Introduction and Dr. Berksonu2019s Background

– Well, Dr. Berkson, I am so excited to have you on the show and as I mentioned previously, we, I interviewed you a number of years ago on my radio show and you're one of those interviews that still sticks in my head because it was it was it was a fun interview.

It was really fun that I think you were walking around by your fireplace as we're doing the interview and you know, so still still remember that part.

So thank you so much for coming onto the summit, – Thank you for having me. It's great to have platforms to get these important messages out to men and women so that they can really have a say for today and tomorrow, no doubt about it. But this information just is not yet out there.

– No, and that's yeah, people really need to understand this value. So before we get going, I want people to really understand, you know, the wealth of knowledge that you come with and and the number of years of experience and even though you're still in your twenties, I don't know how you're able to accomplish all of this.

And so in just a few years. So Dr. Berkson is a thought leader in functional medicine. She was a distinguished scholar at an estrogen think tank at Tulane University Center for by an environmental Research and has been writing lecturing and teaching C mes on hormones to mds and pharmacists for two decades. She has authored 21 books, a few bestsellers and has been functioning for many petitioners for CMS for a long time or breakthrough book on endocrine disruption compounds hormone deception and has been used as textbook in many environmental science University program and its breakthrough reference book on e. D. C. S on endocrine disrupting compounds.

Her latest book, sexy brain warns of environmental castration and about how sex steroid hormones rule the brain as hormones are under assault by endocrine disruption compounds so his brain tissue and human health. Her book, healthy digestion, The natural way was the first gut nutrition, spirituality, digestion book and a longtime bestseller.

Its sequel is a breakthrough book, soon to launch, creating a new field nutritional gastroenterology. Dr. Berkson has a bachelor in the psych neurobiology Masters in nutrition, is a diplomat of American College of nutrition, holds two other nutrition certifications and has worked collaboratively with telepathic medical teams all her career.

Dr. Berkson percent presently works at the Naples Center for functional medicine where she initiated the first functional renal program and a active nutritional pharmaceutical hormonal support program for breast cancer survivors and Dr. Berkson hosts that Dr. Berkson Best health Radio show, soon to be called Agile Thinking also holds a membership for practitioners, Smart Plus Heart, soon to be called Agile thinkers and soon writing for sub stacks dot com under agile thinking. She is west coast swing dancer, a five star organic chef.

That's amazing. – So just because I'm so old, I've been keeping a carbon footprint on this planet longer than many of my peers. – That's incredible. You you look so young, so youthful.

So it speaks highly to what you are doing and what I mean, that you're really living what you preach. – Thank you. I really, you know when I lecture now, when it might be on anything, let's say I'm in the gastroenterology module or the environmental science module.

And at the break, they find out my age at the breaks of the conference. I'm surrounded by the young doctors with their phones out because everyone is scared to death of aging, partially of equating it with frailty. And also that our culture does not embrace the agent, especially if they become frail aged.

So people, young people today and we're so fixated of course, in America on how you look so young people are often I hear this frightened of aging. So I'm surrounded by them and they go, no, no, I'm really serious.

Every single thing you eat and taken hormone, please. I'm scared to death of aging and you've given me hope. And I hear this everywhere I go. – So, aging, I mean, why do you feel are we aging faster now than we used to? – Well, that I don't really know, you know, our indices for aging. There's a lot of controversy like a great cloud over the telomere thesis and measuring your telomeres because it turns out they're the little caps on the end of chromosomes. It turns out that we have different telomeres over different organs. So we don't know if there's one telomere or the serum telomere is really reflective of global resistance to aging.

I don't really know what those markers are, but I know That this is the first year, first part where we're not living longer and are we are less healthy.

And insurance data has come out that there is an um, 80% increase in fatalities of all causes from the ages of around 15-60, the middle-age adult just turning into adults.

Middle age, there's been a lot of deaths lately. We have sicker Children. We want to live longer, but we don't want to live longer the way many are, which is in a wheelchair in a nursing home with cognitive decline and frailty.

And we are a sicker nation. There's no other country in the world that had a million people die from Covid, No other country.

Why Aging and Hormone Health Matter

And I don't know why we don't have experts. We have so many experts. I'm kind of tired. I don't know why anyone is even listening to me. I'm tired of the concept of expert ship. Especially I'm a crusty old fart now, But why don't we have all of our experts to a town meeting on Tv talking about, let's call a spade a spade? Why did we have a million people die?

What do we need to do as a nation to turn this horrific tide of illness around. Talk about obesity talk about lifestyle but everyone's afraid of shaming the over weight or taking a stance. We become so uh brittle over really discussing business of reality and what is taking us down and facing it rather than sugarcoating it and giving everyone a award for every game and every grade that they go through. We're in a backward way and it's making us doughy soft and sick and I want our experts. Where's our mental experts, the American psychological association and psychiatric association to talk about healing us with the PTSD as a culture of so many Children dying so often in schools that were jaded to it when we heard that in Japan last year after the Prime Minister was just killed recently that they had one shooting. Of course it's a totally different society and we want to be in America but we want America to be safe.

So I would like to deal with these issues. And I think these issues have everything to do with how the topics that my career has taken me toward. – And I agree with you. I mean when we look at how the body functions, it it does need stress in order to be able to stay healthy.

So if we create an environment or a society where everybody is is coddled and just taking care of where everyone is a winner and just they just because they exist now.

They are just fantastic and meaning I mean all human beings are fantastic, but you do need to be challenged. You do need to to come under some form of stress in order for the body to stay healthy to prime the immune system to kill off unwanted cells that that needs to be slept off. I mean they to trigger a top Fiji to trigger secretion of hormones. All of these things need to need some kind of stress on the system and we can't avoid that and we shouldn't create a society where that doesn't exist. – That's a really good point.

I agree with you, but we also have to have the terrain inside of us and the relationship with ourselves. Why don't we teach in school, conflict resolution and listening and emotional health and maybe meditation.

I taught these things when I got hired when I was a young woman it was in Vermont at the pitch school system and I tried to teach this back then and after a few months I got a letter, Vermont used to be very conservative, not liberal and I got this letter saying as as much as you are a pagan, you're fired, I wish I would have saved it. We didn't have cell phones back then.

