



The Use of Photobiology as a Means for Mobilizing Stem Cells

Michael Karlfeldt, ND, PhD with David Schmidt



Michael Karlfeldt, ND, PhD

Well, David Schmidt, I am so excited to have you on this segment of Regenerative Medicine Summit. This is gonna be amazing information that we're going to be chatting about.

David Schmidt

Thank you. It's my pleasure, thank you for having me. It's really a pleasure to be with you today and have this time with you

Michael Karlfeldt, ND, PhD

Well and for people out there, not recognizing everything that you're doing your, the inventor of the life weight patches and also CEO of that company and your, your background in invention and entrepreneurial endeavors. I mean it's been pretty incredible. You've been specializing things like energy production technologies for both military and commercial. You were also, you've developed a new method for producing hydrogen oxygen design and also prototype for multi fueled blade less turbine power generating system. And you've done a lot in this honorary doctorate. And also you've been recognized as a, as a leader in the invention, your hall of Fame of inventors and but now you, you really come to a point where you try to figure out how to bring this type of energy, that technology, so it could benefit that, that the human being, right?

David Schmidt

Yeah, absolutely. You know, when I was growing up, I grew up as a Christian and you know, I used to read some pretty amazing stories in the bible and you know, you would see Jesus healing people feeding people and I thought this would really be a great thing to do with my life and I didn't want to be a farmer. So I thought, you know, I think I like this bit about healing others and



you know what would that path of life look like? So that was always the intention and I've been an inventor at heart so I love to explore other areas. But the past maybe 1215 years has been dedicated to stem cell research and looking at how to activate the endogenous stem cells that are already in the human body. So there's a very very exciting future ahead for all of us when we think you know 10, 20 years from now stem cell injections will be very commonplace. So they'll save lives. People will go to hospitals, maybe they were in an auto accident, they'll get a stem cell injection and that will start the healing process. And I have been doing work with the National University of Ireland in Galway and we received a research grant from Scientific Foundation Ireland. And basically my proposal was to see if we could activate the stem cells that were already in the body. So instead of giving an injection maybe we could make the stem cells young and active again and improve the healing. So this would be natural, safe and hopefully effective. And that project went extremely well.

Michael Karlfeldt, ND, PhD

Yeah because when we all have stem cells and that's why you go to the stem cell clinics and they do it from the individuals fat or they do it from their bone marrow. So the stem cells are already there. So to be able to kind of maximize the effect of what we already have in a very usable form. So people don't, I have to go to clinics. I mean yes that that's beneficial as well. But yeah that's time commitment, that's money commitment. And to be able then to have something that people can just use at home. I mean that that is what your technology on OS has been driving.

David Schmidt

Yeah and you know it's a great point because there are a number of complimentary things that people can do along with our technology as well as to support their overall health and stem cell function. So we know that diet plays a role keeping antioxidants elevated plays a role using technology like hyperbaric oxygen is going to increase the time total number of circulating stem cells. So where our technology fits into this is that we can use light to initiate specific biochemical pathways that increased production of G H. K copper peptide. And the advantage of this is that it modulates gene expression to reset the genes to a younger state. So now the stem cells in the body behave like younger healthier cells. So we see some very dramatic examples of how people are healing from chronic injuries as well as acute injuries.

Michael Karlfeldt, ND, PhD

So and that's the thing if they behave in a more youthful fashion and what we've seen. I know if you introduce youthful stem cells then that actually they will then donate youthful mitochondria to the other stem cells. So we'll have like a domino effect where you know when you start with a



group of youthful ones and then that just kind of have a ripple effect and creates more and more youthful ones or the ones that you already have.

David Schmidt

Yeah that's actually extremely insightful. And it is the principle area of our research is looking at how to enhance mitochondrial function. So you know some of the things of course that are popular today are looking at ways that we could elevate N. A. D. With an M. N. Supplements which the FDA of course recently banned. And are we look at older things that have been around like Seattle I carnitine and al Philip OIC acid for enhancing mitochondrial function. And then we really focus on light therapy. So the idea with this is we know that specific wavelengths of light can elevate things like vitamin D. And with our products what we're doing is using specific wavelengths of light to increase beta oxidation. So you get enhanced fat burning and we use it to activate genes that turn on production of copper peptide which naturally occurs in the body but declines with age. So to your point yes at first you see an increase in cytochrome c oxides. Then you see an increase in beta oxidation. This elevates total 80p and then from there you can get increased protein synthesis improved detoxification pathways increase in intracellular antioxidants. And then of course, you know, enhanced stem cell activity.

