

DR. KEESHA EWERS: Welcome to The Woman's Vitality Summit: Caring for Yourself Body and Soul. This is Dr. Keesha Ewers and I am pleased and excited to be interviewing Roger Sramek today, who is the inventor of an amazing bed that helps with sleep, and, of course, restoration of vitality. The backstory of this, which is kind of a really cool story, is that Roger's sleeping companion was an incessant snorer, and as an inventor, he authored eight issued patents and six pending patents, and so he saw a challenge, he saw a problem, and he knew he had to do something for both of their sakes, so they could both sleep. So, he realized that if his partner's head rested closer to the mattress instead of bowing forward that she could breathe easier and not snore as much. So, the next day, he used an electric carving knife to hollow out foam from the bottom and the center of her pillow to allowed her head to tilt back, and it worked - her snoring stopped. So, with this success in hand, he called Stanford University to arrange a meeting with Dr. Clete Kushida at the Stanford University Center for Human Sleep Research and he conducted a clinical trial, and the pillow proved to reduce snoring by 78%, and sleep apnea also, so they conducted two additional studies and a biomechanical study, all of which proved that the pillow worked really well. So, he started a company and applied for, and was granted, FDA clearance.

After the clinical studies, he lunched with Stanford's Dr. Dement, known as the father of sleep medicine, and he was challenged to invent a mattress that would promote better sleep. So, he said all the big brands had been there to do pilot studies and they were surprised to find no significant benefits in any of these mattress products. Over the next several years, with the help of others, he produced a very different mattress and took it into clinical testing to prove that it enhanced sleep, lowered pain and stiffness, and tossing and turning. So, with patents issued and pending, LEVELsleep was born, which is a new company - it's not new anymore, but which was a company that was new at that time - to provide a mattress and a pillow that would actually enhance the experience of sleep and reduce the incidents of sleep apnea and disease. So, welcome to the Summit, Roger, I'm so excited to talk to you about sleep.

ROGER SRAMEK: Well, thank you. It's good to be here. Women have gotten too little attention as regards their sleep and some other health issues, as we know, and so I think I have some information here that might be interesting to all.

DR. KEESHA: Well, one of the things that-- you know, the whole Summit is called The Woman's Vitality Summit: Caring for Yourself Body and Soul, and, of course, vitality is our life energy, our juice, our passion. If we don't sleep well, we don't have that, and this is for men and women, and what I find is that - and this is why I did the Summit - is that so many women today are drained of vitality, so what this summit is for - the subtext of it is Caring for Yourself Body and Soul - is to restore vitality, or even regain or create vitality where there never was any, and sometimes people have felt really low in vitality their whole lives. A lot of research is indicating that we are not sleeping well, we're not getting enough sleep, and the way that we sleep is



actually causing a lot of difficult, so let's talk about some common problems that women experience with sleep that led you to really start this whole journey with inventing new ways to help people sleep.

ROGER SRAMEK: Well, the little story you told in the introduction, there was one more twist to it and that was, what I really noticed first was the wrinkles in her neck and chin, and I thought, oh my, this isn't going to work very well. So, then I began to work with the pillow - an electric carving knife and a foam pillow - and repositioned her head and neck. And so, not only did it solve the snoring problem, but it also took away those wrinkles and so she was very happy about that, of course.

DR. KEESHA: Oh, you've just spoken to female vanity right there. You're going to have all kinds of people wanting this pillow. [laughs]

ROGER SRAMEK: I'd have to say men's vanity as well. So, then I got challenged by Dr. Dement at Stanford to invent a mattress, and that seemed almost daunting, because I had to imagine what happens when women have more curvaceous figures, of course - a thinner waist, and proportionately wider hip - and so, when they attempt to sleep on a flat surface, whether it's firm or soft, how's that going to work? In other words, think of a woman lying on her side and her hip is taking a lot of the weight, her shoulder is taking a lot of the weight, and there's her thin waist unsupported because she's on a flat, uniform surface. So, I thought to myself, all beds are this way - we've been sleeping this way forever - what could you do?

So, that's when we came up with the idea of tri-support, and that is - it's pretty simple: a soft place for your shoulder, a soft place for your hip, and a firmer place for your torso. So, your hip sinks in, your shoulder sinks in, and that leaves your torso resting on a firmer region in the mattress, and it worked - not only for women, of course, but for men. And what we found very quickly was that it not only prevented, but also solved a lot of back and shoulder pain issues, so it was a big, big win to go out of the way. And then, went to Stanford and did some clinical studies on it and have pretty solid evidence that what you don't need to be sleeping on is a mattress that's flat and uniform from head to toe. So, it's an exciting thing to have people phone and say, "The first night, I slept the whole night through," or, "I slept all night without any back pain." It feels very good as an inventor. What finer target could you have than that?