Right. So I was fired for being a pagan for saying what I'm suggesting? We're interviewing a pagan. – I love it because you promote meditation and you promote healthy living, you promote – Back then it was people thought, I remember when I first heard a lecture from Scott nearing at a Theus optical society meeting and he said, I happened to just go up to northern California and I had the summer off from college and I was working with the comedy club, the committee and we had a weekend off and I went up to northern California and he said, you are what you eat, your body is a temple and what you eat, that's what you will become and it will create a vehicle for you to have a better future if you worse or worse future. And it made so much sense to me.

It just clicked right in and I thought that's it, that's it. And so I've been basically eating organic and I had gardens all the way through schools and I had my own goats. In fact I even built a log cabin way back when and it's still, I was going to go stay in it this summer, but they end up having a lot of lyme ticks that have come out in that area of Maine.

So I think I'll just look at a photo. – Yes, it's just not worth the cost with line. – But you know, the thing that's happening is that there is a verifiable decrease, age independent decrease in testosterone levels in males.

There is no denying it. Test males today don't make the same testosterone. They many young males in their twenties, many, not all, certainly not all but too many have hormone levels?

Like a 60 year old man? And we're not talking about getting super organ orgasms were talking about being functional functional and there's a reason for that and fertility is on the increase sharply.

So we want the stressors but we need to have bodies that are healthy and because we're addicted to screens and eat more processed foods and move less and and we have a polluted environment that assaults our hormones are very hormones are under attack mass.

General aging. Male study looked at a large number of men through the V. A. I think it was something like 25,000 men over a certain year period and they were able to show that there was a statistically significant decline occurring and test ostro own levels in young males that is age independent.

It's not even that they're at the age that it would naturally happen. I mean we're seeing young men in their twenties, even some that eat well to having testosterone levels in the one hundreds, two hundreds. So that's body can't be as resilient or meat that stress and then do exactly what you were saying to do their stronger from the stress.

If your hormones are deficient and stress comes on it's it's very hard to have the physiologic resilience. You need to face it and then overcome it. – Yeah. You need to have the tools in order to be able to respond to the stressor you know? So why do you mean you're talking about these hormone disrupters and also lack of activity? Yeah.

So and also obviously the nutrition has has greatly been I mean the nutrition our food now compared to what it used to be is is so much less. So are are these kind of the main factors do you think also like cell phone usage carrying like a cell phone in your pocket? You know?

Do you do you think that that is impacting some men as well? I mean what are some things that that men should look out for and try to avoid in order for them to to keep their hormones at an optimum?

– Well one of the ways males keep hormones at an optimum is to keep testosterone in ratio with estrogen. So if a man, men and women have exactly the same hormones just in different amounts. But viva la difference and size matters the size of how much you have. So many have more testosterone but women also are very sensitive to it.

But nonetheless, if men start to have more estrogen than they should in ratio to their testosterone that starts to feminize them right there and create issues with tissues that have the target tissues that have the receptors to receive those signals, What causes estrogen to elevate in young males sitting too much, sitting more than four hours a day not recruiting muscles having extra fat cells manufacture estrogen and they especially manufacture a pretty aggressive estrogen known as S. Trone. So men can get higher and higher esta rhone.

And they start to become guys that have less testosterone because it's in relation to ship to that estrogen. Also, there's chemicals that literally freeze up the email of the testosterone signal.

And so you want to avoid these foods which are eating foods that are microwaved in plastic food or beverage. That's reused plastic reused in dishwashers with regular green dishwasher soap there with excuse me, non green dishwasher soap when you take a regular dish detergent and you mix it with any plastic container in the plastic. There's estrogenic like molecules and there's micro scratches you can't see. But even if you put water in there after it's processed in the washing machine, it's going to make release estrogen like molecules. You want to avoid chemicals that have estrogen like molecules, your shower and your dishwasher. These are things you have control over.

There's lots and lots of pharmaceuticals that come through the shower. Women are using birth control pills. Women are using hormone replacement water treatment plants. They are not designed to really filter those out. We get a lot of estrogen like molecules, we get more exposure to water standing under the shower than we do drinking water all throughout the day. So getting an inexpensive Berkey water filter of 50 bucks. Berkey water filter.

I've got the link on my website to make it easy because it's so important to do. That's one of your biggest exposures to estrogen molecules along with um the microwave, putting plastics in there in the dishwasher and also perfumes and now that with the metro sexual which I'm all for, you know, men getting any way they want to get.

But as they're, they're using more clone and almost almost 100% of perfumes have phthalates in them which are very estrogenic. And if you're in the shower, your pores open up from the hot water, then you are exposed to personal care products that can have a lot of chemicals that are estrogen acting like or anti androgen.

Hormone Disruption, Environment, and Everyday Exposures

They block testosterone, but they promote estrogen or in some manner maybe their metabolites, but there becomes an imbalance of exposure and that gets translated to your tissues and hormones in my book, hormone deception.

In the last third of that book, I help you out to really take your hand and just say, let's figure out how to reduce exposure in the bathroom in the home that most of your exposure, believe it or not in your home, which is good and bad news, bad news that your home, Good news. You can do many things about it.

So I completely list those things and then also in the office because you can significantly reduce exposure. And as I wrote about um there were finish organic farmers and they were looking at their sperm quality and they compared them to a match cohort of Finnish farmers who were not organic and there was a lot more decreased sperm Count and motility, how they can move in the people that ate foods with pesticides and there was a statistically significant increase improvement in the health of the sperm of organic farmers. And they really, as they assess the data only needed to eat half of their diet as organic to get the statistically significant benefit.

So I say to people, you know, there's 21 meals in a week, so just just half of those meals are really done in the way we're talking about to avoid exposure to estrogenic molecules and processed foods.

And if you're a healthy person, it doesn't mean you need to eat like that all the time and get stressed out over your strategies to improve. So, those are really there. It's amazing how these simple things wiping your feet four times cause there's been elegant studies by prestigious institutions trying to figure out why the household gets so polluted.

And one of the ways is tracking in lead and many endocrine disruptive compounds and metals on the bottom of your feet. A building a mile two miles away gets torn down and these chemicals are released in the air and the molecules found themselves on the pavement when you get out of your car, you go get your mail and it gets tracked into the house.

And they've shown that when things on the pet pause in the bottom of shoes get I don't want to make people O. C.

D. About this but that gets tracked in and it very quickly is detected by exquisite Cornell data within a few hours on the pillows in the master bedroom. So yes it's extraordinary.

So you know I have very high end I. Q. Air filters I have two story home upstairs and downstairs I've got UV lights in my ducks so that they're they won't grow mold. Most of my paint and everything in the house is green. My neighbor next door neighbors just painted the outside of the house with completely toxic paint.