Michael Karlfeldt, ND, PhD

So one of the things, one of the issues is obviously some people they don't like to swallow a bunch of pills. They don't like to. I mean and and with your technology and and this may be hard for people to grasp. I mean here you're just doing a a patch that you put externally on the skin and somehow that activates, you know, that delivers, activates some kind of a light impact that that impacted pathway for the copper peptide, the G H K. Copper. Which we know is fantastic for tissue regeneration. I mean we use it here for like skin regeneration. You know, you can do peptide directly into it and we also use it for our cancer patient because it has huge implications and the apoptosis and controlling tissue so that it doesn't become cancerous. So it kind of bleeds over in so many different areas. Just that one peptide. But tell me a little bit how a patch that you put externally on the skin can then have all these different reaction. I mean, how does it transfer into the bodies or to say.

David Schmidt

Yeah. Great question. So the first thing is that this is a non transdermal patch. So to be clear, there are no drugs or chemicals or natural compounds that are in the product that will diffuse through the skin in a transdermal fashion. Instead, this is a non transdermal patch and it's activated by body heat. So in order to understand this properly, it's important to look at how to



signal induction and signal transaction mechanisms occur in the human body in the first place. And some of the pioneering work on this was done by fritz pop in Germany. And so we know that you take plant cells, animal cells, human cells and you put them in an environment that's completely dark. And using a photo multiplier tube at least back in the old days, then you could see light emission off of the cells. So these are highly coherent pulses of light. And in fact the beauty of the way human beings were created and all life on earth was created. Is that light is a communication mechanism. So very much as what Becker found is that the bio electrical, the energetic systems of the body are controlling the biochemistry.

So it's so critically important when as you know, when we look at overall health, the the energetic systems in the body have to be in balance with the biochemistry, meaning that if you're having a healthy diet, then you want to make sure that your communication systems are working with any number of different techniques and then the person can have optimum health. So the way we approach this is that there are natural compounds. There are principally stereo ice members of amino acids. They're processed in a specific way. So they will reflect specific wavelengths of light onto the skin when activated by body heat. So this is a specific form of low level light therapy and I'm delighted to say that after 20 years of research we have over 80 clinical studies on this. So those that are interested can go to our website, go to the science section and they can go through those studies

Michael Karlfeldt, ND, PhD

And that's incredible. So just using these specific amino assets, you know putting them in certain patterns will then generate a specific frequency that will then turn on mechanism within the body mechanisms like the activating the G. H. K. Coppers. You have a certain kind of pattern in the patch that will then activate that and then by doing that you then activate also the stem cell production and activity of the own individual for regeneration.

David Schmidt

Yeah, so a good way to understand this is that the light that comes off of our products is encoded with information. So let me explain that for a minute when we look at traditional low level light therapy or light therapy in general, we can use wavelengths of light like 6 30 nanometers. 6 68 58 10. You know any blend of infrared or visible light or even up into U. V. And we know that's going to elicit a specific response. So it's pretty common knowledge that we expose the body to UV light and it gives people a tan we exposed to 6 60. We can turn on collagen production, we can improve mitochondrial function and so forth. And what I wanted to do with this was a little bit different. I wanted to see if we could use light to turn on production of



'specific peptides like glutathione like G HK Hk carnitine. And so the principle of this is that we do what you do in laser ca communications is that instead of having a wave that is simply a sign is idle, what we'll do is modulate the wave so it contains information. So now you know this is how of course you know in the military for example you have site to site communications with the laser because the light is encoded with information so the patches work the same way they there is a infrared carrier. It's modulated to contain information to turn on synthesis of a specific peptide.

Michael Karlfeldt, ND, PhD

And that's you know for people understanding we have optic cables you know that we communicate through you know through our phones and so you have and that information goes bi directional. So you can yeah encode exactly like you're saying you can then encode that frequencies with any kind of information. I mean there's there's limitless amount of information that you can encode that and then like you're saying then there's specific communication that will turn on different peptides that will then elicit a response within the body.

David Schmidt

Yeah exactly. And the way we know this is because we do blood studies. So we'll take a baseline blood draw and we'll look at G. H. K. Levels And as Lauren Picard discovered you know, he's the father of G. H. K. We know that copper peptide levels decline with age pretty dramatically. So we'll look at a population of people say over the age of 50 and we know they're copper peptide levels are going to be down 60 80% depending on a person's diet and how well they're taking care of themselves. So we'll do that baseline and then in as little as 24 hours we hit statistical significance. And we'll see increases in both G. H. K. And G. H. K. C. U. What's very typical is within the first 1st 24 hours there's a very significant increase in G. H. K.