DR. KEESHA: No, that's absolutely true. So, there's a lot of science behind this and it's been said in gastroenterology, if you've got gastroesophageal reflux disease that you should elevate the head of your bed a certain number of degrees. If you have sleep apnea, there's certain things that you can do with appliances in your mouth, and people with chronic obstructive pulmonary disease will find themselves sleeping upright in a recliner, so there's a lot of science with sleep



medicine, and I would love to have you tie this into this mattress, because, of course, you used this as the data points to invent this, so I want people to understand the data behind all of it.

ROGER SRAMEK: Well, you pronounced quite a number of different maladies that some of which are pretty elusive, but generally speaking, let's say when you're sleeping on your back, the alignment that is your hip sinking in and then support under your lumbar region of your spine is going to keep you in natural posture, and that's a good thing. Then, when it gets up to the pillow, if your neck is supported well and your head is back in what you would call natural standing position, that causes the maximum opening of the pharyngeal airway. And it's the pharyngeal airway where most of snoring and, in fact, sleep apnea, begin. So, propping it open by sitting or standing or lying with your head in natural good postural position is the key, and so the mattress and pillow work together to do that.

There are some very interesting more recent studies, one was done in England, where they talk about how much sleep to we really need? And so, they went about studying the effect on your genes of various levels of sleep - various amounts of sleep. So, what they found in conclusion was if you're getting less than six hours of sleep each night, it brings about the suppression of expression of 711 genes. The suppression of expression of 711 genes. Now, what that means is that the genes in the cells are sending out messengers called IRNA messengers to convey various messages to the system to repair, replace, or grow new cells, and if those genes are suppressed, then you're not getting the cellular maintenance throughout that you should be getting, and so that causes some very serious problems over a long period of time. Even less than six and a half hours of sleep; six hours of sleep is a 711-gene disaster. Less than six and a half hours of sleep is still the suppression of over 500 genes. All of that says, pretty clearly, you'd better be getting seven and a half, eight hours of sleep; probably eight. That's why we hear that so commonly.

So, that's a fairly new finding, and until then, you'd hear people bragging. "Oh, I can get by on five hours of sleep a night." Oh yeah? I don't think so. So, one of the main effects of that is the suppression of your immune system. Well, your immune system is, of course, what keeps you well, doesn't it? Another one is it tends to foster weight gain, because your genes are telling you to eat carbohydrates and sugars to get your energy level up. Well, suppression of your immune system and weight gain, I think those are two main issues that you want to pay attention to.

And then there's another finding, which is much more recent, and this is really crucial, I think. Your brain contains mostly neural cells, of course, but 75% of the cells are called glial cells - G-L-I-A-L cells - and by day, the glial cells are the insulators between the neural cells, that is, they keep the signals flowing through the neural cells instead of a short-circuiting, so to speak. So, by night, though, these same glial cells change function, and they become the janitorial service. So, their job is to sweep your brain clean from the toxic metabolites - that is the end products of the thinking - the metabolic activity, which you employed all day.



So, these end products of the metabolites accumulate in your brain all day, so something has to remove those, and so the metabolic end products are removed by the glial cells. Now, one of these metabolites - one of these nasty products - is data amyloids: the primary source of Alzheimer's disease. So, the question is, do you want to get the full night's sleep, or do you want to excuse the janitorial service early and let them go home? I think I want them working all night long, and so, again, probably six hours of sleep or less - seven hours of sleep or less, even - is a possible forerunner to some very serious diseases. So, I guess, in a word, seven and a half hours of sleep, maybe eight - use your own judgment in that.

And last, but not least, this is kind of not commonly known, and that is if you have pain, allowing a full night's sleep to repair the damage is a must, and if you don't, you fall into what I like to call sleep-pain syndrome, and what that means is the suppression of the reduction in the threshold for tolerance of pain. In other words, you feel pain more easily if you haven't gotten, of course, the proper repair. So, lowering of the pain threshold is a disaster; it's why so many people walk around with back pain, shoulder pain, neck pain, or whatever: you feel it more if you're not getting enough sleep. So, those are three categorical findings that are not well-known; you don't hear the media talking about them, of course, they're all the buzz in the sleep medicine fraternity, but these are important things that women should know, because so many are running around with pain.