They went from a red brick to a white and I almost was horizontal for a week because I'm used to everything being so clean but you only have to improve it at least by a half. You know look by the end of this year you'll improve your lifestyle by a half. You can divide it up into manageable units so that it's something you can embrace rather than look at this and go oh God I I just can't do this. – I'm Swedish.

11 of the and I know in a lot of Asian cultures you take off your shoes as soon as you enter into the house and – Very smart. So you know that there was a set of studies called the team studies and it was set up by the F.

D. A. It was one of the really great things the FDA did. And they had a representative population of the United States about 303,700 people. And they were pollution badge badges on them for extended years to see where do people really get exposure to pollution? And we know now that this pollution affects the fetus is brain as it's growing fertility.

Brain health. Even in adults, we know that we wonder about it's linked to gender fluidity. There's lots and lots of room of discussion of what all this pollution is doing. Not just climate change but physiologic change.

Women are menstruating early. We're having menopause earlier, men are having lower testosterone etcetera. So really looking at these things is very very important. It's become I I say that in the future I hope there will be green pregnancy clinics that are sponsored insurance reimbursed because what you're exposed to and how you eat just for example, the perfume you wear, the quality of water that comes down in your shower in the morning if you're going to go on and get pregnant, you and your husband are giving a legacy of chemicals or not because many of the effects potentially not to everybody of these chemicals is that once the pregnant adult is exposed, it's then passed down whatever adverse epigenetic change. If it made one made to the next four generations without exposure. It's really a very big deal.

When I was a scholar at the Center for bio environmental research There was a scientist that made headline news. All the TV reporters came and lights came and everybody was recording her. I always forget what her name was but she took just a plastic container and put it in a dishwasher with regular dishwashing soap not green like 7th generation or something like that regular dish washing soap.

And then she took the the washed a little bowl of plastic and put water in it and fed it to a pregnant rodent. And then the rodent had gave birth and she tracked the next four generations and the next four generations with that one single exposure to that one single event.

And remember we live in a toxic soup of chemicals all next four generations were infertile. – Really. – Yes. – So I mean you said next four generations because obviously so when they're infertile, how can the next generation become?

– Well what they're tracking, I don't know how they're tracking that. That's a really good question. Well probably because there's multiple litters and probably because it's not all of the litters and they take one or two but they probably have out of 85 or six that have infertility. It's probably not across the board.

– So it's not it's not 100% infertility but you can then see that there's a lineage of infertility from – That like in D. E. S. Daughters exposed in the womb to diagnose to best rel there's now been a growing number of 8 to 9 to 10 to 11 year old granddaughters that are getting ovarian cancer but it doesn't happen to everyone.

– And one of the reasons, I mean you're looking at the epigenetic changes but all so you have I mean the ovary isn't that the eggs? I mean is that really kind of fatty substance So they absorb a lot of these chemicals and hold on

to them very easily.

– That's exactly right. That's exactly right. Michael these chemicals love fat. They're lipo filic. So the egg and the sperm are really filled with fat.

So the pollution of the planet really calls upon us to rethink the nuclear family to really pick who if you can be cognizant and sophisticated about it, who do you want to be a parent of your child?

And then together have green pregnancies. I'd love to see these places that are insurance reimbursed that couples who want to have a child are trained about the importance of trying to at least 50% of the time reduce exposure and start to eat right and be healthy so that they'll have healthier kids with less risk of them having all of the growing issues we're seeing in kids were saying there's an epidemic of fatty liver disease.

Even in non obese Children there's epidemics of a D. H. D. Autism, emotional stress, anxiety. It's just the list. We have the highest rate of infant death out of the 17 highly industrialized countries and we have the highest rate of maternal death within the first year of all the 17 countries in 22 countries already give for free hormone replacement to women and men when they become menopausal or the men become andropause a well because they've tracked the death registries, the breast breast cancer and prostate cancer registries in the adverse cardiovascular event registries.

And they've really clearly seen People who take hormones have better resilience. They don't and they don't have as much cancers are million dollar Medicaid study that just came out a few weeks ago said exactly the same thing.

Women on hormones. Even older women have 33% less breast cancer, ovarian cancer, uterine cancer, colorectal cancer and they have less adverse events that the bad nasty things that take us out to the next incarnation are moved further away.

Yeah, we don't do that. Right. So we have people all utilizing medicine as emergency. I'm ill now and I need this drug or this but we don't have as a country a lot of emphasis. And well how do we now turn this titanic away from the icebergs and get America. Well again our kids.

Well again part of the thing you can't avoid and no doctors discuss this in the clinical trenches is this pollution that's coming on raining on down us Even if you eat organic.

So, you know, because it's in the air and the rain, etcetera on the bottom of your shoes. So I believe we need to have green pregnancy clinics that are insurance reimbursed so that there isn't a burden on the young people wanting to start a healthy family.

And we train people about the importance now of having the outer environment healthy and the inner environment healthy. Because if we don't turn the tide, we're getting more and more ill. It's a flashing red light about why a million people died in our country, even if no experts seem to want to really talk about that fact.

– And it almost I mean, this is what I do with with patients. I want to be become pregnant. I mean, it is crucial in addition to them cleaning up your environment, which is which is key key key you.

I mean, you can't you have to stop the introduction of these hormone disruptors, but then to start to detoxify. I mean, to clean up, I mean, we since we're all exposed to it all the time, we need to bring in detoxification of these hormone disruptors and make that a continual habit to to clear that because we're always exposed – Now, I did not want to bring up, I don't want to do a sales pitch, but I don't know if you know that. So I worked at Tulane or I got to meet and take classes and hang out with the two scientists who discovered the first and the second hormone receptor. So I learned so much academically from them.

It's extraordinary because hormone health really where the rubber meets the road is receptor functionality. So they would say we think doctors are a little bit stupid and I would say well why? And they say well you know they measure hormones and they debate whether they should be measured in their blood, saliva, urine.

It's all you know and they fight each other and they do everything based on the level of the hormone. But just because there's hormone present doesn't mean it will signal you have to have receptor functionality and that's the problem.

The receptors kind of like a satellite dish or a bowl. And when these chemicals go in they can sit on this receptor and your own hormones can signal. And this receptor also acts like a bull for what you digest.

So the quality of the food and the digestion that you achieve the nutrients more many of them, critical nutrients sit in this receptor. If the receptors occupied or if any of these nutrients are insufficient, even if the hormone levels look perfect, the hormone can't get in and signal the gene.