And then over the course of the next seven days you see the G. H. K. Bind with copper and then there's a statistically significant improvement in G. H. K. C. U. But the metabolism studies that we do, we have one that's published that's on our website and we've done that with first a pilot study with 15 people and then a double blind study with 50 people and with that shows again the statistical significance is that within the first week using the product you see about a 30 42% to 30 to 40% increase in the utilization of amino acids. So the utilization of loosen goes up. So we're gonna get enhanced muscle hypertrophy. We're gonna see tryptophan increase, so in its metabolism and that correlates with the sleep index that we do. So people get better sleep and also branched chain amino acids. We see increase in metabolism of those. So people are recovering faster after exercise and they're healing faster.



Michael Karlfeldt, ND, PhD

Yeah like like trip to fan you have also, you know, it's a precursor to serotonin. So in addition sleep, you know, for mood elevate you have it functions as a neurotransmitter. So any communication in the brain or in the cells or anywhere you need those neurotransmitters. So, I mean, that's huge. And we know also with the introduction of glyphosate at the level that we have, that it really destroys our ability to utilize our absorb tryptophan which is then produced in the gut by our gut, by OEM. And glyphosate destroys that. So now we have a way to support that naturally over and above what's normally supposed to happen in the gut.

David Schmidt

Yeah. You know, these products are very good tools and you know, our message is that it's so critically important for people to build a strong foundation that if they're going to their health care practitioner to get advice on diet and exercise lifestyle changes, keeping the toxins out detoxifying regularly. This is so critically important because without that foundation they're not going to get the best results out of a product like life wave. And we see some amazing things and the people that get the best benefits are those that build up their foundation.

Michael Karlfeldt, ND, PhD

Yeah so talk to me a little bit in regards to so that the G. H. K. Then you also have something called a Hk and that's one of your the newer patches that have come out that's that's quite fascinating and I know our prior discussion we talked and this was before I mean this was in the pipeline at that time and we were talking about five G. S. And and the interruption of these unhealthy frequencies that we are bathed with in the modern society and how important it is to be able to protect ourselves and to kind of normalize our bodies to be able to deal with these stressors because you know whether we like it or not they exist. You know so we just gotta figure out better tools to be able to exist with them in some fashion. So tell me a little bit about the H. K. And that patch and what it does.

David Schmidt

Yeah you know so there's a lot to unpack there and and talk about you know it seems like God created us with the ability to upgrade and deal with all of these challenges and that's something that is incredibly exciting because it's provides some hope that even though we're being bombarded with these synthetic man made radiations, there are things we can do to protect ourselves. So first thing is that you know to give credit where credit is due. Dr. Lauren Pickart discovered G. H. K. He discovered a Hk and without his foundational work I wouldn't have been able to carry on and do the work that I'm doing. So I'm very very appreciative to Dr. Pickart for



everything that he's done. So developing once we knew that we could elevate G. H. K. With light designing a product to elevate a HK seemed to be a natural follow up because the peptides are so similar. G. H. K of course is based on glycerine and hk is based on a line. And so this would you know, glycerine is fairly ubiquitous and it's rather easy to get in the diet. But alan the not so much meat eaters are definitely going to have an advantage over vegetarians or vegans. So if someone was interested in elevating their A hK which they definitely should be they might want to look at supplementing with something like Beta allen in because it's very inexpensive and it's easy to come by. So what are some of these benefits. Well the first thing that you find which we don't make a claim about, but Dr. Pickart is using age K to regrow hair. It's about equivalent about 10 times more powerful than G. H. K.

And it's equivalent to minoxidil without the hormone manipulation at being able to grow hair. So that in the literature was one of the principal benefits. But what I did with our team was to look at HK metabolism and what we thought is that this might be very similar to car using and that you would find a HK in the brain, in the heart, in the muscle fiber and potentially also in the bone. So we did a bone density test and we found that we could reverse age related osteoporosis in women. So that in itself we haven't published that study, but the study finished up to statistical significance that we could stop bone loss and reverse it with this peptide. And that was pioneering work because it wasn't previously in the literature that we could find we also focused on the general health benefits. And so we did some general wellness studies where we took people and put them on a mild exercise program. And what we saw was that the group that was using HK did much better than the control group. And in fact, what was interesting is that we found that without any special diet people lost body fat in addition to building lean muscle mass.

