets to the surface of the skin through the sweat for elimination. And as you well know, the reality is that when there's a health challenge, certainly for a very large proportion of our clients, the skin is not functioning properly, it doesn't work.

And that pathway of elimination from the majority of our clients, number one, is not available. And if you were to attempt to use it by basically heating the body to the point of sweating, that would be so stressful potentially that it could take quite some time to recover from the stress on the system. So no need to do that. We've developed low temperature programs and protocols so we can clear the toxic load by literally flushing the cells with light in a gentle process that will help clear that backlog. And as we eliminate the disruptors, your body systems can begin functioning again and doing what they do best, which is basically repairing and healing your body.

**Kirsty Cullen**

Absolutely. Mark, if we are mobilizing those toxins with a view to cleaning up the body to improve sleep, I wonder, do we have to be cautious of the pace that we move with that sometimes to avoid a big detox reaction, maybe in some of those more sensitive clients?

**Mark Givert**

100%. And this is why, as I said, we monitor and supervise the programs. And I know that you also help your clients in that regard as well. We monitor and supervise the program because actually there is a level of repair and there's a level of restoring function that has to happen really before we even begin or rather before the body is even able to really repair and detox as it normally would.

So to begin with, there's a process of very gently building the program according to the capacity of each person. And normally, I explain, we're often looking at four to six weeks to get the system, shall we say, up and running sufficiently so that the body is able to repair and to eliminate nicely.

**Kirsty Cullen**

Absolutely. And I know certainly in clinic where we've had very hypersensitive clients who are looking for health improvements, it may just be a couple of minutes to start with exposure and building from there in terms of their use of infrared light.

**Mark Givert**

Absolutely right. Some clients, as you mentioned, 1 minute, sometimes even 30 seconds, with great effect. A comment that I have for everybody here is when you're unwell, the only thing you want to do is to get well. And you want to get well as soon as possible. And a common trait in many of us when we want to get well is that we're so anxious to get well that actually even the recovery journey becomes one of stress, anxiety, and as I would phrase it, overdoing. And this is really what's key here, is less is more. The way to accelerate the recovery is by going slower.

## **[00:29:00] Kirsty Cullen**

I completely agree. I'm interested to hear more about the specifics of vascular or blood vessel damage and how that affects sleep and how we can perhaps target that as a therapeutic goal.

## **Mark Givert**

Do you know what? I love that. We've done a lot of research over the years into blood vessel damage. It's not something that is so well known. It's not something that people are talking about so much. But what's so interesting about that is I have to use the phrase, I think we've discussed this previously, but ironically, we need to heat you up to cool you down. What does that even mean? Now, let me explain.

As I said, we've discussed a little bit, we know that the body systems have been disrupted. They're not working so well. The chemicals, the toxins that have gotten into the system, we know they damage the blood vessels. Now, simply, the blood vessels have a lining. That lining controls the ability of the blood vessels to expand and contract so that you can deliver more blood to your muscles and even to the skin, for example. Now, something that happens to so many people is with the chemical disruption, shall we say, one particular gland that is hit hard is the thyroid.

Now, the thyroid, one of the things that happens to the thyroid is often its activity is affected, and commonly it's under active, not producing enough of the thyroid chemicals for the body to utilize, so the thyroid is underactive. Now, the thyroid, some of the functions of the thyroid include regulating your body temperature, enabling you to cool down if you need to. And commonly, what we find is that number one, thyroid production is reduced. So basically, people are not able to cool down.

So they overheat and they're either too hot when they sleep or they're too cold when they sleep. And that means you don't sleep. So number one, two elements, I've kind of gone a bit off-piste there, but when we detox, we get the thyroid working again because the chemicals that are disturbing it are eliminated, the thyroid can start producing normally again the hormones that you need. So you can start regulating body temperature. Number one.

The other element of regulating your body temperature is very much related to the blood vessels. Now, a lot of people who are unwell, often they're cold a lot of the time, cold extremities and they may be kept up from pain in the extremities, extreme cold in the extremities, but potentially pins and needles and maybe even numbness in the extremities. And this is all related to poor blood supply, poor circulation.