So they would say receptor functionality is where the rubber meets the road and you have to ask the patient how they feel. There isn't a test clinically yet that does it.

But it's treating the patient more than laboratory even though you do labs also but you got to get these receptors functioning so I just did you know about my new products surrounding this? – No no please please please tell.

– So you know I got Elwood Jensen discovered the first receptor before him. We all thought there weren't any receptors for hormones. They just must have been enzymatic, a chain of enzymatic act reactions.

Detox, Receptors, and Functional Hormone Support

So he in his laboratory discovered a receptor which actually then got Michael Baker from the university of California I think from san Francisco to start taking a look into the very first hormone receptor ever and I get into that and sexy because it's such a fascinating tale.

But nonetheless, Elwood Jensen discovered the first receptor estrogen and so it's called E. R. alpha before the first receptor. And that is what everyone misconstrues about estrogen.

And when that's receptor is signaled when that satellite dish, this E. R. Alpha satellite dish is signaled. There's a lot of growth signals that are take off the heartbeats and the breast swells and um the entire endometrium expands a little bit and things like that and so people get scared that estrogen promotes growth but there's other receptors.

So a few years later Janaki Gustafson from the Karolinska Institute who I got to hang out with tall – So you know you know Swedish now – I just kind of know how to say er beta and a Swedish accent, that's about it because he just got er beta, – I love it.

– So he and Ken Koresh had two separate labs discovered estrogen receptor beta. Now I think there's a there's a third receptor that is a different type of receptor that's in the gut and it sits on the nervous system of the gut.

And that's one of the reasons women have more gut feelings. And it's also one of the reasons that women have more irritable bowel syndrome and so forth, is because of that fast acting estrogen on the nervous system of the gut.

And they're discovering now another several receptors that we don't need of estrogen that we don't even know what they do. So nobody's got hormones all figured out yet.

It's a moving evolving dance, but the understanding that our own hormones are under attack and the receptors are becoming dysfunctional and that is leading to bigger issues than even global warming. Because you're talking in fact there was a forum put on in 2000 I think 17 January 31st with Huffington Post in Harvard and a lot of the cronies that I worked with a two lane and they said the three major issues facing humanity today are nuclear war, global warming and endocrine disruptors because endocrine disruptors are changing fertility brain health vulnerability to diabetes to many diseases.

So it's an important issue. So based on working with them, I said boy, you know what we really need to do is detox

because we're constantly exposed. So based on what I learned from them and writing the books and now my medical journey is surrounded a lot of work with hormones especially now that I'm at the Naples center, I work a lot with patients with dysfunctional hormones, getting them functional again.

I created two products with biotics which is one of the best professional sales lines. And I'm gonna actually send you sometime soon my link where people can get these if they want.

But one is called receptor detox to clear off the receptor. And if you take two twice a day you get the detox mode and the maintenance mode is one twice a day. So I have people who are gonna initiate hormone therapies take two twice a day for at least five days before they start.

And if you're not on any hormones you can do the same thing, you can do it several times a year. It's got many things in it that cover the health of the receptor. And the second product I designed meta gen X.

For first female line for doctors in the 19 eighties. So because I had those products out and I learned so much from it, Liz Lipski who lectures a lot for I F. M. She always tells me she thought that was the best female product ever. So I wanted to create a product that really was the next generation of that and this product helps keep your hormones level helps make them bio available. And also everyone's worried about hormones and cancer. So I don't know if you remember my story but I had breast cancer and multiple cancers. I'm missing about 7.5 organs till I figured out how to stop that. So it's been a life journey to make my remission my mission.

So I have come up with a medley of the highest grade botanicals that in and of themselves have at least several 1000 citations showing that they block the growth of multiple cancer cell lines and I put them in a product. And so these are daily supplements for daily exposure. Just like you need a daily multivitamin mineral or your supplements that you've individualized because of the dirty environment.

This is now something that is its time has come. And we're just initiating a trial but we've had extraordinary responses even more than I could have dreamed I really am with conditions that I didn't think we're even treatable.

It's been quite amazing. – And these are the companies biotic, I mean carry biotic in my clinic, can you give the name say the name of the two products – Receptor detox to clear away the receptor and keep it functional hormone health is about receptor functionality. Health. This product helps keep your receptors that rule everything you have hormones in your brain and your vocal cords in your heart and your kidney and your bones and your muscles it's sad that the genres of medicine to get people educated enough to be smart enough in each genre like hematology, gastroenterology, nephrology but the problem is all of those tissues have satellite dishes for hormones and hormone health affects all those tissues.

But hormones have been adjudicated to other arenas and we're not really getting that understanding of how critical they are for multi organ multi tissue optimal health.

So receptor detox receptors hormone balance and protect it really balances. So we also when you age you make more of a binding program protein called sex hormone binding protein. So this over time has sufficient boron in it and a number of other items that really help lower over time it's not easy sometimes to lower sex hormone binding globulin but that's all about keeping your hormones whether you're on hormone therapies or not allowing your body to safely and healthfully use the hormones you have. And then I have a lot of other interesting things in here like I have a stinging nettle which helps it's like a D.

W. 40 for your neurotransmitter. So it's this is really a mood elevator and in fact one woman in the office started this very young woman she's not on hormones or anything and she walked in and said I I didn't realize my hormones were so dysfunctional. But after being on these products for about a week plus I suddenly started feeling almost euphoric.

And for the first time in my whole life I got a sex drive. It's very well in in like so far eight out of 10 people. Nothing helps everybody libido booster because it makes these receptors more functional and it makes hormone balance and protect. But it makes helps you prevent cancers.

This is a perfect product for cancer patients also because of all of these botanicals that are growth controllers and that signal the anticancer estrogen that you know, key discovered estrogen receptor beta – Very well done.

And this can this be done for both I assume them for both men and women. – Yes. Yes. Yes. And you can take it after five years old but you just take a smaller dose like maybe one for the five year old receptor detox and one of hormone balance and protect. But you need these before you get pregnant and you can take them even when you're pregnant. If these are safe products but they help house clean and keep your your hormones run your whole we get the memo that food and exercise is important and digestion, but almost nothing is as important as hormones. I mean that's what aging is.

You hormones go down and aging goes up. I mean it's hormones are the email that sends signals. That's what the receptors getting as signals that tell your genes to keep you going in a mojo motivated way and when you have less hormones where you store your memory shrinks Very responsive to memory consolidation hormones, there'll be much less Alzheimer's disease, much less cognitive decline with people on hormones. It's only really the synthetic hormones that have been um linked to all these issues. I think that the University of Arizona came out about 6-9 months ago. I'm not exactly sure of the timing with an amazing study. It should have made headline news.