So that's an exciting area that we still want to explore a little bit more. But to your point we did a study with a biochemist looking at this problem of five G. And wifi and bluetooth and how pervasive it is and what can we do? So I came up with this hypothesis that you know, we in our lab when we test things, we might create a Faraday cage and we might use a copper mesh surround a piece of equipment to isolate it from electromagnetic radiation. And that does a very nice job. So I thought, well maybe the human body has the same capability. What if we elevated maybe what if we gave people a supplement of copper? 2.5 mg of copper glycerin daily just to cover that base. And then we increased both G. H. K. And a H. K C. U. With the idea is that they're going to be found in higher concentrations in the skin. And maybe these peptides because they were bound to copper would block out radiation. And that's in fact exactly what we saw was within about three days of using these products. People sensitivity to Wifi and



Bluetooth and 5G decreased dramatically. So we worked with people that were electro magnetically sensitive.

Michael Karlfeldt, ND, PhD

That's huge. So I mean person, people then become just like walking Faraday cages so that you know, our skin in itself will then protect the rest of the body inside. You know, from the impact of these negative electromagnetic impulses and microwaves and so forth? That were exposed to. I mean that's tremendous.

David Schmidt

Yeah. And I think that's the tip of the iceberg because there's also UV light to be concerned about. And I have some Irish blood from my grandmother and I have always burned very easily my entire life. And so one of the things that we found that we had about 350 of our members on a cruise in the Bahamas and we gave them free sleeves of the product. And what we were finding, you know, this is purely anecdotal, but we were finding is that people didn't get sunburns. They went from you know, being white to going to a tan. So we know that G H K blocks UV light that's in the literature and we see this in practice now with the product you elevate your G H K C. U. And it tends to block UV radiation. So this might offer some protection from things like skin cancer. But of course, we don't know that study hasn't been done.

Michael Karlfeldt, ND, PhD

No, no, that's tremendous. So what are some, I mean, so with the osteoporosis, I mean that's that's huge. So what are some of the impact that you have seen with people. You know, let's kind of focus first on the regenerative aspect. You know people that are dealing with things that are associated with degenerative diseases. You know when the body is shutting down and that can be M. S. Can be a L. S. Can be Parkinson's can can be Crohn's it can be any any of these different things where the communication within the system is dysfunctional and the body starts to break down. I mean like you're mentioning the researcher you know, Alfred Pops and Fritz Pops I'm sorry and the research he's done with the communication within the body and how that's done through by a photon. And it's not really the same kind of chemical dependent type of communication that we thought so much in the past. That is more because the reactions takes place so much faster. So we need that kind of light healthy light communication. And I know that the patches and supports that process which is such a key. So what are some of the effects that you have seen? I mean I know you've done studies on the osteoporosis and I know it might their own clinic we use the patches a lot and we've seen tremendous results but what are some of the common things that you see in regards to the regeneration and obviously we don't we



don't cure anything. There's nothing that's cured or there's no diseases that treated by it but it's supporting the well being of the individual And by doing that then it's amazing how the body can then feel itself from some of these very complex diseases.

David Schmidt

Right? And that's a fantastic point because the body is always healing itself. And so the question then is what can we do to support the natural healing process in the body? Right. That should always be the goal. Let me it'll be far easier if I share some pictures with you. This is from a study. It was a pilot study that we did with Dr. Dr. Gaetan Chevalier And really phenomenal guy. He's a physicist and has his background in nuclear research and got very interested in bio photon emission and laser spectroscopy. So this is with a multi channel E. G. Where we're looking at brain function and we did initial pilot study with 15 people and then later a study with 60 people. And so what we saw is that session one is at baseline. Session two is after three weeks of using X. 39 session three is after six weeks.

So we know that at age 77 there's virtually no stem cell activity in the body. The quantity of stem cells has declined the activity of the stem cells has declined of course as you know when people get to that age they don't heal very well. So any type of interventions becomes very difficult for the practitioner to help the patient more challenging. And so the idea here is well what if we reset stem cells to a more youthful state with G. H. K. What would we see? And so we saw after as little as three weeks that the brain started to go into a state of coherence and this was really remarkable. Dr. Chevalier commented that it might take nine months of therapy, you know good nutrition exercise to see this level of shift that we were seeing in three weeks. So this would mean that this woman was sleeping better. She had better cognitive function, her memory improved short term the speed of processing improved. So this was a very dramatic improvement in health.