DR. KEESHA: Well, and also, in addition to those three key things that sleep is so important for, in Chinese medicine - Ayurvedic medicine - there's an understanding that your liver detoxes in the middle of the night, too, and so, if you're not getting that sleep, your body doesn't get that chance to, again, empty the garbage and restore what it needs for the next day's activity. So, adding the liver into the middle of that too, from Chinese medicine, just tells us how important sleep is. And I think people hear this a lot, "Yeah, yeah, yeah, sleep's important," as they pop open a Red Bull or drink a cup of coffee in the morning to wake up, you know? [laughter] I just think it's sort of that lose weight, eat right, exercise, and get enough sleep, and drink enough water.

These are sort of like these primary foundational things, that most of us in this medical arena are talking about all the time as lifestyle medicine that is so important. But, the truth of the matter is, if you have a bed that's uncomfortable, this is one of the reasons for back pain, and my mattress right now has just gotten to the point where I'm waking up with hip pain in the middle of the night, which is a sign that your bed has kind of gotten to a point where it's not supporting you in the way that it needs to, and the case of the mattress that you've invented, the support that you want it to do is being done in ways that none of us have even experienced yet, which is so cool. Like, whoever thought about supporting your waist while you're sleeping, right?



ROGER SRAMEK: Right. Well, as I said in another way earlier, women are curved more than men are and all mattresses are flat from head to toe - they're made of uniform materials from head to toe. This means that when you're sleeping on your side, an undue amount of pressure due to your body weight and gravity falls on your hip and your shoulder when you're on your side, but there's no support for your thinner waist area, so it sags toward the mattress. Well, the L4 and L5 - the vertebrae just above the pelvis - take a lot of stress - side-loading stress - and so this begins to stress the tissues and then begins to send out signals of pain, and if you don't move from this position - which is one of the reasons we toss and turn all night - then the pain begins to get larger - to grow - and then it can lead to injury. So, that's why we toss and turn all night in many cases, because we're tossing trying to compensate for the pain that's beginning. It's a signal and we're responding to that signal.

So, when you're sleeping on your back, it's the same thing: you have a thinner waist, your posterior is a support, like a bridge support, and your lumbar spine has a curve to it - it's like the San Francisco Golden Gate Bridge, it has that curve - but if there's nothing to hold up the curve, then gravity will pull it down toward the mattress and flatten it out. Well, again, first signal is discomfort and the next is pain, and you probably turn over to one side or there other or even to your stomach to accommodate that. So, all of that, once you see it and once you start to feel it, becomes kind of obvious, but in the early days, as we were inventing tri-support and testing it, it became very obvious to us that mattresses have been the same for a long time and there needs to be a serious change for comfort and to prevent injury.

DR. KEESHA: So, one of the other things that I think mattresses have been the same for a long time about is the materials that they're made from, and that's of concern for anyone that studies environmental medicine and understands that whatever we're exposed to, actually is putting our bodies at risk in terms of toxic overload and our ability to get rid of those things. Health, of course, can be said in this formula that is your genetics, plus your exposure to toxins, and then your ability to get rid of those toxins equals your own quotient of health. So, sleep is something we're supposed to be doing at least eight hours a night, so eight hours of exposure to whatever we've got our face mashed into means that we want to make sure that those materials are healthy and non-toxic, and that's one of the considerations that you took into account when you made this mattress, right?

ROGER SRAMEK: Absolutely. There are a lot of stories floating around and some of them are exaggerated, but if there is a material that is gassing out - that is liberating gases from some sort of chemical reaction - ongoing in the material, that can't be a good thing. The gas might be benign in terms of its effect, but why would you want to take the chance there? So, there is a company called CertiPUR, which certifies the materials, so the manufacturers of the materials we use is CertiPUR supervised and so we know that our materials are not putting forward any of those nasties, which not only can disturb your sleep, but who knows what other harm they could



cause? One of the problems I think with memory foam, that tends to be to throw off a lot more gases than conventional polyurethane foam, and that's one of the reasons we use polyurethane or latex, your choice. We did pay a lot of attention to that, because why would you want to do all these good things to yourself while you're doing some bad things to yourself? So, that's a good point. CertiPUR is important, and the manufacture of our materials is CertiPUR certified.