And it was they looked at 400,000 in Suri's and they looked to see who had Alzheimer's disease. Lewy body disease, Parkinson's disease. That the collection of neurodegenerative diseases that we're all worried about. You don't want to live longer if you lose your sense of self. And then they look to see who had been on hormones and what kind of hormones and if women had been on on hormones on bio identical hormones, They had a 79% decreased incidence of getting cognitive decline of getting Alzheimer's disease, – It's huge. – It's almost 80%.

And then with the regular hormones Premarin which is horse estrogen conjugated equine estrogen, they still had a benefit. They but it was in the sixties like 65% what we've been learning in the last few years that all hormones are protective against the very cancers and things we were worried about from the women's health initiative, but that even the commercially patentable ones are protective, it's not just bio identical, but bio identical in for example, the University of Arizona study gave the highest level of protection because it mimics more what the body naturally makes. – So that the hormones and then we're talking we're going back and you know you had all the men with the hormonal decline, you have all these hormone disruptors and then you mentioned you know people dealing with autism, anxiety, depression, cognitive, so all of all of these kind of cognitive or brain dysfunctions are directly connected to hormone disruptors and lack of hormones – Definitely. You know the one person who's really reversing Alzheimer's disease and not getting the accolades he should that we had a best selling book, he had a New York times Bestselling book is Dale Bredesen.

A neurologist from U. C. L. A. And he has published in peer review. He's trained over 2000 physicians in his technique to reverse within 3 to 6 months is a very short time to reverse mild and moderate cases and he has a pro protocol and they've all replicated his work that it happens this fast. And the very first step he does is look at hormones and if the hormones are low he replaces them because they control the volume and the function of the brain and they control so many other tissues.

And then he looks at heavy metals because heavy metals will sit on receptors and not let hormones work. So he looks at the enemies of hormones he looks at mold toxins and on and on and on. But hormones are one of the first thing he does because they it's been clearly shown that they can reboot brain tissue that has shrunk at the university of my Gil at the Department of Psychiatry.

They won a coveted award in 2008 because um they took people who were becoming frail that were elderly and they measured the size of an anatomical area called the Hippocampus. And that's where memories basically live in motivation and your sense of self. And before Alzheimer's disease that shrinks up.

It's called Hippocampal Val. So these people that were becoming frail they followed men and women had um uh when they were they had functional MRI's of their hippocampal volume it was beginning to shrink.

So they gave an injection of estrogen to the women and they gave injections there were small amounts of

injections weekly and they gave men also injections of testosterone and tracked them. And the next functional M. R. I.

That was six weeks later showed that the hippocampus was already re volumizing. So these the reversal is pa possible and doable. And it's been demonstrated this institution won an award for this work but it's still not translated into gerontological symposium And if you go see a gerontologist for cognitive decline.

– I mean that's that's tremendous. So I mean it means that pretty much anyone. I mean everyone should be aware of their of the enemies. You know like you know they're talking about the mycotoxins the mold like the chemicals heavy metals and then yeah the endocrine disruptors and then at the same time be on top then on where's my estrogen? Where's my testosterone project?

Dhe a pregnant alone that that whole kind of steroid pathway and also recognize that these hormones are not just for sex. They impact so many different areas.

I mean like your brain but then you were talking about that they find receptors in the gut and the kidneys and all these other tissues. – Lungs. Mount Sinai is now gotta study going on giving 100 mg.

I am intra muscularly of progesterone to men that end up in the I. C. U. And are intubated to prevent lung injury because progesterone has receptors in the lung and helps repair of lung tissue.

And most doctors never think if someone has a chronic lung disease using progesterone which is a very helpful cogent thing to do and both genders it isn't just for women but because the way medicine is fragmented you're not going to hear from a pulmonologist that you might utilize. That's the problem.

This is not taught like this in med school. So if you go to your cardiologist you just had a heart attack. You're in your sixties you're starting to have erectile dysfunction and some other things you can't build as much muscle from your that sarko pd a getting less muscle tissue with, you know what really helps prevent aging on the physiologic plane because there's certainly energetic emotional things is hormones and muscle really. But if you have less hormones it's harder to make more muscle. So you get into this.

So let's say you just had a heart attack, you go to your cardiologist and you go boy, you know I've heard about hormones and I was wondering if I'm a candidate for testosterone therapy. Now this is the problem.

You have a well intentioned doctor, it's a really smart cardiologist. Good guy. Good woman, you got a patient who really wants to know. But 98% of the time this guy, this woman, they are not educated into what's really now the world of science and the applicability of hormones. They've Houston Memorial Hospital came out with an article a few years ago saying, look it there's been all this controversy whether testosterone should never be given after a heart attack.

It is heart helpful, it protects the basic cell of the heart, the cardio Maya site. If men are on testosterone, they have less aggressive heart attacks, less aggressive prostate cancer.

And if they get back on it, they heal faster. But if you ask most doctors, they don't think that they think you can never have hormones after a heart attack.

You can never have hormones after cancer. So there's a disconnect of the knowledge that is coming out to be helpful to people and where they can go to get it safely by practitioners trained in identifying the issue. And that's why it's really good for everybody to get in these pride. At least get your all your hormones healthier.

Hormones, Cancer, and Brain Health

But there's a group of us, I don't know if we're going to be successful Michael, but there's a group of us that are trying to put together a board certification program for menopause and andropause bio identical hormone replacement would be fantastic.

So I'll keep you in. And then the nature empathic. When I lectured for Walter crane, Ian's old environmental symposium a few weeks ago in Tucson, they wanted me also to put together a certification course for my a new launching of the renal functional renal program that I've been doing in Naples too.

So there's some new things. But the problem is, most people will get the wrong answers when they ask their doc doesn't mean the doc is bad, but they're not informed. And the residents of the wrong women's health initiative is still in the litigiousness issues that occurred downstream is making everybody With their license and the possibility of getting sued while the amount of data growing about protecting you against Alzheimer's disease and many other things.

Why do 22 countries around the world give hormones for free for when their women become menopausal and their men become andropause away because they're socialized medicine and they track what protects their money coffers. And they see that people get less ill and live younger longer when they're on hormones and our medical system hasn't embraced that yet.