Michael Karlfeldt, ND, PhD

So tell me a little bit what we're looking at, you know with the pictures, what does the red mean? The blue yellow all of that? What does that mean?

David Schmidt

Yeah. So what this would mean is you have different frequencies of that are going on bio electrically in different regions of the brain and the ability of, let's say the pineal gland to communicate with the hypothalamus depends on coherence. So in other words we want to use something like are we want to use our frontal lobes for processing information but that's



contingent upon the ability of the pineal gland to signal the hypothalamus and then the hypothalamus to direct production of hormones and you're a hormone precursors to allow all of that to happen. And so these red areas are indicative of an incoherence in the cell signaling. So that it means at this age for this gentleman at 67 there is internal bio electrical resistance in the tissue that's prohibiting effective communication from one region of the brain to the other. And so what we see is that as we elevate copper peptide in this gentleman over a period of six weeks there is a dramatic improvement in the coherence of communications in the brain. And this of course then leads to overall better health.

Michael Karlfeldt, ND, PhD

So the more blue you're seeing, the cooler the temperature is, you know, the less friction, sort of say less kind of incoherence it is so that all the different glands in the brain are transmitters, all of that can communicate more appropriately.

David Schmidt

Right? Right. So this is a good tool for practitioners. There's a few of them that we use multi-channel E.G. We have a device called a mental scan which I really like. We use a bio pulsar in our labs. They're all, you know, different ways of getting information very quickly as opposed to doing blood or urine. We do a lot of blood in urine tests and they're of course invaluable. But I really like combining that data with the bio electrical because now you get a fuller picture of what's really happening.

Michael Karlfeldt, ND, PhD

Yeah. And dementia Alzheimer's I mean all of that it's a pen. I mean that is a pandemic that's taking place right now. So to be able to have a tool to support the coherence in the brain to reduce risks you know, for those type of things. I mean obviously we can't say that anything prevents anything. But at least we want to do everything that we can to maximize our ability to function and to help regenerate.

David Schmidt

Yeah we did it absolutely. We did a study over 10 years ago with Dr. Tom Budzinski and his wife, Helen Budzinski. And Dr. Budzinski was very well known in neurofeedback. There were college text books that he wrote and one of the investigational studies that we did was on carnitine and carnitine of course is a dye peptide which is made up of valentin and histamine. And so is metabolized in the brain. And what was so exciting is that we saw after 30 days of increasing carnitine content in the brain. We could completely reverse age related cognitive



decline. So this is incredibly exciting for people that are dealing with any normal age related cognitive function. But also people that might have more serious conditions supplementing with things like carnitine and glutathione. You know to a degree can have some dramatic impacts on people's overall health and their memory state of relaxation and immune

Michael Karlfeldt, ND, PhD

And the challenging. So the supplementing is fantastic. You do have to rely then on the absorption and and on, you know, the integrity of your gut in some fashion. So obviously somebody with a healthy guts can absorb more, somebody that's older, less healthy guts can absorb less. So that's why it is great to have an additional delivery system that does not rely then on your ability to absorb things through your intestinal track.

David Schmidt

Yeah, absolutely. This is, like I said, it's a tool that people can use with healthy diet and exercise and supplementation to take the results to a level that they wouldn't have been able to before. You know, in the area of activating stem cells with copper peptide. This was a gentleman that had open heart surgery and had a you know, pretty healthy scar there a year later they received the product in July of 2018 and 30 days later you know, virtually no scar. So this is because G H. K does a great job of managing inflammation and we know the key Lloyd proteins are going to be responsible for scar and copper peptide fortunately can reduce key Lloyd's and help increase protein synthesis and collagen synthesis. So we get reduction in the appearance of scars.

Michael Karlfeldt, ND, PhD

So for I mean here this is really dramatic, right? And obviously you have women out there that dealing with c sections, you know dealing with a lot of different scars or gallbladder surgery and to be able to kind of heal those scars becomes tremendous. And what's interesting also, I do a lot of neural therapy because the scars in themselves create a energetic interference that can create complex pain disorders and other health issues. And so by having tools and to heal the scars and open up that communication through the scar. So it doesn't interfere with the electrical signal signaling through the body. That's, I mean, that's extremely helpful. And it's in addition to just the beauty aspect, functionally, what happens in the body is tremendous as well.