And one major contributory factor to the poor circulation is damage of the blood vessels, meaning that the lining of the blood vessels is damaged. And it's the lining of the blood vessels that produces something called nitric oxide. Nitric oxide is basically what stimulates the blood vessels to expand so you can deliver more blood throughout the body. And as we discussed earlier, something we know that happens is that for many people, the skin isn't working, meaning that the blood supply to the skin has been reduced.

We know that the thermoregulation system has been disrupted, so if you're running hot and you have this damage going on to the body, you can't increase the blood supply to the skin, which means you can't cool off the blood and you can't cool down. So you stay hot, you don't sleep. So why I say heat yourself up to cool yourself down is that for many people who are unwell, the only way we can activate, shall we say, the thermoregulation system is by literally heating the body, warming it.



**[00:33:37]**

And with far infrared, it's possible to do that with very low temperatures. It doesn't have to be high temperatures. And what happens is when we use the far infrared, the blood vessels will start to expand. The body then is able to send more blood to the skin. And the reason the body wants to do that is to cool off the blood. So you can cool down and you can, shall we say, regulate your temperature. And when the body system is not working properly or not working so well, which is common, either because of the hormones or the blood vessel damage, what we can do is with the far infrared, number one, it repairs the damage to the blood vessels, critically.

But, number two, it will, should we say, trigger the expansion of the blood vessels, allowing more blood to the skin so you can cool off. And of course if you're not so hot and you cool off, you can sleep.

**Kirsty Cullen**

Perfect. It's the perfect explanation and it's probably initially counterintuitive before you hear the explanation because you're thinking about heating up and the potential sleep disruption. But that perfectly explains why it helps in this particular arena.

**Mark Givert**

It's a little bit contrarian because there is this thinking and as you know that in the field of sleep science it's so well established that actually you want to be sleeping in a cooler room and the body temperature needs to be kept low. And my comment to you is all of those things certainly would apply to someone where the body is functioning normally. If you're in excruciating pain and you warm the body to relax all the muscles, to deliver more blood to release off the spasms, you're going to sleep.

**Kirsty Cullen**

Absolutely right. I would also love to talk, Mark, about electrical fields because we know that they impact on fatigue, we know that they impact on sleep. So from your perspective, how relevant are they to waking up and feeling tired?

**Mark Givert**

It's a very simple thing. We touched on stress earlier. The reality today is that electrical fields are an additional environmental stressor that cause disruption of the functioning of the body system. And today I would say it's virtually impossible to avoid exposure to metals, chemicals, pesticides, but also electromagnetic pollution. You can't avoid it, it's not possible.

And with the advent of ever increasing technological usage and as we use technology more and more, the reality is, there's only going to be more and more electrical fields that we're exposed to. So they're pretty stressful. And there's a couple of interesting things here. So one of the things that the far infrared does, the best way to describe it, it's not something I've really talked about very much before, but I would like to introduce potentially the concept of electrical immunity, electromagnetic immunity.

And ultimately what we have touched on today is very much about energy production. And certainly where there are toxins, the toxins we know damage the cells and the cells often are not able to

produce energy properly, hence very much underlying fatigue. There's damage that's done and the cells are not producing energy properly. Now, energy, what are we talking about?

**[00:37:25]**

There are many different forms of energy that the body is utilizing. There's chemical energy in the form of ADP and ATP. That's the chemical energy that the body is making to run the body, as it were. But of course, we know that the body is an electrical system. All the nervous impulses are literally electrical messages being sent through the entire nervous system. So the reality of the physical body is that there are a variety of energy forms running the system.

There's chemical, there's electrical, there's light, there's energy in many forms. Now, why am I mentioning this? If the body's compromised and it's not producing energy sufficiently, for want of a better phrase, we know the energy production system is compromised and the energy levels of the body battery have been reduced, or think of it as weakened, and we are moving in a sea of electrical energy today. And if the body, should we say, if the body charge is reduced, and I would say our electrical system is a little bit depleted and under par, the energy system could be overwhelmed by external stresses and electrical fields.

But when the body is robust and is generating more than enough energy you have some immunity in terms of that, your own energy system is able to neutralize the external stresses that it may be exposed to. So one of the things that ideally, if possible, you want to reduce, just like you want to reduce your exposure to toxins, you want to reduce your exposure to stressful electrical fields. There's no question, and there are many ways that you can do that and that's a whole nother dialogue.