So then you have to figure out where do I go get this stuff safely? – And is there a big difference between bioidentical hormones versus you know, synthetic and what is that? – Well, bio identical hormones mean that the molecular configuration is exactly the same as the hormones your own body makes.

So you don't really have to have these large randomized trials on molecules that your own body makes. We know that women have been exposed to estrogen, but that's the way our FDA works. But because drug companies want to make money, they're all about their corporate company wanting to make money and to do that, they need to make a molecule that can't be Pirated and that looks different from what our own bodies make. So they can patent it and it could be so unique.

The patent could be really airtight for any variation on a theme. And then they need to have large randomized trials so they can track what happens to large groups of people because the body has never seen this molecule before, even though it's similar, We used to think that all molecules that were patented because they weren't exactly bio identical were all really bad and there are quite a number of issues with them. But the re the 19-year re analysis of the women's health initiative was published by 12 prestigious cancer institutions Never made headline news came out December 19 at a San Antonio Breast Cancer Symposium every year in San Antonio, all these smart people around breast health get together and have a symposium and share data. And it was presented there here in Texas.

I'm in Austin just down the road and 12 centers like Fred Hutchinson Research Cancer center, Stanford Harvard, you're talking are major prestigious cancer centers in the U. S. Re analyzed this women's health initiative.

Got everyone scared, excuse the word s list um of hormones and uh it was reanalyzed way back and shown to be a statistical fiasco. But none of those re analyses really made any dense.

I wrote a book called safe hormone smart women and I reanalyzed the whole women's health initiative and came out with a lot of information which when this came out, I went back and reread my book to see if what I said in my book was in sync with what they said and thank God it was, I got to give myself a pat on the back.

It was right on, I was worried to death every page I turned, oh my God, am I gonna have made a big faux pas, but they reanalyzed women's health initiative and they said If a woman had been on hormones for even a short period of time and even Premarin, even synthetic patentable hormones. She had over the next 20 years, a 33% decreased incidence of getting breast cancer.

And if she got it with a history of having been on estrogen or she's presently on it, Let's say she gets, she's on hormone, she's on Premarin and she gets breast cancer.

They found that those women have a 44% decreased incidents of dying from the disease, that hormones protect fatality incidents against breast cancer and they protect primary um breast cancer and they protect against recurrence.

Well, that's the exact same statistic. The brand new Medicare study done by the NIH and the National Library of Medicine. Just put out a few months ago, they looked at seven million women in Medicare Americans on Medicare, seven million massive, massive study And they looked to see who was on hormones and who got breast ovarian uterine and colorectal cancer. They found the exact same statistic women on hormones for at least five years and their case there were 65 years old, had a 33% decreased incidents of all those cancers and live 5 to 10 years of healthier longevity. That did not make headline news interestingly enough, both came up with 33% decreased incidence of cancer of looking at estrogen being protective. Um It's it's extraordinary that the statistics came out overlapping like that. But the take home is estrogen does not cause breast cancer and in fact it's protective against it.

And if you're on it, you're less likely to die and you're probably gonna live a better life with a better brain. And so we've really got to get on, get off the fear of hormones if you really want to have a better future.

But the problem is is we don't have the frontline clinicians yet trained to to feel these answers and off for these tools. – So with that, I mean, the next question becomes, you know, so you have somebody with breast cancer, prostate cancer. And so one of the therapies is then to block to take an estrogen blocker or a testosterone blocker, you know, – Standard of care, definitely standard of care. – Yes.

So, what do you have to say about that? Is that appropriate medicine or? No. – Well, first of all, every patient has to be dealt with on a patient patient case. But that is really a great question.

That is the question of the hour. Can high risk patient like a patient who had breast cancer or had prostate cancer or has the brock gene and many people in their family getting breast cancer. I actually wrote a chapter on hormones and breast cancer survivors and even brock gene breast cancer survivors in my books.

A hormone smart women. But that becomes the really big question of the day because here we we really are good now at treating breast cancer. Only about 40,000 women a year get breast cancer.

And very few ladies of it are really dying anymore. We've really got it. I believe in integrative care personally doing the best of both worlds and in cancer especially breast cancer, ovarian cancer. You have to have surgery, you have to have a hysterectomy. I mean there's no doubt about that and then add to that. There's many things to do.

Integrative Li but the big question is if you have such good results now with breast cancer care and hormones rules so many tissues you're going to accelerate the aging of that patient. More people die of heart disease, you're gonna accelerate the risk of heart disease, accelerate the risk of brain fog, cognitive issues, weight gain metabolism issues. They're not the same person when they lose hormones, especially even abruptly. So the question becomes, do we really still say the standard of care is never ever give a woman with breast cancer or a man with prostate cancer hormones and more and more.

The research is coming out. If you read it, it's extraordinary. They're saying there isn't the data to prove this at this time, there are approximately 26 studies.

I gave this talk at the Integrative College of integral Medicine in Dearborn Michigan a few months ago to the I. C. I. M. David Brownstein group and I went over each study where the study came from how many women were in it who was tracked.

And the studies are from prestigious places in the U. S. And then a few outliers like Slovenia and here and there. But their studies go from tracking women with matched cohorts from 2 to 26 years. No study except one showed anything but significant reduced recurrence and less death.

If you had rick currents only benefits with quality of life going up the big deal quality of life because you have receptors all over the place and when hormone signal your brain turns on your vocal cords, don't get little old lady voice.

Your lungs are healthier. You can project and you have air to exercise more and go up and down stairs. I mean it's

on and on and on. Especially muscles. The intimate relationship of muscles and hormones let alone intimacy. You know people lose hormones and they lose connection and they don't like their body shape, they don't want to be touched, they have less intimacy and then a lot of things around the down word slope because intimacy is a glue a glue between successful in many not all but in many relationships.

So it's really so I had breast cancer 30 years ago and everybody told me at that time you can't go on hormones. And I'd had because I was a D. S daughter had so many surgeries.

So I total hysterectomy, no ovaries and I was on this rapid hot flashes nonstop I wasn't myself I couldn't think etcetera. And I read the literature and I got scared but I really started to feel like hormones did the opposite of what everybody was saying and that it wasn't really accurate.

I mean everything is a case by case basis. But now I work with a lot of breast cancer patients because of this very deal. So I decided to wait up to five years after my diagnosis And I had a rare form of breast cancer.

I was the first case of it ever in the United States. So that even of itself was different. And I waited five years and I started hormones then. So I've now been on hormones for about 26 years and I like to go into my surgeon because she has such great pal painting educated fingers and I really don't want to get a mammogram every year.