David Schmidt

Yeah, absolutely, and we see quite a bit of this, of course, you know, in the first example, this was a scar that was there for a year here, this was a woman that was coming out of surgery and you don't have to apply the, the product directly to the injury by the way, this is systemic. So we give



people a couple of different applications point as a matter of convenience, so you can apply it behind the neck, below the belly button if you want to apply it to the injury, you certainly can. But it's not really necessary. And here is an example of someone and that applied the patch, right at the site of the injury.

Michael Karlfeldt, ND, PhD

That's incredible. So, this, yeah, it was just a month. Look at that.

David Schmidt

Yeah, and this was of course, he was a teenager who had a snowboarding accident And yeah he used the product and had some pretty significant results after only a few days.

Michael Karlfeldt, ND, PhD

That's incredible

David Schmidt

This one you know I have to say I was pretty shocked when we got this in. So This was a gentleman that nearly lost his hand in a car accident. And so he got stitched up and applied X. 39. And you know of course what was remarkable was not so much even the scar was the fact that he got the use of his hand back. And that was pretty striking. This was so we have quite a few members over in Denmark. And this was a case where a nine year old boy had caught his finger into a door and it got sliced off. Parents rushed him to the hospital and the doctor said well there's not really anything we can do. And the father begged the doctor to reattach the finger and he said well I can but it's just gonna die and you can see that's exactly what happened. So fortunately they had a friend who was one of our distributors and they got the child the X. 39 product. And after two months it was like it had never happened. So this was pretty life changing for him.

Michael Karlfeldt, ND, PhD

Yeah I mean this is incredible. So actually it's kind of like we were talking about Dr. Becker in regards to his research and the electrical stimulation and growing out body parts. And so it's the same we're seeing that here the same thing you know we're using these patches and you're actually growing something that growing back something that was dead.



David Schmidt

Yeah what we're doing with and this is certainly you know on the outer edge this I wouldn't say is typical you know for full disclosure we get these testimonials all the time. But this is definitely i on the outer edge of what we see

Michael Karlfeldt, ND, PhD

But it's just to kind of show what the potential of it and yes I mean there's so many factors that play that are at play but meaning that what this will do is and support that process and whether you have that complete miraculous healing. I mean that may or may not happen but you're still supporting that process and you want to give you all your all to be able to get that effect obviously.

David Schmidt

Yeah and you know the human body has a funny way of prioritizing things. So often people want a certain thing to be healed first but the body has other plans and you know devotes resources to other places. You know we do see by the way while many people use this technology for healing there are plenty of people that use it just for general wellness to stay in shape. So this is a woman in Australia who had been using our products and so she used the X 39 when it came out and was very pleased after six weeks with the results. And but after a year the change was pretty dramatic.

Michael Karlfeldt, ND, PhD

You can kinda just see that the tightness around the lips yeah, you can see kind of the collagen production and and you know it's just getting fuller. You know, the cheeks are kind of pulling skin up a little But more so yeah, it's really it's really striking difference.

David Schmidt

And this was her after two years of using X. 39. So you know, you made a comment before that. I kind of chuckled that because I thought I might get the opportunity to show you this picture. You made a very insightful comment before that as you're increasing and improving the activity of the mitochondria as the cells are dividing their dividing as younger healthier cells. And we certainly see a lot of evidence for that. And this is certainly a case study where we did see that happen.



Michael Karlfeldt, ND, PhD

That's tremendous. Yeah. I mean she I'm looking from day 1 to 2 years later who wouldn't want that change.

David Schmidt

Right. Exactly. This is what I'd say would be pretty typical that we see over a period of two or three months is that the skin will tighten, it will become clearer. There's detoxification going on, skin tightening. New collagen production better complexion. So this would be very typical of the type of testimonials we get.

Michael Karlfeldt, ND, PhD

Yeah. Yeah. Look at that. Yeah. You can just kind of see that everything is you know with gravity obviously as we get older things and collagen starts to collapse, then everything starts to droop and you can just see how the skin is lifting up. You know, eyes are clear. You know, it's yeah, it's incredible.

David Schmidt

Now this would be one. Again, that is a little bit on the outer edge. We have a huge market in Japan and that market started for us in late 2018, early 2019. And so this would be, you know, the middle photo is about I believe that was 2-3 months after using the product. And now this would have been after about a year on the picture on the far right. So again, to your point, it shows the potential.

Michael Karlfeldt, ND, PhD

Yeah. Underneath the eye. And I mean it's yeah, but you know that when it's happening like this on the surface, you know what's visible and just imagine what's taking place internally as well and that is and that's what's so great. It's not just a superficial healing, it's a whole systemic healing and you know, and that's what we want, we want wellness and health to me.