DR. KEESHA: To me, that's a really important distinction. It hasn't been in the past - I was right in the frontlines of, "Ooh, memory foam sounds good," but then I started - like I do with anything - researching it and saying, "Oh, this is off-gassing - I don't really want to surround myself with that all night long with that." So, I think it's something that we really need to pay attention to, just like the quality of our water and our makeup and our hair care and skincare products, all the things that women are exposed to - and men too - but there's a statistic that says that by the time a woman leaves her front door in the morning, she's been exposed to over 500 different toxins in kind of the standard American habits, in terms of makeup and hair care and skincare things, and that's a lot of toxicity. So, really, what we sleep on and sleep in becomes even of more vital importance, I think, as well as paying attention to what you're putting on your skin. So, I appreciate that you guys did that.

So, how about pillows? How do these fit in, because there are so many different kinds of pillows, and different recommendations on pillows, and I love that you took a carving knife to your wife's pillow, so let's hear about that. [laughter]

ROGER SRAMEK: Well, I think it's one of the least obvious, and least attended to, sleep issues, in other words. And, by the way, women are famous for having a batch of pillows. I've known those who have said they have a dozen pillows, so what it says to me is that they keep trying one pillow after another and never find one that works. Well, what does works mean? Well, again, when you're on your back, certainly you should align your cervical spine - your upper spine - in a way that would be just as if you were standing in perfect posture. And if it's not doing that, well, among other things, it's closing the pharyngeal airway by as much as, let's say, 25%, inducing you to snore, or worse, sleep apnea. So, that's something to really pay attention to: how does it position your head and neck. When you turn on your side, obviously the thickness of the pillow is important; you don't want your head draping down toward the mattress, your spine should be aligned - actually should be slightly higher than a straight line from your spine. In other words, your head should be propped up - oh, I don't know - maybe an inch higher than it would be if you kept full alignment; we're talking about when you're on your side. So, the other thing is we all have these little things we call ears - the pinna of the ear that sticks out from your skull - and when you're sleeping on a conventional pillow, your ear is being pressed against your skull. In many cases, that's a source of pain, and so you toss and turn back and forth all night to get rid of that pain. Well, I put these little-- I called them ear wells in each end of the



pillow, so that when you're sleeping on your side, your ear is not pressed against your skull, and a lot of people like that.

The other thing is as you find that ear well - and you find it automatically after a while - it helps to keep your chin up, rather than letting you go into the fetal position, which some of us do, again, keeping the airway open when you're on your side. So, it's all about-- call it airway patency management, isn't it? It's about keeping the airway open no matter what position you're in. Sorry there's no way of doing that if you're going to sleep on your stomach, because your head is going to be turned 80-90 degrees to the side, and that twists the airway like twisting a garden hose, you know, it does collapse the airway, so sleeping on your stomach is not recommended from that standpoint.

Also, there's another fine point, if you're snoring - especially if you're snoring loudly and laboriously over a long period of time - you're not getting as much oxygen into your blood. In other words, blood oxygen saturation is supposed to be 96%, and it can drop - just from snoring - down into the low 90's or high 80's, which is-- you don't want the maintenance department down there not having the proper oxygen supply. So, the pillow turns out to be a pretty important factor in sleep - as important as the mattress, I should think. So, again, clinical studies and so on, there are people who it'll help, but who must instead of relying on just a pillow, they certainly need a CPAP or BiPAP machine, and those are no fun, but they are life savers, in other words. If you have a sleep apnea problem, you must treat it, it is just so serious. But the pillow can help a little by positioning your head and neck properly in the first place.

DR. KEESHA: Oh, that's really great, and so, maybe you can get away without some of the appliances if you try this. That's what we're going to try with my husband. We're actually going to try this and see what happens. So, what else are you working on that can benefit women when it comes to sleep? I'm curious about what you've got, since you're a serial inventor and were in pre-med to start off with. I assume you have this always on the front of your mind, here.

ROGER SRAMEK: Well, yes, and I can't talk about everything we're doing, but if you just stay tuned to our website, you'll see some new products come along; we're at LevelSleep.com. As I mentioned above, because of women's unique structure - the width of hip versus the waist measurement - when they become pregnant, it's even much more pressure on the hip and then the sagging of the torso toward the mattress, because of that extra weight of the extra tissue mass involving the child and the supporting tissues. So, I have yet to talk to a woman who has not had in the third trimester lower back pain, and, of course, you know back pain is a sleep disturber, so just at the time when you're trying to treat yourself and your child in the best possible way when you're pregnant, now you've got pain that's disturbing your sleep. And one of the other matters here is the doctors recommend that you sleep only on your left side during the trimester of pregnancy. Well, how are you going to do that? You can't do that when you're not pregnant -



how are you going to do that when you are? Well, our basic tri-support configuration of the mattress helps you do that, because your shoulder's in a soft place and your hip is in a soft place, and the torso support helps support the tissue mass of not only your own body, but the weight of the child as it protrudes out there as well. So, I've got some more factors that we're incorporating into a mattress, or a mattress topper, just for pregnant women, which then can be removed when the pregnancy is over, and just becomes a normal tri-support mattress. So, that's in the offing, and there're a couple of other things I'd like to tell you about, but I probably shouldn't until we have the patents all applied for. So, as I say, stay tuned. [chuckles]