So I go in to see her and the mantra in litany is she says you look better that you look the best of any breast cancer patient, I have certainly any of your age, You gotta give off hormones all in one breath, you gotta get off hormones, you gotta get off hormones because the standard of care is if you've had breast cancer You can't be on hormones even if you're 30 years out.

She's a surgeon. She doesn't know about hormones. You know, she's a nice surgeon, an educated surgeon and she's starting to look much older than me, she's much younger than me and hormones slow down aging, the most powerful anti aging tool we have. That's why 22 countries are giving it for free. They're not gonna give something for free.

They haven't shown for sure. The huge benefit and a socialized country, we're talking Britain started doing it last year. Um although it's based on the Amount of money you make, all the Nordic countries have been doing it. My understanding is at least since 2005 and six, and that includes Iceland, Greenland Norway, Scotland is on it, Wales is on it, Italy is on it. There's there's so many countries that say, we see that our citizens stay longer better and don't use up our medical services and money.

So we we are gonna give hormones for free. Here we have this fear, we have a fear. And then you go ask your doctor and the doctor has that fear. That has been taught to have that fear and not taught how to assess your hormone health, especially in relation to specific tissues.

We think the gynecologists, urologists and endocrinologists should be taken care of sex steroid hormones, but they're not many gone ecologists today will say to their patients, when asked, do you think I should take hormone? My patients tell me many gynecologists say they don't believe in hormones. They're really scared of them, Muslim Ism Judaism and hormone is a hormone is is there's a lot of bigotry against, – It's religious discrimination against hormones. – Well, there certainly is discrimination in the United States against older women.

But we don't ever talk about that older women's lives matter. That's one of the reasons that people are so afraid of aging in this society, because the aged aren't embraced and respected and um women over 40 are considered old in the corporate world.

I have a blog. If you go to my website drlindseyberkson.com. I have a blog that was picked up by quite a bit of psychologist called Why We hate older women and three things we might do about it.

– That's a great blog right there. – It's for free and you can read it drlindseyberkson.com. Okay, – So I do wanna cannot go back to the question that I that I asked in regards to. I mean obviously it's individualized medicine.

You have an individual that had prostate breast cancer. You know, we know that they hormones protect all the other areas of the body, so the hormones are important. So should the strategy and and again this is in your from the research, obviously they need to discuss this with their medical doctor and – Most medical doctors are not going to know this information.

– No, no, – That's the deal. But if there's a growing amount of peer reviewed data that testosterone protects the breast and the reason is its final metabolite three beta dial signals that anticancer estrogen that you see Gustafsson and ken courses lab also discovered.

So there is a growing body of research to really validate much of the research is giving testosterone with an aromatase inhibitor because testosterone can under the action of an aromatase enzyme be morphed into estrogen and everyone still thinks that estrogen causes cancer. There are other things to do.

David blasts laboratory was just right below where we worked at Tulane and he's the world's expert on melatonin. He now has a laboratory in Tufts as well as two lane and he's been showing how melatonin with essential fatty acids fights cancer at night.

So there's a lot of things that you can do but the first hormone for women to consider with breast cancer that their doctors should be able to see. I have a little book on my website showing up to the point that I finished that book, the data on in peer review. And in that talk that I gave in Dearborn, I went over the review of of exactly that. So there is a lot of growing literature showing the testosterone is extremely protective.

So that probably be the first hormone you would want to try and Abraham more gun, taller was an associate professor of urology at Harvard. I was lecturing with him in Miami a few months ago, he's on the same mission with men.

I put other people's research together and connect the dots. I'm kind of an agile thinker or I try to be, he's the person who actually does the research himself. I have done research but not as to the point and not on this topic that he has, he has clearly shown that after prostate cancer, men that go back on or initiate testosterone replacement therapy have a decreased incidence of recurrence. And if they have recurrence they have decreased fatality. The same exact thing as we're seeing in the science for women. And I said to him when I was interviewing him on my podcast, I said, you know, it doesn't make any sense to me, estrogen and testosterone, you know, along with other hormones, progesterone, oxytocin, but really estrogen testosterone male, female, you know, going back biblical to the garden of Eden, we um and and Michael baker said that the very first estrogen receptor was really signaled by a bit of a male molecule. So we've always needed each other.

It's almost the the rib story in the bible. That's almost the hormone lineage story. But I lost my thought of where I was going with that. It's oh yes. So the very thought is these are the hormones that make humanity exist, thrive and reproduce and go forward into the future.

Bioidentical Hormones, Standard of Care, and Closing Thoughts

Why would mother nature make the very hormones that drive humanity be mostly carcinogenic just doesn't make sense to me. So I think that we are going to see A huge dawning of an aquarian age of hormones, so to speak, where in another 20 years, they're going to be accepted. People are gonna under doctors are going to understand how to test for it. We're gonna have green pregnancy places people could have been on my products, um, and start taking action in their homes and I think it's going to enter main but you miss out on it. If you don't take action yourself before you wait for your provider to give you guidance while they're still doing Band aid, you come in with an issue and they deal with that.

It's not really unless they're a root cause practitioner – Because the research that takes place, I mean, it has to go through such a long process before it becomes standard of care and a dog doctor is in recognizing as standard of care.

So just because you go to a doctor and the research exists like you mentioned, doesn't mean that he knows about

it or he feels comfortable doing it because it is not standard of care and then he can become liable to then two, then administer medication that is not part of Within the framework that he can operate with him.

– But you know, the whole thing is a charade because the women's health initiative was 40 prestigious institutions coming together saying, Hey, we're an aging country by 2030, we're gonna have more people over 65 than under. We're aging.

So we better figure out how not to topple Medicare and women live longer than men. So let's take a look at everything we can about women. So they did this huge, taking a look at women in cholesterol and um statins and they looked at women 65 to 90 and the women who had the highest number of LDL, what we all say, Oh my God, you should keep that really low and beyond statins.

The women with the highest level of the worst ca Cholesterol lived the longest with the best quality of life. So this was they tracked about 14,000 women.

It was a huge trial and they then concluded that perhaps we should reevaluate our standard of care of looking at cholesterol levels and treating them in older women.

So it became clear to me this whole standard of care and randomization thing is it's just it's a joke because we only use the standard of care studies that we want that promote the way we want to drive clinical traffic and pharmaceutical purchasing.

That's what it's all about. And um we really are not taking a look at it in a different way because here you have a study saying, don't give cholesterol lowering medication to older women, it makes them have worse out.