David Schmidt

Absolutely. That's the most exciting part of this is that this is happening as a result of number one improving mitochondrial function, improving the health of the cell up regulating production of antioxidants, managing inflammation and mobilizing stem cells. So very much that would be consistent with the data that we've collected is that we're in order to get these effects. It's because we're improving the overall health of the body. So this is going to make a practitioners



job a lot easier because now you have a technology like this that you can use an aftercare to help support the overall health of the patients. And this again, this is just another example of what would be pretty normal that we would see.

Michael Karlfeldt, ND, PhD

That's huge.

David Schmidt

And then, yeah, this is pretty normal, pretty normal, as far as the, as the results we get now, this next one was actually the very first, we'll call it youth renewal testimonial that we ever received. This was a woman in Denmark who was having a number of very significant health challenges which we won't make any claims about. And her daughter is a life wave distributor. And so when the product came out, she thought, well, you know, maybe this will help my mom with some of her challenges and make her life a little bit easier. And you can imagine how shocked everyone was to see what happened two months later. So this was really pretty striking and this happened in 2018. So this showed us very, very early on once we took the product to market, you know what was in store. So it was really thrilling. And of course we were delighted for her.

Michael Karlfeldt, ND, PhD

I mean that that's like turning back the clock at least 10 years in two months. I mean that's

David Schmidt

It's about that. Yeah. Yeah. It's a we you know I should mention by the way that Norm Shealy we've been doing clinical studies you know and unfortunately he retired recently. So we've been doing studies with norm maybe since about 2008, or so. And we did Norman I did three years worth of telomere studies. And what we were showing is that we could lengthen telomeres by about 8.5% within six months. So sorry. So that equates rather to 8.5 years of age reversal in about six in about six months. Yeah. So and of course doing a totally non drug. And we had people that were at the lower end which was maybe about a 1% improvement or so within six months. And then we had some very unusual cases where people were getting 16-18 years of age reversal in about a six-month period of time. So you know you look at those anomalies and say well why are people you know at that extreme? It is that their genetics is that their diet, you know what's causing it. But the exciting thing is that we are showing that we can at least in part reverse the age of specific parts of the cell.



Michael Karlfeldt, ND, PhD

Well, so, I mean, cause telomeres as we get older, they break down, they get shorter and shorter. So even if you just keep it at bay, meaning that, you know, let's say you didn't get 1% it was just stable. Just being stable is fantastic. You know? So, and then to be able to get 1% and then get 16, 18, I mean, whatever else. I mean, that's incredible in six months.

David Schmidt

Yeah. So, you know, for those people that aren't familiar with it. Normally, our telomeres are gonna shorten by anywhere from a quarter of a percent to 1% per year. So, to your point, even if we were regenerating telomeres at the rate of 1% in Improvements per year, we're reversing age. And so over a period of 10, 20 years, that's going to be a very, very dramatic improvement for someone. And you know, who knows what that means. And who knows how high is up at this point.

Michael Karlfeldt, ND, PhD

And talk to me because I know you were very interested in weight loss in the past. You know, that was kind of one of the things that technologies that you were driving how do these patches, can they help with that as well. I mean, I would assume turning on healthier mitochondria more muscle mass and and that that would then stimulate higher metabolism, which will cause people to lose weight.

David Schmidt

Yeah, so it's not a claim we make, but on the patches, what we see is about it. We had Frank Shallenberger did the Origen Pioneering study force where we used the Captain Ah meter and we saw about a 23% improvement in fat burning on the very first day of using the energy patches. We later did an informal analysis with indirect Kalorama tree and we saw that the patches were able to help burn about another 300 calories per day. So as a weight loss aid, they're very good. It's not going to replace diet and exercise, right if people don't have proper sleep, proper diet, proper exercise, it's not gonna be a magic pill that they take where they're gonna shred body fat, but it's a very good aid. We also have two new products that we just came out with which are a new class of aromatherapy and time doesn't really allow us to talk about In detail. But one of the products will help to elevate testosterone in both men and women and it will help to normalize testosterone levels. So I'll use myself as an example and in our initial pilot study that we did with 15 people, we saw that within three days, 85% of the participants had



statistically significant improvement in testosterone and 14 of the 15 people had increases in testosterone after two weeks. My testosterone levels went from about the mid three hundred's to 7,10 and so as a 59 year old guy, I'm really happy with testosterone levels about 700

Michael Karlfeldt, ND, PhD

That's a huge cassette. And we know that these sex hormones that play such an integral part in our brain function in our mood, in our regenerate abilities. So yeah, I mean this is tremendous. So this is an essential oil then or are these patches as well?