But one thing that the far infrared helps with is, number one, as we mentioned, it helps charge the system and regenerate the body's energy levels, giving you greater resistance to the electrical stress that you may be facing. Certainly with the equipment that we've developed, the electrical fields are close to zero. But we also, we developed some technology specifically that can be used during sleep time, where we've eliminated all electrical fields, zero.

We're not powering the particular equipment that is used while you're sleeping, because we wanted to ensure that there was absolutely no electrical fields of any kind in the bed, really ensuring that we can activate the body's healing and repairing systems in the optimum way with no stress, certainly not from the equipment that you might be using in the bed. So that's one of our innovations, as it were, that we've eliminated, actually, because many of our clients, and I'm sure as your clients are many people, are sensitive to electrical fields.

And that's the result of an accumulation of metals, toxic metals in the body, disturbing the whole electrical system. And the toxic load results in sensitivities, as you know, to chemicals, to electrical fields, to a variety of toxins. And as we start to clear the body, the sensitivities start to clear up, even the electrical sensitivities. But the sensitivities are the result of toxic overload. And we need to address that. But until we've eliminated the toxic load, it's helpful to reduce the stresses, toxic stress and even electrical stress that we're exposed to.

### **Kirsty Cullen**

Yeah, absolutely. And I know many of us, myself included, are used to plugging our infrared bed into the wall. Can you explain how with the Sleeptek bed, it's body heat that activates the technology there?

**[00:41:59] Mark Givert**

Absolutely. It's a pretty unique system, and of course, one of the benefits of that, so for example, this boiling hot summer, the last thing you want is warmth in the bed. So the system that we have, you can utilize a heating system. Again, it's a non-electrical heating system, but also certainly body heat activated so that when you're lying in bed, you don't need to turn on any heating for the equipment. Your body heat activates the system and we're replicating basically what happens in nature.

In nature, there are certain minerals that when they're warmed, and inevitably, if it's in nature, it'll be warmed by the sun for example. These minerals, when they're warmed by the sun, their property is that they will emit photons and generate light. So energy is never destroyed, it's always transformed. So literally what's happened is these minerals are transforming the warmth of the sun into photons that are being emitted from the minerals.

And this is what happens during sleep time. Your body heat, we're not using the sun, but we're using your body heat with that same property. We're using minerals that when they're warm, they emit photons and light into the cells of the body. And what we're doing is a little bit unique, we're harnessing the heat and the energy being generated by your body to create the far infrared for the benefits that we've mentioned, to start the repair and calming the nervous system down, and for the detox.

**Kirsty Cullen**

Superb. And to be able to access that in bed overnight is superb. Not only is it very helpful in the moment, but obviously it's a superb use of that time, isn't it, to try and get these circadian rhythms back in check.

**Mark Givert**

100% and what we've realized over the years is that to be able, again, we mentioned that sedentary time is going to be a minimum of 8 to 12 hours or so during the day. And certainly what we decided to do was to utilize that sedentary time, meaning you're not going to be doing anything else if you're sitting at the office or you're sitting at home watching TV or reading a book, if you're sleeping at night in your bed.

What we've done is create technologies that you can utilize during your sedentary time, so literally introduce light into the cells of the body for repair, for calming the nervous system, for regeneration. And what everybody now has at their hand is a potential window. If we sleep, let's say, well, I mean, actually you've got pretty much 24 hours a day now that you can regenerate the system, but certainly now 8 to 12 hours or plus we can use to regenerate the body, to calm the body, to help the repair of the body.

So rather than the majority of the day being stressful due to sedentary stress, it's now possible to utilize that time for healing, for repair, for cleaning up, for detoxification. And I think that's a huge leap in potentially the wellness journey for people.

**[00:45:27] Kirsty Cullen**

Yeah, I would agree. Mark, thank you so much for joining us today and sharing your insights. If people want to find out more about infrared technology as something they might consider in their sleep toolkit and the work that you do specifically, where should we send them?

**Mark Givert**

Our website is [www.get-fitt.com](http://www.get-fitt.com).

**Kirsty Cullen**

Thanks again for your time and I hope our listeners enjoyed hearing about your work.

**Mark Givert**

Thank you very much. Thanks for having me, Kirsty, it's always nice to catch up with you.