But we're not changing anything based on that because that doesn't support the statin, it's really shocking how much all of this and it's not who who do you blame?

How do you stop it? I don't really know. But they want randomized trials. The other thing is I went, I did a deep dive into statistical analysis of randomized trials because that's what everybody says we need, oh, we don't want to over mix because it doesn't have randomized trials.

You know, that was a big call in the pandemic. And when there wasn't a rand no trial, no one would let them publish it anywhere. Right? Because it was against the vaccine. I mean, this is all about driving the pharmaceutical traffic.

It's so add not. It's terrifying actually. – Yeah, it is a whole, you know farce. It's a it's it's ridiculous with the standard of care. Yeah. And and it is all based upon the pharmaceutical companies, what it is that they are wanting to drive.

And like you mentioned, you know, I mean, cholesterol is like the building block of your sex steroids. I mean if you don't have enough cholesterol, you can't build your hormones. And we now, I mean like you mentioned the importance of these hormones and all these tissues everywhere.

– Your brain is mostly made of cholesterol and b vitamins of good fat though, it's mainly made of fat but so there was a patient that was being seen by my medical director at the clinic. I work at in Florida, which is Perlmutter who wrote the book grain brain, that he opened this clinic, he was a neurologist.

So we've got hyperbaric oxygen tanks blow. I just got certified and hyperbaric medicine, but I haven't certified a patient in that yet. But we do a lot of diverse things.

And where was I just going with that? We've been talking for a while now. Why don't you just ask me? I'm sorry. – I can't remember something. – You just where were we going with that?

Oh yeah. So this is the story I was talking about my medical director in Naples. There you go. And she had a patient that was suffering from severe depression and anxiety and he also had a history of heart disease. His

cardiologist had him on staff And got his cholesterol so low it was about 89. She told me below 160.

You can't make your hormones, you can't make your cell membranes. You can't operate and lubricate your brain. Well you need cholesterol. It's not the enemy. You just don't want it to get soluble.

Ized with calcium and usually travels to a site in the blood vessel because there's already an injury there. And it goes there is a fatty little band aid.

The cholesterol is like a secondary player. It's not really a primary player. But you need with cholesterol levels that low. You're in danger. Your heart is in danger. So she called up the cardiologist and tried to have a friendly conversation with this regular telepathic cardiologist and say his cholesterol is too low. Can we take him off statins.

Is that all right with you? And he's not even on co Q. 10 that statins wipe out co Q. 10 I think it's malpractice for cardiologists to write a script for statins and not also recommend in the same breath Co Q 10.

Every medicine wipes out some nutrient if you're on a medicine and you need it you need it. But you want to find out what nutrients it rinses out so you can take care of yourself and take the medicine and get the good benefits and not end up having more issues downstream. But that cardiologist hung up on her just hung up on her and that patient died a few months later and we were talking about this a lot.

There's so much resistance and that's the part that's crazy making for patients because they don't know understandably who to believe. Who do you believe?

Right. Do you believe the conversation or do you believe the card geologists with all these plaques on the walls and you know, they're very smart too. It's very hard to tread carefully in the health care system. – Yeah. Yeah. And that is that is the stress of patients because they they need a cardiologist and they don't want to be.

So it's almost like they are taking the medication just to be a good patient. So the cardiologist still want to see, – You know I see a functional cardiologist and he's fabulous. He teaches functional cardiology at A.

Four M. And I'm hoping to take his modules this coming fall and he's wonderful but he doesn't know anything about hormones and doesn't embrace them. And I used to send patients, he's such a great diagnostician. But every time I did he told them they had to go off hormones. So I was I warned them and then I just decided not to send him any Patients anymore because you know, you're usually down on what you're not up on. It doesn't mean he's not a fabulous, brilliant agile thinking cardiologist. But he doesn't know hormones.

And that old thought over the last 20 years is that they cause trouble in the heart and with cancer. And it all turned out to be wrong but it hasn't changed. But that's the teaching that these people in practice, you know this established practice have so people just have to keep that in mind.

You need to ask a functional practitioner, a nature empathic doctor, a functional medicine doctor. You know, I'm also a functional chiropractic. I went to naturopathic school when they had the dual degree but then they stopped it.

So I'm kind of a more of nature path and chiropractic. And then I ended up being a researcher and I worked for 10 years in a dialysis center and then 10 years at the center for the environmental estrogen.

So I kind of a tapestry of converging facts to try and you know, most people retire in their sixties, Right? And you really, I found only kind of figuring out how to treat a patient by your 50s, 60s. You're just going oh my God the epiphany of connecting the dots and figuring it out. So I'm still wanting to go strong into that dark night.

– Like well Dr. Berkson there's so many more questions than I would have loved to go into like oxytocin and all of those. I mean there's so much – My new book that I haven't quite finished yet.

Bad me. I'm resting and swimming in the lake and canoeing to such a lecture lecture schedule this last year. But it's a very it's a science fun read but it's called orgasm medicine.

The whole book using oxytocin in clinical practice and the science that supports it. – I love that. And it's not just only in regards to our connectedness and how we feel and how we connect but also I remember you mentioning there's a huge amount of research supporting the need for oxytocin in your G.

I. – There's vasopressin and oxytocin receptors from your mouth all the way to uranus, all over your pancreas a year. The cells that make insulin, it's covered with oxytocin receptors.

Your liver is covered with oxytocin receptors. The only part of your digestive track that isn't as your gallbladder because it's really a storage piggy bank for bile.

So oxytocin is a huge player and many of the tissues that are influenced by thyroid and estrogen are a team effort with oxytocin. It's a tremendous team player.

I could go on and on and talk about oxytocin for hours but I'm going to have to go, I have a house guest and we have dinner plans at this lovely little place on our lake behind my gym that hung out in yesterday. We just sat on noodles.

We canoed for about four miles really before it got 100 and four. We we started out a little earlier down on Lady Bird Lake and then we went up to quarry lake and just sat on noodles for hours. So we became human prunes.

We're going to go eat on the lake, – See that is perfect life and that, that's what you should do. Well Dr. Berkson, I'm so delighted to have you as one of the presenters at at this summit. Thank you so much.

– I hope this was helpful for your guests and any platform to help get what I feel is cogent, grounded information to people. I feel lucky to do it because I want more people to know about how to get more tools in their own tool bag. So thank you very much for having me on and I hope in the future when new things come out we can have more riveting conversation.

– I have. I have no doubt whatsoever. Thank you so much. – Okay, bye bye