David Schmidt

I know. So these are they're technically regulated as aromatherapy products. So there's very limited claims we can make with them. But what's different about it is that we developed a specific type of structured water to use as a delivery system, like aromatherapy. They contain alcohol But they have a blend of herbs and essential oils that act as active. So, because this is based on olfaction. When you inhale this aroma, the delivery system helps carry this into the blood and the results are very very rapid

Michael Karlfeldt, ND, PhD

Yeah. Because I know when you apply a little bit of essential oil underneath your feet, I mean it's within your whole body and your bloodstream within like 20 seconds. I mean it delivers tremendous. Yeah, and then you have the nerves, the hair follicles in your nose. I mean those are actually extension of nerves that have direct access to your brain. So by inhaling, you know, and then if it increases the steroid hormones like testosterone you know we know that they have kind of stimulating effect on your cognitive ability, reduce inflammation like depression, anxiety, a lot of the neurological conditions, autism, A. D. H. D. All of these are related to inflammation, the brain. So to be able to get those steroids and have an impact on the brain through the old factory. That's a fantastic delivery system to be able to get that.

David Schmidt

Yeah. And you know to your point I think this there's tremendous hope for people that are dealing with those types of disorders in the research that we do. I tend to think that some of these disorders are going to come down to improper metabolism of align. And to your point I completely agree that one of the therapeutic and prophylactic things that people can do is to improve their antioxidant profiles in their brain and get inflammation under control and that itself should be preventative for many many people.



Michael Karlfeldt, ND, PhD

So I know we're kind of running a little short on I mean we're there's so much information and we can chat forever about all these all the research and science. So right now tell me kind of when should a person you use J. A. G. H. K versus A. Hk versus carnitine versus glutathione. I mean those are kind of the main and you have a bunch of other patches that are energy patch you have, I mean, there's a lot of different ones. So what kind of in a kind of a quick summary, you know what what's your People think, you know, when I should reach for this one, obviously to do all of them at the same time and be the best because then you get all the delivery, but

David Schmidt

You know, not necessarily, you know, sometimes less is more, but what I would say is a great way for people to start is with X- 39 because there are so many benefits to it. And for many people, it's going to cover all the bases. If someone were to have, let's say chronic inflammation, maybe they're dealing with arthritis, they're dealing with Parkinson's, you know, and we're just talking about the pain. They could combine X 39 with Eon or ice wave. Both are natural light based anti inflammatories. If you use EON for example, which is a broad spectrum anti inflammatory, they could put X 39 behind the neck and then simply apply the EON patch to the point of pain.

If there is a systemic pain, they can just apply the patch below the belly button and that will cover the whole body, someone's having a problem sleeping. They could use X 39 with or silent nights product, which is a natural way of elevating melatonin with light. They're interested in sports performance. They could combine X 39 with either X 49 or carnitine and see some very rapid improvements you know within the first week with those products. If they're interested in immune function detoxification then they combine X 39 with glutathione. So that's a very quick rundown. There's certainly a lot of other things there too to cover. But that's a good rundown to start.

Michael Karlfeldt, ND, PhD

I love it. Well David Schmidt, I mean you brought such tremendous amount. I mean like you were saying thinking in your youthful days that you didn't want to become a harmer farmer, you didn't want to become a harmer which is yeah no no no pharmaceutical. You really brought this tremendous technology out and and obviously we we we we base it on research and other scientists have done and we take that to the next step the next applications and that's the beauty of of science, the the evolution and I think in regards to healing, I think that wave technology using light using sound, you know, these are kind of the next frontier that that we're



dealing with. And because it is completely harmless and it's just supportive, it supports the innate intelligence within the body so that it can do what it's supposed to do at a higher level. And so that's what when we kind of step away from these kind of fist physical things that we swallow and we supported with light and frequencies, I think we're going to achieve. I mean, it's amazing where what we're going to see in the area of healing, I think as we are evolving in that field.

David Schmidt

Yeah. No question about it, it's an exciting future. Right?

Michael Karlfeldt, ND, PhD

So thank you so much, David. I really appreciate this.

David Schmidt

Pleasure is mine. Thank you for having me. Thank you.

Michael Karlfeldt, ND, PhD

Thanks.