DR. KEESHA: That sounds exciting. So, yeah, pregnancy is an interesting time to try to sleep. Your body's changing - I did this four times as I was having my kids, and it's a challenge because of all of the shifting that's happening with your body reshaping and getting weight in different areas, so it's always been, "Here, try this body pillow to put between your knees," and that's about as good as it gets, right?

ROGER SRAMEK: Well, that's one-- that's better than nothing. I'll put it that way.

DR. KEESHA: Right.

ROGER SRAMEK: But still, you've got the pressure on your hip and the pressure on your shoulder, so--

DR. KEESHA: Right. Yeah, that's great. So, what about pillows and the positioning of them some people, like you said, women have these whole collections of pillows and say that they don't work. I think that some of the things they're looking for is that support, just like you were talking about, because their bodies are shaped a little differently, and they're not finding it, because their mattress isn't giving it to them, but what about sleeping with a pillow between your legs? What's the skinny on all of that as far as supporting your body during sleep with pillows?

ROGER SRAMEK: Well, we do have what we call a lower body pillow, which is, if you look at it from the end, it looks like a figure-8. One of the problems when you're sleeping on your side is if you're keeping your knees together, your knee joints are a protrusion and the weight of their interface tends to cut off the circulation, so you get that burning sensation, and, of course, you turn away from it. Same with your ankles: if you keep your ankles and your knees together, well, you're getting loss of capillary blood flow in the tissues between them. So, a cushion between the two that runs from the knees all the way down to the ankle that keeps them separated, you might call it two parallel grooves in the pillow that not only keep them separated, but also keep you aligned, because you do want to have your knees absolutely adjacent to one another, not one up higher or one lower or one forward or one back; they should be aligned, because that keeps your pelvis aligned. So, we do have that lower body support unit that some people really like.



DR. KEESHA: So, Roger, how do people find these products that you've been talking about, because, I, for one, am very excited about this. I've ordered a mattress from you, I'm really excited to try it out, and I want to give people the option to be able to find out how to look at your product suite and what's going on with their own sleep needs. So, what's your URL?

ROGER SRAMEK: Well, we've just re-commissioned a website that's much more detailed for that reason, so people can learn more about sleep and more about what sleep products should do, and we're called LevelSleep.com, and I think you'll enjoy the website. It's got a lot of good information on it about sleep, not just about our products.

DR. KEESHA: Yeah, it has a great, robust blog site on there, everybody, so that you can go in there and there's a library of things that you never even knew that you needed to know about sleep. So, I would really highly encourage people to go there; it's got great information.

ROGER SRAMEK: Well, thank you.

DR. KEESHA: We've also got your information on our speaker's page. I so appreciate you coming on as an expert for the Summit, Roger, to talk about something that I think is completely underrated in our culture. We're very much reinforced to stay super, super busy and produce, we're rewarded for productivity, and I think very often - at least the patients I see in my office - that ekes into sleep time. I have women coming in often that are saying that they're staying up until 1:00 in the morning and then getting up at 6, and so, they've got adrenal fatigue and weight issues and memory problems, and I say, "Well, we need to start with these very basic things, and one of them is sleep, so getting you to bed by 10:00 at night is really, really important," and there're all kinds of self-care things that I add in there as far as alerting your body that it's time to power down and it's time to sleep, but what you're giving us is a surface that we can then sleep on that will be of the utmost quality to get us the best sleep that we can have as we do that regenerative time, so thank you for your invention and for your attention to this really, really important activity that we're all supposed to be engaging in every single night.

ROGER SRAMEK: Well, you're certainly welcome, and we'll be adding lots more to our blog site too, as new medical information develops, so, happy to have you all aboard and we want women to be the best women can possibly be, and so this could help.

DR. KEESHA: All right. Thank you so much. And remember, everybody, to live, love, laugh, keep on learning, and make this the most fantastic day of your life. Until next time.